

ALAMEDA COUNTY  
HEALTH CARE SERVICES  
AGENCY  
ALEX BRISCOE, Director



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

August 6, 2014

Mr. John Buestad  
Foley Street Investments LLC  
2533 Clement Avenue  
Alameda, CA 94501  
(Sent via E-mail to: [john@buestad.com](mailto:john@buestad.com))

Mr. John F. Buono, Jr.  
Good Chevrolet  
P.O. Box 1730  
Alameda, CA 94501

Subject: Case Closure for Fuel Leak Case No. RO0003112 and GeoTracker Global ID T1000004754,  
Good Chevrolet Parcel A, 1600 Park Street, Alameda, CA 94501

Dear Gentlemen:

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.waterboards.ca.gov>) and the Alameda County Environmental Health website (<http://www.acgov.org/aceh/index.htm>).

Site management requirements do not appear to be necessary. However, 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.

If you have any questions, please call Karel Detterman at (510) 567-6708. Thank you.

Sincerely,

A handwritten signature in blue ink that reads "Dilan Roe". The signature is fluid and cursive.

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

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

cc with enclosures:

Jeremy Smith, AEI Consulting, (sent via e-mail to: [jasmith@aeiconsultants.com](mailto:jasmith@aeiconsultants.com))  
Tom Graf, Grafcon, (sent via e-mail to: [tom@grafcon.us](mailto:tom@grafcon.us))  
Dilan Roe, ACEH, (sent via e-mail to: [dilan.roe@acgov.org](mailto:dilan.roe@acgov.org))  
Karel Detterman, ACEH, (sent via e-mail to: [karel.detterman@acgov.org](mailto:karel.detterman@acgov.org))  
Geotracker, Electronic File



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**REMEDIAL ACTION COMPLETION CERTIFICATION**

August 6, 2014

Mr. John Buestad  
Foley Street Investments LLC  
2533 Clement Avenue  
Alameda, CA 94501  
(Sent via E-mail to: [john@buestad.com](mailto:john@buestad.com))

Mr. John F. Buono, Jr.  
Good Chevrolet  
P.O. Box 1730  
Alameda, CA 94501

Subject: Case Closure for Fuel Leak Case No. RO0003112 and GeoTracker Global ID T1000004754,  
Good Chevrolet Parcel A, 1600 Park Street, Alameda, CA 94501

Dear Gentlemen:

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,

A handwritten signature in blue ink, appearing to read "Ariu Levi".

Ariu Levi  
Director

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

**I. AGENCY INFORMATION**

Date: August 5, 2014

Agency Name: Alameda County Environmental Health	Address: 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502-6577	Phone: (510) 567-6708
Responsible Staff Person: Karel Detterman	Title: Hazardous Materials Specialist

**II. CASE INFORMATION**

Site Facility Name: Good Chevrolet Parcel A		
Site Facility Address: 1600 Park Street, Alameda, CA 94501		
RB Case No.: ----	STiD No. ---	LOP Case No.: RO0003112
GeoTracker ID: T1000004754		APN: 070-0191-35-4
Current Land Use: Commercial		
Responsible Parties	Addresses	Phone Numbers
Foley Street Investment, LLC	1980 Mountain Blvd., Suite 208, Oakland, CA 94611	(510) 523-1925
John Buono Jr.	P.O Box 1730 Alameda, CA 94501	(510) 522-9221

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.		
Number of monitoring wells installed: ---	Number of monitoring wells destroyed: ---	Number of monitoring wells remaining: ---
Highest Groundwater Depth Below Ground Surface: 8 feet bgs measured during 2013 UST removal	Lowest Depth: 10 feet bgs measured during 2013 UST removal	Flow Direction: Estimated to be to the northwest based on data from Fuel Leak Case No. RO0000008 located northeast and adjacent to 1600 Park Street
Most Sensitive Current Groundwater Use: Potential drinking water source		

<p>Summary of Production Wells in Vicinity: The groundwater gradient direction appears to be to the northwest According to the results of the ACDPW well search; there were no water supply wells found to be located within a radius of 2,000 feet downgradient of the site. There are two industrial wells located approximately 1,200 feet downgradient of the site located on Clement Avenue; however the wells are 72 and 82 feet deep. Based on the location and depths of the industrial wells with respect to the site, the wells are not expected to be a receptor for the site.</p>	
Are drinking water wells affected? No	Aquifer Name: East Bay Plain
Is surface water affected? No	Nearest Surface Water Name: The nearest surface water body is the tidal canal located approximately 1,900 feet to the northeast.



**LTCP GROUNDWATER SPECIFIC CRITERIA**

LTCP Groundwater Specific Scenario under which case was closed: Scenario 1

Site Data		LTCP Scenario 1 Criteria (ppb)	LTCP Scenario 2 Criteria (ppb)	LTCP Scenario 3 Criteria (ppb)	LTCP Scenario 4 Criteria (ppb)
Plume Length	---	<100 feet	<250 feet	<250 feet	<1,000 feet
Free Product	---	No free product	No free product	Removed to maximum extent practicable	No free product
Plume Stable or Decreasing	---	Stable or decreasing	Stable or decreasing	Stable or decreasing for minimum of 5 Years	Stable or decreasing
Distance to Nearest Water Supply Well	---	>250 feet	>1,000 feet	>1,000 feet	>1,000 feet
Distance to Nearest Surface Water and Direction	Approximately 1,900 feet northeast to the Tidal Canal	>250 feet	>1,000 feet	>1,000 feet	>1,000 feet
Property Owner Willing to Accept a Land Use Restriction?	-----	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	18	18	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?

N/A

**LTCP VAPOR SPECIFIC CRITERIA**

LTCP Vapor Specific Scenario under which case was closed: Scenario 4

Active Fueling Station      Active as of: Not applicable

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	7 feet	≥30 feet	≥30 feet	≥5 feet	≥10 feet	≥5 feet	≥5 feet
Total TPH in Bioattenuation Zone	< 1 ppm	<100 ppm	<100 ppm	<100 ppm	<100 ppm	<100 ppm	<100 ppm
Maximum Current Benzene Concentration in Groundwater	< 0.5 ppb	No criteria	No criteria	<100 ppb	≥100 and <1,000 ppb	<1,000 ppb	No criteria
Oxygen Data within Bioattenuation Zone	≥4%	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	5 feet	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	8.2 (<25)	8.2	<85	<280	<85,000	<280,000
Ethylbenzene	2.7 (<25)	2.7	<1,100	<3,600	<1,100,000	<3,600,000
Naphthalene	<5.3 (<25)	<5.3	<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?

---

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?

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**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	<0.005	<0.005	<0.005	<0.005
LTCP Criteria	Benzene	≤1.9	≤2.8	≤8.2	≤12	≤14
Site Maximum	Ethylbenzene	<0.005	28	<0.005	28	28
LTCP Criteria	Ethylbenzene	≤21	≤32	≤89	≤134	≤314
Site Maximum	Naphthalene	---	36	---	36	36
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?		---				
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?		---				

#### 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). Based on this evaluation, no site management requirements appear to be necessary. However, 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.

If a change in land use to any residential or conservative land use, or if any redevelopment occurs, Alameda County Environmental Health (ACEH) must be notified as required by Government Code Section 65850.2.2

Should corrective action be reviewed if land use changes? No

Was a deed restriction or deed notification filed? No



Date Recorded: ----

#### V. ADDITIONAL COMMENTS AND CONCLUSION

##### Additional Comments:

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.

#### VI. LOCAL AGENCY REPRESENTATIVE DATA

Prepared by: Karel Detterman, P.G.	Title: Hazardous Materials Specialist
Signature: 	Date: 8/5/2014
Approved by: Dilan Roe, P.E.	Title: LOP and SCP Program Manager
Signature: 	Date: 8/5/2014

#### VII. REGIONAL BOARD AND PUBLIC NOTIFICATION

Regional Board Staff Name: Cherie McCaulou	Title: Engineering Geologist
Regional Board Notification Date: 5/6/2014	
Public Notification Date: 07/05/2014	



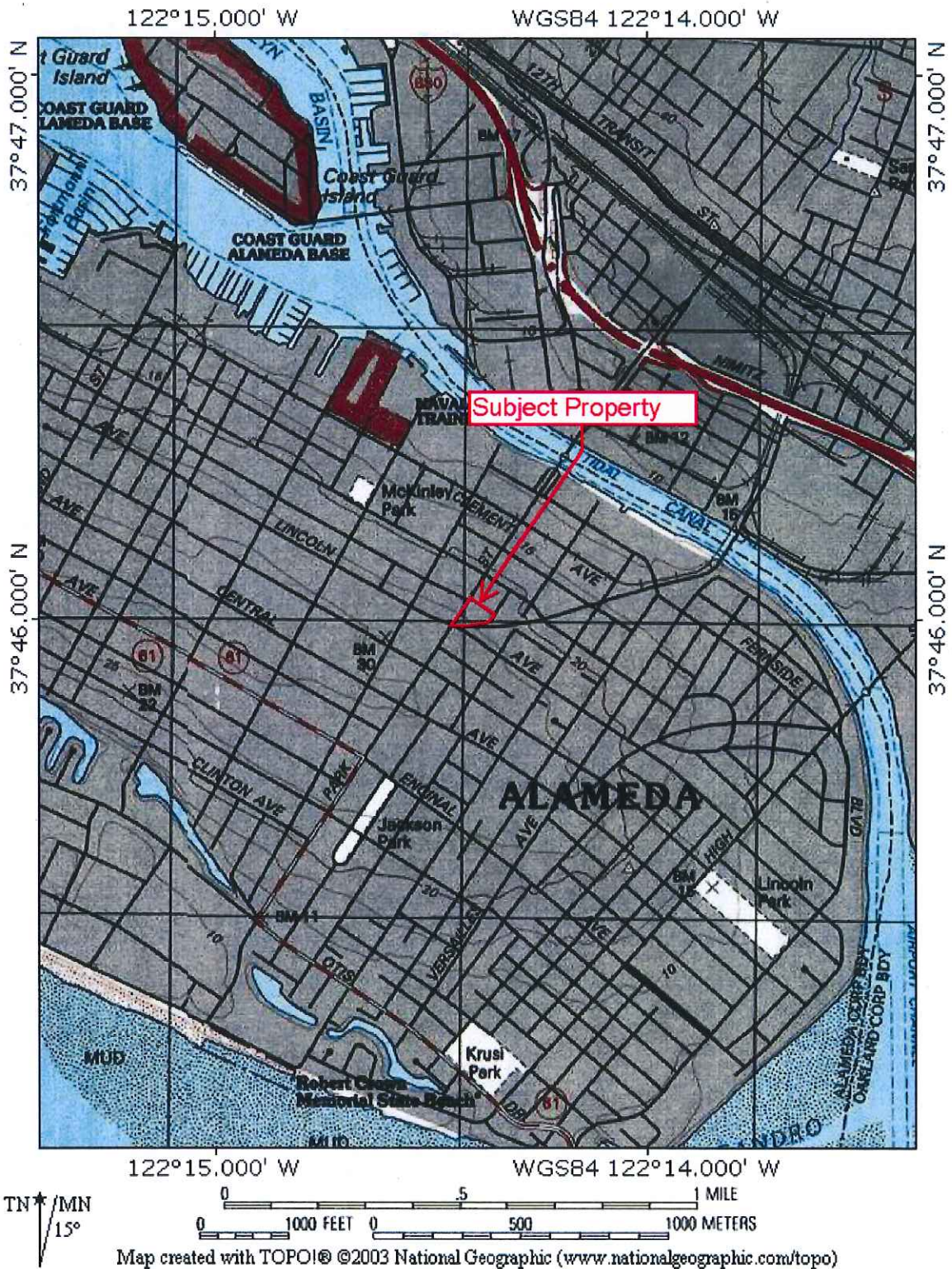
### VIII. MONITORING WELL DESTRUCTION

Date Requested by ACEH: ----	Date of Well Decommissioning Report: ----	
All Monitoring Wells Destroyed: ----	Number Destroyed: ----	Number Retained: ----
Reason Wells Retained: ----		
Additional requirements for submittal of groundwater data from retained wells: ----		
ACEH Concurrence - Signature: ----		Date: ----

Attachments:

1. Site Location Map
2. Aerial Photo
3. Site Plan
4. Soil Analytical Data
5. Groundwater Analytical Data
6. Soil Vapor Analytical Data

# ATTACHMENT 1



## SITE LOCATION MAP

1600-1650 Park Street

Alameda, California 94501



FIGURE 1

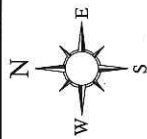
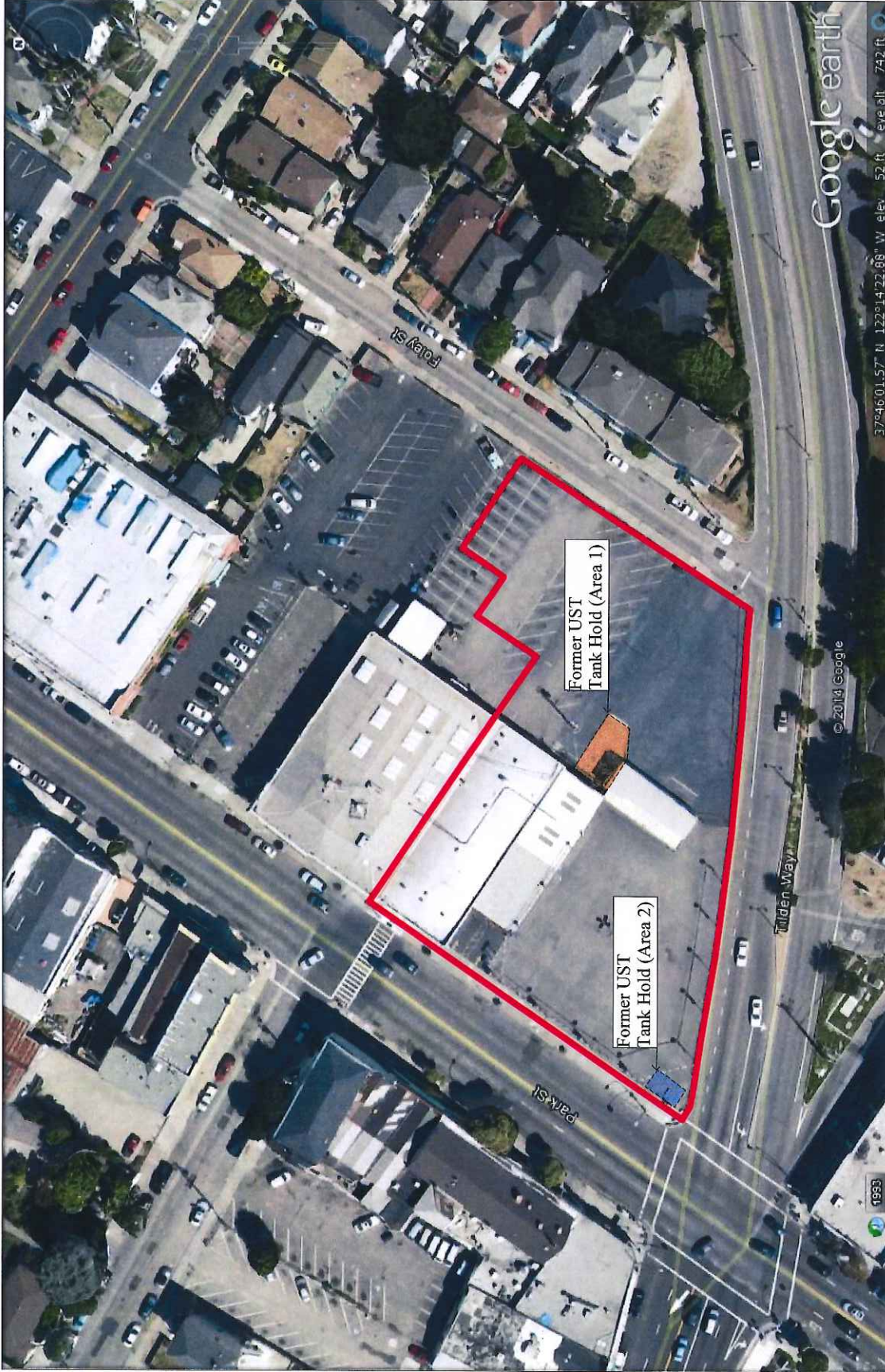
Project Number: 298931

Source: USGS



# ATTACHMENT 2





**LEGEND**

Approximate Property Line

DRAFTED BY JAS 7-11-14

**AEI CONSULTANTS**  
2500 CAMINO DIABLO, WALNUT CREEK

**AERIAL PHOTO**

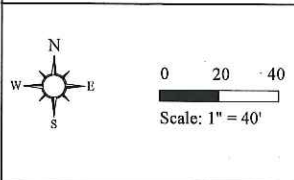
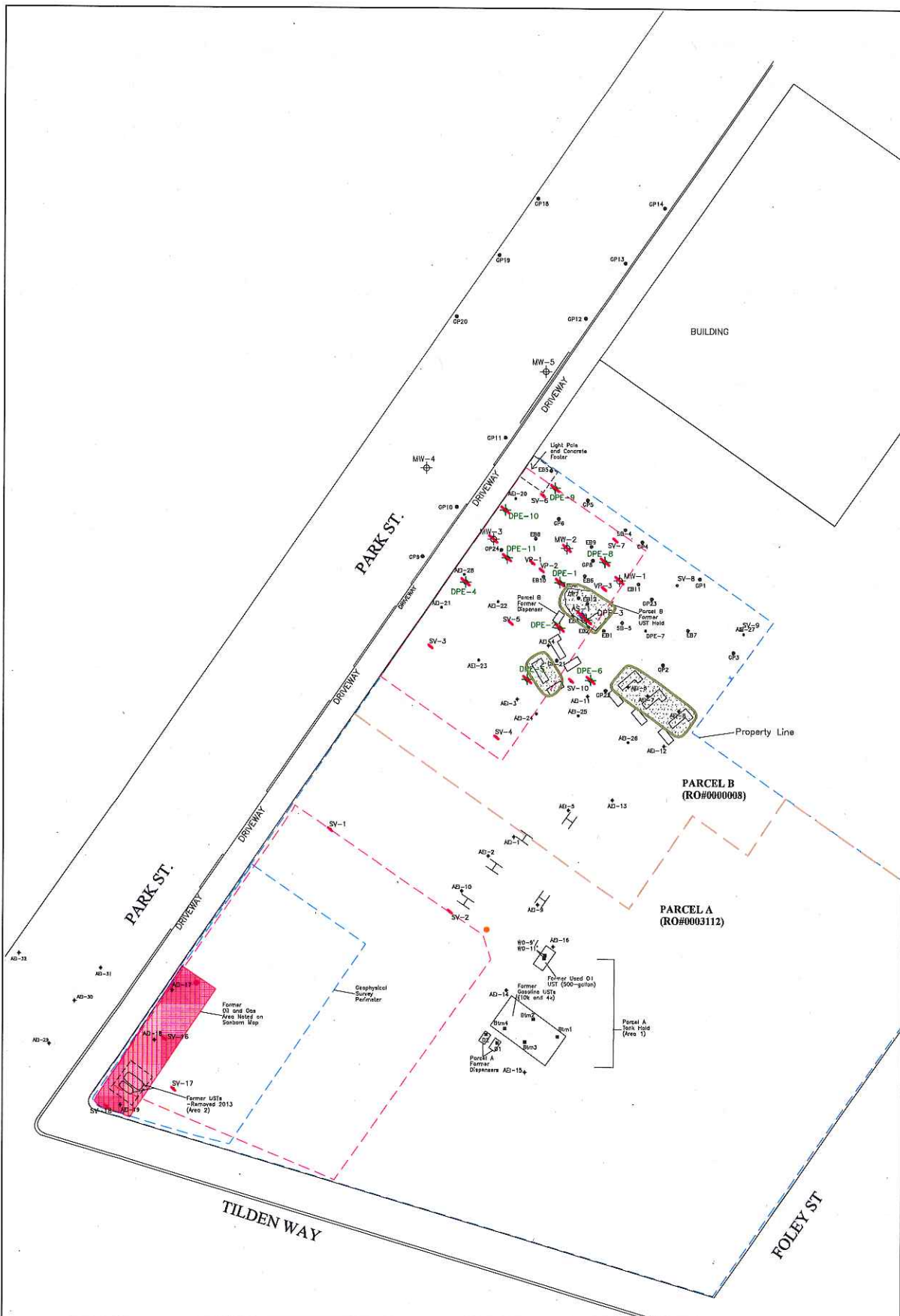
1600 PARK STREET  
ALAMEDA, CALIFORNIA

**FIGURE 2**  
PROJECT NO. 324771

© 2014 Google  
37°46'01.57" N 122°14'22.88" W elev. 52 ft. eye alt. 742 ft.

# ATTACHMENT 3





**LEGEND**

Former Remediation Well	Former Hydraulic Lift with Excavation Extents
Groundwater Monitoring Well	Former Hydraulic Lift
AEI Soil Boring	Grab Soil Sample
Drum / Reservoir	Soil Boring (4/08)
Parcel Split	Soil Boring (Pre 1997)
Property Line	Former Vapor Probe
Proposed Buildings	

DRAFTED BY JAS 3-9-12  
 REVISED BY JAS 3-24-13

**AEI CONSULTANTS**  
 2500 CAMINO DIABLO, WALNUT CREEK

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**EXTENDED SITE PLAN**

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1600 PARK STREET  
 ALAMEDA, CALIFORNIA

**FIGURE 2**  
 PROJECT NO. 324771



**LEGEND**

- N** SUBJECT PROPERTY BOUNDARY
- (2) GASOLINE UST LOCATIONS
- WASTE OIL UST LOCATION
- (2) DISPENSER LOCATIONS

0' 20' 40'  
 APPROX. SCALE: 1 in = 40 ft

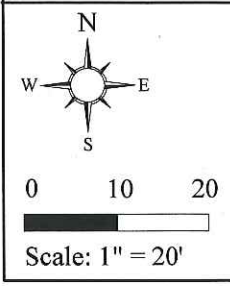
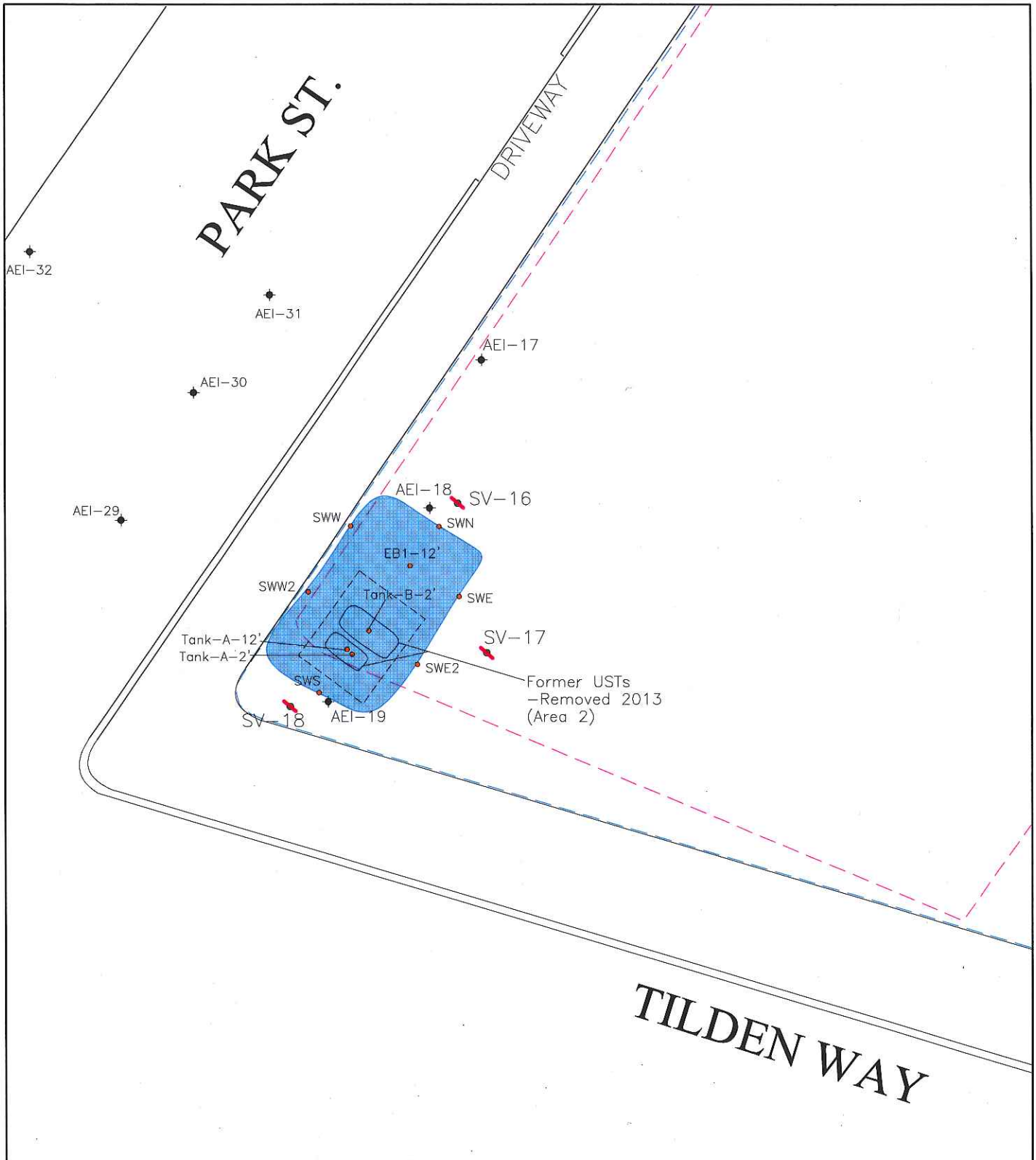
**SITE PLAN**

1630 PARK STREET  
 ALAMEDA, CALIFORNIA

**FIGURE 2**  
 JOB NO: 298931

**AEI**  
 Consultants





LEGEND	
	2013 Over-Excavation Extents
	Original UST Excavation Extent
	USTs (Removed 10/29/13)
	AEI Soil Boring
	Property Line
	Grab Soil Sample
	Former Soil Vapor Probe
	Proposed Buildings

DRAFTED BY JAS 3-9-12  
 REVISED BY JAS 10-29-13

**AEI CONSULTANTS**  
 2500 CAMINO DIABLO, WALNUT CREEK





**SITE PLAN**

1600 PARK STREET  
 ALAMEDA, CALIFORNIA

**FIGURE 3**  
 PROJECT NO. 324771

# ATTACHMENT 4

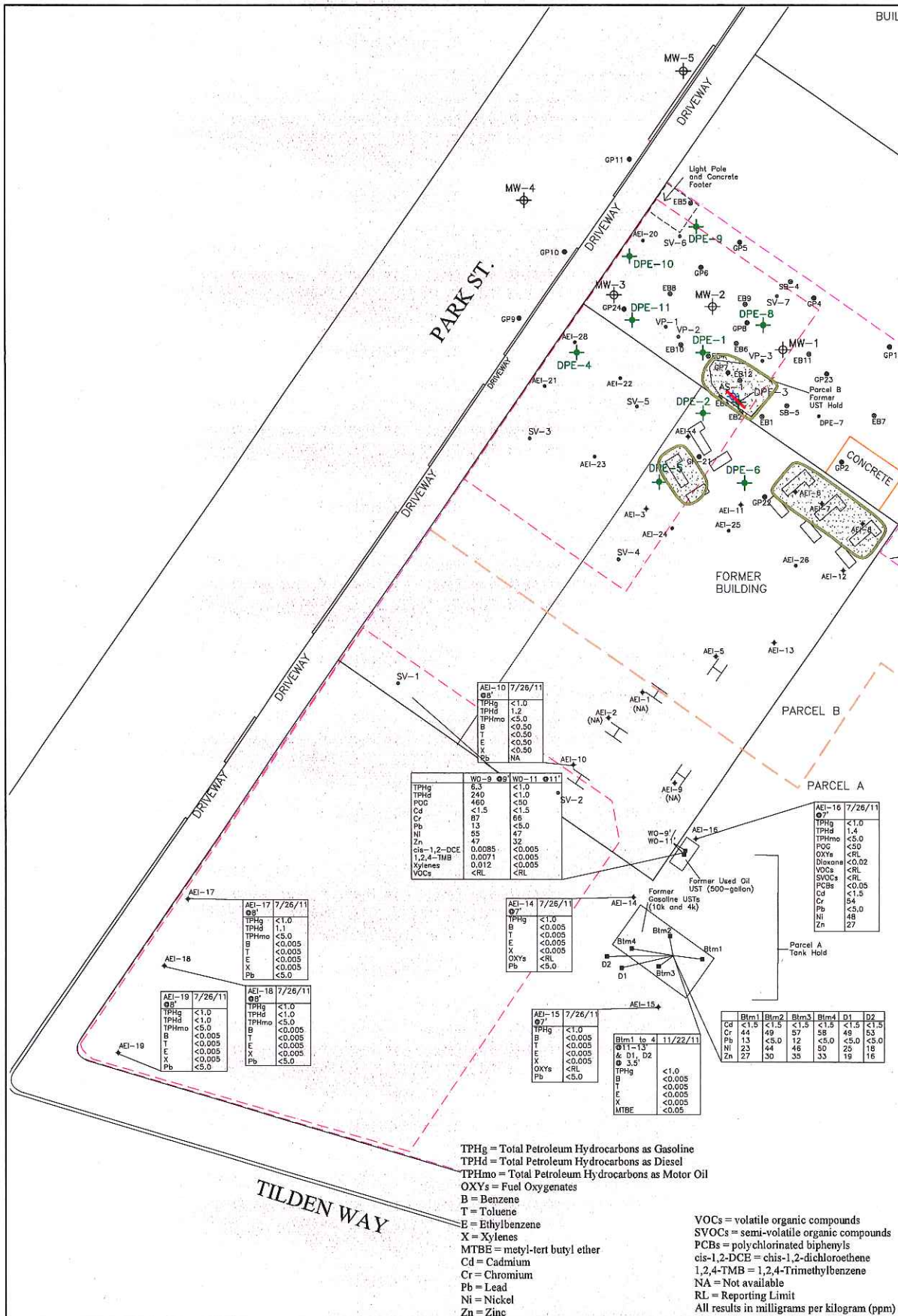


LEGEND	
<b>N</b>	SUBJECT PROPERTY BOUNDARY 
	EXCAVATION EXTENT 
	SOIL SAMPLE 
	GROUNDWATER SAMPLE 

0'      20'      40'  
 APPROX. SCALE: 1 in = 40 ft

SAMPLE LOCATION PLAN	
1630 PARK STREET ALAMEDA, CALIFORNIA	
<b>FIGURE 3</b> JOB NO: 298931	<b>AEI</b> Consultants





0 15 30
   
 Scale: 1" = 30'

**LEGEND**  
 DRAFTED BY JAS 3-9-12  
 REVISED BY JAS 3-24-13

**AEI CONSULTANTS**  
 2500 CAMINO DIABLO, WALNUT CREEK  
**SOIL ANALYTICAL  
 MAP - PARCEL A**  
 1600 PARK STREET  
 ALAMEDA, CALIFORNIA  
**FIGURE 3**  
 PROJECT NO. 298931



Sample Analytical Data Tables  
1630 Park Street, Alameda, CA

TABLE 1: Soil Sample Analytical Data - Petroleum Hydrocarbons and Metals

Sample ID	Date	Depth	Method SW8021B/8015Bm															
			TPH-g	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes (mg/kg)	TPH-d	POG	Cadmium	Chromium	Lead	Nickel	Zinc	Lead-STLC (mg/L)	Lead-TCLP (mg/L)	
Btm1	11/22/2011	13'	ND<1.0	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<1.5	44.0	13.0	23	27	-	
Btm2	11/22/2011	13'	ND<1.0	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<1.5	49	ND<5.0	44	30	-	
Btm3	11/22/2011	11'	ND<1.0	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<1.5	57	12	46	35	-	
Btm4	11/22/2011	11'	ND<1.0	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<1.5	58	ND<5.0	50	33	-	
D1	11/22/2011	3.5'	ND<1.0	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<1.5	49	ND<5.0	25	19	-	
D2	11/22/2011	3.5'	ND<1.0	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<1.5	53	ND<5.0	18	16	-	
WO-9**	11/22/2011	9'	6.3	-	-	-	-	-	-	-	240	460	87	13	55	47	-	
WO-11'	11/22/2011	11'	ND<1.0	-	-	-	-	-	-	-	ND<1.0	ND<50	66	ND<5.0	47	32	-	
STKP1(A/B/C/D)	11/22/2011	-	ND<1.0	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	150	370	41	130	36	54	-	
STKP2(A/B/C/D)	11/22/2011	-	ND<1.0	-	-	-	-	-	-	-	83	-	7.4	2500	150.0	600	ND<0.2	
ESL	-	-	83	0.023	0.044	2.9	3.3	2.3	2.3	83	-	-	-	750	150.0	600	150.0	600

TABLE 2: Soil Sample Analytical Data - Volatile Organic Compounds (VOCs)

Sample ID	Date	Method SW8260B		
		PCE	cis12-DCA	124-TMB
STKP2(A/B/C/D)	11/22/2011	0.016	ND<0.005	0.0056
WO-9**	11/22/2011	ND<0.005	0.0085	0.0071
WO-11'	11/22/2011	ND<0.005	ND<0.005	ND<0.005
ESL	-	0.70	0.19	2.3

TABLE 3: Groundwater Sample Analytical Data - Petroleum Hydrocarbons and Metals

Sample ID	Date	Depth	Method SW8021B/8015Bm										
			TPH-g	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes (µg/L)	Cadmium	Chromium	Lead	Nickel	Zinc
GW-1	11/22/2011	13'	2400	ND<0.05	18	180	42	310	ND<0.25	ND<0.5	ND<0.5	2.9	83
ESL	-	-	100	5	1	40	30	20	0.25	50	2.5	8.2	81

mg/kg = milligrams per kilogram

µg/L = micrograms per liter

TPH-g = total petroleum hydrocarbons as gasoline

TPH-d = total petroleum hydrocarbons as diesel

ND = non-detect, below reporting limit

124-TMB = 1,2,4-Trimethylbenzene

PCE = Tetrachloroethene

cis12-DCA = cis-1,2-Dichloroethene

STLC = Soluble Threshold Limit Concentration (extraction method required for landfill profiling)

TCLP = Toxicity Characteristic Leaching Procedure (extraction method required for landfill profiling)

ESL = Environmental Screening Levels for commercial/industrial area where groundwater is a potential drinking source, set by SF Bay Regional Water Quality Control Board

\*\* = denotes sample area which was removed in additional excavation activities performed on 12/2/2011

**Table 1**

**Soil Sample Analytical Data  
TPH, MBTEX and POG**

AEI Project No. 298931, 1600 Park Street (Parcel A), Alameda, California

Sample ID	Date Collected	Approx. Depth (feet)	TPH-g (mg/kg)	TPH-d* (mg/kg)	TPH-mo* (mg/kg)	MTBE (mg/kg) EPA Method SW802.1B/801.5B/m	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	POG (mg/kg) EPA Method SM5520E/F
AEI-10-8'	7/26/2011	8	<1.0	1.2	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	-
AEI-14-7	7/26/2011	7	<1.0	-	-	<0.05	<0.005	<0.005	<0.005	<0.005	-
AEI-15-7	7/26/2011	7	<1.0	-	-	<0.05	<0.005	<0.005	<0.005	<0.005	-
AEI-16-7	7/26/2011	7	<1.0	1.4	<5.0	-	-	-	-	-	<50
AEI-17-8'	7/26/2011	8	<1.0	1.1	<5.0	<0.05	<0.005	<0.005	<0.005	<0.005	-
AEI-18-8'	7/26/2011	8	<1.0	<1.0	<5.0	<0.05	<0.005	<0.005	<0.005	<0.005	-
AEI-19-8'	7/26/2011	8	<1.0	<1.0	<5.0	<0.05	<0.005	<0.005	<0.005	<0.005	-

mg/kg = milligrams per kilogram (equivalent to parts per million)  
 MDL = method detection limit  
 TPH = total petroleum hydrocarbons  
 TPH-g = TPH as gasoline  
 TPH-d = TPH as diesel  
 TPH-mo = TPH as motor oil  
 POG = petroleum oil and grease  
 MTBE = methyl butyl tertiary ethyl  
 "<" = less than  
 "nd" = with silica gel cleanup  
 "-" = not available

Table 2

**Soil Sample Analytical Data  
VOCs, Fuel Oxygenates, SVOCs, and PCBs**

AEI Project No. 298931, 1600 Park Street (Parcel A), Alameda, California

Sample ID	Date Collected	Approx. Depth (feet)	1,4-Dioxane (mg/kg) EPA Method SW8260	All target VOCs (mg/kg) EPA Method SW8260	Fuel Oxygenates^ (mg/kg) EPA Method SW8260B	All target SVOCs (mg/kg) EPA Method 8270	All other target PCBs (mg/kg) EPA Method SW8082
AEI-14-7	7/26/2011	7	-	-	<MDL	-	-
AEI-15-7	7/26/2011	7	-	-	<MDL	-	-
AEI-16-7	7/26/2011	7	<0.02	<MDL	<MDL	<MDL	<0.05

mg/kg = milligrams per kilogram (equivalent to parts per million)

MDL = method detection limit

VOCs = volatile organic compounds

SVOCs = semi-volatile organic compounds

PCBs = polychlorinated biphenyls

"<" = less than

"^" = not available

"A" = fuel oxygenates tert-amyl methyl ether (TAME), t-butyl alcohol (TBA),

1,2-dibromomethane (EDB), 1,2-dichloroethane (1,2-DCA), diisopropyl ether (DIPE), methanol,

ethanol, ethyl tert-butyl ether (ETBE), methyl tert-butyl ether (MTBE), and 1,2-dichloroethane (EDC)

**Table 3**  
**Soil Sample Analytical Data**  
**Metals**

AEI Project No. 298931, 1600 Park Street (Parcel A), Alameda, California

Sample ID	Date Collected	Approx. Depth (feet)	Cd mg/kg	Cr (total)* mg/kg	Pb mg/kg	Ni mg/kg	Zn mg/kg
AEI-14-7'	7/26/2011	7	-	-	<5.0	-	-
AEI-15-7'	7/26/2011	7	-	-	<5.0	-	-
AEI-16-7'	7/26/2011	7	<1.5	54	<5.0	48	27
AEI-17-8'	7/26/2011	8	-	-	<5.0	-	-
AEI-18-8'	7/26/2011	8	-	-	<5.0	-	-
AEI-19-8'	7/26/2011	8	-	-	<5.0	-	-

**Notes:**

mg/kg = milligrams per kilogram

"-" = not available

Cd = Cadmium

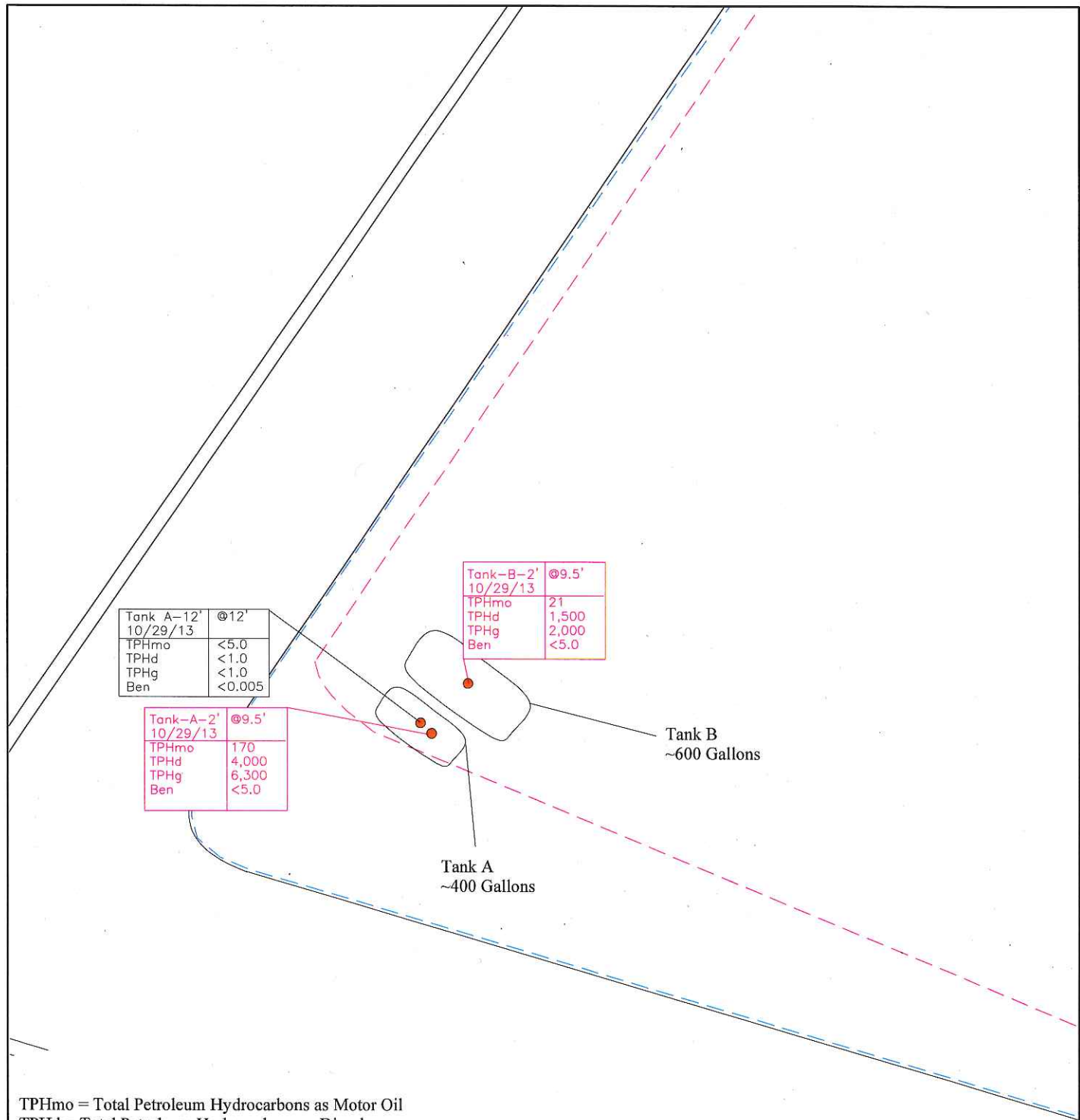
Cr = Chromium

Pb = Lead

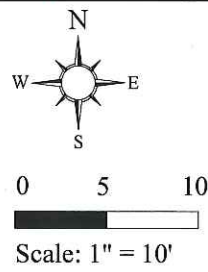
Ni = Nickel

Zn = Zinc



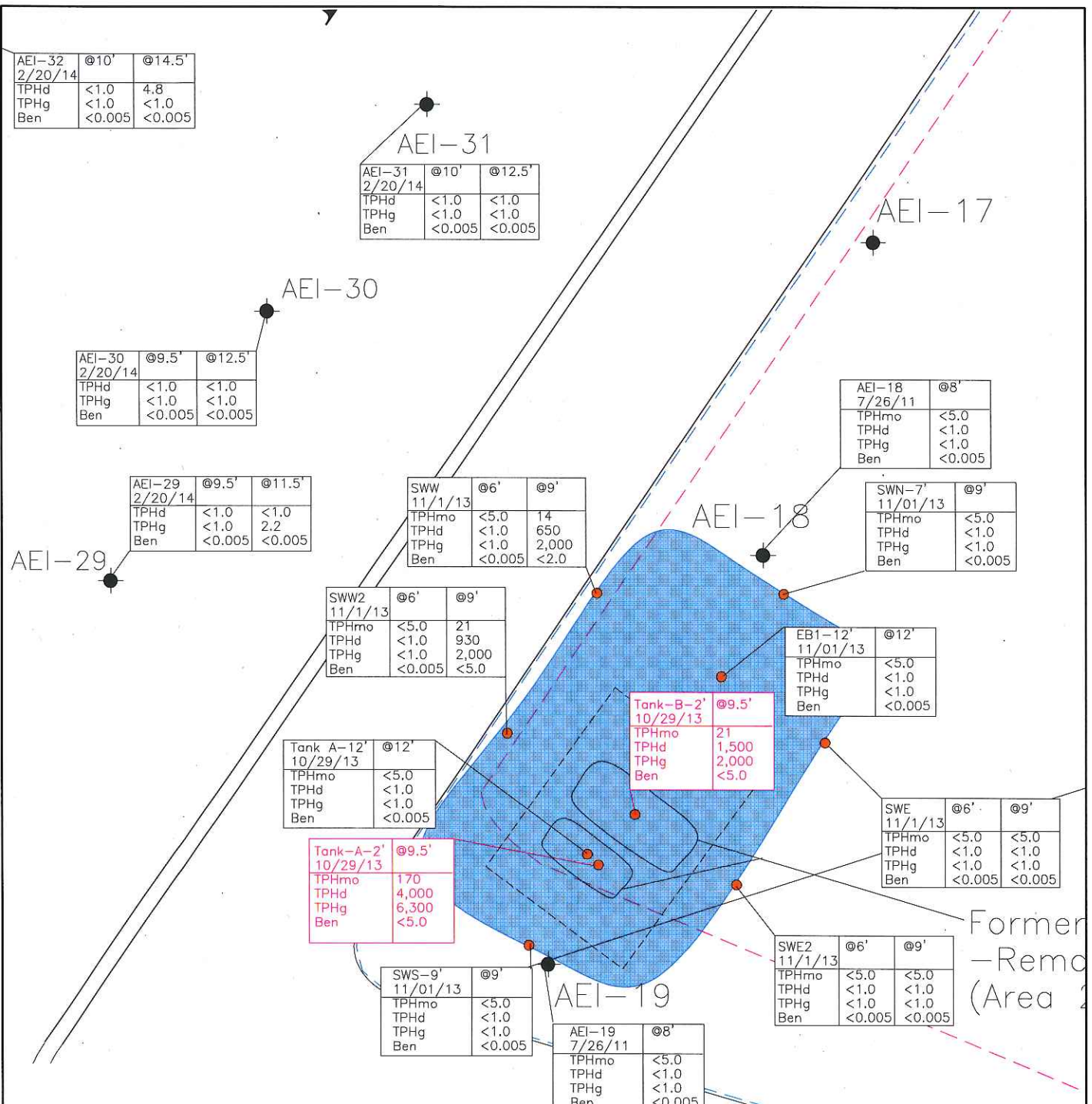


TPHmo = Total Petroleum Hydrocarbons as Motor Oil  
 TPHd = Total Petroleum Hydrocarbons as Diesel  
 TPHg = Total Petroleum Hydrocarbons as Gasoline  
 Ben = Benzene  
 All soil results in milligrams per kilogram (mg/kg)  
**Sample Excavated and Properly Disposed of.**

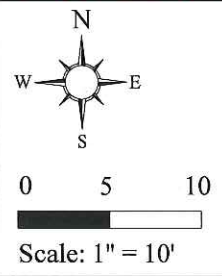


<b>LEGEND</b> Grab Soil Sample USTs (Removed 10/29/13) Property Line Proposed Buildings	DRAFTED BY JAS 3-9-12
	REVISED BY JAS 12-12-13

<b>AEI CONSULTANTS</b> 2500 CAMINO DIABLO, WALNUT CREEK	
<b>SITE PLAN</b>	
1600 PARK STREET ALAMEDA, CALIFORNIA	<b>FIGURE 2</b> PROJECT NO. 324771



TPHmo = Total Petroleum Hydrocarbons as Motor Oil  
 TPHd = Total Petroleum Hydrocarbons as Diesel  
 TPHg = Total Petroleum Hydrocarbons as Gasoline  
 Ben = Benzene  
 All soil results in milligrams per kilogram (mg/kg)  
 Sample Excavated and Properly Disposed of.



LEGEND		DRAFTED BY JAS 3-9-12 REVISED BY JAS 4-15-14	
	Excavation Extents		Grab Soil Sample
	USTs (Removed 10/29/13)		
	AEI Soil Boring (7/11)		
	Property Line		
	Proposed Buildings		

**AEI CONSULTANTS**  
2500 CAMINO DIABLO, WALNUT CREEK

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**SOIL ANALYTICAL DATA**

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1600 PARK STREET  
ALAMEDA, CALIFORNIA

**FIGURE 4**  
PROJECT NO. 324771

**Table 1**  
**Soil Sample Analytical Data - Hydrocarbons**  
**1600 Park Street, Alameda, CA**

Sample ID	Date	Depth (feet bgs)	TPHd mg/Kg	TPHg mg/Kg	TPHmo mg/Kg	MTBE mg/Kg	Benzene mg/Kg	Toluene mg/Kg	Ethylbenzene mg/Kg	Total Xylenes mg/Kg
Tank-A-2'	10/29/2013	9.5	4,000	6,300	170	<5.0	<5.0	<5.0	28	12
Tank-A-12'	10/29/2013	12.0	<1.0	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005	<0.005
Tank-B-2'	10/29/2013	9.5	1,500	2,000	21	<5.0	<5.0	<5.0	<5.0	<5.0
ESL (Shallow Soil)	-	-	500	500	2,500	0.023	0.044	2.9	3.3	2.3
ESL (Deep Soil)	-	-	530	580	5,000	0.023	0.044	2.9	3.3	2.3

**Notes:**

mg/kg = milligrams per kilogram

bgs = below ground surface

ESL (Shallow Soil) = < 3 meters bgs, Commercial Land Use, groundwater is a current or potential drinking water source. From Screening for Environmental Concerns at Sites with Contaminated

Soil and Groundwater - California RWQCB San Francisco Bay Region (Revised 2013)

ESL (Deep Soil) = > 3 meters bgs, Commercial Land Use, groundwater is a current or potential drinking water source. From Screening for Environmental Concerns at Sites with Contaminated

Soil and Groundwater - California RWQCB Bay Region (Revised 2013)

RWQCB = Region Water Quality Control Board

TPHg = total petroleum hydrocarbons as gas analyzed using EPA Method 8015B

TPHd = total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B

TPHmo = total petroleum hydrocarbon as motor oil analyzed using EPA Method 8015B

MTBE = Methyl-tert-butyl ether analyzed using EPA Method 8260B

Benzene analyzed using EPA Method 8260B

Toluene analyzed using EPA Method 8260B

Ethylbenzene analyzed using EPA Method 8260B

Total Xylenes analyzed using EPA Method 8260B

< = below method detection limit

- = not analyzed/applicable

**Bold** = Exceeds Environmental Screening Level (ESL)

**Table 2**  
**Soil Sample Analytical Data - VOCs & SVOCs**  
**1600 Park Street, Alameda, CA**

Sample ID	Date	Depth (feet bgs)	n-Butylbenzene mg/Kg	Isopropylbenzene mg/Kg	Naphthalene mg/Kg EPA Method 8260B	n-Propylbenzene mg/Kg	1,3,5-TMB mg/Kg	Remaining VOCs	Naphthalene mg/Kg	2-Methylnaphthalene mg/Kg EPA Method 8270B	Remaining SVOCs
Tank-A-2'	10/29/2013	9.5	14	8.1	36	20	8.1	<RL	19	6.0	<RL
Tank-A-12'	10/29/2013	12.0	<0.005	<0.005	<0.005	<0.005	<0.005	<RL	-	-	-
Tank-B-2'	10/29/2013	9.5	6.8	<5.0	8.2	<5.0	<5.0	<RL	<2.5	1.8	<RL
ESL (Shallow Soil)	-	-	-	-	1.2	-	-	varies	1.2	0.25	varies
ESL (Deep Soil)	-	-	-	-	1.2	-	-	varies	1.2	0.25	varies

**Notes:**

mg/kg = milligrams per kilogram

bgs= below ground surface

RL= laboratory reporting limit

ESL (Shallow Soil)= < 3 meters bgs, Commercial Land Use, groundwater is a current or potential drinking water source. From Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater - California RWQCB San Francisco Bay Region (Revised 2013)

ESL (Deep Soil)= > 3 meters bgs, Commercial Land Use, groundwater is a current or potential drinking water source. From Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater - California RWQCB Bay Region (Revised 2013)

RWQCB= Region Water Quality Control Board

1,3,5-TMB = 1,3,5- Trimethylbenzene analyzed using EPA Method 8260B

Naphthalene analyzed using EPA Method 8270B

VOCs= volatile organic compounds analyzed using EPA Method 8260B

SVOCs= semi-volatile organic compounds analyzed using EPA Method 8270B

< = below method detection limit

- = not analyzed/applicable

**Table 3**  
**Soil Sample Analytical Data - LUFT 5 Metals**  
**1600 Park Street, Alameda, CA**

Sample ID	Date	Depth (feet bgs)	Cadmium mg/Kg	Chromium mg/Kg	Lead mg/Kg	Nickel mg/Kg	Zinc mg/Kg
Tank-A-2'	10/29/2013	9.5	<0.25	37	22	34	21
Tank-B-2'	10/29/2013	9.5	<0.25	38	12	26	16
ESL (Shallow Soil)	-	-	12	-	320	150	600

**Notes:**

mg/kg = milligrams per kilogram

bgs= below ground surface

ESL (Shallow Soil)= < 3 meters bgs, Commercial Land Use, groundwater is a current or potential drinking water source. From Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater - California RWQCB San Francisco Bay Region (Revised 2013)

RWQCB= Region Water Quality Control Board

Cadmium analyzed using EPA Method 6020

Chromium analyzed using EPA Method 6020

Lead analyzed using EPA Method 6020

Nickel analyzed using EPA Method 6020

Zinc analyzed using EPA Method 6020

< = below reporting limit

- = not analyzed/applicable

**Table 1**  
**Soil Sample Analytical Data - TPH and MBTEX**  
 AEI Project No. 324771, 1600 Park Street, Alameda, California

Sample ID	Date Collected	Approx. Depth (feet)	TPH-g (mg/kg)	TPH-d* (mg/kg)	TPH-mo* (mg/kg)	HEMSGT EPA Method SW8260/8015B/m	MTBE (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)
Tank-A-12'	10/29/2013	12'	<1.0	<1.0	<5.0	-	<0.005	<0.005	<0.005	<0.005	<0.005
EB1-12'	11/1/2013	12'	<1.0	<1.0	<5.0	-	<0.005	<0.005	<0.005	<0.005	<0.005
SWN-7'	11/1/2013	9'	<1.0	<1.0	<5.0	-	<0.005	<0.005	<0.005	<0.005	<0.005
SWW-9'	11/1/2013	9'	2,000	650	14	-	<2.0	<2.0	<2.0	4.6	9.2
SWW-6'	11/1/2013	6'	<1.0	<1.0	<5.0	-	<0.005	<0.005	<0.005	<0.005	<0.005
SWE-9'	11/1/2013	9'	<1.0	<1.0	<5.0	-	<0.005	<0.005	<0.005	<0.005	<0.005
SWE-6'	11/1/2013	6'	<1.0	<1.0	<5.0	-	<0.005	<0.005	<0.005	<0.005	<0.005
SWW2-9'	11/1/2013	9'	2,000	930	21	-	<5.0	<5.0	<5.0	<5.0	<5.0
SWW2-6'	11/1/2013	6'	<1.0	<1.0	<5.0	-	<0.005	<0.005	<0.005	<0.005	<0.005
SWE2-9'	11/1/2013	9'	<1.0	<1.0	<5.0	-	<0.005	<0.005	<0.005	<0.005	<0.005
SWE2-6'	11/1/2013	6'	<1.0	<1.0	<5.0	-	<0.005	<0.005	<0.005	<0.005	<0.005
SWS-9'	11/1/2013	9'	<1.0	1.1	<5.0	-	<0.005	<0.005	<0.005	<0.005	<0.005
ESL (Shallow Soil)	-	-	500	500	2,500	-	0.023	0.044	2.9	3.3	2.3
ESL (Deep Soil)	-	-	580	530	5,000	-	0.023	0.044	2.9	3.3	2.3

**October / November 2013 Excavation Activities**

mg/kg = milligrams per kilogram (equivalent to parts per million)  
 TPH = total petroleum hydrocarbons MTBE = methyl tertiary butyl ethyl  
 TPH-g = TPH as gasoline  
 TPH-d = TPH as diesel  
 TPH-mo = TPH as motor oil  
 MTBE = methyl tertiary butyl ethyl  
 HEMSGT = Hexane Extractable Material with Silica Gel Treatment  
 ESL (Shallow Soil) = < 3 meters bgs, Commercial Land Use, groundwater is a current or potential drinking water source. From Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater - California Regional Water Quality Control Board - San Francisco Bay Region (Revised 2013)  
 ESL (Deep Soil) = > 3 meters bgs, Commercial Land Use, groundwater is a current or potential drinking water source. From Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater - California Regional Water Quality Control Board - San Francisco Bay Region (Revised 2013)

"<" = less than  
 "n" = with silica gel cleanup  
 "-" = not available



**Table 2**  
**Soil Sample Analytical Data - VOCs and SVOCs**  
 AEI Project No. 324771, 1600 Park Street, Alameda, California

Sample ID	Date Collected	Approx. Depth (feet)	n-Butyl-benzene (mg/kg)	Naphthalene (mg/kg)	1,2,4-Trimethyl benzene (mg/kg)	1,3,5-Trimethyl benzene (mg/kg)	n-Propyl benzene (mg/kg)	Isopropyl-benzene (mg/kg)	Remaining VOCs	Naphthalene (mg/kg)	2-Methyl-naphthalene (mg/kg)	Remaining SVOCs
<b>October 2013 Excavation Activities</b>												
Tank-A-12'	10/29/2013	12'	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<RL	-	-	-
EBI-12'	11/1/2013	12'	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<RL	-	-	-
SWN-7'	11/1/2013	9'	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<RL	-	-	-
SWW-9'	11/1/2013	9'	3.6	5.8	36	6.8	4.0	<2.0	<RL	-	-	-
SWW-6'	11/1/2013	6'	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<RL	-	-	-
SWE-9'	11/1/2013	9'	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<RL	-	-	-
SWE-6'	11/1/2013	6'	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<RL	-	-	-
SWW2-9'	11/1/2013	9'	<5.0	6.2	<5.0	<5.0	<5.0	<5.0	<RL	-	-	-
SWW2-6'	11/1/2013	6'	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<RL	-	-	-
SWE2-9'	11/1/2013	9'	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<RL	-	-	-
SWE2-6'	11/1/2013	6'	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<RL	-	-	-
SWS-9'	11/1/2013	9'	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<RL	-	-	-
ESL (Shallow Soil)	-	-	-	1.2	-	-	-	-	-	-	0.25	-
ESL (Deep Soil)	-	-	-	1.2	-	-	-	-	-	-	0.25	-

mg/kg = milligrams per kilogram (equivalent to parts per million)

VOCs = volatile organic compounds

"<" = less than

RL = reporting limit - see laboratory reports for sample specific dilution factors

ESL (Shallow Soil) = < 3 meters bgs, Commercial Land Use, groundwater is a current or potential drinking water source. From Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater - California Regional Water Quality Control Board - San Francisco Bay Region (Revised 2013)

ESL (Deep Soil) = > 3 meters bgs, Commercial Land Use, groundwater is a current or potential drinking water source. From Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater - California Regional Water Quality Control Board - San Francisco Bay Region (Revised 2013)

**Table 3**  
**Soil Sample Analytical Data - Metals**  
 AEI Project No. 324771, 1600 Park Street, Alameda, California

Sample ID	Date Collected	Approx. Depth (feet)	Cd mg/kg	Cr (total) mg/kg	Pb mg/kg	Ni mg/kg	Zn mg/kg
ESL (Shallow Soil)	-	-	12	-	320	150	600

**Notes:**

- mg/kg = milligrams per kilogram
- "-" = not available
- Cd = Cadmium
- Cr = Chromium
- Pb = Lead
- Ni = Nickel
- Zn = Zinc

ESL (Shallow Soil) = < 3 meters bgs, Commercial Land Use, groundwater is a current or potential drinking water source. From Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater - California Regional Water Quality Control Board - San Francisco Bay Region (Revised 2013)

# ATTACHMENT 5



**LEGEND**

	<p>SUBJECT PROPERTY BOUNDARY</p>
	<p>EXCAVATION EXTENT</p>
	<p>SOIL SAMPLE</p>
	<p>GROUNDWATER SAMPLE</p>

0'      20'      40'  
 APPROX. SCALE: 1 in = 40 ft

**SAMPLE LOCATION PLAN**

1630 PARK STREET ALAMEDA, CALIFORNIA	
<b>FIGURE 3</b> JOB NO: 298931	

Sample Analytical Data Tables  
1630 Park Street, Alameda, CA

TABLE 1: Soil Sample Analytical Data - Petroleum Hydrocarbons and Metals

Sample ID	Date	Depth	Method SW8021B/8015Bm																
			TPH-g	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes (mg/kg)	TPH-d	POG	Cadmium	Chromium	Lead	Nickel	Zinc	Lead-STLC	Lead-TCLP (mg/L)		
Btm1	11/22/2011	13'	ND<1.0	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<1.5	44.0	13.0	23	27	-	-
Btm2	11/22/2011	13'	ND<1.0	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<1.5	49	ND<5.0	44	30	-	-
Btm3	11/22/2011	11'	ND<1.0	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<1.5	57	12	46	35	-	-
Btm4	11/22/2011	11'	ND<1.0	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<1.5	58	ND<5.0	50	33	-	-
D1	11/22/2011	3.5'	ND<1.0	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<1.5	49	ND<5.0	25	19	-	-
D2	11/22/2011	3.5'	ND<1.0	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<1.5	53	ND<5.0	18	16	-	-
WO-9**	11/22/2011	9'	6.3	-	-	-	-	-	-	-	240	460	ND<1.5	87	13	55	47	-	-
WO-11'	11/22/2011	11'	ND<1.0	-	-	-	-	-	-	-	ND<1.0	ND<50	ND<1.5	66	ND<5.0	47	32	-	-
STRP(A/B/C/D)	11/22/2011	-	ND<1.0	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	-	-	ND<1.5	53	34	36	54	-	-
STKP2(A/B/C/D)	11/22/2011	-	ND<1.0	-	-	-	-	-	-	-	150	370	ND<1.5	41	130	23	110	5.5	ND<0.2
ESL	-	-	83	0.023	0.044	2.9	3.3	2.3	83	-	-	-	7.4	2500	750	150.0	600	150.0	600

TABLE 2: Soil Sample Analytical Data - Volatile Organic Compounds (VOCs)

Sample ID	Date	Method SW8260B		
		PCE	cis12-DCA	124-TMB
STKP2(A/B/C/D)	11/22/2011	0.016	ND<0.005	0.0056
WO-9**	11/22/2011	ND<0.005	0.0085	0.0071
WO-11'	11/22/2011	ND<0.005	ND<0.005	ND<0.005
ESL	-	0.70	0.19	-

TABLE 3: Groundwater Sample Analytical Data - Petroleum Hydrocarbons and Metals

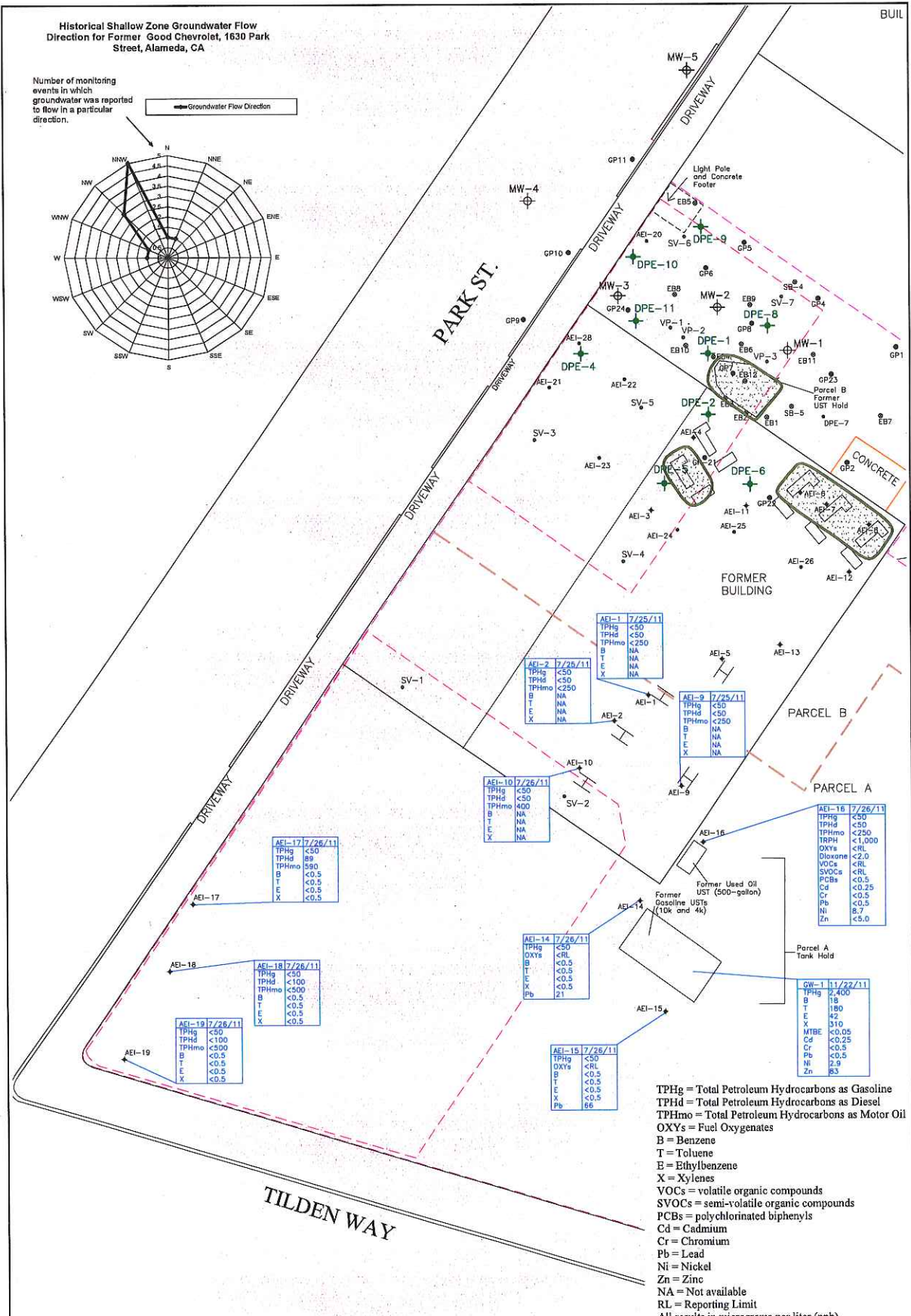
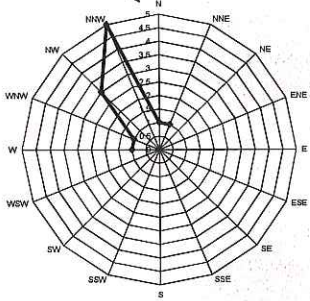
Sample ID	Date	Depth	Method SW8021B/8015Bm										
			TPH-g	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes (µg/L)	Cadmium	Chromium	Lead	Nickel	Zinc
GW-1	11/22/2011	13'	2400	ND<0.05	18	180	42	310	ND<0.25	ND<0.5	ND<0.5	2.9	83
ESL	-	-	100	5	1	40	30	20	0.25	50	2.5	8.2	81

mg/kg = milligrams per kilogram  
µg/L = micrograms per liter  
TPH-g = total petroleum hydrocarbons as gasoline  
TPH-d = total petroleum hydrocarbons as diesel  
ND = non-detect, below reporting limit  
124-TMB = 1,2,4-Trimethylbenzene  
PCE = Tetrachloroethene  
cis12-DCA = cis-1,2-Dichloroethene  
STLC = Soluble Threshold Limit Concentration (extraction method required for landfill profiling)  
TCLP = Toxicity Characteristic Leaching Procedure (extraction method required for landfill profiling)  
ESL = Environmental Screening Levels for commercial/industrial area where groundwater is a potential drinking source, set by SF Bay Regional Water Quality Control Board  
\*\* = denotes sample area which was removed in additional excavation activities performed on 12/2/2011



**Historical Shallow Zone Groundwater Flow Direction for Former Good Chevrolet, 1630 Park Street, Alameda, CA**

Number of monitoring events in which groundwater was reported to flow in a particular direction.



AEI-17	7/26/11
TPHg	<50
TPHd	89
TPHmo	590
B	<0.5
T	<0.5
E	<0.5
X	<0.5

AEI-18	7/26/11
TPHg	<50
TPHd	<100
TPHmo	<500
B	<0.5
T	<0.5
E	<0.5
X	<0.5

AEI-19	7/26/11
TPHg	<50
TPHd	<100
TPHmo	<500
B	<0.5
T	<0.5
E	<0.5
X	<0.5

AEI-2	7/26/11
TPHg	<50
TPHd	<50
TPHmo	<250
B	NA
T	NA
E	NA
X	NA

AEI-10	7/26/11
TPHg	<50
TPHd	<50
TPHmo	400
B	NA
T	NA
E	NA
X	NA

AEI-14	7/26/11
TPHg	<50
TPHd	<50
TPHmo	<50
B	<0.5
T	<0.5
E	<0.5
X	<0.5
Pb	21

AEI-15	7/26/11
TPHg	<50
TPHd	<50
TPHmo	<50
B	<0.5
T	<0.5
E	<0.5
X	<0.5
Pb	86

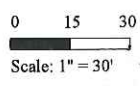
AEI-1	7/25/11
TPHg	<50
TPHd	<50
TPHmo	<250
B	NA
T	NA
E	NA
X	NA

AEI-9	7/25/11
TPHg	<50
TPHd	<50
TPHmo	<250
B	NA
T	NA
E	NA
X	NA

AEI-16	7/26/11
TPHg	<50
TPHd	<50
TPHmo	<250
TPH	<1,000
OXYs	<RL
Dioxane	<2.0
VOCs	<RL
SVOCs	<RL
PCBs	<0.5
Cd	<0.25
Cr	<0.5
Pb	<0.5
Ni	8.7
Zn	<5.0

GW-1	11/22/11
TPHg	2,400
B	18
T	180
E	42
X	310
MTBE	<0.05
Cd	<0.25
Cr	<0.5
Pb	<0.5
Ni	2.9
Zn	83

TPHg = Total Petroleum Hydrocarbons as Gasoline  
 TPHd = Total Petroleum Hydrocarbons as Diesel  
 TPHmo = Total Petroleum Hydrocarbons as Motor Oil  
 OXYs = Fuel Oxygenates  
 B = Benzene  
 T = Toluene  
 E = Ethylbenzene  
 X = Xylenes  
 VOCs = volatile organic compounds  
 SVOCs = semi-volatile organic compounds  
 PCBs = polychlorinated biphenyls  
 Cd = Cadmium  
 Cr = Chromium  
 Pb = Lead  
 Ni = Nickel  
 Zn = Zinc  
 NA = Not available  
 RL = Reporting Limit  
 All results in micrograms per liter (ppb)



LEGEND	
	Remediation Well (12/11 and 1/12)
	Groundwater Monitoring Well
	AEI Soil Boring (1/12)
	AEI Soil Boring (7/11)
	Parcel Split
	Property Line
	Former Hydraulic Lift
	Former Hydraulic Lift
	Soil Boring (4/08)
	Soil Boring (1/97)
	Vapor Probe
	Air Sparge Well
	Proposed Buildings

DRAFTED BY JAS 3-9-12  
 REVISED BY JAS 3-24-13

**AEI CONSULTANTS**  
 2500 CAMINO DIABLO, WALNUT CREEK  
**GROUNDWATER ANALYTICAL MAP-PARCEL A**  
 1600 PARK STREET ALAMEDA, CALIFORNIA  
**FIGURE 4**  
 PROJECT NO. 298931

**Table 5**  
**Groundwater Analytical Data - Grab Samples**  
**VOCs, Fuel Oxygenates, SVOCs, and PCBs**  
 AEI Project No. 298931, 1600 Park Street (Parcel A), Alameda, California

Sample ID	Date Collected	1,4-Dioxane (µg/L)	TBA (µg/L)	EDB (µg/L)	EDC (µg/L) EPA Method SW8260B	MTBE (µg/L)	Fuel Oxygenates (µg/L)	All Target VOCs (µg/L)	All Target SVOCs (µg/L) EPA Method 8270	All Target PCBs (µg/L) EPA Method SW8082
AEI-14-W	7/26/2011	-	<2.0	<0.5	<0.5	<0.5	<MDL	-	-	-
AEI-15-W	7/26/2011	-	<2.0	<0.5	<0.5	<0.5	<MDL	-	-	-
AEI-16-W	7/26/2011	<2.0	<2.0	<0.5	<0.5	<0.5	<MDL	<MDL	<MDL	<0.5

mg/kg = milligrams per kilogram (equivalent to parts per million)

MDL = method detection limit

VOCs = volatile organic compounds

SVOCs = semi-volatile organic compounds

PCBs = polychlorinated biphenyls

TBA = t-butyl alcohol

EDB = 1,2-dibromomethane

EDC = 1,2-dichloroethane

MTBE = methyl tert-butyl ether

"-" = not available

"<" = less than

"^" = fuel oxygenates tert-amyl methyl ether (TAME),  
 1,2-dichloroethane (1,2-DCA), diisopropyl ether (DIPE), methanol,  
 ethanol, and ethyl tert-butyl ether (ETBE)

**Table 6**  
**Grab Groundwater Sample Analytical Data**  
**Metals**

AEI Project No. 298931, 1600 Park Street (Parcel A), Alameda, California

Sample ID	Date Collected	Cd µg/L	Cr (total) µg/L	Pb µg/L EPA Method E200.8	Ni µg/L	Zn µg/L
AEI-14-W*	7/26/2011	-	-	21	-	-
AEI-15-W*	7/26/2011	-	-	66	-	-
AEI-16-W**	7/26/2011	<0.25	<0.5	<0.5	8.7	<5.0

**Notes:**

µg/L = micrograms per liter

"\*" = total

"\*\*" = dissolved

Cd = Cadmium

Cr = Chromium

Pb = Lead

Ni = Nickel

Zn = Zinc

Table 4

**Groundwater Analytical Data - Grab Samples  
TPH, MBTEX and TRPH**

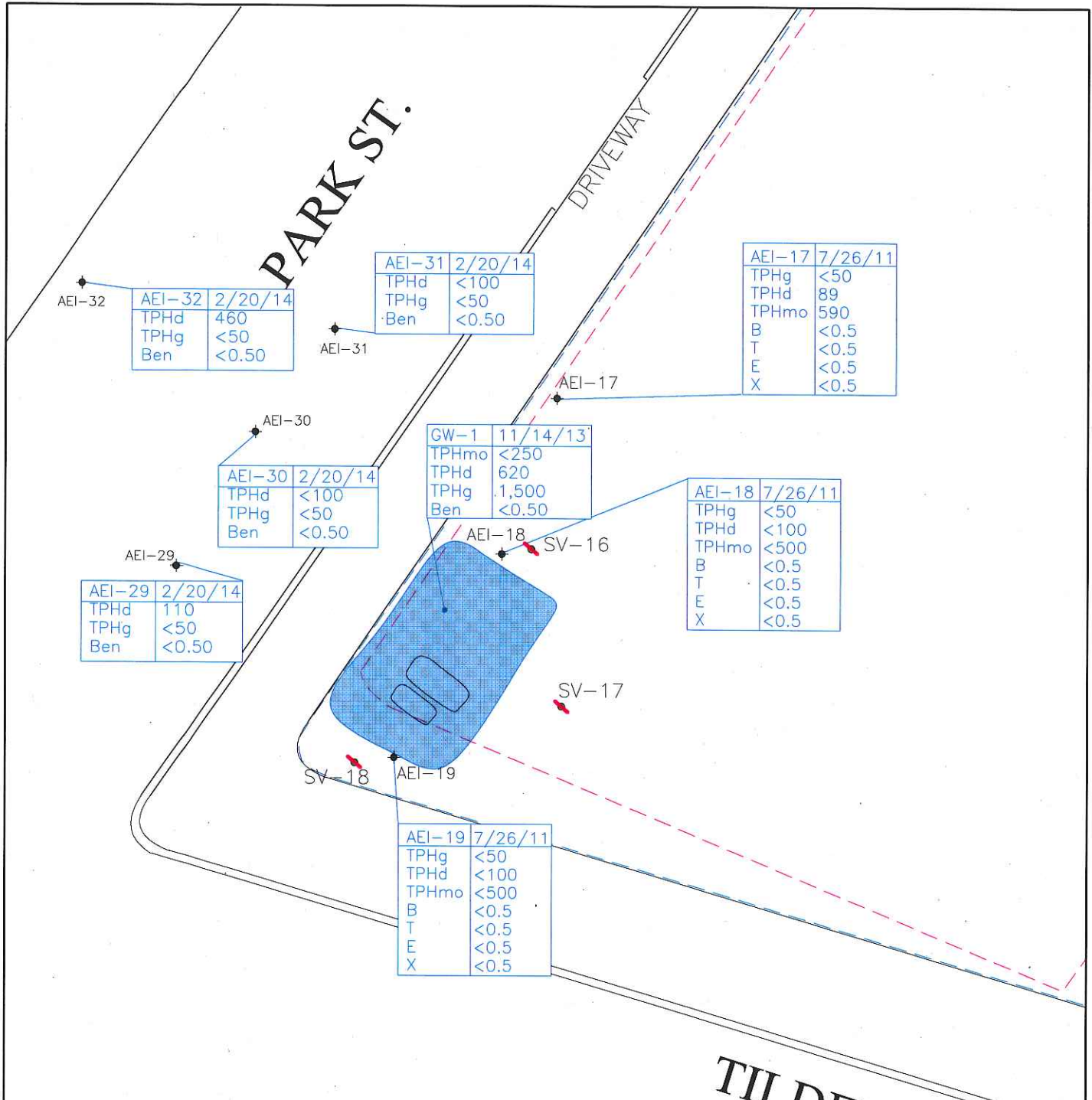
AEI Project No. 298931, 1600 Park Street (Parcel A), Alameda, California

Sample ID	Date Collected	TPH-g (µg/L)	TPH-d* (µg/L)	TPH-mo* (µg/L)	MTBE (µg/L) EPA Method SW8021B/8015Bm	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	TRPH (µg/L) EPA Method E418.1
AEI-1-W	7/25/2011	<50	<50	<250	-	-	-	-	-	-
AEI-2-W	7/25/2011	<50	<50	<250	-	-	-	-	-	-
AEI-9-W	7/25/2011	<50	<50	<250	-	-	-	-	-	-
AEI-10-W	7/26/2011	<50	<50	400	-	-	-	-	-	-
AEI-14-W	7/26/2011	<50	-	-	<5.0	<0.5	<0.5	<0.5	<0.5	-
AEI-15-W	7/26/2011	<50	-	-	<5.0	<0.5	<0.5	<0.5	<0.5	-
AEI-16-W	7/26/2011	<50	<50	<250	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
AEI-17-W	7/26/2011	<50	89	590	<5.0	<0.5	<0.5	<0.5	<0.5	-
AEI-18-W	7/26/2011	<50	<100	<500	<5.0	<0.5	<0.5	<0.5	<0.5	-
AEI-19-W	7/26/2011	<50	<100	<500	<5.0	<0.5	<0.5	<0.5	<0.5	-

µg/L = micrograms per liter  
 TPH = total petroleum hydrocarbons  
 TPH-g = TPH as gasoline  
 TPH-d = TPH as diesel  
 TPH-mo = TPH as motor oil  
 MTBE = methyl tertiary butyl ether  
 "\*" = with silica gel cleanup  
 "-" = not available

"<" = less than  
 MDL = method detection limit  
 TRPH = total recoverable petroleum hydrocarbons  
 MTBE and BTEX analysis for AEI-16-W performed by EPA Method SW8260B





AEI-32

AEI-32	2/20/14
TPHd	460
TPHg	<50
Ben	<0.50

AEI-31

AEI-31	2/20/14
TPHd	<100
TPHg	<50
Ben	<0.50

AEI-17

AEI-17	7/26/11
TPHg	<50
TPHd	89
TPHmo	590
B	<0.5
T	<0.5
E	<0.5
X	<0.5

AEI-30

AEI-30	2/20/14
TPHd	<100
TPHg	<50
Ben	<0.50

GW-1

GW-1	11/14/13
TPHmo	<250
TPHd	620
TPHg	1,500
Ben	<0.50

AEI-18

AEI-18	7/26/11
TPHg	<50
TPHd	<100
TPHmo	<500
B	<0.5
T	<0.5
E	<0.5
X	<0.5

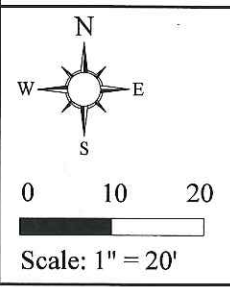
AEI-29

AEI-29	2/20/14
TPHd	110
TPHg	<50
Ben	<0.50

AEI-19

AEI-19	7/26/11
TPHg	<50
TPHd	<100
TPHmo	<500
B	<0.5
T	<0.5
E	<0.5
X	<0.5

TPHmo = Total Petroleum Hydrocarbons as Motor Oil  
 TPHd = Total Petroleum Hydrocarbons as Diesel  
 TPHg = Total Petroleum Hydrocarbons as Gasoline  
 Ben = Benzene  
 All water results in micrograms per liter (ug/L)



<b>LEGEND</b> 2013 Excavation Extents USTs (Removed 10/29/13) AEI Soil Boring Property Line Proposed Buildings	DRAFTED BY JAS 3-9-12 REVISED BY JAS 3-12-14
	Former Soil Vapor Probe

**AEI CONSULTANTS**  
 2500 CAMINO DIABLO, WALNUT CREEK

**GROUNDWATER ANALYTICAL DATA**

1600 PARK STREET  
 ALAMEDA, CALIFORNIA

**FIGURE 5**  
 PROJECT NO. 324771

**Table 5**  
**Groundwater Analytical Data**  
 AEI Project No. 324771, 1600 Park Street, Alameda, California

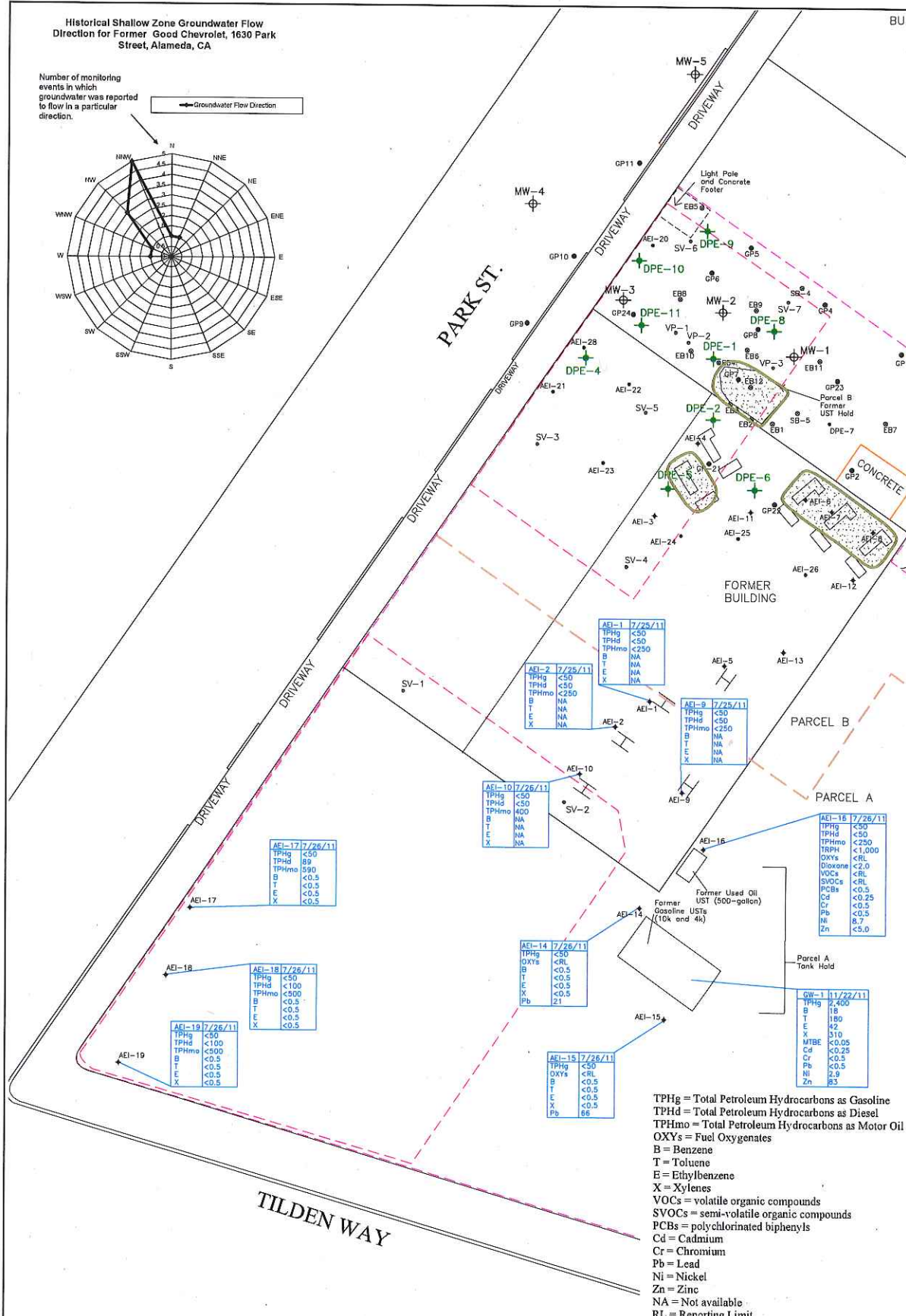
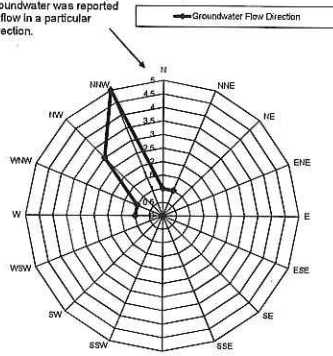
Sample ID	Date Collected	TPH-g (µg/L)	TPH-d* (µg/L)	TPH-mo* (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Acetone (µg/L) EPA Method SW8260B/8015Bm	2-Butanone (µg/L)	n-Butyl Alcohol (µg/L)	sec-Butyl benzene (µg/L)	4-Isopropyl-toluene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	1,3,5-Trimethylbenzene (µg/L)	Remaining VOCs
GW-1	11/4/2013	1,500	620	<250	<0.50	<0.50	0.93	13	10	4.8	2.7	0.65	0.98	2.3	15	<RL
ESLS - DW	-	100	100	100	1.0	40	30	20	1,500	-	-	-	-	-	-	-

µg/L = micrograms per liter  
 TPH = total petroleum hydrocarbons  
 TPH-g = TPH as gasoline  
 TPH-d = TPH as diesel  
 TPH-mo = TPH as motor oil  
 VOCs = volatile organic compounds  
 RL = reporting limit  
 \*SL\* = with silica gel cleanup  
 "n" = not available  
 "<" = less than  
 ESL = Environmental Screening Levels, Table F-1a, San Francisco Regional Water Quality Control Board (Potential Drinking Water Aquifer), Revised May 2013

# ATTACHMENT 6

**Historical Shallow Zone Groundwater Flow Direction for Former Good Chevrolet, 1630 Park Street, Alameda, CA**

Number of monitoring events in which groundwater was reported to flow in a particular direction.



AEI-1 7/25/11 TPHg <50 TPHd <50 TPHmo <250 B NA T NA E NA X NA	AEI-2 7/25/11 TPHg <50 TPHd <50 TPHmo <250 B NA T NA E NA X NA	AEI-9 7/25/11 TPHg <50 TPHd <50 TPHmo <250 B NA T NA E NA X NA	AEI-10 7/26/11 TPHg <50 TPHd <50 TPHmo 400 B NA T NA E NA X NA	AEI-14 7/26/11 TPHg <50 OXys <RL B <0.5 T <0.5 E <0.5 X <0.5 Pb Z1	AEI-15 7/26/11 TPHg <50 OXys <RL B <0.5 T <0.5 E <0.5 X <0.5 Pb 66	AEI-17 7/26/11 TPHg <50 TPHd 89 TPHmo 590 B <0.5 T <0.5 E <0.5 X <0.5	AEI-18 7/26/11 TPHg <50 TPHd <100 TPHmo <500 B <0.5 T <0.5 E <0.5 X <0.5	AEI-19 7/26/11 TPHg <50 TPHd <100 TPHmo <500 B <0.5 T <0.5 E <0.5 X <0.5	AEI-16 7/26/11 TPHg <50 TPHd <50 TPHmo <250 OXys <RL Dioxane <2.0 VOCs <RL SVOCs <RL PCBs <0.5 Cd <0.25 Cr <0.5 Pb <0.5 Ni 8.7 Zn <5.0	GW-1 11/22/11 TPHg 2,400 B 15 T 180 E 42 X 310 MTBE <0.05 Cd <0.25 Cr <0.5 Pb <0.5 Ni 2.9 Zn 83
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TPHg = Total Petroleum Hydrocarbons as Gasoline  
 TPHd = Total Petroleum Hydrocarbons as Diesel  
 TPHmo = Total Petroleum Hydrocarbons as Motor Oil  
 OXys = Fuel Oxygenates  
 B = Benzene  
 T = Toluene  
 E = Ethylbenzene  
 X = Xylenes  
 VOCs = volatile organic compounds  
 SVOCs = semi-volatile organic compounds  
 PCBs = polychlorinated biphenyls  
 Cd = Cadmium  
 Cr = Chromium  
 Pb = Lead  
 Ni = Nickel  
 Zn = Zinc  
 NA = Not available  
 RL = Reporting Limit  
 All results in micrograms per liter (ppb)

<p>0 15 30 Scale: 1" = 30'</p>	<p><b>LEGEND</b></p> <ul style="list-style-type: none"> <li>Remediation Well (12/11 and 1/12)</li> <li>Groundwater Monitoring Well</li> <li>AEI Soil Boring (1/12)</li> <li>AEI Soil Boring (7/11)</li> <li>Parcel Split</li> <li>Property Line</li> </ul>	<p>DRAFTED BY JAS 3-9-12                  REVISED BY JAS 3-24-13</p> <ul style="list-style-type: none"> <li>Former Hydraulic Lift</li> <li>Former Hydraulic Lift</li> <li>Soil Boring (4/08)</li> <li>Soil Boring (1/97)</li> <li>Vapor Probe</li> <li>Air Sparge Well</li> <li>Proposed Buildings</li> </ul>	<p><b>AEI CONSULTANTS</b>                  2500 CAMINO DIABLO, WALNUT CREEK</p> <p><b>GROUNDWATER ANALYTICAL MAP-PARCEL A</b></p>	
			<p>1600 PARK STREET                  ALAMEDA, CALIFORNIA</p>	<p><b>FIGURE 4</b>                  PROJECT NO. 298931</p>



Table 7

Soil Vapor Analytical Data

AEI Project No. 298931, 1600 Park Street (Parcel A), Alameda, CA

Sample ID	Date	Sample Depth (feet bgs)	TPH-g ( $\mu\text{g}/\text{m}^3$ )	Benzene ( $\mu\text{g}/\text{m}^3$ )	Toluene ( $\mu\text{g}/\text{m}^3$ )	Ethylbenzene ( $\mu\text{g}/\text{m}^3$ )	Xylenes ( $\mu\text{g}/\text{m}^3$ )	Naphthalene ( $\mu\text{g}/\text{m}^3$ )	CO2 ( $\mu\text{g}/\text{L}$ )	Methane ( $\mu\text{g}/\text{L}$ )	Oxygen ( $\mu\text{g}/\text{L}$ )	Helium maintained in Shroud <sup>1</sup> %	Laboratory Reported Helium %	Corrected Helium <sup>2</sup> %
SV-1	4/16/2013	5.0	<2,500	<25	<25	<25	<25	<25	3,400	<2.0	170,000	18.5	0.017	0.092
SV-2	4/16/2013	5.0	<2,500	<25	<25	<25	<25	<25	4,600	2	170,000	21.9	0.018	0.082
Trip Blank	4/16/2013	NA	<2,500	<25	<25	<25	<25	<25	NA	NA	NA	NA	<0.005	<0.005
ESL	--		3,100,000	420	1,300,000	4,900	440,000	360	NA	NA	NA	NA	NA	NA

TPH-g= total petroleum hydrocarbons as gasoline

bgs = below ground surface

$\mu\text{g}/\text{m}^3$  = micrograms per cubic meter

$\mu\text{g}/\text{L}$  = micrograms per liter

Helium used as leak check compound.

NA = Not analyzed or applicable

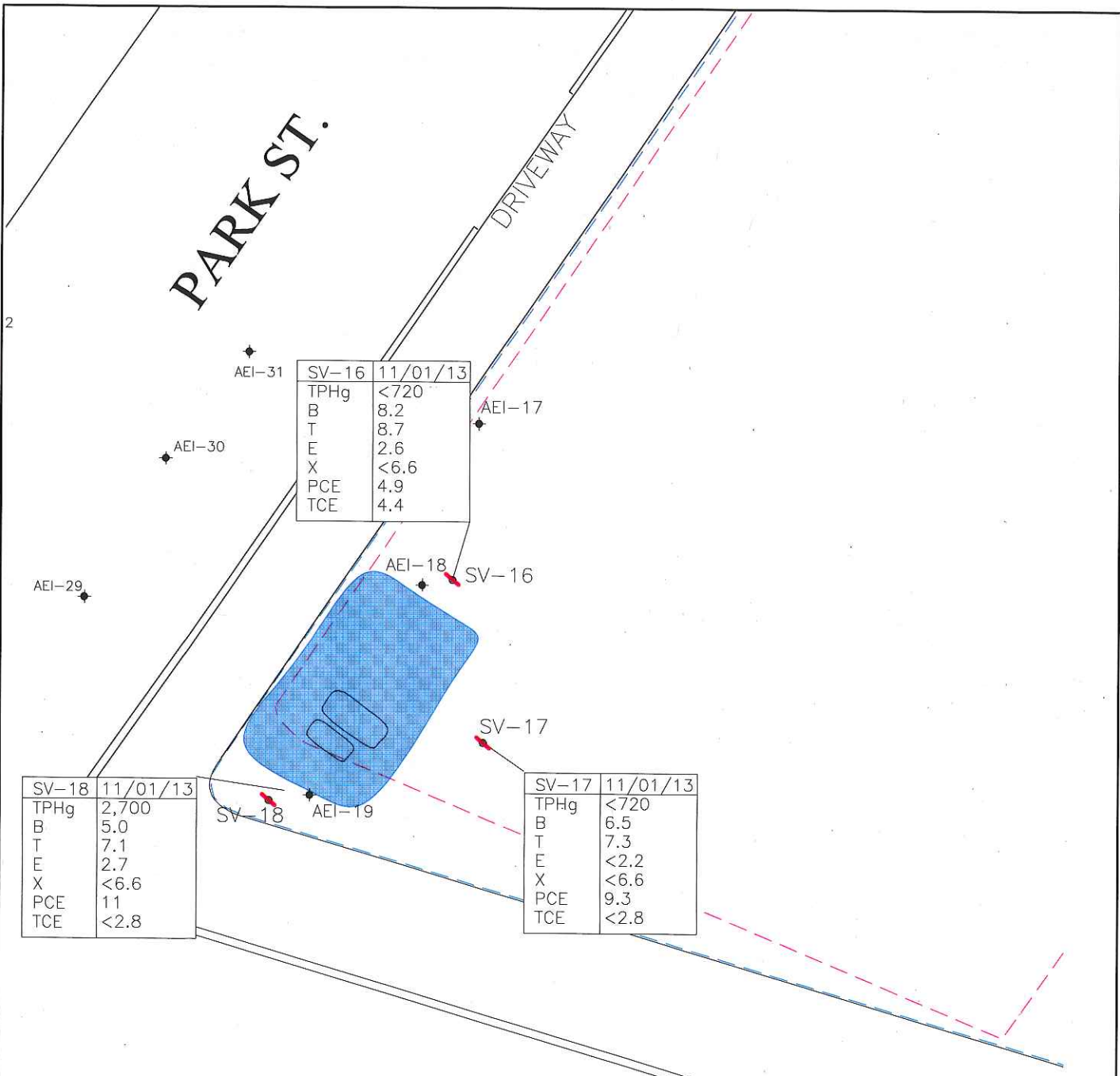
ESL = Environmental Screening Levels, Table E-2, San Francisco Regional Water Quality Control Board (Shallow Soil Gas- Lowest Commercial), Revised February 2013

TPH-g & VOCs analyzed using EPA Method TO17

Atmospheric gases analyzed using Method ASTM D1946-90

<sup>1</sup> = Lowest measured helium percentage recorded during sampling (most conservative number)

<sup>2</sup> = Helium corrected to represent % of leak at 100% concentration in shroud. DTSC recognizes <5% as acceptable.

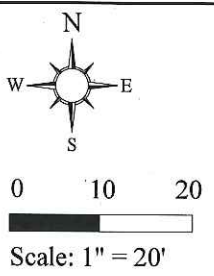


SV-16	11/01/13
TPHg	<720
B	8.2
T	8.7
E	2.6
X	<6.6
PCE	4.9
TCE	4.4

SV-18	11/01/13
TPHg	2,700
B	5.0
T	7.1
E	2.7
X	<6.6
PCE	11
TCE	<2.8

SV-17	11/01/13
TPHg	<720
B	6.5
T	7.3
E	<2.2
X	<6.6
PCE	9.3
TCE	<2.8

TPHg = Total Petroleum Hydrocarbons as Gasoline  
 B = Benzene  
 T = Toluene  
 E = Ethylbenzene  
 X = Xylenes  
 PCE = Tetrachloroethene  
 TCE = Trichloroethene  
 All results in micrograms per cubic meter



**LEGEND**

- Excavation Extents
- USTs (Removed 10/29/13)
- AEI Soil Boring (7/11)
- Property Line
- Proposed Buildings
- Former Soil Vapor Probe

DRAFTED BY JAS 3-9-12  
 REVISED BY JAS 10-29-13

**AEI CONSULTANTS**  
 2500 CAMINO DIABLO, WALNUT CREEK

**SOIL VAPOR ANALYTICAL DATA**

1600 PARK STREET  
 ALAMEDA, CALIFORNIA

**FIGURE 6**  
 PROJECT NO. 324771

Table 4

Soil Vapor Analytical Data

AEI Project No. 324771, 16100 Park Street, Alameda, CA

Sample ID	Date	Analyzed using Method TO15													Analyzed using ASTM D 1946-90				
		TPH-g (µg/m <sup>3</sup> )	Benzene (µg/m <sup>3</sup> )	Toluene (µg/m <sup>3</sup> )	Ethyl-benzene (µg/m <sup>3</sup> )	PCE (µg/m <sup>3</sup> )	TCE (µg/m <sup>3</sup> )	4-Ethyltoluene (µg/m <sup>3</sup> )	1,2,4-Trimethylbenzene (µg/m <sup>3</sup> )	Tetrahydrofuran (µg/m <sup>3</sup> )	Carbon Disulfide (µg/m <sup>3</sup> )	Acetone (µg/m <sup>3</sup> )	1,3,5-Trimethylbenzene (µg/m <sup>3</sup> )	Other VOCs (µg/m <sup>3</sup> )	Helium* (%)	CO <sub>2</sub> (µL/L)	Methane (µL/L)	Oxygen (µL/L)	
SV-16	11/1/13	<720	8.2	8.7	2.6	4.9	4.4	<2.5	3.8	13	3.4	<60	<2.5	<RL	0.057	2,000	5.1	170,000	
SV-17	11/1/13	<720	6.5	7.3	<2.2	9.3	<2.8	<2.5	3.2	<1.5	1.9	<60	<2.5	<RL	0.018	2,500	3.3	170,000	
SV-18	11/1/13	2,700	5.0	7.1	2.7	11	<2.8	3.6	8.9	<1.5	<1.6	110	3.0	<RL	0.012	1,200	<1.0	170,000	
ESL		1,200,000	420	1,300,000	4,900	2,100	3,000	--	--	--	--	140,000,000	--	NA	NA	NA	NA	NA	

Notes:

- µg/m<sup>3</sup> = micrograms per cubic meter (ppbv)
- µL/L = microliters per liter
- \* = Leak check compound; <5% of Tracer Concentration is Acceptable; or 1% assuming a 20% atmosphere was maintained.
- <1.0 = Not detected above the laboratory reporting limit shown
- Bold** = Result exceeds screening criteria (ESL)
- NA = Not applicable
- = No value established
- <RL = Less than laboratory reporting limit
- ESL = Environmental Screening Levels, Table E-2, San Francisco Regional Water Quality Control Board (Commercial/Industrial, Shallow Soil, Drinking Water Aquifer), Revised May 2013