



AEI Consultants

Environmental & Engineering Services

June 11, 2012

GROUNDWATER MONITORING AND SOIL VAPOR SAMPLING REPORT (MAY 2012)

Property Identification:

1630 Park Street
Alameda, California

AEI Project No. 298931

Prepared for:

Mr. John Buestad
Foley Street Investments, LLC
1980 Mountain Boulevard, Suite 208
Oakland, CA 94611

Prepared by:

AEI Consultants
2500 Camino Diablo
Walnut Creek, CA 94597
(925) 746-746-6000

RECEIVED

8:58 am, Jul 16, 2012

Alameda County
Environmental Health

San Francisco HQ

Atlanta

Chicago

Costa Mesa

Dallas

Denver

Los Angeles

Miami

New York

Phoenix

Portland

San Jose

National Presence

Regional Focus

Local Solutions

June 11, 2012

Ms. Karel Detterman
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

Subject: Perjury Statement and Report Transmittal

1600 – 1630 Park Street
Alameda, California 94501
AEI Project No. 298931
ACEH RO#0000008

Dear Ms. Detterman:

I declare under penalty of perjury, that the information and/or recommendations contained in the attached report for the above-referenced site are true and correct to the best of my knowledge.

If you have any questions or need additional information, please do not hesitate to call me or Mr. Peter McIntyre at AEI Consultants, (925) 746-6004.

Sincerely,



John Buestad
President

JB/pm

Attachment: AEI Consultants, *Groundwater Monitoring and Soil Vapor Sampling Report (May 2012)*

cc: Mr. Peter McIntyre, AEI Consultants, 2500 Camino Diablo, Walnut Creek, CA 94597



AEI Consultants

Environmental & Engineering Services

June 11, 2012

Mr. John Buestad
Foley Street Investments, LLC
1980 Mountain Boulevard, Suite 208
Oakland, California 94611

Subject: Groundwater Monitoring and Soil Vapor Sampling Report (May 2012)
1630 Park Street
Alameda, California
AEI Project No. 298931

Dear Mr. Buestad:

AEI Consultants (AEI) has prepared this report on behalf of Foley Street Investments, LLC, for the property referenced above. AEI has been retained by Foley Street Investments, LLC to provide environmental consulting and engineering services. This report has been prepared to document the field activities and the results of recent groundwater monitoring and soil vapor sampling event.

SITE DESCRIPTION AND HISTORY

The subject property (hereafter referred to as the "site" or "property") is located at in a commercial area on the southeast side of Park Street in Alameda, California (Figure 1 and Figure 2). The property consists of an automobile dealership, repair facility, and parking lot.

According to a Phase I Environmental Site Assessment dated July 5, 2011 by AEI, the current building was constructed in 1945 by Christensen & Lyons for use as an automobile garage and showroom, a canopy was added in 1962, and a fuel tank was installed in 1990 by Pearson Equipment. A review of historical city directories indicates that the subject property was occupied by various auto dealerships and repair facilities including Good Chevrolet/Good Leasing from at least 1971 to 2006, Fairway Leasing from 1986 to 2006, and Enterprise Rent-A-Car in 1991.

- In 1986, a 300-gallon waste oil underground storage tank (UST) and a 500-gallon UST were reportedly removed from the property by Petroleum Engineering, Inc. Soil samples collected from the adjacent tank pits indicated hydrocarbon impacts in the soils. An environmental case was subsequently opened with the Alameda County Health Care Services Agency.
- In January 1987, three groundwater monitoring wells (MW-1 through MW-3) were installed at the site to evaluate the groundwater conditions. Two additional borings (SB-4

and SB-5) were advanced at the same time and soil samples were collected from one of the borings (SB-5).

- In October 1993, a supplemental investigation was performed by Geo Plexus which included advancing seven (7) soil borings (EB1 through EB7) across the parking area of the property. The investigation identified concentrations of hydrocarbons and volatile aromatic compounds in the vicinity of the former USTs at depths between 5 to 12 feet below ground surface (bgs).
- In April 1994, two additional groundwater monitoring wells (MW-4 and MW-5) were installed by Geo Plexus to further characterize the downgradient groundwater conditions.
- In January 1997, a remedial investigation was performed by Geo Plexus which included advancing eight (8) soil borings (EB8 through EB12 and P1 through P3) at locations which were immediately upgradient, downgradient, and cross gradient from the former USTs. Soil samples were collected from EB8 through EB12). The investigation indicated that gasoline impacted soil remains at depths ranging from 7 to 11 feet bgs.
- In November 1998, an investigation for a risk assessment was performed by Geo Plexus. The investigation involved the collection of soil gas samples from three (3) soil gas probes. Soil gas samples were collected at a depth of 3 feet bgs and collected in summa canisters. Using a commercial health risk of 1×10^{-4} , a risk-based corrective action analysis indicated that soil gas concentrations do not represent a significant health risk.
- In April 2008, Blymer Engineers collected soil and groundwater samples from 24 soil borings (GP1 to GP24) on and offsite to characterize the extent of soil and groundwater pollution. It should be noted that AEI was not able to locate a formal report of these activities, only tables of soil and groundwater data and figures have been located.
- In June 2011, a Phase I ESA was conducted for the subject property as detailed in a report dated July 5, 2011 (AEI 2011a).
- In July 2011, a subsurface investigation was conducted at the property relating to potential environmental issues aside from the Good Chevrolet LUST case. The areas of concern investigated include five former and five existing underground hydraulic lifts, several floor drains, three existing USTs (1 550-gallon waste-oil UST, 1 10,000 gallon and 1 4,000 gallon gasoline UST), and a former gasoline station identified on the southern end of the development site at the intersection of Park Street and Tilden Way. A total of 19 soil borings (AEI-1 to AEI-19) were drilled for soil and groundwater sampling. Results of the investigation are summarized in the August 16, 2011 *Phase II Subsurface Investigation Report* (AEI 2011b) prepared by AEI.
- An *Interim Corrective Action Plan* (ICAP) dated September 28, 2011 (AEI 2011c) was submitted and followed by an *ICAP Comment Letter Response and Pilot Test Workplan Details* dated November 14, 2011 (AEI 2011d). Both documents proposed the performance a High Vacuum Dual Phase Extraction (HVDPE) Pilot Test at the site. A review of multiple remedial options was discussed in these documents and HVDPE was considered the most feasible option given the site conditions.
- In November 2011, three (3) dual phase extraction wells (DPE-1, DPE-2 and DPE-3) and one (1) air sparge well (AS-1) were installed. In early December, three vacuum

monitoring points (VP-1, VP-2 and VP-3) were installed and pilot testing began. Results of the HVDPE pilot test were preliminarily provided in the *Investigation and Remedial Action Workplan* dated January 12, 2012 (AEI 2012a). The work plan also proposed the advancement of additional borings and the installation of additional HVPDE wells. In January 2012, borings AEI-20 through AEI-28 were advanced and wells DPE-4 through DPE-6, and DPE-8 through DPE-11 were installed. DPE-7 was advanced as a boring instead of being completed as a well. Soil sample analytical results for samples collected during the drilling were used to help define the extent of impacted soil and groundwater and to identify target areas for additional remedial action.

- A *Corrective Action Plan (CAP)* dated February 3, 2012, (AEI 2012b) was submitted to the ACEHD. The CAP documented the December 2011 to January 2012 HVDPE event and based on the results, recommended HVDPE as the remedial option for the site.
- On January 25, 2012, based on the results of the prior extraction, the HVDPE system resumed operation. The system was operated for 94 days and was turned off on April 25, 2012.
- At the request of the ACEHD, a *Data Gap and Interim Source Removal Workplan*, was prepared and submitted on May 4, 2012 (AEI 2012c). The work plan outlined the scope of work to define the lateral extent of impacted groundwater and proposed excavation of known sources of impacts to groundwater. The work plan is currently pending approval by ACEHD.
- Groundwater monitoring and sampling was conducted approximately quarterly from 1992 through 1995, then sporadically through 2003, once in 2008, twice in 2011 and twice, including this event, in 2012.

SUMMARY OF GROUNDWATER MONITORING ACTIVITIES

On May 18, 2012, eleven (11) groundwater monitoring wells (MW-1, MW-3, MW-5, DPE-1, DPE-2, DPE-3, DPE-4, DPE-6, DPE-10 and DPE-11) were gauged and sampled in accordance with the groundwater monitoring schedule presented in the May 2012, Data Gap Investigation and Interim Source Removal Workplan (AEI, 2012c). MW-4 was gauged and sampled on May 23, 2012 due to traffic control coordination requirements. Groundwater well field sampling forms are included in Appendix A.

GAUGING

Prior to gauging, the wells caps were opened and allowed to equilibrate with atmospheric pressure. The depths to water from the top of the well casings were then measured with an electric water level indicator accurate to 0.01 feet prior to sampling.

SAMPLING

Groundwater sampling was accomplished using a peristaltic pump and low-flow purge techniques. New disposable ¼-inch polyethylene tubing was set to the approximate depth of the middle of the screened interval and the pump was operated at a flow rate of approximately 250 milliliters per minute or less. The discharge tubing was connected to a flow-through cell fitted with water quality sensors and readings of temperature, pH, conductivity, dissolved oxygen (DO) and oxygen reduction potential (ORP) were recorded. A visual estimate and description of turbidity was also

noted for each well. Once the field parameters stabilized, groundwater samples were collected directly from the discharge side of peristaltic pump.

The groundwater samples were collected into laboratory supplied, unpreserved 1-liter amber glass bottles and 40-milliliter (mL) volatile organic analysis (VOA) vials preserved with hydrochloric acid capped such that no head space or air bubbles were visible. Samples were labeled with a unique sample name and the date and time of collection, then entered onto a chain of custody record and placed in a pre-chilled cooler on wet ice pending transportation to the laboratory. The samples were delivered on the day of collection, under proper chain of custody protocol and within hold time, to McCampbell Analytical, Inc. of Pittsburg, California (Department of Health Services Certification #1644) for analysis. The groundwater samples were analyzed for:

- Total Petroleum Hydrocarbons as gasoline (TPH-g) by EPA Method SW8015Bm, Total Petroleum Hydrocarbons as diesel (TPH-d) and Total Petroleum Hydrocarbons as motor oil (TPH-mo) by EPA Method SW8015B with silica gel clean-up.
- Benzene, toluene, ethylbenzene, total xylenes (BTEX), and methyl tertiary butyl ether (MTBE) by EPA Method SW8260B.

GROUNDWATER MONITORING RESULTS

GROUNDWATER ELEVATIONS AND HYDRAULIC GRADIENT

The depth to water data was reduced with surveyed top-of-casing elevation data to obtain the groundwater elevation at each well. The groundwater elevations, groundwater flow direction and hydraulic gradient are summarized below:

- The groundwater elevations ranged from 16.62 (MW-4) to 18.70 (DPE-6) feet above mean sea level (amsl). Depth to water ranged from 7.43 (DPE-6) to 8.96 (MW-4) below ground surface.
- Based on these data, the groundwater flow direction was to the north-northwest under a hydraulic gradient of approximately 0.01 ft/ft.

Current and historical groundwater elevations and flow directions are summarized in Table 2. The groundwater elevation data, flow direction and hydraulic gradient are presented on Figure 3.

GROUNDWATER SAMPLE LABORATORY ANALYTICAL DATA

The groundwater analytical data, with a comparison to the previous monitoring event, are summarized below:

- Concentrations of TPH-g increased in wells MW-1 and MW-5; however the recent concentrations are well below historical levels. TPH-g decreased in all other wells compared to prior events. The highest concentration of TPH-g was reported in the sample collected from well DPE-9 at 4,400 micrograms per liter (ug/L).

- THP-d was detected in 5 of the wells sampled at a maximum concentration of 420 ug/L in well DPE-10.
- No TPH-mo or MTBE was detected in groundwater samples collected at the site during the event.
- Concentrations of benzene increased in wells MW-1 and decreased in all other wells compared to prior events. The highest concentration of benzene was reported in the sample collected from well MW-1 at 200 ug/L, although this concentration is well below historical levels.
- Groundwater samples from three wells (MW-4, DPE-4 and DPE-6) were non-detect for all analytes for this event.

The groundwater analytical data are summarized in Table 3 and are presented graphically on Figure 4. Laboratory analytical reports with chain of custody and quality assurance/quality control documentation are included in Appendix B.

SUMMARY OF SOIL VAPOR SAMPLING ACTIVITIES

On May 17, 2012, three (3) soil vapor probes (VP-1, VP-2, and VP-3) were sampled. The probes are located in the source area near the former tank hold, which had recently undergone HVDPE. The purpose of the sampling was to establish a baseline concentration post interim remediation and as part of an evaluation of vapor intrusion potential.

Soil vapor samples were collected in one-liter summa canisters fitted with 150 ml/hr flow controllers. Each canister and flow controller was individually checked, tested and certified by the laboratory for air tightness and proper vacuum prior to shipping. A vacuum gauge was used to measure and record the initial and final summa canister vacuum pressure. Prior to collecting each vapor sample, a shut-in test was performed to verify that the sampling train was free of leaks, and approximately three tubing volumes were purged using a spare summa-canister. During sampling a leak check compound (isopropyl alcohol) was used to check for leaks. Upon completion of sampling the valves were removed, the inlet fittings tightly capped, and the canisters were labeled with sample name, date and time of collection, and then entered onto a chain of custody record.

After sample collection, field readings of oxygen (O₂), methane (CH₄), carbon dioxide (CO₂) and total volatile hydrocarbons (TVHC) were collected using a multi-gas detector. The instrument uses a photoionization detected (PID) calibrated to 100 ppm isobutylene to read TVHC and contains dedicated O₂, CH₄ and CO₂ sensors. The data were recorded on field sampling sheets which are included in Appendix A.

The soil vapor samples were delivered on the day of collection, under proper chain of custody protocol and within hold time, to McCampbell Analytical, Inc. of Pittsburg, California (Department of Health Services Certification #1644) for analysis. Soil vapor samples were analyzed by EPA Method TO-15 for total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, and xylenes (BTEX).

SOIL VAPOR SAMPLING ANALYTICAL RESULTS

- All soil vapor samples collected during the event were non-detect for TPH-g and BTEX.
- PID and methane field readings from the vapor probes were non-detect (zero).
- Oxygen level field readings from the probes ranged from 17.7 to 18.4%.
- Carbon dioxide field readings from the probes ranged from 0.4 to 0.9%.

Laboratory analytical results are summarized in Table 4. Laboratory analytical reports with chain of custody and quality assurance/quality control documentation are included in Appendix C.

SUMMARY

AEI completed a groundwater monitoring and sampling event on May 18 and 23, 2012. Twelve wells were monitored as per the proposed groundwater monitoring schedule. The results of the groundwater monitoring are summarized below:

- Groundwater flow is toward north-northwest under a hydraulic gradient of 0.01 ft/ft.
- TPH-g, TPH-d, benzene, toluene, ethylbenzene, and total xylenes were detected in groundwater samples.
- TPH-mo and MTBE were not detected in groundwater samples.
- In general, concentrations of TPH-g and BTEX were lower as compared to previous monitoring events.

The next groundwater monitoring event is scheduled for August 2012.

AEI also completed a soil vapor sampling event on May 17, 2012. Three soil vapor probes were sampled to determine base line concentrations post-interim remediation. The results of the soil vapor sampling are summarized below:

- All soil vapor samples collected during the event were non-detect for TPH-g and BTEX. Field monitoring data indicated sufficient oxygen for aerobic degradation of hydrocarbons.

REPORT LIMITATIONS AND SIGNATURES

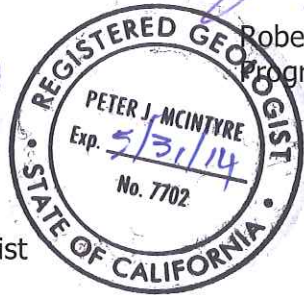
This report presents a summary of work completed by AEI Consultants. The completed work includes observations and descriptions of site conditions encountered. Where appropriate, it includes analytical results for samples taken during the course of the work. The number and location of samples are chosen to provide the requested information, but it cannot be assumed that they are representative of areas not sampled. All conclusions and/or recommendations are based on these analyses and observations, and the governing regulations. Conclusions beyond those stated and reported herein should not be inferred from this document. These services were performed in accordance with generally accepted practices, in the environmental engineering and construction field, which existed at the time and location of the work and were performed under the direction of appropriate California-licensed professionals.


Should you have any questions, or need any additional information regarding this report, please do not hesitate to contact us at (925) 746-6000.

Sincerely,
AEI Consultants


Stephen Lao
Project Engineer


Peter McIntyre, PG, REA
Sr. Vice President, Geologist




Robert Robitaille
Program Manager

Figures

Figure 1	Site Location Map
Figure 2	Site Plan
Figure 3	Groundwater Elevation Data
Figure 4	Groundwater Analytical Data

Tables

Table 1	Well Construction Details
Table 2	Groundwater Elevation Data
Table 3	Groundwater Analytical Data
Table 4	Soil Vapor Analytical Data

Appendices

Appendix A	Field Sampling Forms
Appendix B	Groundwater Sample Laboratory Analytical Reports
Appendix C	Soil Vapor Sample Laboratory Analytical Reports

REFERENCES

AEI Consultants (AEI) 2011a. Phase I Environmental Site Assessment, 1600 – 1650 Park Street, 1600 – 1606 Foley Street, 2329 Pacific Avenue, Alameda, California, July 5, 2011.

AEI Consultants (AEI) 2011b. Phase II Subsurface Investigation, 1600 to 1630 Park Street, Alameda, California, August 16, 2011.

AEI Consultants (AEI) 2011c. Interim Corrective Action Plan, 1630 Park Street, Alameda, California, September 2011.

AEI Consultants (AEI) 2011d. ICAP Comment Letter Response and Pilot Test Workplan Details, 1630 Park Street, Alameda, California, November 14, 2011.

AEI Consultants (AEI) 2012a. Investigation and Remedial Action Workplan, 1630 Park Street, Alameda, California, January 12, 2012.

AEI Consultants (AEI) 2012b. Corrective Action Plan, 1630 Park Street, Alameda, California, February 3, 2012.

AEI Consultants (AEI) 2012c. Data Gap and Interim Source Removal Workplan, 1630 Park Street, Alameda, California, May 4, 2012.

RWQCB Environmental Screening Levels, Table E-2, San Francisco Regional Water Quality Control Board

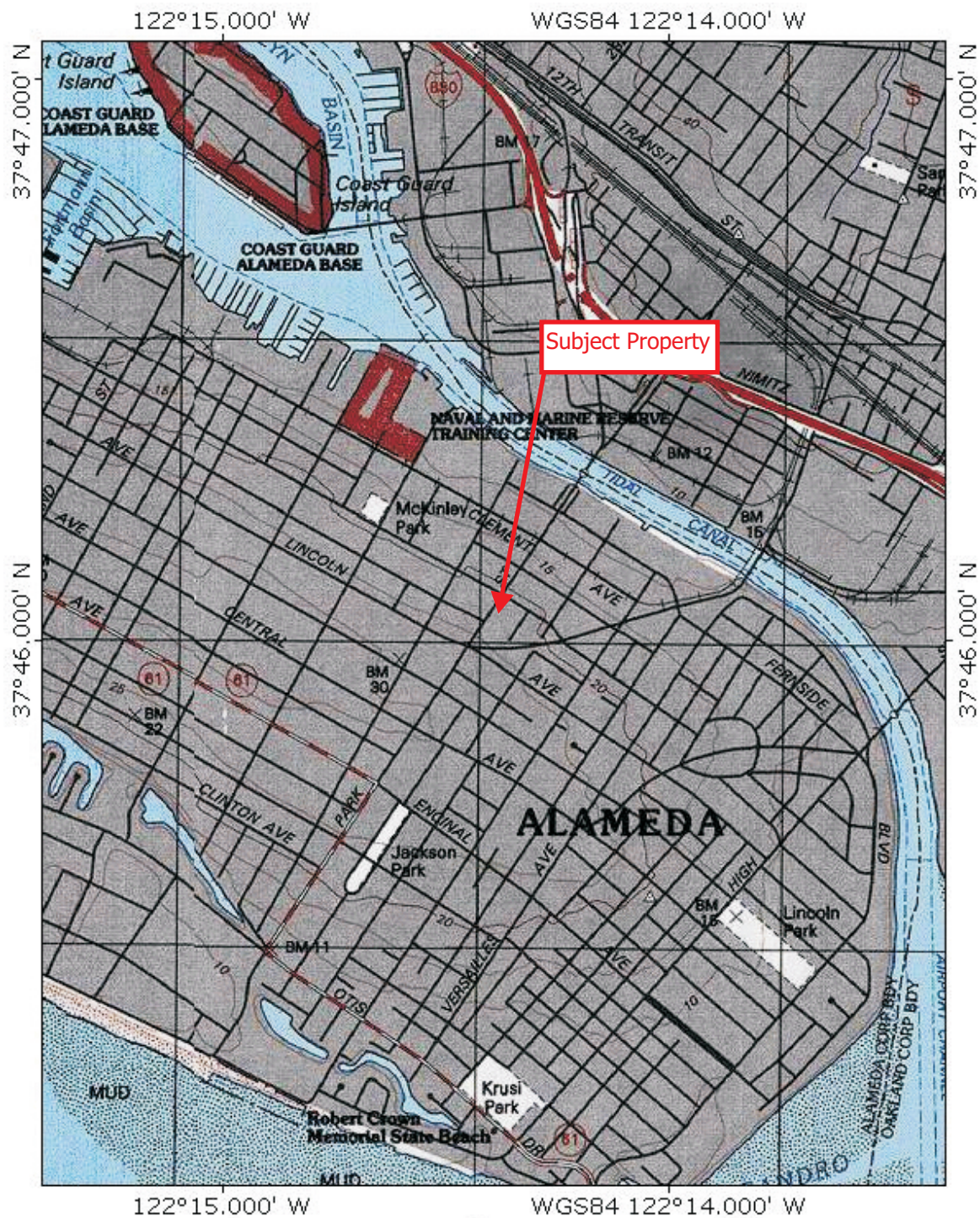
DISTRIBUTION:

John Buestad, Foley Street Investments

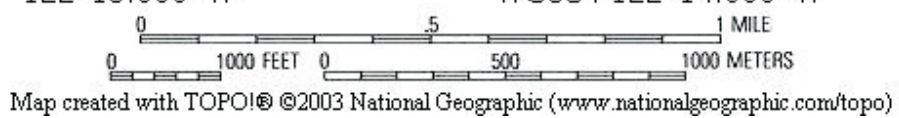
Karel Detterman, Alameda County Environmental Health Department (FTP Upload)

GeoTracker (Upload)

FIGURES



TN
MN
15°



WELL



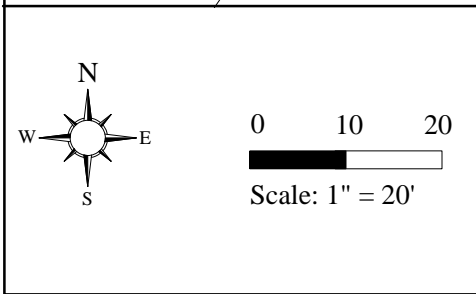
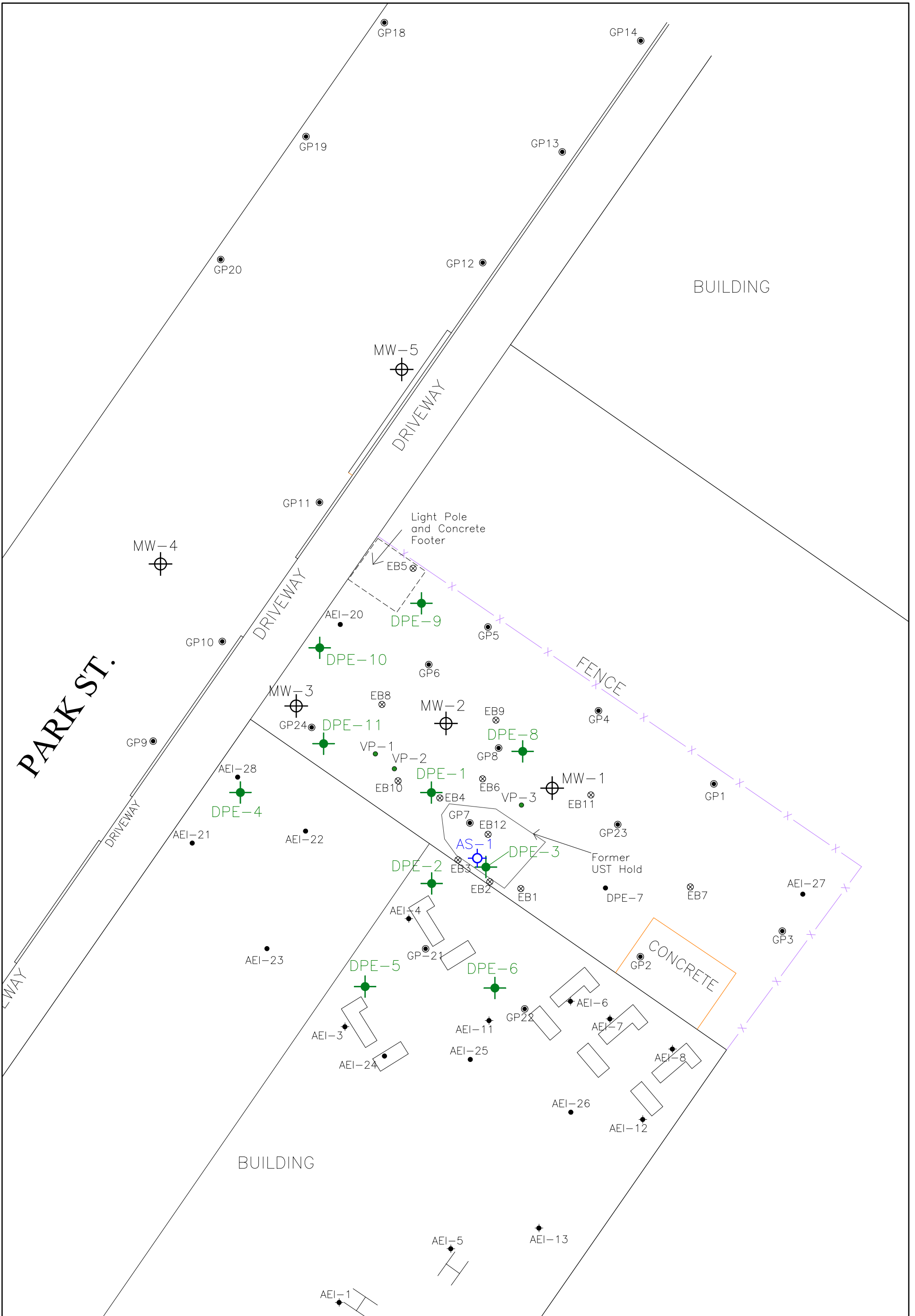
SITE LOCATION MAP

1630 Park Street, Alameda, California

FIGURE 1

Project Number: 298931

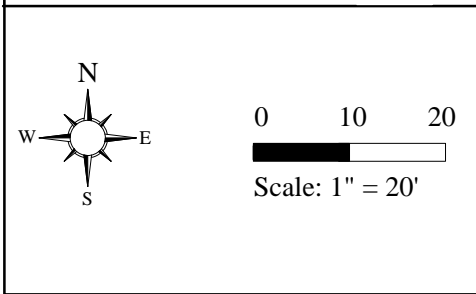
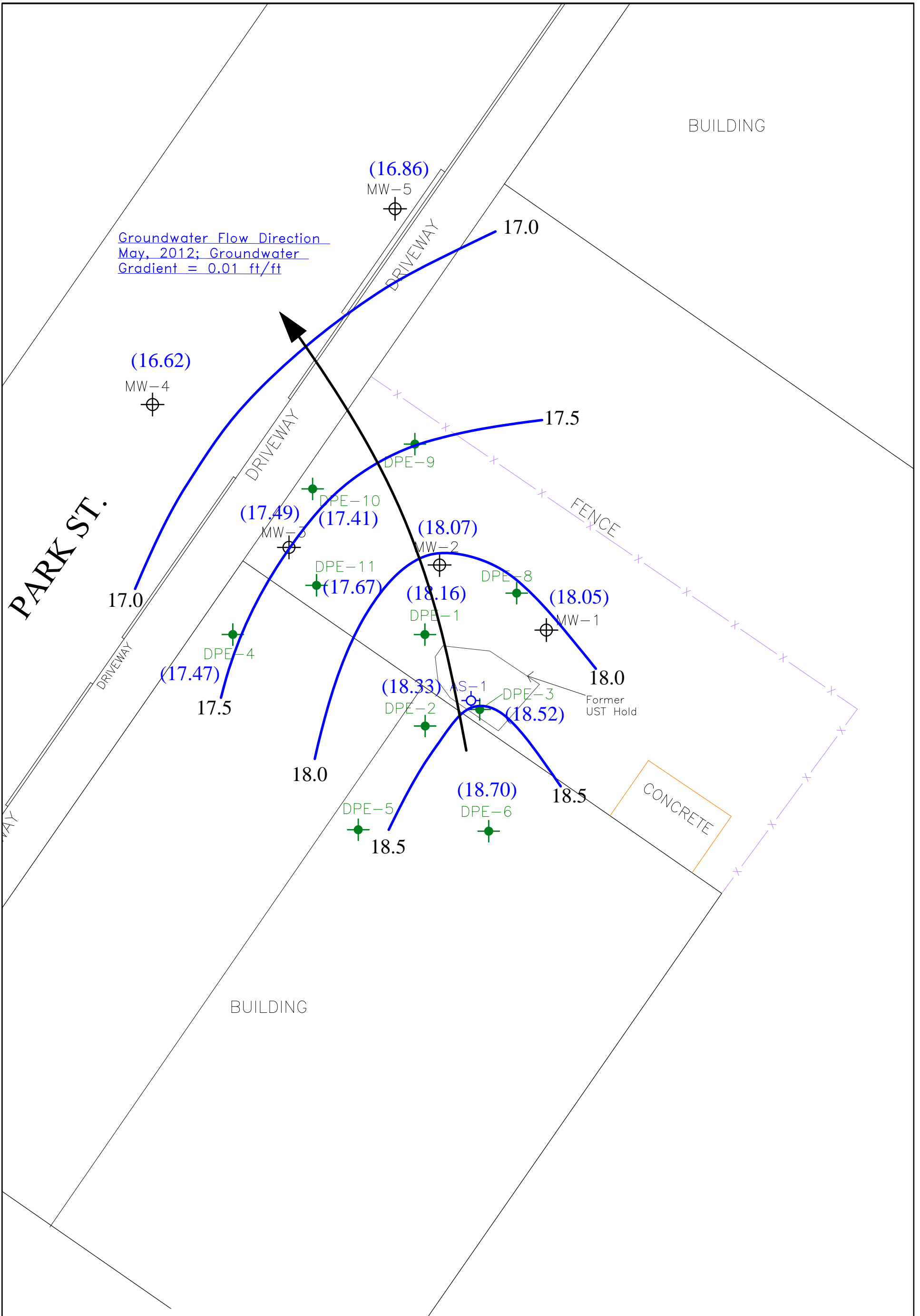
AEI
Consultants



LEGEND	
	Remediation Well (12/11 and 1/12)
	AEI Soil Boring (1/12)
	Vapor Probe (12/11)
	AEI Soil Boring (7/11)
	Soil Boring (4/08)
	Soil Boring (1/97)
	Groundwater Monitoring Well
	Air Sparge Well
	Existing Hydraulic Lift
	Former Hydraulic Lift

DRAFTED BY JAS 3-2-12
 REVISED BY JAS 3-15-12

AEI CONSULTANTS 2500 CAMINO DIABLO, WALNUT CREEK	
SITE PLAN	
1630 PARK STREET ALAMEDA, CALIFORNIA	FIGURE 2 PROJECT NO. 298931



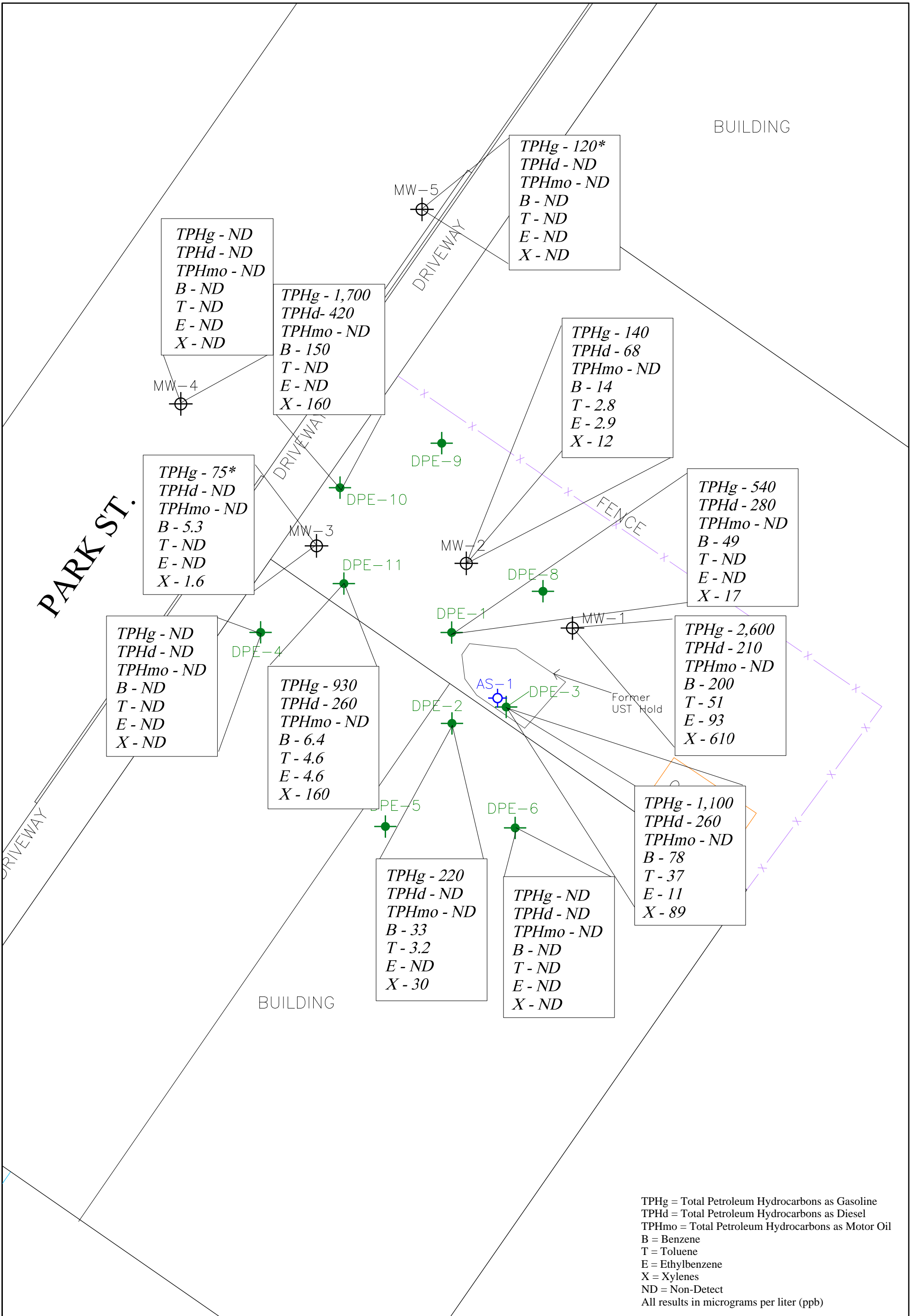
LEGEND	
	Remediation Well (12/11 and 1/12)
	Groundwater Monitoring Well
	Groundwater Elevation
	Groundwater Flow Direction

DRAFTED BY JAS 3-9-12
REVISED BY SL 6-1-12

AEI CONSULTANTS
2500 CAMINO DIABLO, WALNUT CREEK

**GROUNDWATER ELEVATION
DATA - May 2012**

1630 PARK STREET ALAMEDA, CALIFORNIA	FIGURE 3 PROJECT NO. 298931
---	---------------------------------------



BUILDING

TPHg - 120*
 TPHd - ND
 TPHmo - ND
 B - ND
 T - ND
 E - ND
 X - ND

TPHg - ND
 TPHd - ND
 TPHmo - ND
 B - ND
 T - ND
 E - ND
 X - ND

TPHg - 1,700
 TPHd - 420
 TPHmo - ND
 B - 150
 T - ND
 E - ND
 X - 160

TPHg - 140
 TPHd - 68
 TPHmo - ND
 B - 14
 T - 2.8
 E - 2.9
 X - 12

TPHg - 75*
 TPHd - ND
 TPHmo - ND
 B - 5.3
 T - ND
 E - ND
 X - 1.6

TPHg - 540
 TPHd - 280
 TPHmo - ND
 B - 49
 T - ND
 E - ND
 X - 17

TPHg - ND
 TPHd - ND
 TPHmo - ND
 B - ND
 T - ND
 E - ND
 X - ND

TPHg - 930
 TPHd - 260
 TPHmo - ND
 B - 6.4
 T - 4.6
 E - 4.6
 X - 160

TPHg - 2,600
 TPHd - 210
 TPHmo - ND
 B - 200
 T - 51
 E - 93
 X - 610

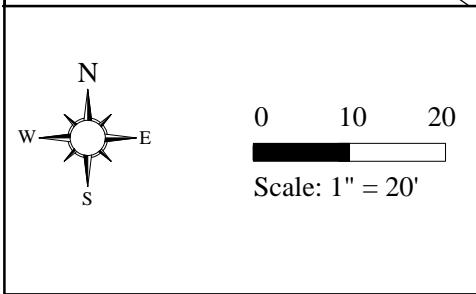
Former UST Hold

TPHg - 220
 TPHd - ND
 TPHmo - ND
 B - 33
 T - 3.2
 E - ND
 X - 30

TPHg - ND
 TPHd - ND
 TPHmo - ND
 B - ND
 T - ND
 E - ND
 X - ND

TPHg - 1,100
 TPHd - 260
 TPHmo - ND
 B - 78
 T - 37
 E - 11
 X - 89

TPHg = Total Petroleum Hydrocarbons as Gasoline
 TPHd = Total Petroleum Hydrocarbons as Diesel
 TPHmo = Total Petroleum Hydrocarbons as Motor Oil
 B = Benzene
 T = Toluene
 E = Ethylbenzene
 X = Xylenes
 ND = Non-Detect
 All results in micrograms per liter (ppb)



LEGEND	
	Remediation (DPE) Well
	Groundwater Monitoring Well
	AEI Soil Boring
	Isolated non-target peaks identified in TPHg analysis

DRAFTED BY JAS 3-9-12
 REVISED BY SL 6-4-12

AEI CONSULTANTS
 2500 CAMINO DIABLO, WALNUT CREEK

**GROUNDWATER ANALYTICAL
 DATA - MAY 2012**

1630 PARK STREET ALAMEDA, CALIFORNIA	FIGURE 4 PROJECT NO. 298931
---	---------------------------------------

TABLES

Table 1

Well Construction Details

AEI Project No. 298931, 1630 Park Street, Alameda, California

Well ID Number	Well Installation Date	Elevation TOC (feet)	Casing Material	Total Depth (feet)	Well Depth (feet)	Borehole Diameter (inches)	Casing Diameter (inches)	Screened Interval (feet)	Slot Size (inches)	Filter Pack Interval (feet)	Filter Pack Material
AS-1	11/14/2011	-	PVC	25	25	8	2	20 - 25	0.020	20 - 25	#3 Sand
DPE-1	11/15/2011	-	PVC	16	15	10	4	7 - 15	0.010	6.5 - 16	#2/12 Sand
DPE-2	11/15/2011	-	PVC	16	15	10	4	7 - 15	0.010	6.5 - 16	#2/12 Sand
DPE-3	11/14/2011	-	PVC	16	14	10	4	7 - 14	0.010	6.5 - 16	#2/12 Sand
DPE-4	1/19/2012	-	PVC	17	17	10	4	8 - 17	0.010	7.5 - 17	#2/12 Sand
DPE-5	1/20/2012	-	PVC	18	18	10	4	8 - 18	0.010	7.5 - 18	#2/12 Sand
DPE-6	1/20/2012	-	PVC	18	18	10	4	8 - 18	0.010	7.5 - 18	#2/12 Sand
DPE-8	1/20/2012	-	PVC	18	18	10	4	8 - 18	0.010	7.5 - 18	#2/12 Sand
DPE-9	1/20/2012	-	PVC	18	18	10	4	8 - 18	0.010	7.5 - 18	#2/12 Sand
DPE-10	1/20/2012	-	PVC	17	17	10	4	8 - 17	0.010	7.5 - 17	#2/12 Sand
DPE-11	1/20/2012	-	PVC	18	18	10	4	8 - 18	0.010	7.5 - 18	#2/12 Sand
MW-1	1/15/1987	-	PVC	-	20	8	2	5 - 20	-	-	-
MW-2	1/15/1987	-	PVC	-	20	8	2	5 - 20	-	-	-
MW-3	1/15/1987	-	PVC	-	20	8	2	5 - 20	-	-	-
MW-4	4/20/1994	-	PVC	-	23	8	2	8 - 23	-	-	-
MW-5	4/20/1994	-	PVC	-	22	8	2	7 - 22	-	-	-
VP-1	12/6/2011	-	Stainless Steel	6	6	1.25	1/4	5.1 - 5.6	Mesh	4.7 - 6	#30 Mesh Sand
VP-2	12/6/2011	-	Stainless Steel	5.9	5.9	1.25	1/4	5.1-5.6	Mesh	4.7-5.9	#30 Mesh Sand
VP-3	12/6/2011	-	Stainless Steel	5.75	5.75	1.25	1/4	5.1-5.6	Mesh	4.7-5.75	#30 Mesh Sand

PVC = polyvinyl chloride
 TOC = top of casing
 "-" = not available

Table 2

Groundwater Elevation Data

AEI Project No. 298931, 1600-1630 Park Street, Alameda, CA

Well ID (Screen Interval)	Date Collected	Well Elevation (ft amsl)	Depth to Water (ft)	Groundwater Elevation (ft amsl)
MW-1 (5 - 20 feet bgs)	Jul-89	104.76	8.93	95.83
	Apr-91		7.59	97.17
	Jul-92		8.72	96.04
	Aug-92		9.09	95.67
	Sep-92		9.25	95.51
	Oct-92		9.34	95.42
	Nov-92		9.21	95.55
	Dec-92		9.26	95.50
	Jan-93		7.81	96.95
	Feb-93		7.32	97.44
	Mar-93		7.20	97.56
	Apr-93		7.31	97.45
	May-93		8.29	96.47
	Jul-93		8.30	96.46
	Oct-93		9.38	95.38
	Jan-94		8.80	95.96
	Apr-94		8.15	96.61
	Jul-94		8.70	96.06
	Oct-94		9.37	95.39
	Jan-94		7.18	97.58
	Apr-95		6.76	98.00
	Jan-97		7.03	97.73
	Nov-98		8.10	96.66
	Jan-01		7.70	97.06
	Jun-02		7.30	97.46
	Nov-02		8.14	96.62
	Feb-03		6.87	97.89
	Jun-03		7.05	97.71
	Apr-08	25.42	7.13	18.29
	Jun-11	25.42	7.54	17.88
	Dec-11	25.37	8.02	17.35
Jan-12	25.37	8.08	17.29	
May-12	25.37	6.87	18.50	
MW-2 (5 - 20 feet bgs)	Jul-89	104.86	9.24	95.62
	Apr-91		8.01	96.85
	Jul-92		9.03	95.83
	Aug-92		9.34	95.52
	Sep-92		9.46	95.40
	Oct-92		9.52	95.34
	Nov-92		9.42	95.44
	Dec-92		9.47	95.39
	Jan-93		8.25	96.61
	Feb-93		7.85	97.01
	Mar-93		7.77	97.09
	Apr-93		7.86	97.00
	May-93		8.20	96.66
	Jul-93		8.72	96.14
	Oct-93		9.64	95.22
	Jan-94		9.12	95.74
	Apr-94		8.56	96.30
	Jul-94		9.02	95.84
	Oct-94		9.59	95.27
	Jan-94		7.71	97.15
	Apr-95		7.40	97.46
	Jan-97		7.55	97.31
	Nov-98		8.49	96.37
	Jan-01		8.08	96.78
	Jun-02		7.77	97.09
Nov-02		8.50	96.36	
Feb-03		7.38	97.48	
Jun-03		7.57	97.29	

Table 2

Groundwater Elevation Data

AEI Project No. 298931, 1600-1630 Park Street, Alameda, CA

Well ID (Screen Interval)	Date Collected	Well Elevation (ft amsl)	Depth to Water (ft)	Groundwater Elevation (ft amsl)
MW-2 (continued)	Apr-08	25.52	7.67	17.85
	Jun-11	25.52	7.35	18.17
	Dec-11	25.48	8.41	17.07
	Jan-12	25.48	8.43	17.05
	May-12	25.48	7.41	18.07
MW-3 (5 - 20 feet bgs)	Jul-89	104.52	9.00	95.52
	Apr-91		8.06	96.46
	Jul-92		8.82	95.70
	Aug-92		9.05	95.47
	Sep-92		9.09	95.43
	Oct-92		9.15	95.37
	Nov-92		9.05	95.47
	Dec-92		9.12	95.40
	Jan-93		8.18	96.34
	Feb-93		7.98	96.54
	Mar-93		7.94	96.58
	Apr-93		8.02	96.50
	May-93		7.69	96.83
	Jul-93		8.65	95.87
	Oct-93		9.32	NC
	Jan-94		8.93	NC
	Apr-94		8.52	96.00
	Jul-94		8.86	95.66
	Oct-94		9.25	95.27
	Jan-94		7.85	96.67
	Apr-95		7.64	96.88
	Jan-97		7.75	96.77
	Nov-98		8.38	96.14
	Jan-01		8.00	96.52
	Jun-02		7.81	96.71
	Nov-02		8.37	96.15
	Feb-03		7.48	97.04
	Jun-03		7.67	96.85
	Apr-08	25.17	7.74	17.43
Jun-11	25.17	7.50	17.67	
Dec-11	25.13	8.25	16.88	
Jan-12	25.13	8.25	16.88	
May-12	25.13	7.64	17.49	
MW-4 (8 - 23 feet bgs)	Apr-94	104.86	9.29	95.57
	Jul-94		9.55	95.31
	Oct-94		9.83	95.03
	Jan-94		8.88	95.98
	Apr-95		8.80	96.06
	Jan-97		-	-
	Nov-98		-	-
	Jan-01		-	-
	Jun-02		-	-
	Nov-02		-	-
	Feb-03		-	-
	Jun-03		-	-
	Apr-08	25.53	8.73	16.80
	Jun-11	25.53	8.52	17.01
	Dec-11	25.58	-	-
	Jan-12	25.58	-	-
	May-12	25.58	8.96	16.62

Table 2

Groundwater Elevation Data

AEI Project No. 298931, 1600-1630 Park Street, Alameda, CA

Well ID (Screen Interval)	Date Collected	Well Elevation (ft amsl)	Depth to Water (ft)	Groundwater Elevation (ft amsl)
MW-5 (7 - 22 feet bgs)	Apr-94	103.62	8.27	95.35
	Jul-94		8.50	95.12
	Oct-94		8.92	94.70
	Jan-94		7.61	96.01
	Apr-95		8.48	95.14
	Jan-97		6.79	96.83
	Nov-98		8.12	95.50
	Jan-01		7.67	95.95
	Jun-02		7.61	96.01
	Nov-02		8.01	95.61
	Feb-03		7.22	96.40
	Jun-03		7.43	96.19
	Apr-08	24.31	7.36	16.95
	Jun-11	24.31	7.43	16.88
	Dec-11	24.32	-	-
Jan-12	24.32	-	-	
May-12	24.31	7.46	16.86	
DPE-1 (7 - 15 feet bgs)	Dec-11	25.88	8.81	17.07
	Jan-12	25.88	8.78	17.10
	May-12	25.88	7.72	18.16
DPE-2 (7 - 15 feet bgs)	Dec-11	26.22	9.29	16.93
	Jan-12	26.22	7.97	18.25
	May-12	26.22	7.89	18.33
DPE-3 (7 - 15 feet bgs)	Dec-11	25.27	7.92	17.35
	Jan-12	25.27	8.98	16.29
	May-12	25.27	6.75	18.52
DPE-4 (8-17 feet bgs)	Jan-12	26.06	9.11	16.95
	May-12	26.06	8.59	17.47
DPE-5 (8-18 feet bgs)	Jan-12	26.25	-	-
DPE-6 (8-18 feet bgs)	Jan-12	26.13	8.58	17.55
	May-12	26.13	7.43	18.70
DPE-8 (8-18 feet bgs)	Jan-12	25.36	-	-
DPE-9 (8-18 feet bgs)	Jan-12	25.09	8.12	16.97
DPE-10 (8-17 feet bgs)	Jan-12	25.14	-	-
	May-12	25.14	7.73	17.41
DPE-11 (8-18 feet bgs)	Jan-12	25.57	-	-
	May-12	25.57	7.90	17.67

ft amsl = feet above mean sea level

All water level depths are measured from the top of casing

"-" = not measured

bgs = below ground surface

Table 3

Groundwater Analytical Data- Monitoring Wells
 AEI Project No. 298931, 1600-1630 Park Street, Alameda, CA

Sample ID	Date	Notes	TPH-d	TPH-mo	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	MTBE	TAME	TBA	EDB	1,2-DCA	DIPE	Ethanol	ETBE	Methanol	Lead
			(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-1	1/21/1987		-	-	21,020	1,148	8,627	1,792	6,012	-	-	-	-	-	-	-	-	-	-	-
	1/11/1989		-	-	1,400	74	10	13	5.0	-	-	-	-	-	-	-	-	-	-	-
	7/12/1989		-	-	1,200	470	49	45	33	-	-	-	-	-	-	-	-	-	-	-
	4/9/1991		-	-	850	260	10	15	12	-	-	-	-	-	-	-	-	-	-	-
	7/14/1992		-	-	13,000	2,300	1,200	1,200	1,200	-	-	-	-	-	-	-	-	-	-	-
	10/7/1992		-	-	3,600	1,600	80	120	120	-	-	-	-	-	-	-	-	-	-	-
	1/11/1993		-	-	1,200	410	16	23	19	-	-	-	-	-	-	-	-	-	-	-
	4/23/1993	a	-	-	2,200	720	180	82	150	-	-	-	-	-	-	-	-	-	-	-
	7/8/1993	a	-	-	3,200	1,200	110	97	100	-	-	-	-	-	-	-	-	-	-	-
	10/15/1993	a	-	-	3,700	1,400	43	94	36	-	-	-	-	-	-	-	-	-	-	-
	1/25/1994	a	-	-	1,600	680	16	41	35	-	-	-	-	-	-	-	-	-	-	-
	4/28/1994	a	-	-	6,100	1,900	380	250	340	-	-	-	-	-	-	-	-	-	-	-
	7/27/1994	a	-	-	6,000	1,800	510	220	450	-	-	-	-	-	-	-	-	-	-	-
	10/27/1994	a	-	-	3,000	1,100	79	82	87	-	-	-	-	-	-	-	-	-	-	-
	1/26/1995	a	-	-	1,600	660	100	82	87	-	-	-	-	-	-	-	-	-	-	-
	4/13/1995	a	-	-	3,800	1,200	270	120	260	-	-	-	-	-	-	-	-	-	-	-
	7/21/1995	a	-	-	5,200	1,500	450	190	400	-	-	-	-	-	-	-	-	-	-	-
	10/25/1995	a	-	-	5,900	1,800	450	210	400	-	-	-	-	-	-	-	-	-	-	-
	1/21/1997	a	-	-	3,100	1,100	87	160	180	<7.3	-	-	-	-	-	-	-	-	-	-
	11/12/1998	a	-	-	1,000	280	3	3.3	7.9	<30	-	-	-	-	-	-	-	-	-	-
	1/16/2001	a	-	-	4,700	1,20	18	150	49	-	<5	<5.0	<25	<5.0	<5.0	<5.0	-	<5.0	-	-
	6/27/2002	a	-	-	5,900	230	7.7	<5	1,500	-	<5	<5.0	<50	<5.0	<5.0	<5.0	-	<5.0	-	-
	11/18/2002	a	-	-	3,100	890	12	310	28	-	<2.5	-	-	<2.5	<2.5	-	-	-	-	-
	2/20/2003	d	-	-	260	100	0.72	<0.5	<0.5	-	<0.5	-	-	<0.5	<0.5	-	-	-	-	-
	6/11/2003	a	-	-	3,100	480	6.7	220	420	-	<2.5	-	-	<2.5	<2.5	-	-	-	-	-
	4/3/2008	a	-	-	2,700	280	21	130	230	<25	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0	<100	<1.0	<1,000	<0.5
	6/23/2011	a	-	-	610	100	6.2	46	77	-	<2.5	<2.5	<10	-	-	<2.5	-	<2.5	-	-
	12/6/2011	a	-	-	900	160	<5.0	68	76	-	<5.0	<5.0	<20	-	-	<5.0	-	<5.0	-	-
1/24/2012	a	-	-	190	25	<1.0	1.4	4.6	<1.0	-	-	-	-	-	-	-	-	-	-	
5/18/2012	f	210	<50	2,600	200	51	93	610	<5.0	-	-	-	-	-	-	-	-	-	-	

Table 3

Groundwater Analytical Data- Monitoring Wells
 AEI Project No. 298931, 1600-1630 Park Street, Alameda, CA

Sample ID	Date	Notes	TPH-d	TPH-mo	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	MTBE	TAME	TBA	EDB	1,2-DCA	DIPE	Ethanol	ETBE	Methanol	Lead
			(µg/L)	(µg/L)	(µg/L)	EPA Methods 8020, 8021B, or 8260B (µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-2	1/21/1987		-	-	5,018	386	1,981	285	1,432	-	-	-	-	-	-	-	-	-	-	-
	1/11/1989		-	-	10,000	3,000	410	240	190	-	-	-	-	-	-	-	-	-	-	-
	7/12/1989		-	-	7,600	2,700	540	250	320	-	-	-	-	-	-	-	-	-	-	-
	4/9/1991		-	-	4,900	910	210	130	200	-	-	-	-	-	-	-	-	-	-	-
	7/14/1992		-	-	13,000	4,400	1,500	610	1,100	-	-	-	-	-	-	-	-	-	-	-
	10/7/1992		-	-	11,000	5,200	1,500	500	1,200	-	-	-	-	-	-	-	-	-	-	-
	1/11/1993		-	-	17,000	940	1,100	480	930	-	-	-	-	-	-	-	-	-	-	-
	4/23/1993	a	-	-	52,000	13,000	8,400	1,700	5,300	-	-	-	-	-	-	-	-	-	-	-
	7/8/1993	a	-	-	6,400	2,500	470	280	530	-	-	-	-	-	-	-	-	-	-	-
	10/15/1993	a	-	-	17,000	3,900	870	500	940	-	-	-	-	-	-	-	-	-	-	-
	1/25/1994	a	-	-	16,000	5,400	1,140	640	1,500	-	-	-	-	-	-	-	-	-	-	-
	4/28/1994	a	-	-	15,000	4,000	910	480	1,200	-	-	-	-	-	-	-	-	-	-	-
	7/27/1994	a	-	-	18,000	6,000	760	630	1,600	-	-	-	-	-	-	-	-	-	-	-
	10/27/1994	a	-	-	9,500	2,700	230	320	640	-	-	-	-	-	-	-	-	-	-	-
	1/26/1995	a	-	-	5,900	1,900	290	230	500	-	-	-	-	-	-	-	-	-	-	-
	4/13/1995	a	-	-	10,000	3,300	620	360	930	-	-	-	-	-	-	-	-	-	-	-
	7/21/1995	a	-	-	9,900	3,300	320	390	830	-	-	-	-	-	-	-	-	-	-	-
	10/25/1995	a	-	-	13,000	4,900	400	580	990	-	-	-	-	-	-	-	-	-	-	-
	1/21/1997	a	-	-	7,600	2,600	310	330	660	<20	-	-	-	-	-	-	-	-	-	-
	11/12/1998	a	-	-	31,000	11,000	750	1,500	2,300	<900	-	-	-	-	-	-	-	-	-	-
	1/16/2001	a	-	-	23,000	8,200	260	1,000	820	<30	-	<30	<150	<30	<30	<30	-	<30	-	-
	6/27/2002	a	-	-	39,000	7,000	1,800	690	4,000	-	<5	<5.0	<5.0	<5.0	6.1	<5.0	-	<5.0	-	-
	11/18/2002	a	-	-	15,000	5,700	76	1,000	150	-	<12	-	-	<12	<12	-	-	-	-	-
	2/20/2003	a	-	-	26,000	6,300	1,100	1,300	1,900	-	<5.0	-	-	<5.0	<5.0	-	-	-	-	-
	6/11/2003	a	-	-	37,000	7,100	2,300	2,000	3,600	-	<25	-	-	<25	<25	-	-	-	-	-
	4/3/2008	a	-	-	4,100	760	96	250	130	<50	<2.5	<2.5	<10	<2.5	<2.5	<2.5	<250	<2.5	<2,500	<0.5
	6/23/2011	a	-	-	6,500	2,100	210.0	560	310	-	<50	<50	<200	-	-	<50	-	<50	-	-
	12/6/2011	a	-	-	4,800	1,600	<50	260	<50	-	<50	<50	<200	-	-	<50	-	<50	-	-
	1/24/2012	a	-	-	2,500	100	22.0	<5.0	410	<5.0	-	-	-	-	-	-	-	-	-	-
	5/18/2012	f	68	<50	140	14	2.8	2.9	12	<0.5	-	-	-	-	-	-	-	-	-	-

Table 3

Groundwater Analytical Data- Monitoring Wells
 AEI Project No. 298931, 1600-1630 Park Street, Alameda, CA

Sample ID	Date	Notes	TPH-d	TPH-mo	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	MTBE	TAME	TBA	EDB	1,2-DCA	DIPE	Ethanol	ETBE	Methanol	Lead
			(µg/L)	(µg/L)	(µg/L)	EPA Methods 8020, 8021B, or 8260B (µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-3	1/21/1987		-	-	10,287	1,428	3,281	610	2,761	-	-	-	-	-	-	-	-	-	-	-
	1/11/1989		-	-	5,300	1,800	340	150	160	-	-	-	-	-	-	-	-	-	-	-
	7/12/1989		-	-	7,800	3,100	900	300	480	-	-	-	-	-	-	-	-	-	-	-
	4/9/1991		-	-	9,400	1,400	730	200	510	-	-	-	-	-	-	-	-	-	-	-
	7/14/1992		-	-	17,000	3,500	390	390	260	-	-	-	-	-	-	-	-	-	-	-
	10/7/1992		-	-	9,200	4,300	470	390	610	-	-	-	-	-	-	-	-	-	-	-
	1/11/1993		-	-	2,000	740	29	58	28	-	-	-	-	-	-	-	-	-	-	-
	4/23/1993	a	-	-	6,500	2,600	280	260	190	-	-	-	-	-	-	-	-	-	-	-
	7/8/1993	a	-	-	5,200	2,100	260	250	180	-	-	-	-	-	-	-	-	-	-	-
	10/15/1993	a	-	-	11,000	3,500	580	430	370	-	-	-	-	-	-	-	-	-	-	-
	1/25/1994	a	-	-	6,200	2,500	270	160	28	-	-	-	-	-	-	-	-	-	-	-
	4/28/1994	a	-	-	5,300	1,700	190	210	180	-	-	-	-	-	-	-	-	-	-	-
	7/27/1994	a	-	-	5,900	2,000	360	260	330	-	-	-	-	-	-	-	-	-	-	-
	10/27/1994	a	-	-	8,000	2,200	580	260	170	-	-	-	-	-	-	-	-	-	-	-
	1/26/1995	a	-	-	3,700	1,200	150	150	190	-	-	-	-	-	-	-	-	-	-	-
	4/13/1995	a	-	-	4,000	1,400	200	180	210	-	-	-	-	-	-	-	-	-	-	-
	7/21/1995	a	-	-	5,700	2,000	280	270	280	-	-	-	-	-	-	-	-	-	-	-
	10/25/1995	a	-	-	11,000	3,500	1,100	460	680	-	-	-	-	-	-	-	-	-	-	-
	1/21/1997	a	-	-	2,200	860	63	71	80	<5	-	-	-	-	-	-	-	-	-	-
	11/12/1998	d	-	-	180	44	0.51	<0.5	0.92	<20	-	-	-	-	-	-	-	-	-	-
	1/16/2001	a	-	-	64	11	0.77	<0.5	<0.5	-	<5	<1.0	<5.0	<1.0	1.4	<1.0	-	<1.0	-	-
	6/27/2002		-	-	<50	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	-	<0.5	-	-
	11/18/2002	a	-	-	110	21	1	<0.5	<0.5	-	<0.5	-	-	<0.5	<0.5	-	-	-	-	-
	2/20/2003		-	-	<50	2.5	<0.5	<0.5	<0.5	-	<0.5	-	-	<0.5	<0.5	-	-	-	-	-
	6/11/2003		-	-	<50	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	-	<0.5	<0.5	-	-	-	-	-
	4/3/2008	a	-	-	7,600	2,400	58	250	170	<100	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<500	<5.0	<5,000	<0.5
	6/23/2011	a	-	-	1,300	560	21	86	150	-	<12	<12	<50	-	<12	-	<12	<12	-	-
	12/6/2011	a	-	-	1,800	620	28	22	46	-	<17	<17	<67	-	<17	-	<17	<17	-	-
	1/24/2012	a	-	-	3,700	1,200	68	34	130	<25	-	-	-	-	-	-	-	-	-	-
	5/18/2012	f	<50	<50	75	5.3	<0.5	<0.5	1.6	<0.5	-	-	-	-	-	-	-	-	-	-

Table 3

Groundwater Analytical Data- Monitoring Wells
AEI Project No. 298931, 1600-1630 Park Street, Alameda, CA

Sample ID	Date	Notes	TPH-d	TPH-mo	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	MTBE	TAME	TBA	EDB	1,2-DCA	DIPE	Ethanol	ETBE	Methanol	Lead
			(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-4	4/28/1994	b,c	-	-	190	3.8	2.9	2.1	3.1	-	-	-	-	-	-	-	-	-	-	-
	7/27/1994	a	-	-	180	15	9.2	7.6	28	-	-	-	-	-	-	-	-	-	-	-
	10/27/1994	a	-	-	130	8.6	6.6	4.5	17	-	-	-	-	-	-	-	-	-	-	-
	1/26/1995	-	-	-	110	6.5	1.2	1.8	11	-	-	-	-	-	-	-	-	-	-	-
	4/13/1995	-	-	-	82	3.9	<0.5	<0.5	2.5	-	-	-	-	-	-	-	-	-	-	-
	7/21/1995	-	-	-	130	8.8	1.3	4.5	7.6	-	-	-	-	-	-	-	-	-	-	-
	10/25/1995	-	-	-	95	6.6	1.7	4.3	7	-	-	-	-	-	-	-	-	-	-	-
	4/3/2008	-	-	-	130	1.6	<0.5	0.89	0.85	<5.0	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<50	<0.5	<500	<0.5
	6/23/2011	a	-	-	53	2.7	<0.5	1.0	1.7	-	<0.5	<0.5	<2.0	-	-	<0.5	-	<0.5	-	-
	5/23/2012	f	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-
MW-5	4/28/1994	a	-	-	30,000	4,000	3,000	810	3,500	-	-	-	-	-	-	-	-	-	-	-
	7/27/1994	a	-	-	9,300	2,000	800	290	940	-	-	-	-	-	-	-	-	-	-	-
	10/27/1994	a	-	-	15,000	2,700	1,300	420	1,100	-	-	-	-	-	-	-	-	-	-	-
	1/26/1995	a	-	-	7,900	2,100	680	240	860	-	-	-	-	-	-	-	-	-	-	-
	4/13/1995	a	-	-	7,900	2,400	580	340	630	-	-	-	-	-	-	-	-	-	-	-
	7/21/1995	a	-	-	11,000	3,400	760	610	1,200	-	-	-	-	-	-	-	-	-	-	-
	10/25/1995	a	-	-	13,000	2,900	830	570	1,100	-	-	-	-	-	-	-	-	-	-	-
	1/21/1997	a	-	-	2,600	750	65	1,860	280	<5	-	-	-	-	-	-	-	-	-	-
	11/12/1998	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<5	-	-	-	-	-	-	-	-	-	-
	1/16/2001	-	-	-	<50	11	<0.5	<0.5	0.82	-	<5	<1.0	<5.0	<1.0	<1.0	<1.0	-	<1.0	-	-
	6/27/2002	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	-	<0.5	-	-
	11/18/2002	a	-	-	130	17	3.8	2.1	16	-	<0.5	-	-	<0.5	<0.5	-	-	-	-	
	2/20/2003	-	-	-	<50	5.6	0.51	<0.5	0.68	-	<0.5	-	-	<0.5	<0.5	-	-	-	-	
	6/11/2003	a	-	-	170	48	<0.5	<0.5	1.4	-	<0.5	-	-	<0.5	<0.5	-	-	-	-	
	4/3/2008	a	-	-	31,000	490	3,400	1,600	5,300	<250	<10	<10	<40	<10	<10	<10	<1,000	<10	<10,000	<0.5
	6/23/2011	a	-	-	82	5.1	<0.5	12.0	8.4	-	<0.5	<0.5	<2.0	-	-	<0.5	-	<0.5	-	-
5/18/2012	f	<50	<50	120	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	

Table 3

Groundwater Analytical Data- Monitoring Wells
 AEI Project No. 298931, 1600-1630 Park Street, Alameda, CA

Sample ID	Date	Notes	TPH-d	TPH-mo	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	MTBE	TAME	TBA	EDB	1,2-DCA	DIPE	Ethanol	ETBE	Methanol	Lead
			(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
DPE-1	12/6/2011	a	-	-	9,200	1,800	570	460	1,100	-	<50	<50	<200	-	-	<50	-	<50	-	-
	1/24/2012	a	-	-	3,200	170	58	<5.0	620	<5.0	-	-	-	-	-	-	-	-	-	-
	5/18/2012	f	280	<50	540	49	<1.0	<1.0	17	<1.0	-	-	-	-	-	-	-	-	-	-
DPE-2	12/6/2011	a	-	-	22,000	2,100	3,300	650	3,300	-	<100	<100	<400	-	-	<100	-	<100	-	-
	1/24/2012	a	-	-	1,100	44	26	11	150	<2.5	-	-	-	-	-	-	-	-	-	-
	5/18/2012	f	<50	<50	220	33	3.2	<0.5	30	<0.5	-	-	-	-	-	-	-	-	-	-
DPE-3	12/6/2011	a	-	-	6,400	550	560	180	1,000	-	<17	<17	<67	-	-	<17	-	<17	-	-
	1/24/2012	a	-	-	5,500	290	240	44	1,000	<5.0	-	-	-	-	-	-	-	-	-	-
	5/18/2012	f	260	<50	1,100	78	37	11	89	<1.7	-	-	-	-	-	-	-	-	-	-
DPE-4	1/24/2012	a	-	-	730	66	6.0	7.1	83	2.5	-	-	-	-	-	-	-	-	-	-
	5/18/2012	f	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-
DPE-6	1/24/2012	a	-	-	64*	<0.5	<0.5	<0.5	3.2	<0.5	-	-	-	-	-	-	-	-	-	-
	5/18/2012	f	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-
DPE-9	1/24/2012	a	<50	<50	4,400	160	390	93	1,100	<5.0	-	-	-	-	-	-	-	-	-	-
DPE-10	5/18/2012	f	420	<50	1,700	150	<5.0	<5.0	<5.0	160	-	-	-	-	-	-	-	-	-	-
DPE-11	5/18/2012	f	260	<50	930	6.4	4.6	4.6	160	<1.2	-	-	-	-	-	-	-	-	-	-
ESL			83	83	83	0.044	2.9	3.3	2.3	0.023	0.023	NA	0.075	0.00033	0.0045	NA	NA	NA	NA	750

Table 3

Groundwater Analytical Data- Monitoring Wells
 AEI Project No. 298931, 1600-1630 Park Street, Alameda, CA

Sample ID	Date	Notes	TPH-d (µg/L)	TPH-mo (µg/L)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	MTBE (µg/L)	TAME (µg/L)	TBA (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	Ethanol (µg/L)	ETBE (µg/L)	Methanol (µg/L)	Lead (µg/L)
-----------	------	-------	-----------------	------------------	-----------------	-------------------	-------------------	------------------------	-------------------	----------------	----------------	----------------	---------------	---------------	-------------------	----------------	-------------------	----------------	--------------------	----------------

TPH-g= total petroleum hydrocarbons as gasoline
 TPH-d= total petroleum hydrocarbons as diesel
 TPH-mo= total petroleum hydrocarbons as motor oil
 MTBE = Methyl tertiary butyl ether
 TAME = Tertiary amyl methyl ether
 TBA = Tertiary butyl alcohol
 EDB = 1,2-Dibromoethane
 1,2-DCA = 1,2-Dichloroethane
 DIPE = Diisopropyl ether
 ETBE = Ethyl tertiary butyl ether
 "-" = Not analyzed or data not available
 µg/L = micrograms per liter (ppb)
 ESL = Environmental Screening Levels, Table A-2, Shallow Soil, Commercial- Potential Drinking Water, San Francisco Regional Water Quality Control Board, Revised May 2008
 NA = Not applicable

- a = Laboratory note indicates the unmodified or weakly modified gasoline is significant.
- b = Laboratory note indicates heavier gasoline range compounds are significant (aged gas?).
- c = Laboratory note indicates gasoline range compounds are significant with no recognizable pattern.
- d = Laboratory note indicates that lighter gasoline range compounds (the most mobile fraction) are significant.
- e = Laboratory note indicates that one to a few isolated non-targeted peaks are present.
- f = Laboratory note indicates that low surrogate due to matrix interference.

* Total petroleum hydrocarbons as diesel = <50; Total petroleum hydrocarbons as motor oil = <250

Table 4

Soil Vapor Analytical Data

AEI Project No. 298931, 1600-1630 Park Street, Alameda, CA

Sample ID	Date	TPH-g (µg/m3)	Benzene (µg/m3)	Toluene (µg/m3)	Ethylbenzene (µg/m3)	Xylenes (µg/m3)	Isopropyl Alcohol (µg/m3)
VP-1	5/17/2012	<1,800	<6.5	<7.7	<8.8	<27	<50
VP-2	5/17/2012	<1,800	<6.5	<7.7	<8.8	<27	<50
VP-3	5/17/2012	<1,800	<6.5	<7.7	<8.8	<27	<50
ESL		10,000	84	63,000	980	21,000	NA

TPH-g= total petroleum hydrocarbons as gasoline

µg/m3 = micrograms per cubic meter (ppbv)

NA = Not applicable

ESL = Environmental Screening Levels, Table E-2, San Francisco Regional Water Quality Control Board
(Shallow Soil Gas- Lowest Residential), Revised May 2008

APPENDIX A

FIELD SAMPLING FORMS

AEI CONSULTANTS

GROUNDWATER MONITORING WORK ORDER (LOW-FLOW PURGING & SAMPLING)

Project Name: Foley Street Investments
 Project Number: 298931

Activity	Hours	
	Budget	Actual

Client Contact: John Buestad
 Project Manager: Bob Robitaille
 Gate / System Combo: _____
 PO Number: WC083593
 Scheduled Work Date: Week of May 14, 2012
 Flexible: YES NO
 Site Contact: N/A
 Site Phone: N/A
 Site Address: 1630 Park St.
Alameda, CA 94501

Groundwater and Soil Vapor Monitoring Event

Summary of Work Requested

- 1) Measure DTW and sample **Groundwater** at **MW-1, 2, 3, 4, 5, DPE-1, 2, 3, 4, 6, 10, and 11** using low-flow purging and sampling method. DTW only at DPE-5, 8 and 9.
- 2) Run the peristaltic pump at 150 rpms x 1.67 ml/rev = 250 ml/min, or less.
- 3) Stabilization criteria: pH ±0.1; conductivity ±3%; DO ±10%; ORP ±10 mV.
- 4) Collect at least three **(3) 40-mL VOAs** and one **(1) amber liter** from each well.
- 5) Collect **Soil Vapor** samples from **VP-1, 2 and 3**.
- 6) Use **1-Liter summa** canisters equipped with **150 ml/min** regulators.
- 7) Stop pulling sample when ~5 in.Hg vacuum remaining in canister.
- 8) Inventory Drums at Site. Make sure all of ours are labeled.

*1 Water Drum } on Site
 1 Soil Drum }*

- | <input checked="" type="checkbox"/> Completed | <input type="checkbox"/> Not Completed | |
|---|--|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1. Removed standing water from well boxes; removed well caps; allowed water levels to stabilize. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 2. Checked the depth to water in each well sampled before and after purging and sampling. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. Continuously purged up to 10 liters of groundwater using peristaltic pump and flow-thru cell. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Recorded temp, pH, sc, DO, and ORP readings until stabilization criteria was achieved (see above). |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 5. Noted appearance of purge water (clear, dark, milky, etc.) and if an immiscible sheen was present. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 6. Collected three (3) 40-ml VOA vials per well, capped with zero head space (no bubbles in the VOAs). |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 7. Noted condition of well boxes, well casing, and well plug; recorded wellhead info on the field sheets. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 8. Recorded the amount of consumables (bailers, drums, well plugs, tubing, etc.) used. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 9. Labeled purge water drums; recorded the total number of drums used and left onsite below. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 10. Transported samples on water ice to McCampbell Analytical, Inc. of Pittsburg, CA for analyses. |

Lab Analyses: See Chain-of-Custody

Turnaround Time: Rush 24 hours 48 hours 72 hours Standard

Consumables: # of Bailers: _____ # of Drums: # of Well Plugs: _____

[Handwritten Signature]

AEI CONSULTANTS

GROUNDWATER MONITORING WORK ORDER (LOW-FLOW PURGING & SAMPLING)

Drums Onsite: # of Water: 1 # of Soil: 1 # of Other: 0

Requested by PM: _____ Completed by Tech: John Sig

5/23/12

Groundwater Notes:

Need traffic control to access MW-4. Coordinate with Robitaille and/or Campbell.

During each monitoring event, water levels will be measured, and for new wells, light non-aqueous phase liquid (LNAPL) will be checked with an oil-water interface probe. Wells not containing measurable LNAPL will be purged using low flow sampling techniques until field readings have stabilized. During purging the following water quality measurements will be collected: temperature, pH, specific conductivity, and dissolved oxygen (DO). Groundwater samples will be collected into appropriate laboratory-supplied containers using the purge tubing which will consist of new, unused disposable tubing for each well. Samples will then be logged onto the Chain of Custody and placed in a cooler with water ice. All samples will be delivered to a state certified laboratory under Chain of Custody documentation.

One groundwater sample will be analyzed from each well for TPHmo and TPHd by EPA method 8015 Modified with silica gel cleanup, TPHg by EPA method 8015 Modified, and BTEX & MTBE by EPA method 8260B.

Soil Vapor Notes:

5-17-12

To begin, a 1 liter summa canister connected to a flow controller, will be connected to the probe sampling lines. Prior to collecting the sample, soil vapor will be withdrawn from the inert tubing using a calibrated syringe connected via an on-off valve. A total of three purge volumes will be removed from each probe. Following purging, soil gas will be monitoring with an Eagle ® field meter for oxygen (O2), carbon dioxide (CO2), and total hydrocarbons. The sample canister will then be connected, opened, and the initial vacuum recorded. Vapor samples will be collected through the regulator at approximately 150 mL/minute. Upon reaching approximately 5 in Hg vacuum in the canister, the canister will be closed and removed from the sampling line. Samples will be appropriately labeled and entered onto the chain of custody prior to shipping to the laboratory. During sampling, a leak check gas will be used to confirm that the sample train was tight and leak free.

All vapor samples will be sealed and labeled immediately upon collection. Chain of custody documentation will be initiated prior to leaving the site. All samples will be shipped to a state certified laboratory on the day of collection. Soil vapor samples will be analyzed by EPA Method TO-3 for total petroleum hydrocarbons as gasoline (TPHg) and by EPA Method TO-15 for benzene, toluene, ethylbenzene, and xylenes (BTEX).

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-1

Project Name:	Buestad	Date of Sampling:	5-18-12
Job Number:	298931	Name of Sampler:	J. Sugg
Project Address:	1630 Park Street		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2
Wellhead Condition	▼
Elevation of Top of Casing (feet above msl)	
Depth of Well	20.00
Depth to Water (from top of casing)	6.87
Water Elevation (feet above msl)	
Well Volumes Purged	
Gallons Purged: formula valid only for casing sizes of 2" (0.16 gal/ft), 4" (0.65 gal/ft), and 6" (1.44 gal/ft)	
Actual Volume Purged (liters)	5
Appearance of Purge Water	Clear
Free Product Present?	Thickness (ft):

GROUNDWATER SAMPLES

Number of Samples/Container Size							
Time	Vol Removed (liters)	Temperature (deg C)	pH	Conductivity (μ S/cm)	DO (mg/L)	ORP (meV)	Comments
0620	1	18.30	7.56	473	6.13	-30.8	
	2	18.50	7.34	462	2.62	-44.3	
	3	18.58	7.29	456	1.68	-50.8	
	4	18.64	7.23	450	1.26	-52.8	
0630	5	18.67	7.17	441	1.08	-54.0	

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-2

Project Name:	Buestad	Date of Sampling:	5-18-12
Job Number:	298931	Name of Sampler:	J. Sigg
Project Address:	1630 Park Street		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2
Wellhead Condition	▼
Elevation of Top of Casing (feet above msl)	
Depth of Well	20.00
Depth to Water (from top of casing)	7.41
Water Elevation (feet above msl)	
Well Volumes Purged	
Gallons Purged: formula valid only for casing sizes of 2" (0.16 gal/ft), 4" (0.65 gal/ft), and 6" (1.44 gal/ft)	
Actual Volume Purged (liters)	5
Appearance of Purge Water	Clear
Free Product Present?	Thickness (ft):

GROUNDWATER SAMPLES

Number of Samples/Container Size							
Time	Vol Removed (liters)	Temperature (deg C)	pH	Conductivity (μ S/cm)	DO (mg/L)	ORP (meV)	Comments
0720	1	18.86	7.11	1037	14.05	-24.6	
	2	18.97	6.91	1007	2.91	-25.4	
	3	19.04	6.82	970	1.94	-23.7	
	4	19.10	6.78	930	1.61	-22.8	
0730	5	19.13	6.75	906	1.43	-22.2	

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-3

Project Name:	Buestad	Date of Sampling:	5-18-12
Job Number:	298931	Name of Sampler:	J. Sigg
Project Address:	1630 Park Street		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2
Wellhead Condition	▼
Elevation of Top of Casing (feet above msl)	
Depth of Well	20.00
Depth to Water (from top of casing)	7.64
Water Elevation (feet above msl)	
Well Volumes Purged	
Gallons Purged: formula valid only for casing sizes of 2" (0.16 gal/ft), 4" (0.65 gal/ft), and 6" (1.44 gal/ft)	
Actual Volume Purged (liters)	5
Appearance of Purge Water	clear
Free Product Present?	Thickness (ft):

GROUNDWATER SAMPLES

Number of Samples/Container Size							
Time	Vol Removed (liters)	Temperature (deg C)	pH	Conductivity (μ S/cm)	DO (mg/L)	ORP (meV)	Comments
0920	1	18.30	7.24	563	10.18	14.3	
	2	18.28	7.18	607	3.24	-16.1	
	3	18.29	7.09	605	1.63	-10.9	
	4	18.29	6.99	596	1.25	-2.1	
0930	5	18.31	6.96	587	1.23	2.9	

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-4

Project Name:	Buestad	Date of Sampling:	5-23-12
Job Number:	298931	Name of Sampler:	J. Sigg
Project Address:	1630 Park Street		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2
Wellhead Condition	▼
Elevation of Top of Casing (feet above msl)	
Depth of Well	20.00
Depth to Water (from top of casing)	8.96
Water Elevation (feet above msl)	
Well Volumes Purged	
Gallons Purged: formula valid only for casing sizes of 2" (0.16 gal/ft), 4" (0.65 gal/ft), and 6" (1.44 gal/ft)	
Actual Volume Purged (liters)	5
Appearance of Purge Water	Clear
Free Product Present?	Thickness (ft):

GROUNDWATER SAMPLES

Number of Samples/Container Size							
Time	Vol Removed (liters)	Temperature (deg C)	pH	Conductivity (μ S/cm)	DO (mg/L)	ORP (meV)	Comments
0925	1	18.05	4.77	198	6.65	166.0	
	2	17.99	5.01	198	5.33	120.1	
	3	18.06	6.00	200	5.54	52.3	
0935	4	18.06	6.28	201	4.95	-2.8	
	5	18.07	6.05	199	4.02	16.2	

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-5

Project Name:	Buestad	Date of Sampling:	5-18-12
Job Number:	298931	Name of Sampler:	J. Sigg
Project Address:	1630 Park Street		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2
Wellhead Condition	▼
Elevation of Top of Casing (feet above msl)	
Depth of Well	20.00
Depth to Water (from top of casing)	7.46
Water Elevation (feet above msl)	
Well Volumes Purged	
Gallons Purged: formula valid only for casing sizes of 2" (0.16 gal/ft), 4" (0.65 gal/ft), and 6" (1.44 gal/ft)	
Actual Volume Purged (liters)	5
Appearance of Purge Water	Clear
Free Product Present?	Thickness (ft):

GROUNDWATER SAMPLES

Number of Samples/Container Size							
Time	Vol Removed (liters)	Temperature (deg C)	pH	Conductivity (μ S/cm)	DO (mg/L)	ORP (meV)	Comments
0520	1	19.11	7.57	609	3.02	-51.2	
	2	19.21	7.51	606	1.71	-62.1	
	3	19.25	7.47	603	1.31	-63.9	
	4	19.27	7.45	601	1.19	-63.6	
0530	5	19.29	7.43	600	1.06	-63.3	

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: DPE-1

Project Name:	Buestad	Date of Sampling:	5-18-12
Job Number:	298931	Name of Sampler:	J. Sigg
Project Address:	1630 Park Street		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4
Wellhead Condition	▼
Elevation of Top of Casing (feet above msl)	
Depth of Well	15.00
Depth to Water (from top of casing)	7.72
Water Elevation (feet above msl)	
Well Volumes Purged	
Gallons Purged: formula valid only for casing sizes of 2" (0.16 gal/ft), 4" (0.65 gal/ft), and 6" (1.44 gal/ft)	
Actual Volume Purged (liters)	5
Appearance of Purge Water	Clear
Free Product Present?	Thickness (ft):

GROUNDWATER SAMPLES

Number of Samples/Container Size							
Time	Vol Removed (liters)	Temperature (deg C)	pH	Conductivity (μ S/cm)	DO (mg/L)	ORP (meV)	Comments
0650	1	17.83	7.13	659	8.67	-8.9	
	2	17.91	7.15	667	4.72	-30.7	
	3	17.95	7.18	669	2.93	-39.1	
	4	17.98	7.21	670	2.61	-43.1	
0700	5	18.02	7.22	670	1.77	-45.2	

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: DPE-2

Project Name:	Buestad	Date of Sampling:	5-18-12
Job Number:	298931	Name of Sampler:	J. S. 99
Project Address:	1630 Park Street		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4
Wellhead Condition	▼
Elevation of Top of Casing (feet above msl)	
Depth of Well	15.00
Depth to Water (from top of casing)	7.89
Water Elevation (feet above msl)	
Well Volumes Purged	
Gallons Purged: formula valid only for casing sizes of 2" (0.16 gal/ft), 4" (0.65 gal/ft), and 6" (1.44 gal/ft)	
Actual Volume Purged (liters)	5
Appearance of Purge Water	Clean
Free Product Present?	Thickness (ft):

GROUNDWATER SAMPLES

Number of Samples/Container Size							
Time	Vol Removed (liters)	Temperature (deg C)	pH	Conductivity (μ S/cm)	DO (mg/L)	ORP (meV)	Comments
1120	1	17.82	6.90	1102	6.81	-24.6	
	2	17.77	6.91	1104	3.53	-29.9	
	3	17.78	6.90	1104	2.33	-28.7	
	4	17.76	6.88	1104	1.74	-27.4	
1130	5	17.77	6.87	1104	1.46	-26.5	

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: DPE-3

Project Name:	Buestad	Date of Sampling:	5-18-12
Job Number:	298931	Name of Sampler:	J. Sigg
Project Address:	1630 Park Street		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4
Wellhead Condition	▼
Elevation of Top of Casing (feet above msl)	
Depth of Well	14.00
Depth to Water (from top of casing)	6.75
Water Elevation (feet above msl)	
Well Volumes Purged	
Gallons Purged: formula valid only for casing sizes of 2" (0.16 gal/ft), 4" (0.65 gal/ft), and 6" (1.44 gal/ft)	
Actual Volume Purged (liters)	5
Appearance of Purge Water	clean
Free Product Present?	Thickness (ft):

GROUNDWATER SAMPLES

Number of Samples/Container Size							
Time	Vol Removed (liters)	Temperature (deg C)	pH	Conductivity (μ S/cm)	DO (mg/L)	ORP (meV)	Comments
0550	1	17.25	7.17	1361	7.35	-214.8	
	2	17.40	7.36	1369	2.62	-251.1	
	3	17.45	7.41	1371	1.87	-254.2	
	4	17.48	7.42	1371	1.59	-253.9	
0600	5	17.50	7.42	1370	1.47	-252.8	

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: DPE-4

Project Name:	Buestad	Date of Sampling:	5-18-12
Job Number:	298931	Name of Sampler:	J. Sigg
Project Address:	1630 Park Street		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4
Wellhead Condition	▼
Elevation of Top of Casing (feet above msl)	
Depth of Well	17.00
Depth to Water (from top of casing)	8.59
Water Elevation (feet above msl)	
Well Volumes Purged	
Gallons Purged: formula valid only for casing sizes of 2" (0.16 gal/ft), 4" (0.65 gal/ft), and 6" (1.44 gal/ft)	
Actual Volume Purged (liters)	5
Appearance of Purge Water	Clear
Free Product Present?	Thickness (ft):

GROUNDWATER SAMPLES

Number of Samples/Container Size							
Time	Vol Removed (liters)	Temperature (deg C)	pH	Conductivity (μ S/cm)	DO (mg/L)	ORP (meV)	Comments
1150	1	18.16	7.02	808	4.18	40.4	
	2	18.12	7.02	807	2.22	25.2	
	3	18.10	7.03	806	1.43	16.0	
	4	18.09	7.03	806	1.15	13.6	
1200	5	18.08	7.02	805	1.03	13.1	

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: DPE-6

Project Name:	Buestad	Date of Sampling:	5-18-12
Job Number:	298931	Name of Sampler:	J. Sigg
Project Address:	1630 Park Street		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4
Wellhead Condition	▼
Elevation of Top of Casing (feet above msl)	
Depth of Well	18.00
Depth to Water (from top of casing)	7.43
Water Elevation (feet above msl)	
Well Volumes Purged	
Gallons Purged: formula valid only for casing sizes of 2" (0.16 gal/ft), 4" (0.65 gal/ft), and 6" (1.44 gal/ft)	
Actual Volume Purged (liters)	5
Appearance of Purge Water	Clear
Free Product Present?	Thickness (ft):

GROUNDWATER SAMPLES

Number of Samples/Container Size							
Time	Vol Removed (liters)	Temperature (deg C)	pH	Conductivity (μ S/cm)	DO (mg/L)	ORP (meV)	Comments
1050	1	18.37	7.23	716	8.59	-83.2	
	2	18.22	7.09	718	2.82	-73.3	
	3	18.18	6.98	717	1.44	-56.7	
	4	18.18	6.90	717	1.23	-46.4	
1100	5	18.17	6.86	718	1.08	-38.1	

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: DPE-10

Project Name:	Buestad	Date of Sampling:	5-18-12
Job Number:	298931	Name of Sampler:	J. Sigg
Project Address:	1630 Park Street		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4
Wellhead Condition	▼
Elevation of Top of Casing (feet above msl)	
Depth of Well	15.00
Depth to Water (from top of casing)	7.73
Water Elevation (feet above msl)	
Well Volumes Purged	
Gallons Purged: formula valid only for casing sizes of 2" (0.16 gal/ft), 4" (0.65 gal/ft), and 6" (1.44 gal/ft)	
Actual Volume Purged (liters)	5
Appearance of Purge Water	Clear
Free Product Present?	Thickness (ft):

GROUNDWATER SAMPLES

Number of Samples/Container Size							
Time	Vol Removed (liters)	Temperature (deg C)	pH	Conductivity (μ S/cm)	DO (mg/L)	ORP (meV)	Comments
0820	1	18.57	6.85	729	9.17	-129.9	
	2	18.65	6.95	743	3.11	-157.7	
	3	18.69	7.00	740	1.79	-153.9	
	4	18.71	7.03	738	1.47	-166.9	
0830	5	18.71	7.04	737	1.30	-179.4	

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: DPE-11

Project Name:	Buestad	Date of Sampling:	5-18-12
Job Number:	298931	Name of Sampler:	J. Sigg
Project Address:	1630 Park Street		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4
Wellhead Condition	▼
Elevation of Top of Casing (feet above msl)	
Depth of Well	15.00
Depth to Water (from top of casing)	7.90
Water Elevation (feet above msl)	
Well Volumes Purged	
Gallons Purged: formula valid only for casing sizes of 2" (0.16 gal/ft), 4" (0.65 gal/ft), and 6" (1.44 gal/ft)	
Actual Volume Purged (liters)	5
Appearance of Purge Water	Clean
Free Product Present?	Thickness (ft):

GROUNDWATER SAMPLES

Number of Samples/Container Size							
Time	Vol Removed (liters)	Temperature (deg C)	pH	Conductivity (μ S/cm)	DO (mg/L)	ORP (meV)	Comments
0950	1	18.14	7.05	810	7.97	-240.0	
	2	18.12	7.12	823	2.80	-246.7	
	3	18.10	7.15	824	1.71	-250.1	
	4	18.11	7.14	824	1.45	-250.3	
1000	5	18.11	7.13	825	1.28	-249.4	

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

McCAMPBELL ANALYTICAL INC.

1538 Willow Pass Road, Pittsburg, CA 94565

Telephone: (925) 252-9262

Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

TURN AROUND TIME

RUSH 24 HR 48 HR 72 HR 5 DAY

EDF Required? Yes No

PDF Required? Yes No

Report To: Robert Robitaille Bill To: AEI Consultants
Company: AEI Consultants, 2500 Camino Diablo, Walnut Creek, CA 94597

PO# WC083593 Global ID: T0600100655

E-Mail: rrobitaille@aeiconsultatns.com

Telephone: (925) 746-6000, ext. 148 Fax: (925) 746-6099

AEI Project No. 298931 Project Name: FSI

Project Location: 1630 Park St., Alameda, CA 94501

Sampler Signature: *[Signature]*

SAMPLE ID	FIELD POINT NAME	SAMPLING		# of Containers	Type Containers	MATRIX					METHOD PRESERVED				TPH-G (EPA 8015 M)	TPH-D / TPH-MO (EPA 8015 M w/ Silica Gel Clean-up)	BTEX, MTBE (EPA 8260B)	Analysis Request	Other	Comments
		Date	Time			Water	Soil	Air	Sludge	Other	Ice	HCL	HNO ₃	Other						
MW-1	5-18-12	5-18-12	0630	4	VOA, amber L	X					X	X		X	X	X				
MW-2			0730	4	VOA, amber L	X					X	X		X	X	X				
MW-3			0930	4	VOA, amber L	X					X	X		X	X	X				
MW-4				4	VOA, amber L	X					X	X		X	X	X				
MW-5			0530	4	VOA, amber L	X					X	X		X	X	X				
DPE-1			0700	4	VOA, amber L	X					X	X		X	X	X				
DPE-2			1130	4	VOA, amber L	X					X	X		X	X	X				
DPE-3			0600	4	VOA, amber L	X					X	X		X	X	X				
DPE-4			1200	4	VOA, amber L	X					X	X		X	X	X				
DPE-6			1100	4	VOA, amber L	X					X	X		X	X	X				
DPE-10			0830	4	VOA, amber L	X					X	X		X	X	X				
DPE-11			1000	4	VOA, amber L	X					X	X		X	X	X				

Relinquished By: *[Signature]* Date: 5-18-12 Time: 1316 Received By: *[Signature]*

Relinquished By: Date: Time: Received By:

Relinquished By: Date: Time: Received By:

ICE/t° _____ PRESERVATION APPROPRIATE _____
 GOOD CONDITION _____ CONTAINERS _____
 HEAD SPACE ABSENT _____
 DECHLORINATED IN LAB _____ PERSERVED IN LAB _____

VOAS O&G METALS OTHER

AEI CONSULTANTS
SOIL VAPOR FIELD SAMPLING FORM

SOIL VAPOR PROBE ID: VP-1

Project Name:	Foley Street Investments	Date of Sampling:	05/17/12
Job Number:	298931	Start Time:	13:27
Project Address:	1630 Park St. Alameda, CA 94501	End Time:	13:33
		Name of Sampler:	J. Sigg

SOIL GAS PROBE DATA

Starting Vacuum (in-Hg)	30"
Ending Vacuum (in-Hg)	5"
Flow Controller / Sampling Flow Rate (mL/min)	100 - 200
Tubing Inside Diameter (1/8" or 1/4")	1/8" I.D. ▼
Tubing Type (Nylon, Kynar, Teflon, Stainless Steel)	NYLON / NYLAFLOW ▼
Wellbox Condition	▼
Depth of Probe (ft bgs)	6
Length of Tubing Above Grade (ft)	1
Total Length of Tubing Purged (ft)	7
Number of Purge Volumes (default = 3 purge volumes)	3
Total Volume Purged (mL): formula valid only for tubing sizes of 1/8" I.D. (~2.4 mL/ft), 3/16" I.D. (~5.4 mL/ft), and 1/4" I.D. (~9.6 mL/ft)	50
Appreciable Amount of Rain (>1/2") in Last Five Days?	No
Moisture / Water Present in Tubing?	No

SOIL GAS SAMPLING EQUIPMENT

Number of Samples / Container Size and Type	One (1) 1-Liter Summa Canister
Summa Canister Number	
Sampling Manifold / Flow Controller Number	
Leak Check Compound	1,1-DIFLUOROETHANE (1,1-DFE) ▼

NOTES & COMMENTS

cc = cubic centimeter 1 L = 1000 mL in-Hg = inches of mercury
mL = milliliter 1 mL = 1 cc ft bgs = feet below ground surface

AEI CONSULTANTS
SOIL VAPOR FIELD SAMPLING FORM

SOIL VAPOR PROBE ID: VP-1

Project Name:	Foley Street Investments	Date of Sampling:	5-30-12
Job Number:	298931	Start Time:	11:30
Project Address:	1630 Park St. Alameda, CA 94501	End Time:	12:00
		Name of Sampler:	J. Sigg

SOIL GAS PROBE DATA

Starting Vacuum (in-Hg)	
Ending Vacuum (in-Hg)	
Flow Controller / Sampling Flow Rate (mL/min)	100 - 200
Tubing Inside Diameter (1/8" or 1/4")	1/8" I.D. ▼
Tubing Type (Nylon, Kynar, Teflon, Stainless Steel)	NYLON / NYLAFLOW ▼
Wellbox Condition	▼
Depth of Probe (ft bgs)	6
Length of Tubing Above Grade (ft)	1
Total Length of Tubing Purged (ft)	7
Number of Purge Volumes (default = 3 purge volumes)	3
Total Volume Purged (mL): formula valid only for tubing sizes of 1/8" I.D. (~2.4 mL/ft), 3/16" I.D. (~5.4 mL/ft), and 1/4" I.D. (~9.6 mL/ft)	50
Appreciable Amount of Rain (>1/2") in Last Five Days?	No
Moisture / Water Present in Tubing?	No

SOIL GAS SAMPLING EQUIPMENT

Number of Samples / Container Size and Type	One (1) 1-Liter Summa Canister
Summa Canister Number	
Sampling Manifold / Flow Controller Number	
Leak Check Compound	1,1-DIFLUOROETHANE (1,1-DFE) ▼
Eagle Screening	THV ppmv/ 0 CH4 %/ 0.0 O2 %/ 17.7 CO2 %/ 0.5

NOTES & COMMENTS

cc = cubic centimeter 1 L = 1000 mL in-Hg = inches of mercury
mL = milliliter 1 mL = 1 cc ft bgs = feet below ground surface

AEI CONSULTANTS
SOIL VAPOR FIELD SAMPLING FORM

SOIL VAPOR PROBE ID: VP-2

Project Name:	Foley Street Investments	Date of Sampling:	5-30-12
Job Number:	298931	Start Time:	11:00
Project Address:	1630 Park St. Alameda, CA 94501	End Time:	11:30
		Name of Sampler:	J. Sigg

SOIL GAS PROBE DATA

Starting Vacuum (in-Hg)	
Ending Vacuum (in-Hg)	
Flow Controller / Sampling Flow Rate (mL/min)	100 - 200
Tubing Inside Diameter (1/8" or 1/4")	1/8" I.D. ▼
Tubing Type (Nylon, Kynar, Teflon, Stainless Steel)	NYLON / NYLAFLOW ▼
Wellbox Condition	▼
Depth of Probe (ft bgs)	6
Length of Tubing Above Grade (ft)	1
Total Length of Tubing Purged (ft)	7
Number of Purge Volumes (default = 3 purge volumes)	3
Total Volume Purged (mL): formula valid only for tubing sizes of 1/8" I.D. (~2.4 mL/ft), 3/16" I.D. (~5.4 mL/ft), and 1/4" I.D. (~9.6 mL/ft)	50
Appreciable Amount of Rain (>1/2") in Last Five Days?	NO
Moisture / Water Present in Tubing?	NO

SOIL GAS SAMPLING EQUIPMENT

Number of Samples / Container Size and Type	One (1) 1-Liter Summa Canister
Summa Canister Number	
Sampling Manifold / Flow Controller Number	
Leak Check Compound	HELIUM GAS (HE) ▼

Eagle Screening THV ppmv/ 0 CH4 %/ 0.0 O2 %/ 18.4 CO2 %/ 0.4

NOTES & COMMENTS

cc = cubic centimeter
mL = milliliter

1 L = 1000 mL
1 mL = 1 cc

in-Hg = inches of mercury
ft bgs = feet below ground surface

AEI CONSULTANTS
SOIL VAPOR FIELD SAMPLING FORM

SOIL VAPOR PROBE ID: VP-3

Project Name:	Foley Street Investments	Date of Sampling:	5-30-12
Job Number:	298931	Start Time:	12:10
Project Address:	1630 Park St. Alameda, CA 94501	End Time:	12:30
		Name of Sampler:	J. Sigg

SOIL GAS PROBE DATA

Starting Vacuum (in-Hg)	
Ending Vacuum (in-Hg)	
Flow Controller / Sampling Flow Rate (mL/min)	100 - 200
Tubing Inside Diameter (1/8" or 1/4")	1/8" I.D. ▼
Tubing Type (Nylon, Kynar, Teflon, Stainless Steel)	NYLON / NYLAFLOW ▼
Wellbox Condition	▼
Depth of Probe (ft bgs)	6
Length of Tubing Above Grade (ft)	1
Total Length of Tubing Purged (ft)	7
Number of Purge Volumes (default = 3 purge volumes)	3
Total Volume Purged (mL): formula valid only for tubing sizes of 1/8" I.D. (~2.4 mL/ft), 3/16" I.D. (~5.4 mL/ft), and 1/4" I.D. (~9.6 mL/ft)	50
Appreciable Amount of Rain (>1/2") in Last Five Days?	NO
Moisture / Water Present in Tubing?	NO

SOIL GAS SAMPLING EQUIPMENT

Number of Samples / Container Size and Type	One (1) 1-Liter Summa Canister
Summa Canister Number	
Sampling Manifold / Flow Controller Number	
Leak Check Compound	HELIUM GAS (HE) ▼

Eagle Screening THV ppmv/ 0 CH4 %/ 0.0 O2 %/ 18.2 CO2 %/ 0.9

NOTES & COMMENTS

cc = cubic centimeter 1 L = 1000 mL in-Hg = inches of mercury
mL = milliliter 1 mL = 1 cc ft bgs = feet below ground surface

APPENDIX B

LABORATORY ANALYTICAL REPORTS W/ CHAIN OF CUSTODY DOCUMENTATION



Analytical Report

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #298931; FSI	Date Sampled: 05/18/12
		Date Received: 05/18/12
	Client Contact: Robert Robitaille	Date Reported: 05/25/12
	Client P.O.: #WC083593	Date Completed: 05/25/12

WorkOrder: 1205551

May 25, 2012

Dear Robert:

Enclosed within are:

- 1) The results of the **11** analyzed samples from your project: **#298931; FSI**,
- 2) QC data for the above samples, and
- 3) A copy of the chain of custody.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
 Laboratory Manager
 McC Campbell Analytical, Inc.

The analytical results relate only to the items tested.



1534 Willow Pass Rd
 Pittsburg, CA 94565-1701
 (925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1205551

ClientCode: AEL

WaterTrax
 WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:

Robert Robitaille
 AEI Consultants
 2500 Camino Diablo, Ste. #200
 Walnut Creek, CA 94597
 (408) 559-7600 FAX: (408) 559-7601

Email: rrobitaille@aeiconsultants.com
 cc:
 PO: #WC083593
 ProjectNo: #298931; FSI

Bill to:

Sara Guerin
 AEI Consultants
 2500 Camino Diablo, Ste. #200
 Walnut Creek, CA 94597
 AccountsPayable@AEIConsultants.c

Requested TAT: 5 days

Date Received: 05/18/2012

Date Printed: 05/18/2012

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1205551-001	MW-1	Water	5/18/2012 6:30	<input type="checkbox"/>	A	B	A										
1205551-002	MW-2	Water	5/18/2012 7:30	<input type="checkbox"/>	A	B											
1205551-003	MW-3	Water	5/18/2012 9:30	<input type="checkbox"/>	A	B											
1205551-004	MW-5	Water	5/18/2012 5:30	<input type="checkbox"/>	A	B											
1205551-005	DPE-1	Water	5/18/2012 7:00	<input type="checkbox"/>	A	B											
1205551-006	DPE-2	Water	5/18/2012 11:30	<input type="checkbox"/>	A	B											
1205551-007	DPE-3	Water	5/18/2012 6:00	<input type="checkbox"/>	A	B											
1205551-008	DPE-4	Water	5/18/2012 12:00	<input type="checkbox"/>	A	B											
1205551-009	DPE-6	Water	5/18/2012 11:00	<input type="checkbox"/>	A	B											
1205551-010	DPE-10	Water	5/18/2012 8:30	<input type="checkbox"/>	A	B											
1205551-011	DPE-11	Water	5/18/2012 10:00	<input type="checkbox"/>	A	B											

Test Legend:

1	G-MBTEX_W	2	MBTEX-8260B_W	3	PREDF REPORT	4		5	
6		7		8		9		10	
11		12							

The following SampIDs: 001A, 002A, 003A, 004A, 005A, 006A, 007A, 008A, 009A, 010A, 011A contain testgroup.

Prepared by: Maria Venegas

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
 Hazardous samples will be returned to client or disposed of at client expense.



Sample Receipt Checklist

Client Name: **AEI Consultants** Date and Time Received: **5/18/2012 2:52:40 PM**
 Project Name: **#298931; FSI** LogIn Reviewed by: **Maria Venegas**
 WorkOrder N°: **1205551** Matrix: Water Carrier: Client Drop-In

Chain of Custody (COC) Information

Chain of custody present? Yes No
 Chain of custody signed when relinquished and received? Yes No
 Chain of custody agrees with sample labels? Yes No
 Sample IDs noted by Client on COC? Yes No
 Date and Time of collection noted by Client on COC? Yes No
 Sampler's name noted on COC? Yes No

Sample Receipt Information

Custody seals intact on shipping container/cooler? Yes No NA
 Shipping container/cooler in good condition? Yes No
 Samples in proper containers/bottles? Yes No
 Sample containers intact? Yes No
 Sufficient sample volume for indicated test? Yes No

Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes No
 Container/Temp Blank temperature Cooler Temp: 1.2°C NA
 Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
 Sample labels checked for correct preservation? Yes No
 Metal - pH acceptable upon receipt (pH<2)? Yes No NA
 Samples Received on Ice? Yes No

(Ice Type: WET ICE)

* NOTE: If the "No" box is checked, see comments below.

 Comments:



McC Campbell Analytical, Inc.

"When Quality Counts"

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

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #298931; FSI	Date Sampled: 05/18/12
		Date Received: 05/18/12
	Client Contact: Robert Robitaille	Date Extracted 05/22/12-05/23/12
	Client P.O.: #WC083593	Date Analyzed 05/22/12-05/23/12

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*

Extraction method: SW5030B

Analytical methods: SW8015Bm

Work Order: 1205551

Lab ID	Client ID	Matrix	TPH(g)	DF	% SS	Comments
1205551-001A	MW-1	W	2600	10	95	d1
1205551-002A	MW-2	W	140	1	---#	d1
1205551-003A	MW-3	W	75	1	---#	d1,d6
1205551-004A	MW-5	W	120	1	---#	d6
1205551-005A	DPE-1	W	540	1	---#	d1
1205551-006A	DPE-2	W	220	1	107	d1
1205551-007A	DPE-3	W	1100	2	127	d1
1205551-008A	DPE-4	W	ND	1	107	
1205551-009A	DPE-6	W	ND	1	---#	
1205551-010A	DPE-10	W	1700	2	---#	d1
1205551-011A	DPE-11	W	930	2	---#	d1

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	µg/L
	S	NA	NA

* water and vapor samples are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts in mg/L.

cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference. %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:
d1) weakly modified or unmodified gasoline is significant
d6) one to a few isolated non-target peaks present in the TPH(g) chromatogram

DHS ELAP Certification 1644

 Angela Rydelius, Lab Manager



McC Campbell Analytical, Inc.

"When Quality Counts"

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

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #298931; FSI	Date Sampled: 05/18/12
		Date Received: 05/18/12
	Client Contact: Robert Robitaille	Date Extracted: 05/22/12-05/23/12
	Client P.O.: #WC083593	Date Analyzed: 05/22/12-05/23/12

MTBE and BTEX by GC/MS*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1205551

Lab ID	1205551-001B	1205551-002B	1205551-003B	1205551-004B	Reporting Limit for DF=1	
Client ID	MW-1	MW-2	MW-3	MW-5		
Matrix	W	W	W	W		
DF	10	1	1	1		

Compound	Concentration				ug/kg	µg/L
Benzene	200	14	5.3	ND	NA	0.5
Ethylbenzene	93	2.9	ND	ND	NA	0.5
Methyl-t-butyl ether (MTBE)	ND<5.0	ND	ND	ND	NA	0.5
Toluene	51	2.8	ND	ND	NA	0.5
Xylenes, Total	610	12	1.6	ND	NA	0.5

Surrogate Recoveries (%)

%SS1:	119	120	122	121	
%SS2:	92	91	93	92	

Comments

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

%SS = Percent Recovery of Surrogate Standard

DF = Dilution Factor



McC Campbell Analytical, Inc.

"When Quality Counts"

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

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #298931; FSI	Date Sampled: 05/18/12
		Date Received: 05/18/12
	Client Contact: Robert Robitaille	Date Extracted: 05/22/12-05/23/12
	Client P.O.: #WC083593	Date Analyzed: 05/22/12-05/23/12

MTBE and BTEX by GC/MS*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 120551

Lab ID	1205551-005B	1205551-006B	1205551-007B	1205551-008B	Reporting Limit for DF = 1	
Client ID	DPE-1	DPE-2	DPE-3	DPE-4		
Matrix	W	W	W	W		
DF	2	1	3.3	1		

Compound	Concentration				ug/kg	µg/L
Benzene	49	33	78	ND	NA	0.5
Ethylbenzene	ND<1.0	ND	11	ND	NA	0.5
Methyl-t-butyl ether (MTBE)	ND<1.0	ND	ND<1.7	ND	NA	0.5
Toluene	ND<1.0	3.2	37	ND	NA	0.5
Xylenes, Total	17	30	89	ND	NA	0.5

Surrogate Recoveries (%)

%SS1:	122	118	122	120	
%SS2:	91	92	90	92	

Comments

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

%SS = Percent Recovery of Surrogate Standard

DF = Dilution Factor



McC Campbell Analytical, Inc.

"When Quality Counts"

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

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #298931; FSI	Date Sampled: 05/18/12
		Date Received: 05/18/12
	Client Contact: Robert Robitaille	Date Extracted: 05/22/12-05/23/12
	Client P.O.: #WC083593	Date Analyzed: 05/22/12-05/23/12

MTBE and BTEX by GC/MS*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 120551

Lab ID	1205551-009B	1205551-010B	1205551-011B		Reporting Limit for DF = 1	
Client ID	DPE-6	DPE-10	DPE-11			
Matrix	W	W	W			
DF	1	10	2.5			

Compound	Concentration			ug/kg	ug/L
Benzene	ND	150	6.4	NA	0.5
Ethylbenzene	ND	ND<5.0	4.6	NA	0.5
Methyl-t-butyl ether (MTBE)	ND	ND<5.0	ND<1.2	NA	0.5
Toluene	ND	ND<5.0	4.6	NA	0.5
Xylenes, Total	ND	160	160	NA	0.5

Surrogate Recoveries (%)

%SS1:	122	122	117	
%SS2:	91	91	92	

Comments

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

%SS = Percent Recovery of Surrogate Standard

DF = Dilution Factor



McC Campbell Analytical, Inc.

"When Quality Counts"

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

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #298931; FSI	Date Sampled: 05/18/12
		Date Received: 05/18/12
	Client Contact: Robert Robitaille	Date Extracted: 05/18/12
	Client P.O.: #WC083593	Date Analyzed: 05/18/12-05/22/12

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up*

Extraction method: SW3510C/3630C

Analytical methods: SW8015B

Work Order: 1205551

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	TPH-Motor Oil (C18-C36)	DF	% SS	Comments
1205551-001A	MW-1	W	210	ND	1	91	e4
1205551-002A	MW-2	W	68	ND	1	88	e4,e2
1205551-003A	MW-3	W	ND	ND	1	90	
1205551-004A	MW-5	W	ND	ND	1	90	
1205551-005A	DPE-1	W	280	ND	1	92	e4,e2
1205551-006A	DPE-2	W	ND	ND	1	95	
1205551-007A	DPE-3	W	260	ND	1	90	e4
1205551-008A	DPE-4	W	ND	ND	1	90	
1205551-009A	DPE-6	W	ND	ND	1	90	
1205551-010A	DPE-10	W	420	ND	1	83	e4
1205551-011A	DPE-11	W	260	ND	1	90	e4

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	250	µg/L
	S	NA	NA	mg/Kg

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

#) cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract; &) low or no surrogate due to matrix interference.

%SS = Percent Recovery of Surrogate Standard. DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:

e2) diesel range compounds are significant; no recognizable pattern

e4) gasoline range compounds are significant.



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 67724

WorkOrder: 1205551

EPA Method: SW8021B/8015Bm		Extraction: SW5030B					Spiked Sample ID: 1205567-002A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH(btex) £	ND	60	90.7	88.9	2.06	90	70 - 130	20	70 - 130	
MTBE	ND	10	91	89.4	1.79	88.7	70 - 130	20	70 - 130	
Benzene	ND	10	89.8	89.7	0.156	87.9	70 - 130	20	70 - 130	
Toluene	ND	10	88.3	88.1	0.301	85.8	70 - 130	20	70 - 130	
Ethylbenzene	ND	10	90.6	90	0.756	85.7	70 - 130	20	70 - 130	
Xylenes	ND	30	93.9	93.1	0.777	90.3	70 - 130	20	70 - 130	
%SS:	96	10	95	94	0.928	94	70 - 130	20	70 - 130	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
 NONE

BATCH 67724 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1205551-001A	05/18/12 6:30 AM	05/22/12	05/22/12 2:28 AM	1205551-002A	05/18/12 7:30 AM	05/23/12	05/23/12 2:46 AM
1205551-009A	05/18/12 11:00 AM	05/22/12	05/22/12 4:54 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 % Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.
 £ TPH(btex) = sum of BTEX areas from the FID.
 # cluttered chromatogram; sample peak coelutes with surrogate peak.
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.
 NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content, or inconsistency in sample containers.



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 67738

WorkOrder: 1205551

EPA Method: SW8021B/8015Bm		Extraction: SW5030B					Spiked Sample ID: 1205614-001A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH(btex) £	ND	60	82.2	84.9	3.22	86.4	70 - 130	20	70 - 130	
MTBE	ND	10	79.2	89.7	12.4	90.4	70 - 130	20	70 - 130	
Benzene	ND	10	77.3	82.5	6.58	82.9	70 - 130	20	70 - 130	
Toluene	ND	10	76.6	82	6.63	84.3	70 - 130	20	70 - 130	
Ethylbenzene	ND	10	76.6	82	6.65	81.9	70 - 130	20	70 - 130	
Xylenes	ND	30	79.8	86.4	7.76	83.9	70 - 130	20	70 - 130	
%SS:	93	10	91	91	0	92	70 - 130	20	70 - 130	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
 NONE

BATCH 67738 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1205551-003A	05/18/12 9:30 AM	05/22/12	05/22/12 6:00 PM	1205551-004A	05/18/12 5:30 AM	05/22/12	05/22/12 7:29 PM
1205551-005A	05/18/12 7:00 AM	05/22/12	05/22/12 8:57 PM	1205551-006A	05/18/12 11:30 AM	05/22/12	05/22/12 9:26 PM
1205551-007A	05/18/12 6:00 AM	05/23/12	05/23/12 5:24 PM	1205551-008A	05/18/12 12:00 PM	05/23/12	05/23/12 4:14 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 % Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.
 £ TPH(btex) = sum of BTEX areas from the FID.
 # cluttered chromatogram; sample peak coelutes with surrogate peak.
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.
 NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content, or inconsistency in sample containers.



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 67805

WorkOrder: 1205551

EPA Method: SW8021B/8015Bm		Extraction: SW5030B					Spiked Sample ID: 1205632-001A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH(btex) £	ND	60	88.6	91.5	3.28	93	70 - 130	20	70 - 130	
MTBE	ND	10	94.2	98.4	4.38	98	70 - 130	20	70 - 130	
Benzene	ND	10	91.2	90	1.26	92	70 - 130	20	70 - 130	
Toluene	ND	10	93	92	1.09	94.2	70 - 130	20	70 - 130	
Ethylbenzene	ND	10	91.8	91.3	0.607	91.9	70 - 130	20	70 - 130	
Xylenes	ND	30	96	94.6	1.41	96.3	70 - 130	20	70 - 130	
%SS:	97	10	99	92	6.68	93	70 - 130	20	70 - 130	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
 NONE

BATCH 67805 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1205551-010A	05/18/12 8:30 AM	05/23/12	05/23/12 5:54 PM	1205551-011A	05/18/12 10:00 AM	05/23/12	05/23/12 6:24 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 % Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.
 £ TPH(btex) = sum of BTEX areas from the FID.
 # cluttered chromatogram; sample peak coelutes with surrogate peak.
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.
 NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content, or inconsistency in sample containers.



QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 67760

WorkOrder: 1205551

EPA Method: SW8260B		Extraction: SW5030B					Spiked Sample ID: 1205614-001B			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
Benzene	ND	10	92.7	95.4	2.91	90.3	70 - 130	20	70 - 130	
Methyl-t-butyl ether (MTBE)	ND	10	104	108	3.41	91.9	70 - 130	20	70 - 130	
Toluene	ND	10	90.6	93.3	2.94	91.2	70 - 130	20	70 - 130	
%SS1:	121	25	123	123	0	121	70 - 130	20	70 - 130	
%SS2:	91	25	89	90	0.598	93	70 - 130	20	70 - 130	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
 NONE

BATCH 67760 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1205551-001B	05/18/12 6:30 AM	05/22/12	05/22/12 4:04 PM	1205551-002B	05/18/12 7:30 AM	05/22/12	05/22/12 8:41 PM
1205551-003B	05/18/12 9:30 AM	05/22/12	05/22/12 12:09 PM	1205551-004B	05/18/12 5:30 AM	05/22/12	05/22/12 12:48 PM
1205551-005B	05/18/12 7:00 AM	05/22/12	05/22/12 11:19 PM	1205551-006B	05/18/12 11:30 AM	05/22/12	05/22/12 2:46 PM
1205551-007B	05/18/12 6:00 AM	05/22/12	05/22/12 11:59 PM	1205551-008B	05/18/12 12:00 PM	05/22/12	05/22/12 8:02 PM
1205551-009B	05/18/12 11:00 AM	05/22/12	05/22/12 9:20 PM	1205551-010B	05/18/12 8:30 AM	05/22/12	05/22/12 10:00 PM
1205551-011B	05/18/12 10:00 AM	05/23/12	05/23/12 2:25 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 % Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.
 Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.



QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 67632

WorkOrder: 1205551

EPA Method: SW8015B		Extraction: SW3510C/3630C					Spiked Sample ID: N/A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH-Diesel (C10-C23)	N/A	1000	N/A	N/A	N/A	104	N/A	N/A	70 - 130	
%SS:	N/A	625	N/A	N/A	N/A	90	N/A	N/A	70 - 130	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
 NONE

BATCH 67632 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1205551-001A	05/18/12 6:30 AM	05/18/12	05/19/12 10:13 AM	1205551-002A	05/18/12 7:30 AM	05/18/12	05/19/12 2:16 AM
1205551-003A	05/18/12 9:30 AM	05/18/12	05/19/12 11:51 PM	1205551-004A	05/18/12 5:30 AM	05/18/12	05/19/12 9:05 AM
1205551-005A	05/18/12 7:00 AM	05/18/12	05/19/12 6:10 PM	1205551-006A	05/18/12 11:30 AM	05/18/12	05/22/12 12:03 AM
1205551-007A	05/18/12 6:00 AM	05/18/12	05/19/12 6:48 AM	1205551-008A	05/18/12 12:00 PM	05/18/12	05/19/12 5:40 AM
1205551-009A	05/18/12 11:00 AM	05/18/12	05/19/12 7:56 AM	1205551-010A	05/18/12 8:30 AM	05/18/12	05/18/12 11:59 PM
1205551-011A	05/18/12 10:00 AM	05/18/12	05/19/12 1:07 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 % Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



Analytical Report

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #298931; FSI	Date Sampled: 05/23/12
		Date Received: 05/23/12
	Client Contact: Robert Robitaille	Date Reported: 05/25/12
	Client P.O.: #WC083609	Date Completed: 05/25/12

WorkOrder: 1205667

May 25, 2012

Dear Robert:

Enclosed within are:

- 1) The results of the **1** analyzed sample from your project: **#298931; FSI**,
- 2) QC data for the above sample, and
- 3) A copy of the chain of custody.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
 Laboratory Manager
 McC Campbell Analytical, Inc.

The analytical results relate only to the items tested.

1205667

McCAMPBELL ANALYTICAL INC.

1538 Willow Pass Road, Pittsburg, CA 94565

Telephone: (925) 252-9262

Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

TURN AROUND TIME

RUSH 24 HR 48 HR 72 HR 5 DAY

EDF Required? Yes No

PDF Required? Yes No

Report To: Robert Robitaille Bill To: AEI Consultants
 Company: AEI Consultants, 2500 Camino Diablo, Walnut Creek, CA 94597
 PO# ~~WC083593~~ **WC083609** Global ID: T0600100655
 E-Mail: rrobitaille@aeiconsultatns.com
 Telephone: (925) 746-6000, ext. 148 Fax: (925) 746-6099
 AEI Project No. 298931 Project Name: FSI
 Project Location: 1630 Park St., Alameda, CA 94501
 Sampler Signature: *John Sigg*

Analysis Request										Other		Comments									
TPH-G (EPA 8015 M) TPH-D / TPH-MO (EPA 8015 M w/ Silica Gel Clean-up) BTEX, MTBE (EPA 8260B)																					

SAMPLE ID	FIELD POINT NAME	SAMPLING		# of Containers	Type Containers	MATRIX					METHOD PRESERVED				
		Date	Time			Water	Soil	Air	Sludge	Other	Ice	HCL	HNO ₃	Other	
MW-1				4	VOA, amber L.	X					X	X	X	X	X
MW-2				4	VOA, amber L.	X					X	X	X	X	X
MW-3				4	VOA, amber L.	X					X	X	X	X	X
MW-4		5-23-12	0935	4	VOA, amber L.	X					X	X	X	X	X
MW-5				4	VOA, amber L.	X					X	X	X	X	X
DEP-1				4	VOA, amber L.	X					X	X	X	X	X
DEP-2				4	VOA, amber L.	X					X	X	X	X	X
DEP-3				4	VOA, amber L.	X					X	X	X	X	X
DEP-4				4	VOA, amber L.	X					X	X	X	X	X
DEP-6				4	VOA, amber L.	X					X	X	X	X	X
DEP-10				4	VOA, amber L.	X					X	X	X	X	X
DEP-11				4	VOA, amber L.	X					X	X	X	X	X

Relinquished By: *John Sigg* Date: 5-23-12 Time: 12:19 Received By: *Marcus 2-5*

Relinquished By: _____ Date: _____ Time: _____ Received By: _____

Relinquished By: _____ Date: _____ Time: _____ Received By: _____

ICE/t° 5.2

GOOD CONDITION PRESERVATION APPROPRIATE

HEAD SPACE ABSENT CONTAINERS

DECHLORINATED IN LAB PERSERVED IN LAB

VOAS O&G METALS OTHER



1534 Willow Pass Rd
 Pittsburg, CA 94565-1701
 (925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1205667

ClientCode: AEL

WaterTrax
 WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:

Robert Robitaille Email: rrobitaille@aeiconsultants.com
 AEI Consultants cc:
 2500 Camino Diablo, Ste. #200 PO: #WC083609
 Walnut Creek, CA 94597 ProjectNo: #298931; FSI
 (408) 559-7600 FAX: (408) 559-7601

Bill to:

Sara Guerin
 AEI Consultants
 2500 Camino Diablo, Ste. #200
 Walnut Creek, CA 94597
 AccountsPayable@AEIConsultants.c

Requested TAT: 5 days

Date Received: 05/23/2012

Date Printed: 05/23/2012

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1205667-001	MW-4	Water	5/23/2012 9:35	<input type="checkbox"/>	A	B	A										

Test Legend:

1	G-MBTEX_W	2	MBTEX-8260B_W	3	PREF REPORT	4		5	
6		7		8		9		10	
11		12							

The following SampID: 001A contains testgroup.

Prepared by: Maria Venegas

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
 Hazardous samples will be returned to client or disposed of at client expense.



Sample Receipt Checklist

Client Name: **AEI Consultants** Date and Time Received: **5/23/2012 12:23:13 PM**
 Project Name: **#298931; FSI** LogIn Reviewed by: **Maria Venegas**
 WorkOrder N°: **1205667** Matrix: Water Carrier: Client Drop-In

Chain of Custody (COC) Information

Chain of custody present? Yes No
 Chain of custody signed when relinquished and received? Yes No
 Chain of custody agrees with sample labels? Yes No
 Sample IDs noted by Client on COC? Yes No
 Date and Time of collection noted by Client on COC? Yes No
 Sampler's name noted on COC? Yes No

Sample Receipt Information

Custody seals intact on shipping container/cooler? Yes No NA
 Shipping container/cooler in good condition? Yes No
 Samples in proper containers/bottles? Yes No
 Sample containers intact? Yes No
 Sufficient sample volume for indicated test? Yes No

Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes No
 Container/Temp Blank temperature Cooler Temp: 5.2°C NA
 Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
 Sample labels checked for correct preservation? Yes No
 Metal - pH acceptable upon receipt (pH<2)? Yes No NA
 Samples Received on Ice? Yes No

(Ice Type: WET ICE)

* NOTE: If the "No" box is checked, see comments below.

 Comments:



AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #298931; FSI	Date Sampled: 05/23/12
	Client Contact: Robert Robitaille	Date Received: 05/23/12
	Client P.O.: #WC083609	Date Extracted 05/24/12
		Date Analyzed 05/24/12

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*

Extraction method: SW5030B

Analytical methods: SW8015Bm

Work Order: 1205667

Lab ID	Client ID	Matrix	TPH(g)	DF	% SS	Comments
001A	MW-4	W	ND	1	115	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	µg/L
	S	NA	NA

* water and vapor samples are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts in mg/L.

cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference. %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:



McC Campbell Analytical, Inc.

"When Quality Counts"

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

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #298931; FSI	Date Sampled: 05/23/12
		Date Received: 05/23/12
	Client Contact: Robert Robitaille	Date Extracted: 05/25/12
	Client P.O.: #WC083609	Date Analyzed: 05/25/12

MTBE and BTEX by GC/MS*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1205667

Lab ID	1205667-001B				Reporting Limit for DF = 1
Client ID	MW-4				
Matrix	W				
DF	1				

Compound	Concentration				ug/kg	µg/L
Benzene	ND				NA	0.5
Ethylbenzene	ND				NA	0.5
Methyl-t-butyl ether (MTBE)	ND				NA	0.5
Toluene	ND				NA	0.5
Xylenes, Total	ND				NA	0.5

Surrogate Recoveries (%)

%SS1:	121			
%SS2:	121			

Comments

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

%SS = Percent Recovery of Surrogate Standard

DF = Dilution Factor



McC Campbell Analytical, Inc.

"When Quality Counts"

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

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #298931; FSI	Date Sampled: 05/23/12
		Date Received: 05/23/12
	Client Contact: Robert Robitaille	Date Extracted: 05/23/12
	Client P.O.: #WC083609	Date Analyzed: 05/24/12

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up*

Extraction method: SW3510C/3630C

Analytical methods: SW8015B

Work Order: 1205667

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	TPH-Motor Oil (C18-C36)	DF	% SS	Comments
1205667-001A	MW-4	W	ND	ND	1	92	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	250	µg/L
	S	NA	NA	mg/Kg

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

#) cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract; &) low or no surrogate due to matrix interference.

%SS = Percent Recovery of Surrogate Standard. DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:

DHS ELAP Certification 1644

 Angela Rydelius, Lab Manager



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 67806

WorkOrder: 1205667

EPA Method: SW8021B/8015Bm		Extraction: SW5030B					Spiked Sample ID: 1205667-001A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH(btex) [£]	ND	60	96.3	94.8	1.66	94.3	70 - 130	20	70 - 130	
MTBE	ND	10	91.5	88.2	3.43	87.1	70 - 130	20	70 - 130	
Benzene	ND	10	92.2	92.3	0.150	92.1	70 - 130	20	70 - 130	
Toluene	ND	10	93.4	93.9	0.472	94.7	70 - 130	20	70 - 130	
Ethylbenzene	ND	10	92.5	93.1	0.622	93.8	70 - 130	20	70 - 130	
Xylenes	ND	30	95.2	97	1.91	97.9	70 - 130	20	70 - 130	
%SS:	115	10	94	95	0.883	97	70 - 130	20	70 - 130	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
 NONE

BATCH 67806 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1205667-001A	05/23/12 9:35 AM	05/24/12	05/24/12 4:41 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 % Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.
 £ TPH(btex) = sum of BTEX areas from the FID.
 # cluttered chromatogram; sample peak coelutes with surrogate peak.
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.
 NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content, or inconsistency in sample containers.



QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 67828

WorkOrder: 1205667

EPA Method: SW8260B		Extraction: SW5030B					Spiked Sample ID: 1205683-003A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
Benzene	ND	10	86.7	89.1	2.76	93.1	70 - 130	20	70 - 130	
Methyl-t-butyl ether (MTBE)	ND	10	103	103	0	96.5	70 - 130	20	70 - 130	
Toluene	ND	10	84.4	87	2.94	91.1	70 - 130	20	70 - 130	
%SS1:	124	25	119	119	0	115	70 - 130	20	70 - 130	
%SS2:	121	25	118	120	1.67	120	70 - 130	20	70 - 130	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
 NONE

BATCH 67828 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1205667-001B	05/23/12 9:35 AM	05/25/12	05/25/12 12:14 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 $\% \text{ Recovery} = 100 * (\text{MS-Sample}) / (\text{Amount Spiked}); \text{RPD} = 100 * (\text{MS} - \text{MSD}) / ((\text{MS} + \text{MSD}) / 2).$
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.
 Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.



QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 67695

WorkOrder: 1205667

EPA Method: SW8015B		Extraction: SW3510C/3630C					Spiked Sample ID: N/A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH-Diesel (C10-C23)	N/A	1000	N/A	N/A	N/A	110	N/A	N/A	70 - 130	
%SS:	N/A	625	N/A	N/A	N/A	98	N/A	N/A	70 - 130	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
 NONE

BATCH 67695 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1205667-001A	05/23/12 9:35 AM	05/23/12	05/24/12 9:51 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 $\% \text{ Recovery} = 100 * (\text{MS-Sample}) / (\text{Amount Spiked}); \text{RPD} = 100 * (\text{MS} - \text{MSD}) / ((\text{MS} + \text{MSD}) / 2).$
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



Analytical Report

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #298931; FSI	Date Sampled: 05/17/12
		Date Received: 05/18/12
	Client Contact: Robert Robitaille	Date Reported: 05/29/12
	Client P.O.: #WC083593	Date Completed: 05/29/12

WorkOrder: 1205549

May 29, 2012

Dear Robert:

Enclosed within are:

- 1) The results of the **3** analyzed samples from your project: **#298931; FSI**,
- 2) QC data for the above samples, and
- 3) A copy of the chain of custody.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McC Campbell Analytical, Inc.

The analytical results relate only to the items tested.



1534 Willow Pass Rd
 Pittsburg, CA 94565-1701
 (925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1205549

ClientCode: AEL

WaterTrax
 WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:	Robert Robitaille	Email: rrobitaille@aeiconsultants.com	Bill to:	Sara Guerin	Requested TAT:	5 days
	AEI Consultants	cc:		AEI Consultants	<i>Date Received:</i>	05/18/2012
	2500 Camino Diablo, Ste. #200	PO: #WC083593		2500 Camino Diablo, Ste. #200	<i>Date Printed:</i>	05/29/2012
	Walnut Creek, CA 94597	ProjectNo: #298931; FSI		Walnut Creek, CA 94597		
	(408) 559-7600 FAX: (408) 559-7601			AccountsPayable@AEIConsultants.c		

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1205549-001	VP-1	Soil Gas	5/17/2012 13:27	<input type="checkbox"/>	A	A											
1205549-002	VP-2	Soil Gas	5/17/2012 13:45	<input type="checkbox"/>		A											
1205549-003	VP-3	Soil Gas	5/17/2012 14:05	<input type="checkbox"/>		A											

Test Legend:

1	PREF REPORT	2	TO15+GAS_SOIL(UG/M3)	3		4		5	
6		7		8		9		10	
11		12							

The following SampIDs: 001A, 002A, 003A contain testgroup.

Prepared by: Maria Venegas

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
 Hazardous samples will be returned to client or disposed of at client expense.



Sample Receipt Checklist

Client Name: **AEI Consultants** Date and Time Received: **5/18/2012 1:59:46 PM**
 Project Name: **#298931; FSI** LogIn Reviewed by: **Maria Venegas**
 WorkOrder N°: **1205549** Matrix: Soil Gas Carrier: Client Drop-In

Chain of Custody (COC) Information

Chain of custody present? Yes No
 Chain of custody signed when relinquished and received? Yes No
 Chain of custody agrees with sample labels? Yes No
 Sample IDs noted by Client on COC? Yes No
 Date and Time of collection noted by Client on COC? Yes No
 Sampler's name noted on COC? Yes No

Sample Receipt Information

Custody seals intact on shipping container/cooler? Yes No NA
 Shipping container/cooler in good condition? Yes No
 Samples in proper containers/bottles? Yes No
 Sample containers intact? Yes No
 Sufficient sample volume for indicated test? Yes No

Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes No
 Container/Temp Blank temperature Cooler Temp: NA
 Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
 Sample labels checked for correct preservation? Yes No
 Metal - pH acceptable upon receipt (pH<2)? Yes No NA
 Samples Received on Ice? Yes No

* NOTE: If the "No" box is checked, see comments below.

 Comments:



McC Campbell Analytical, Inc.

"When Quality Counts"

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

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #298931; FSI	Date Sampled: 05/17/12
		Date Received: 05/18/12
	Client Contact: Robert Robitaille	Date Extracted: 05/23/12
	Client P.O.: #WC083593	Date Analyzed: 05/23/12

TPH gas + Volatile Organic Compounds in µg/m³*

Extraction Method: TO15

Analytical Method: TO15

Work Order: 1205549

Lab ID	1205549-001A	1205549-002A	1205549-003A	Reporting Limit for DF = 1 and Pressure Ratio (Final/Initial) = 2	
Client ID	VP-1	VP-2	VP-3		
Matrix	Soil Gas	Soil Gas	Soil Gas		
Initial Pressure (psia)	12.21	12.75	12.98		
Final Pressure (psia)	24.34	25.41	25.86		
DF	1	1	1		
				Soil Gas	W

Compound	Concentration			µg/m ³	ug/L
Benzene	ND	ND	ND	6.5	NA
Ethylbenzene	ND	ND	ND	8.8	NA
Toluene	ND	ND	ND	7.7	NA
TPH(g)	ND	ND	ND	1800	NA
Xylenes, Total	ND	ND	ND	27	NA

Surrogate Recoveries (%)

%SS1:	95	95	95
%SS2:	102	101	101
%SS3:	104	104	103

Comments

*vapor samples are reported in µg/m³.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor



QC SUMMARY REPORT FOR TO15

W.O. Sample Matrix: Soilgas

QC Matrix: Soilgas

BatchID: 67847

WorkOrder: 1205549

EPA Method: TO15		Extraction: TO15					Spiked Sample ID: N/A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	nL/L	nL/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
Benzene	N/A	25	N/A	N/A	N/A	128	N/A	N/A	70 - 130	
Ethylbenzene	N/A	25	N/A	N/A	N/A	126	N/A	N/A	70 - 130	
Toluene	N/A	25	N/A	N/A	N/A	122	N/A	N/A	70 - 130	
Xylenes, Total	N/A	75	N/A	N/A	N/A	122	N/A	N/A	70 - 130	
%SS1:	N/A	500	N/A	N/A	N/A	101	N/A	N/A	70 - 130	
%SS2:	N/A	500	N/A	N/A	N/A	100	N/A	N/A	70 - 130	
%SS3:	N/A	500	N/A	N/A	N/A	100	N/A	N/A	70 - 130	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
 NONE

BATCH 67847 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1205549-001A	05/17/12 1:27 PM	05/23/12	05/23/12 3:46 PM	1205549-001A	05/17/12 1:27 PM	05/23/12	05/23/12 3:46 PM
1205549-002A	05/17/12 1:45 PM	05/23/12	05/23/12 4:27 PM	1205549-002A	05/17/12 1:45 PM	05/23/12	05/23/12 4:27 PM
1205549-003A	05/17/12 2:05 PM	05/23/12	05/23/12 5:08 PM	1205549-003A	05/17/12 2:05 PM	05/23/12	05/23/12 5:08 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 $\% \text{ Recovery} = 100 * (\text{MS-Sample}) / (\text{Amount Spiked}); \text{RPD} = 100 * (\text{MS} - \text{MSD}) / ((\text{MS} + \text{MSD}) / 2).$
 * MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.
 Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.