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Alameda County
Environmental Health

INTERIM SOURCE REMOVAL REPORT

3442 Adeline Street
Oakland, CA 94608

Project No. 281939

Prepared For

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Prepared By

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1.0 INTRODUCTION

AEI Consultants (AEI) has prepared this report on behalf of Ms. Steffi Zimmerman, the owner of the property located at 3442 Adeline Street in the City of Oakland, Alameda County, California. AEI has been retained by Ms. Zimmerman to provide environmental engineering and consulting services relating to the release of gasoline from a former underground storage tank (UST) on the property.

Previous site investigations have identified a release of gasoline from the former UST. Following an onsite meeting with the ACEH on March 19, 2008, AEI prepared a work plan for source area removal and installation of groundwater monitoring wells. This report summarizes the source removal activities in March and soil and Water disposal in and April and May 2009.

2.0 SITE DESCRIPTION

The subject site (hereinafter referred to as the “site” or “property”) is situated on the northeast corner of 35th Street and Chestnut Street in a mixed commercial, industrial and residential area of Oakland. The Main entrance to the property is on 3442 Adeline St.. A second entrance is located at 3433 Chestnut St. The on-site building covers approximately 65% of the property and is currently a. Refer to Figure 2 for an aerial photo of the property and Figure 3, Site Map.

2.1 UST Removal

On February 22, 2000, Clearwater supervised the excavation and removal of a single-wall 3,750 gallon UST. Soil samples and a groundwater sample was collected from the excavation pit and analyzed for total petroleum hydrocarbons as gasoline (TPH-g), as diesel (TPH-d), methyl tertiary butyl ether (MTBE) and BTEX (benzene, toluene, ethyl benzene, and total xylenes). Soil analyses reported concentrations of TPH-g, TPH-d and benzene at concentrations up to 920 milligrams per kilogram (mg/kg), 850 mg/kg, and 0.3 mg/kg, respectively. TPH-g, TPH-d, and benzene were reported in the excavation groundwater sample at concentrations of 7,400 micrograms per liter ($\mu\text{g/L}$), 34,000 $\mu\text{g/L}$, and 3,300 $\mu\text{g/L}$, respectively.

Following receipt of the tank removal report, the City of Oakland Fire Department requested (May 15, 2006) requested additional soil and groundwater samples to further characterize the site. The location of the former UST and sample locations are presented in Figure 3

2.2 Clearwater Phase II Investigation

In June, 2006 Clearwater Group (Clearwater) performed a Phase II Environmental Site Investigation. Four (4) additional soil borings (S1 - S4) were drilled on June 23, 2006. The location of soil borings are shown in Figure 3. Analysis of groundwater samples reported TPH-g and benzene at concentrations up to 120,000 $\mu\text{g/L}$ and 7,000 $\mu\text{g/L}$, respectively. TPH-d was reported as non-detectable at elevated reporting limits

2.3 AEI Consultants Site Investigation

In October and December of 2007 and May of 2008, AEI performed additional site investigations to further define the nature and extent of the release. A total of thirty-one soil borings (SB-1 through SB-22) have been advanced to an approximate depth of 16 feet bgs and three (3) soil vapor samples collected from within the building. Soil boring locations are shown on Figure 3.

The maximum concentrations of TPH-g, TPH-d, and BTEX reported in soil were 1,200 mg/kg, 450 mg/kg, 6.9 mg/kg, 2.5 mg/kg, 24 mg/kg and 110 mg/kg, respectively. MTBE was reported at a concentration of 0.14 mg/kg in one sample, SB-11-15.5.

The maximum concentrations of TPH-g, TPH-d and BTEX reported in groundwater were 83,000 µg/L, 12,000 µg/L, 10,000 µg/L, 640 µg/L, 2,700 µg/L and 7,900 µg/L, respectively. No MTBE was reported in groundwater samples from any of the soil borings

The maximum concentrations of TPH-g, TPH-d and BTEX reported in soil vapor samples were 3,100 µg/m³, 130 µg/m³, 42 µg/m³, 16 µg/m³, and 49 µg/L, respectively. No MTBE was reported in soil vapor samples.

Soil and groundwater analytical data indicates gasoline plume in the soil and groundwater trend in a west to northwesterly direction, beneath the warehouse building on the property. TPH-g concentrations decrease rapidly to the north, south and east of the former UST. The results of these and previous soil, soil vapor, and groundwater analyses can be found in Well Installation Report. Soil boring locations are shown on Figure 3.

2.4 Well Installation

AEI installed seven groundwater monitoring wells and one sparge well during April and May 2009. The locations of the wells are shown on Figure 3. The details of the well installation are summarized in Groundwater Monitoring Well Installation Report.

3.0 GEOLOGY AND HYDROLOGY

The site lies on the distal end of the Temescal Creek Alluvial Fan at approximately 45 feet above mean seal level (amsl). The Temescal Alluvial Fan is a low relief broad fan sloping westerly and southwesterly from the mouth of the Temescal Creek. The Holocene age alluvial fan deposits are mapped as Qhaf (Helley 1997). The sediments are described as typically, brown to tan gravelly sand or sandy gravel, which generally grades upward into sandy or silty clay.

The sediments in the upper four (4) to five (5) feet underlying the site are black silty clay – clayey silt containing variable amounts of scattered gravel. These sediments are considered to be bay margin sediments.

The shallow fine grained surface layer is underlain by alluvial deposits of intercalated, lenticular bodies of silt, clay, sand, and gravel. The sediments are typically highly variable mixtures of the four primary lithologies. Permeability (transmissivity) of the coarse grained sediments is typically low due to the presence of interstitial clay; however scattered clean sands and gravels are present with good permeability. These permeable bodies appear to act as preferential channels for groundwater flow across the site and are the likely cause of the slightly sinuous, asymmetric appearance of the hydrocarbon plume in the soil and groundwater.

Groundwater was encountered in all borings; however the borings were slow to produce water and in some cases several days were required to accumulate sufficient water to allow collection of groundwater samples. Groundwater elevations range from 24.11 feet amsl (6.53 ft bgs) in well MW-7, located in Chestnut Street to the east, to 19.36 ft amsl (9.98 ft bgs) in well MW-6 adjacent to Adeline Street to the West. Groundwater flow direction is in a westerly direction at an average gradient of 0.019ft/ft.

4.0 ENVIRONMENTAL CONCERNS

4.1 Soil

Based on the results of previous investigations significant concentrations of hydrocarbon contamination have been identified in the shallow soil, typically between a depth 5 feet and 12 feet bgs with only occasional significant impact identified below 12 feet bgs. Maximum hydrocarbon concentrations reported in the tank removal samples were samples for TPH-g, TPH-d, and benzene were 920 mg/kg, 850 mg/kg, and 0.3 mg/kg, respectively. Maximum hydrocarbon concentrations reported in soil boring samples were 1,200 mg/kg, 450 mg/kg, and 6.9 mg/kg, respectively for TPH-g, TPH-d, and benzene. The distribution of hydrocarbons in the soil is variable and appears related to variations in lithology and permeability.

4.2 Groundwater

Maximum concentrations of TPH-g and BTEX reported in groundwater samples from soil borings were 120,000 µg/L (S-4), 10,000 µg/L (SB-11) 930 µg/L (SB-11), 3,500 µg/L(S-4), and 7,900 µg/L (SB-11), respectively. No MTBE has been reported in groundwater samples.

The primary contaminant reported in soil and groundwater analyses is a gasoline range fuel with related BTEX. Diesel range hydrocarbons are typically reported at significantly lower concentration than TPH-g and examination of chromatograph charts from several of the wells concentration found no indication of diesel present. Chart patterns that are consistent with a gasoline range fuel release.

An exception to the rule of higher gasoline concentrations and significantly lower diesel concentrations is seen water samples from soil borings SB-16, SB-18 and SB-19. These borings are located on the eastern up gradient edge of the plume in Chestnut Street and are up gradient of the former UST location. The analytical reports of diesel range hydrocarbons in

these samples typically carry laboratory flags indicating the presence of oil range hydrocarbons. The analyses for these samples were re-quantified as diesel and motor oil. The re-quantified results for these samples reported motor oil at significantly higher concentration than either gasoline or diesel. Examination of the chromatograph charts for these three samples show the presence of a hydrocarbon centered in the overlap of diesel motor oil ranges. These heavier than gasoline and diesel range hydrocarbons suggest a release up gradient of the site, probably of heating oil.

The calculated direction of groundwater flow is to the west, however the orientation of the hydrocarbon plume and hydrocarbon distribution in the groundwater indicates that the actual groundwater flow is sinuous and appears to follow permeability channels (sands and gravels).

Depth to groundwater ranges from 6.53 feet bgs (MW-7, 24.51 ft amsl) to 9.98 feet bgs (MW-6, 19.36 ft amsl).

5.0 SCOPE OF WORK

The scope of work for this project consisted of the following:

- Excavation of clean shallow soil to a depth of approximately 3.5 – 4.0 feet and stockpile soil for re-use.
- Excavation of impacted soil to a depth of approximately 12 – 12.5 feet bgs.
- De-water excavation and store water onsite pending disposal.
- Place 3-4 feet of permeable fill in the bottom of excavation to support the excavation sidewalls and to allow maintenance of existing groundwater movements in the Shallow Groundwater Zone.
- Installation of five (5) 4-inch diameter PVC casings to allow monitoring of groundwater in excavation and for possible use to remediate residual hydrocarbons.
- Backfilled the remainder of the excavation with engineered fill to a depth of 6-inches below grade.
- Characterization and disposal of excavated soil and water resulting from de-watering of excavation.

6.0 EXCAVATION

6.1 Excavation

The concrete floor slab overlying the excavation area was cut and removed by the client in February 2009 (Figures 3 & 4). Beginning on March 2, 2009 the surface layer of non-impacted soil was removed from the excavation and stockpiled to the northwest in the corner of the building. The shallow soil was excavated to a depth of approximately 4.0 feet bgs to 4.5 feet bgs, the depth below which field screening with a photo-ionization detector (PID) exceeded 100 ppmv. Field screening concentrations at depths between 5 and 6 feet bgs ranged from 110 ppmv

to 2,100 ppmv. The locations of field screenings samples and vapor concentrations are show on Figure 5. Soil samples from the vadose zone were field screened with PID reading ranging from 500 ppmv to 2,000 ppmv. The locations of screening samples are shown on Figure 5.

On March 9, 2009, three (3) sets of four (4) discrete soil samples were collected from shallow stockpiled soil to confirm its acceptance for re-use as backfill in the excavation. Analysis of the samples reported TPH-g, and MBTEX at concentrations up to 9.0 mg/kg, ND<0.05 mg/kg, 0.18 mg/kg, 0.049 mg/kg, 0.087 mg/kg, and 0.27 kg/kg respectively meeting the regional water quality control boards guideline for re-use of soil on impacted sites. The results of the chemical analyses are shown on Table 1. Copies of the analytical reports are included in Appendix A.

The impacted soil was removed in sections beginning in the south end of the excavation proceeding northward. During excavation the impacted soil was temporarily stockpiled at under the roofed over area adjacent to Adeline Street pending profiling and disposal after the excavation was backfilled. Soil was excavated to yellowish brown soil at a depth of approximately 12 – 13 feet bgs, the depth at which field screening of soil at the bottom of the excavation reported PID readings below 100 ppmv.

Following excavation of impacted soil to apparent clean soil in each section, the excavation was backfilled with ¾ inch drain rock to a depth of approximately 9 feet bgs prior to excavation of the next section. During the emplacement of the permeable fill in each section of the excavation, a section of 0.020-inch factory slotted, 4-inch diameter, schedule 40 PVC with a blank riser was installed in a sump at a depth of approximately 13 feet bgs to allow the excavation to be kept free of water. Five (5) temporary casings (BF-1 through BF-5) were installed during excavation under permit from the Alameda County PWD. The locations of the backfill casings are shown on Figure 6.

The excavation had overall dimensions of 35 feet by 70 feet with 9 feet indentation by sixteen feet indentation in the northeast corner around the facility bathroom. Impacted soil was excavated to an average depth of 12 feet with an estimated volume of soil removed of 982.09 cubic yards.

6.2 Confirmation Sampling

During excavation, soil samples were collected from the side walls of the excavation to confirm the extent to which impacted soil was being removed. Soil was sampled at a approximately 20 foot intervals along the sides of the excavation at depths of approximately 7 feet bgs and 11.5 feet bgs. A total of 19 soil samples were collected from the excavation side walls and 3 soil samples were collected from the bottom of the excavation. No groundwater was collected from the excavation during excavation activities, but a light sheen of free product was seen on the water seeping into the pit during excavation. The results of the confirmation soil sample analyses are shown in Table 2. Copies of the analytical reports are included in Appendix B.

6.3 Excavation Backfill

As described above, the excavation was backfilled a permeable bridge of ¾-inch drain rock at the bottom of the excavation, approximately four feet of drain rock was placed in the bottom of excavation. A layer of geo-textile fabric was then placed over the drain rock and the excavation was back-filled to a depth of 7 feet bgs with compacted Class II base rock. Three horizontal SVE wells were installed along the north, east and south sides of the excavation as described below. The purpose of the casing was allow evaluation of the vadose zone adjacent to the excavation in the same interval that field screening indicated the presence of significant concentrations of hydrocarbons. The shallow stockpiled soil and recycled Class II base rock was used to fill the excavation to approximately three feet bgs. The broken concrete from the former floor was placed in a single layer across the excavation then covered with engineered fill to the bottom of the adjacent existing floor. A concrete slab will be installed by the client to match the adjacent floor.

6.4 Backfill Wells

During the emplacement of the ¾-inch drain rock permeable bridge in the bottom of each section excavated, a four foot section of 0.020-inch factory slotted, 4-inch diameter, schedule 40 PVC and blank riser was installed in a sump at a depth of approximately 13 feet bgs to allow the excavation to be dewatered. Flush mounted well boxes will be placed at the surface to protect the well heads when the final concrete slab is poured by the client.

6.5 Horizontal SVE Wells

When the excavation was backfilled to a depth of 7 feet bgs, three horizontal SVE wells were installed along the north, east and south sides of the excavation to allow evaluation and possible remediation of high VOC vapor concentrations seen during field screening of this interval. The horizontal wells consisted of four-inch schedule 40 PVC 0.010 slotted casing with 4-inch blank risers at each end of the horizontal section. The horizontal casings were covered by approximately one foot of pea gravel then covered with geotextile fabric then backfilling of the excavation was completed.

On April 27, 2009, concentrations of VOCs, oxygen and CO₂ in the soil vapor of the SVE casings were measured to determine hydrocarbon concentrations and potential for remediation of hydrocarbons in the vadose zone. Vapor concentrations were measured by placing a 4-inch to ¼-inch reducing fitting on one end of a horizontal SVE well with an end cap on the other. A vacuum was placed on the well casing using a peristaltic pump. An Eagle vapor meter capable of measuring parts per vapor million (ppmv) range organic vapor concentration , as well as percent concentrations of oxygen (O₂), carbon dioxide (CO₂), and methane (CH₄) was attached to the discharge side of the pump as shown on Figure 8. A Tedlar bag sample was collected from each well and submitted for analysis to McCampbell Analytical, in Pittsburg, CA. Field VOC concentrations reported ranged from 60 ppmv (SVE-1) to 55 ppmv (SVE-3). Oxygen was reported at concentrations of 10.7 % (SVE-1) to 8.9 % (SVE-3) and CO₂ at concentrations of 7.7 % (SVE-1) to 8.1 % (SVE-2). Re-measurement of the gases in the SVE casings on June 6, 2009 reported VOCs as less than at 1 ppmv, and average oxygen and CO₂ measurements of 14.26 % and 6.03 %, respectively.

Analysis of the Tedlar bag vapor samples from SVE-1, SVE-2 and SVE-3 reported TPH-g at concentrations of 51 µg/L, 48 µg/L, and ND <25 µg/L.

The results of vapor sampling from the SVE wells are summarized on Table 3. Field data sheets for SVE casing measurements and vapor analyses are attached in Appendix C.

7.0 TREATMENT AND DISPOSAL OF GROUNDWATER FROM EXCAVATION

De-watering activities during excavation produced approximately 5,000 gallons of water which was stored on site in a Baker Tank. Laboratory analysis of a water sample from the tank on March 11, 2009 reported TPH-g and MBTEX at concentrations of 3,500 µg/L, ND<90 µg/L, 750 µg/L, 24 µg/L, 15 µg/L, and 180 µg/L, respectively. April 1, 2009 the water in the tank was treated with approximately 25 gallons of 50% hydrogen peroxide to reduce TPH, and MBTEX to concentrations to East Bay Municipal Utility District (EBMUD). Re-sampling of the water in the tank on April 15, 2009 reported TPH-g and MBTEX at concentrations of 200 µg/L, 5.7 µg/L, 30 µg/L, 1.5 µg/L, 0.60 µg/L, and 11 µg/L, respectively. On April 23, 2009 20 additional gallons of 50% hydrogen peroxide were mixed into the tank. Re-sampling of water in the tank on April 30, 2009 reported TPH, MTBE and BTEX at concentrations of ND<50 µg/L, ND<5.0 µg/L, 2.6 µg/L, 0.57 µg/L, ND<0.5 µg/L, and 3.1 µg/L, respectively. The water was disposed into the EBMUD sanitary sewer on May 5, 2009, under EBMUD permit No. 50642901. The results of analysis of extracted groundwater samples are summarized on Table 4. A copy of the water analyses and disposal permit are attached in Appendix D.

8.0 SOIL DISPOSAL

The stockpiled soil excavated from below a depth of 4.5 feet bgs was divided into three equal sections. Three groups of four (4) discrete soil samples were collected and composited by the laboratory into four-point composite samples (STKA1234, STKB1234, STKC1234) to characterize the soil for disposal. TPH-g, benzene was reported in composite samples STKA1234, STKB1234, STKC1234 at concentrations of 43 mg/kg and 0.17 mg/kg; 31 mg/kg and 0.044 mg/kg; 60 mg/kg and 0.25 mg/kg, respectively. Copies of the soil analyses are attached as Appendix E. 745.37 tons of soil (STKA1234, STKB1234) were transported under bill of lading to West Contra Costa Sanitary Landfill, Inc, Richmond California. 352.84 tons of soil (STKC1234) was transported to Keller Canyon Landfill under non-hazardous waste manifest. The results of analysis of the impacted stockpile samples are summarized on Table 1. Copies of the analytical results and disposal manifests are attached in Appendix F.

9.0 PERMEABLE BRIDGE TREATMENT

A groundwater sample was collected from backfill casing BF-1 on March 27, 2009. Laboratory analysis reported TPH-g, TPH-d and MBTEX at concentrations of 19,000 µg/L, ND<250 µg/L, 890 µg/L, 27 µg/L, 460 µg/L, and 1,200 µg/L, respectively. On April 1, 2009 the water in the permeable bridge was treated with approximately 75 gallons of 50% hydrogen peroxide was mixed into the permeable bridge by injecting it into groundwater being circulated from BF-5 to BF-1. The purpose of the injection of the hydrogen peroxide was to remove the free product observed during excavation and to determine circulation of groundwater through the permeable bridge could be used to intercept and treat groundwater migrating down gradient from former tank hold. On June 22, 2009, BF-1 was re-sampled with analysis reporting TPH-g and MBTEX at concentrations of 6,700 µg/L, ND<150 µg/L, 840 µg/L, 19 µg/L, 170 µg/L, and 150 µg/L, respectively.

On August 10, 2009, casings BF-1 and BF-5 were re-sampled. TPH-g and MBTEX were reported in BF-1 at concentrations of 11,000 µg/L, ND<120 µg/L, 710 µg/L, 14 µg/L, 440 µg/L, and 290 µg/L, respectively. TPH-g and MBTEX were reported in BF-5 at concentrations of 170 µg/L, ND<25 µg/L, 32 µg/L, 0.55 µg/L, 4.2 µg/L, and 0.81 µg/L, respectively.

The results of analysis of backfill casing groundwater samples are summarized on Table 4. Copies of the backfill well water sample analytical reports are attached as Appendix G.

10.0 HEALTH AND SAFETY PLAN

AEI prepared a site specific Health and Safety Plan (HASP) conforming to Part 1910.120 (i) (2) of 29 CFR. Prior to commencement of field activities, a site safety meeting was held at a designated command post near the working area. The HASP was discussed and emergency procedures will be reviewed at this meeting, including an explanation of the hazards of the known or suspected chemicals of interest. All site personnel were in modified Level D personal protection equipment, which is the anticipated maximum amount of protection needed. A working area was established with bright orange cones, barricades and/or warning tape to delineate the zone where hard hats, steel-toed shoes and eye protection must be worn at all times, as well as where unauthorized personnel were not be allowed. The site HASP was onsite and available at all times during the project.

11.0 RECOMMENDATIONS

AEI recommends that the oxygen concentrations in the excavations permeable backfill bridge be kept elevated to enhance the natural biodegradation, there by reducing the residual hydrocarbons remaining and allowing closure of the site.

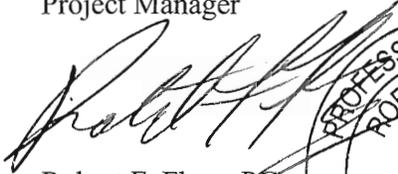
Sincerely,
AEI Consultants



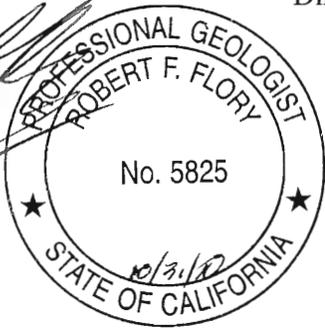
Kirby Fernando
Project Manager



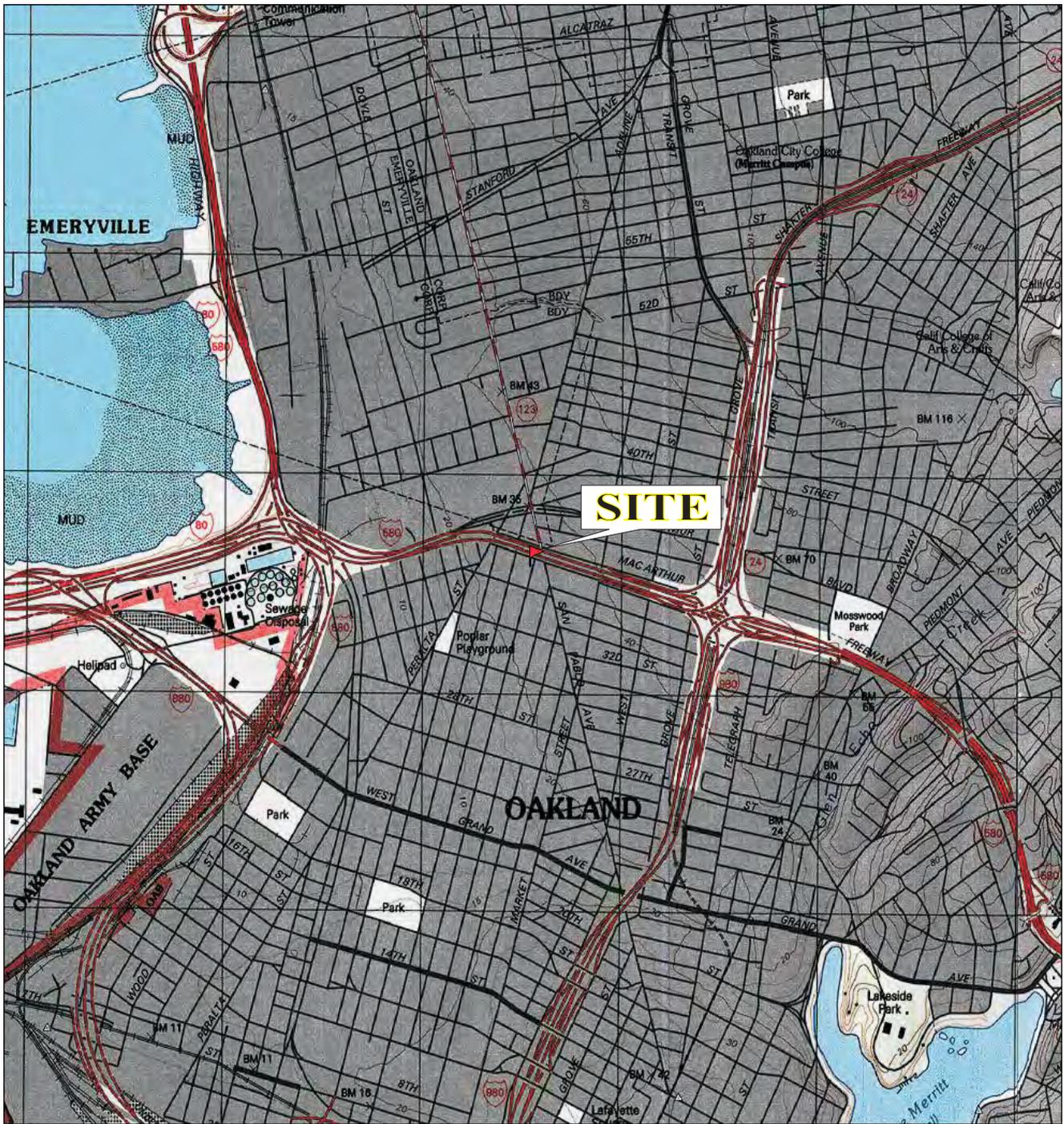
Dusty Roy
Director, Construction



Robert F. Flory, PG
Senior Geologist



FIGURES



TN \nearrow MN
15°

0 5 1 MILE
0 1000 FEET 0 500 1000 METERS
Map created with TOPO!® ©2002 National Geographic (www.nationalgeographic.com/topo)

<p>AEI CONSULTANTS 2500 Camino Diablo, Suite 200, Walnut Creek, CA 94597</p>	
<p>Site Location Map</p>	
<p>3442 Adeline Street Oakland, CA 94608</p>	<p>FIGURE 1 Job No: 281939</p>

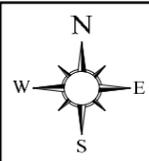


-  Property Boundary
-  Former UST Area

Approximate Scale:
1 inch = 55 feet

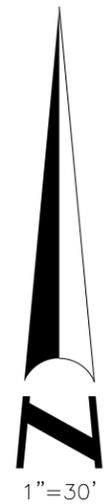


AEI CONSULTANTS 2500 Camino Diablo, Suite 200, Walnut Creek, CA 94597	
Site Vicinity Map	
3442 Adeline Street Oakland, CA 94608	FIGURE 2 Job No: 281939



ADELINE STREET

CHESTNUT STREET



LEGEND

- Soil Boring - 2006
- ⊙ Soil Boring - 2007
- ⊕ Monitoring Well
- - - Former UST
- Soil vapor Sample Point
- ▭ Source Removal Excavation

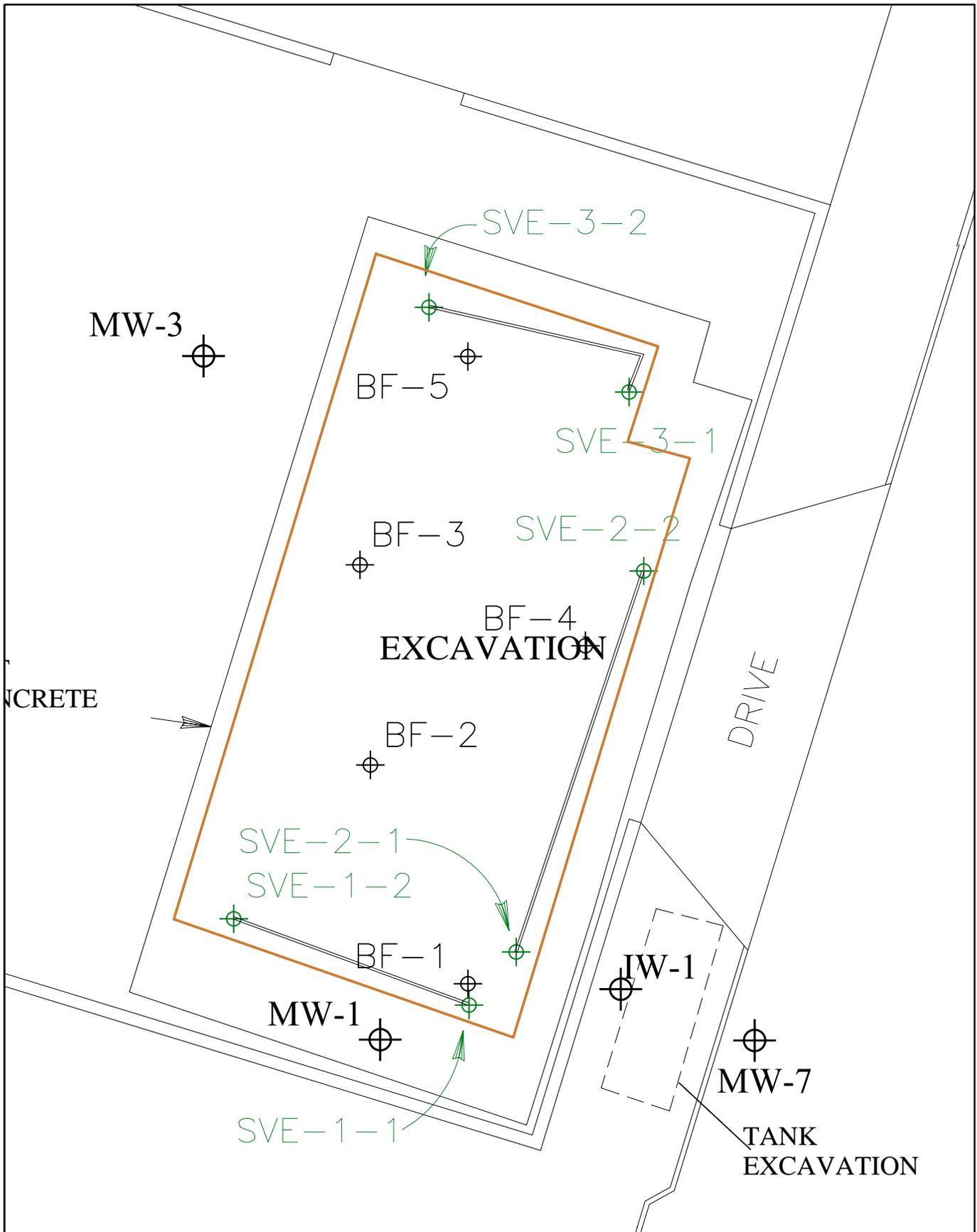
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2500 CAMINO DIABLO, WALNUT CREEK

SITE PLAN

3442 ADELINE STREET
OAKLAND, CALIFORNIA

FIGURE 3
PROJECT NO. 281939



LEGEND

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- Soil Boring
- ⊕ Proposed Monitoring Well
- ▭ Former UST
- Surrounding Property Boundaries
- G - Total Petroleum Hydrocarbons as Gasoline (µg/L)
- D - Total Petroleum Hydrocarbons as Diesel (µg/L)
- B - Benzene (µg/L)



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2500 CAMINO DIABLO, WALNUT CREEK

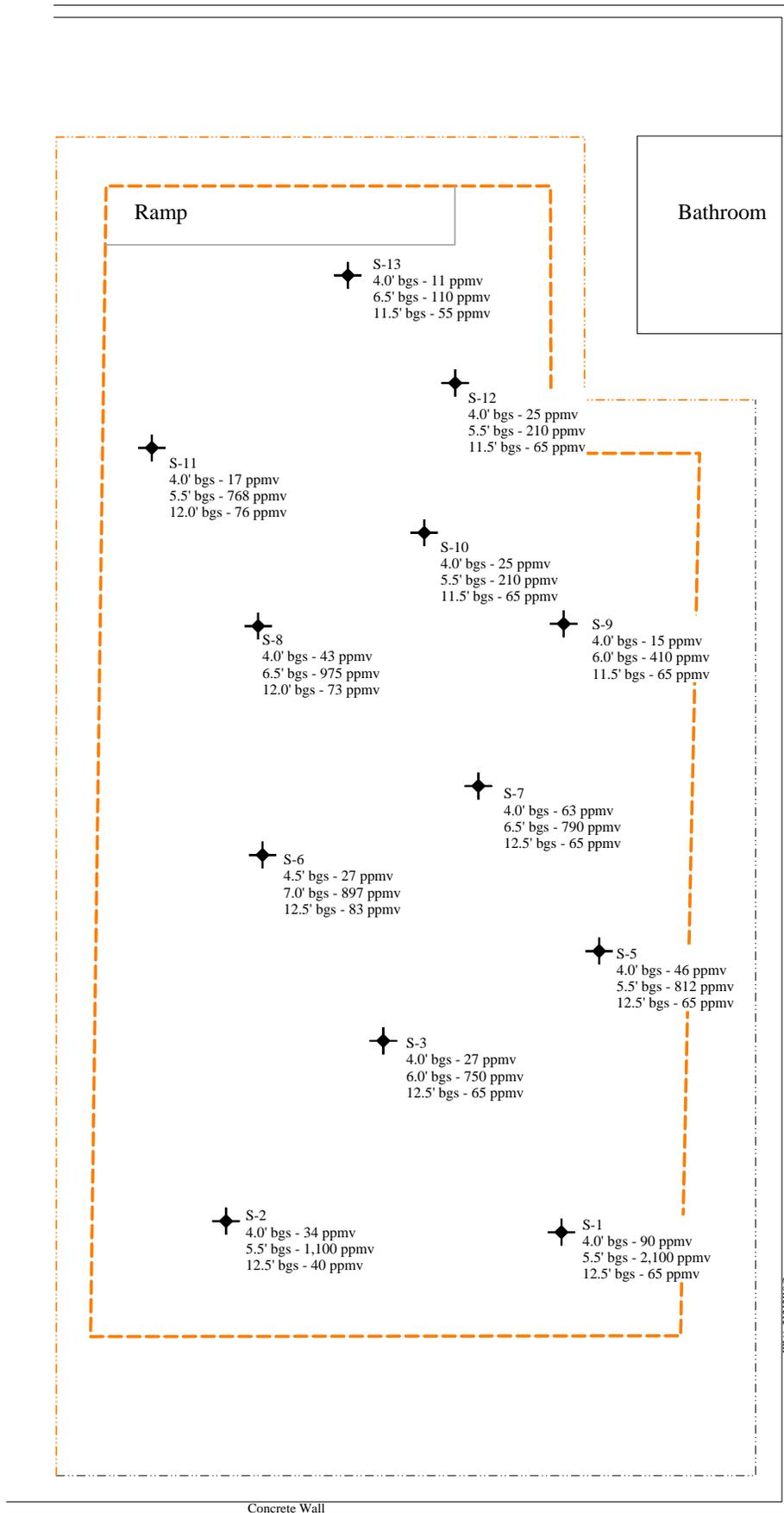
SITE PLAN

3442 ADELIN STREET
OAKLAND, CALIFORNIA

FIGURE 4
PROJECT NO. 281939

LEDGEND

- ✦ PID Field Screening Samples
- - - Floor Cut
- - - Limit of excavation
- Floor Joint



AEI CONSULTANTS

2500 CAMINO DIABLO, WALNUT CREEK

Field Screening Data

3442 ADELIN STREET
OAKLAND, CALIFORNIA

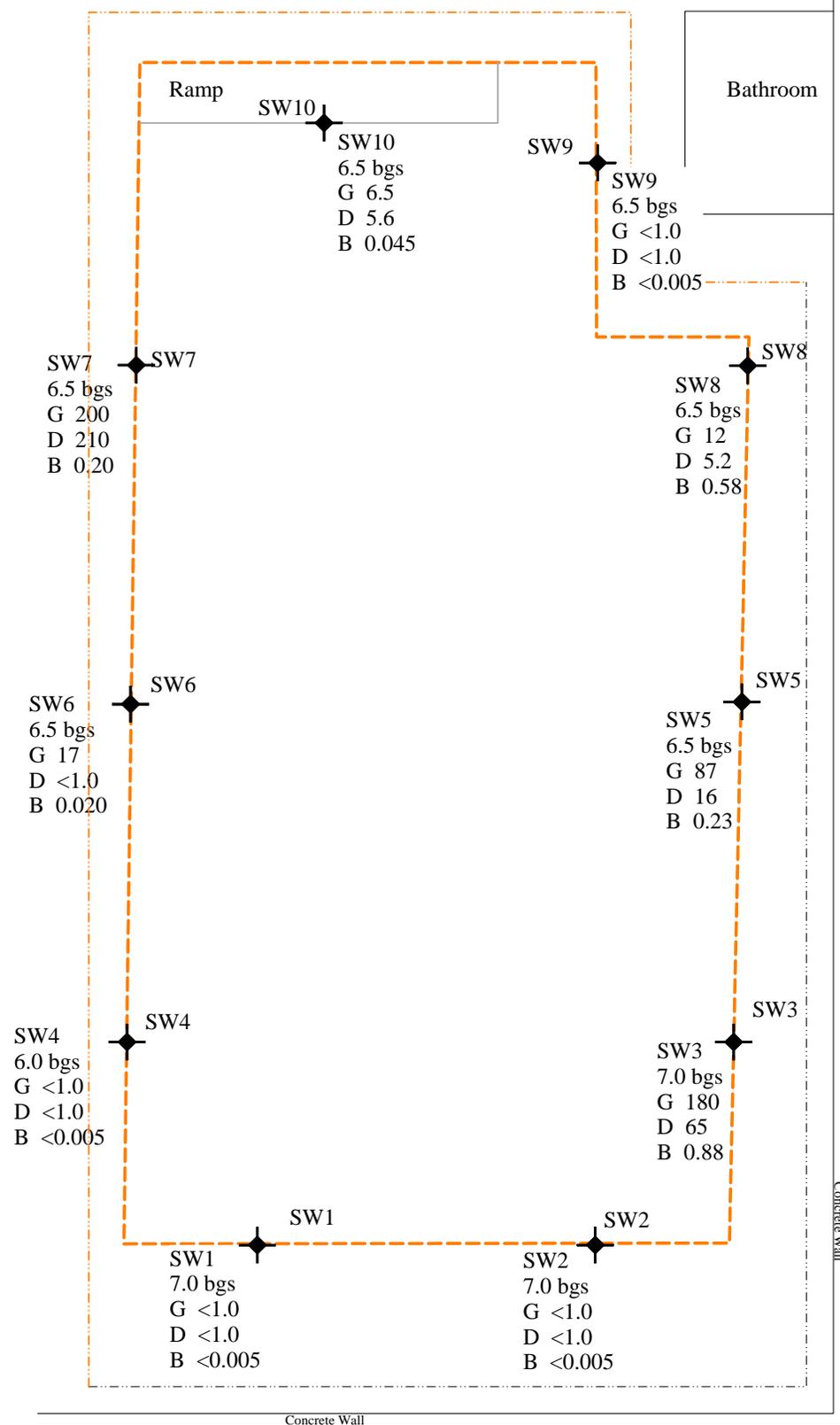
FIGURE # 5
PROJECT NO. 281939

LEDGEND

✦ Excavation confirmation samples

- - - Floor Cut

- - - Limit of excavation



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2500 CAMINO DIABLO, WALNUT CREEK

EXCAVATION CONFIRMATION SAMPLES (6-7 ft. bgs)

3442 ADELIN STREET
OAKLAND, CALIFORNIA

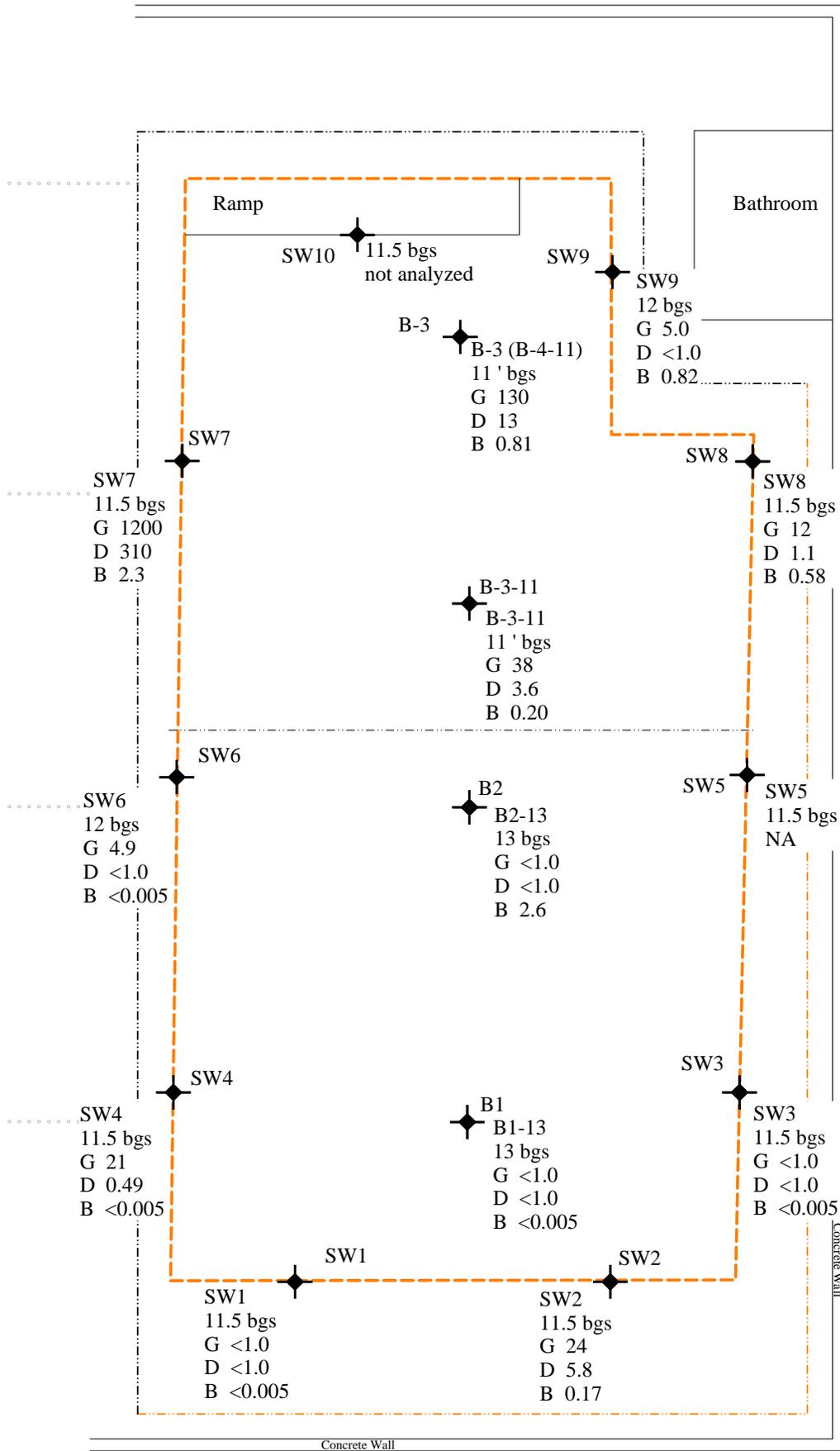
FIGURE # 6
PROJECT NO. 281939

LEDGEND

✦ Excavation confirmation samples

--- Floor Cut

- - - Limit of excavation



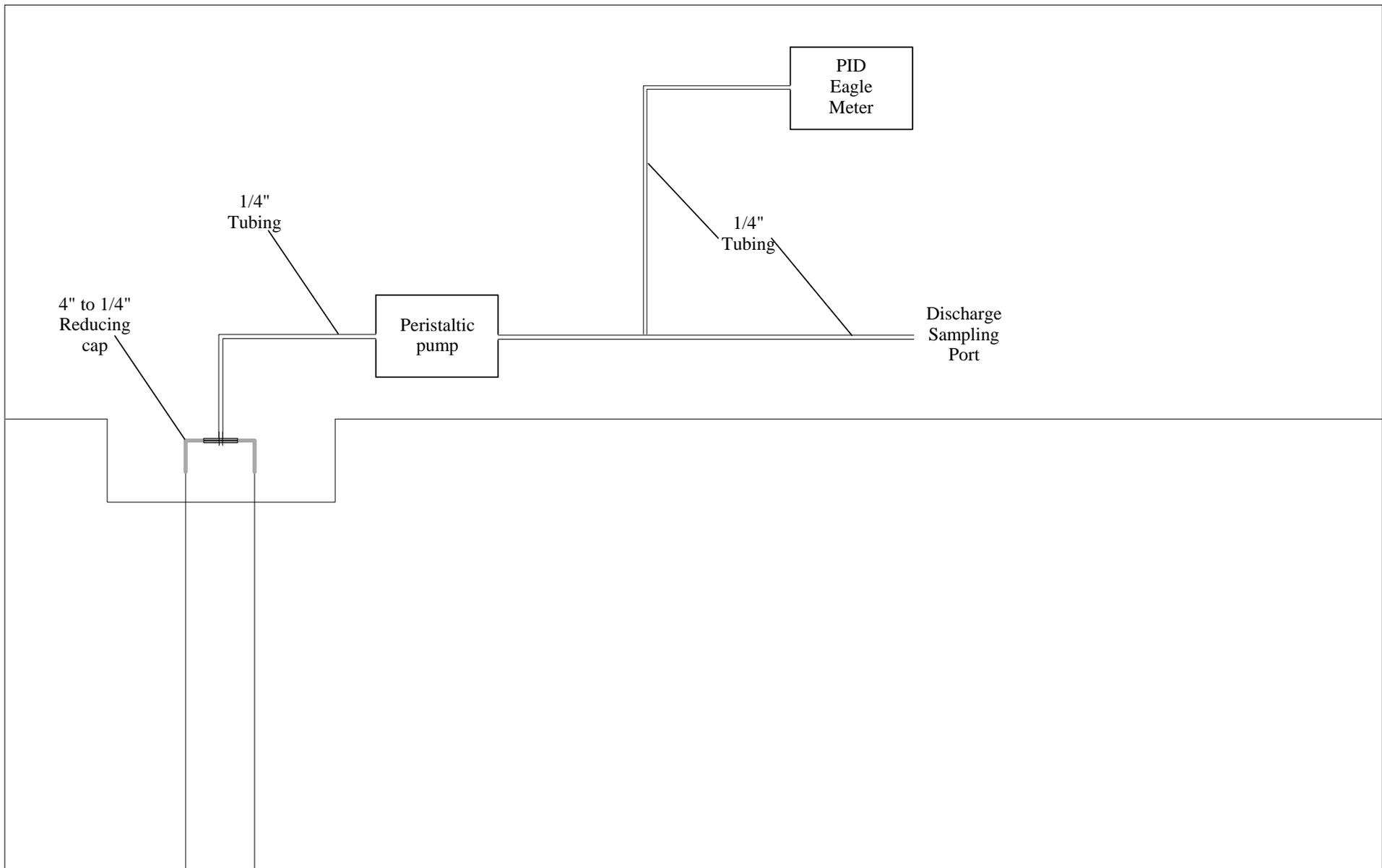
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2500 CAMINO DIABLO, WALNUT CREEK

EXCAVATION CONFIRMATION SAMPLES (11.5 - 12.0 ft)

3442 ADELIN STREET
OAKLAND, CALIFORNIA

FIGURE # 7
PROJECT NO. 281939



AEI CONSULTANTS
 2500 CAMINO DIABLO, WALNUT CREEK

SVE Well Sampling Flow Diagram

3442 ADELIN STREET
 OAKLAND, CALIFORNIA

FIGURE # 8
 PROJECT NO. 281939

TABLES

Table 1: Stockpiled Soil Analytical Data
3442 Adeline Street St. Oakland, CA 94608
AEI Project 281939

Sample Number	Date Collected	TPHg	TPH-d	MTBE	Benzene	Toluene	Ethyl benzene	Xylenes	
		8015		8021B					
		mg/kg		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
"Clean" Soil Stockpile									
ST1-A-D	3/9/2009	3.9	2.6	<0.05	0.071	0.023	0.064	0.22	
ST2-A-D	3/9/2009	5.0	2.2	<0.05	0.057	0.036	0.069	0.21	
ST3-A-D	3/9/2009	9.0	1.3	<0.05	0.18	0.049	0.087	0.27	
ST4-A-D	3/9/2009	6.0	1.7	<0.05	0.066	0.031	0.078	0.27	
Impacted Soil Stockpile									
STKA1234		43	----	0.17	0.069	0.32	0.32	0.82	
STKB1234		31	----	<5.0	0.044	0.019	0.13	0.4	
STKA1234		60	----	<5.0	0.25	0.032	0.59	1.3	

mg/kg = milligrams per kilogram

TPH-g = total petroleum hydrocarbons as gasoline

TPH-d = total petroleum hydrocarbons as diesel

MTBE = methyl tertiary butyl ether

< = not detected at or above laboratory reporting limit

**Table 2: Excavation Confirmation Sampling
3442 Adeline Street St. Oakland, CA 94608
AEI Project 281939**

Sample Number	Date Collected	Depth	TPHg	TPHd	MTBE	Benzene	Toluene	Ethyl-benzene	Xylenes
			8015		8021B				
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Sidewall Samples									
SW1-7.0	3/4/2009	7.0	<1.0	<1.0	<0.05	<0.005	<0.005	<0.005	<0.005
SW1-11.5	3/4/2009	11.5	<1.0	<1.0	<0.05	<0.005	<0.005	<0.005	<0.005
SW2-8.0	3/4/2009	8.0	<1.0	<1.0	<0.05	<0.005	<0.005	<0.005	<0.005
SW2-11.5	3/4/2009	11.5	24	5.8	<0.05	0.17	<0.005	0.26	0.19
SW3-7.5	3/4/2009	7.5	180	65	<1.0	0.88	0.28	2.9	4.2
SW3-11.5	3/4/2009	11.5	<1.0	<1.0	<0.05	<0.005	<0.005	<0.005	<0.005
SW4-6	3/5/2009	6.0	<1.0	<1.0	<0.05	<0.005	<0.005	<0.005	<0.005
SW4-11.5	3/5/2009	11.5	100	21	<1.0	0.49	0.10	1.5	4.2
SW5-6.5	3/5/2009	6.5	87	16	<0.50	0.23	0.11	0.62	0.49
SW5-11.5	3/10/2009	11.5	----	Sample not analyzed by error			----	----	----
SW6-6.5	3/5/2009	6.5	17	<1.0	<0.10	0.020	<0.010	<0.010	0.032
SW6-12	3/11/2009	11.5	4.9	<1.0	<0.05	0.54	<0.005	0.15	0.16
SW7-6.5	3/5/2009	6.5	200	210	<1.0	0.20	<0.10	0.49	0.71
SW7-11.5	3/9/2009	11.5	1200	310	<2.5	2.3	1.4	18	41
SW8-6.5	3/11/2009	6.5	12	5.2	<0.05	0.085	0.0084	0.027	0.070
SW8-11.5	3/11/2009	11.5	12	1.1	<0.05	0.58	0.0091	0.15	0.19
SW9-6.5	3/11/2009	6.5	<1.0	<1.0	<0.05	<0.005	<0.005	<0.005	<0.005
SW9-12	3/11/2009	11.5	5.0	<1.0	<0.05	0.82	<0.005	0.2	0.2
SW10-6.5	3/11/2009	6.5	5.6	<1.0	<0.05	0.045	0.0062	0.0089	0.012
SW10-11.5	3/11/2009	11.5	Mislabeled not analyzed						
Bottom Samples									
B1-13	3/4/2009	13	<1.0	<1.0	<0.05	<0.005	<0.005	<0.005	<0.005
B2-13	3/4/2009	13	<1.0	<1.0	<0.05	<0.005	<0.005	<0.005	<0.005
B-3-11	3/9/2009	11	38	3.6	<0.50	2.6	<0.050	0.49	0.58
B-3 (B-4-11)	3/11/2009	12	130	13	<0.50	0.81	0.12	1.5	2.5

mg/kg = milligrams per kilogram

TPH-g = total petroleum hydrocarbons as gasoline

TPH-d = total petroleum hydrocarbons as diesel

< = not detected at or above laboratory reporting limit

MTBE = methyl tertiary butyl ether

Table 3: Horizontal SVE Casing Tests
3442 Adeline Street St. Oakland, CA 94608
AEI Project 281939

Sample Number	Date Collected	Purge Vacuum	PID	CH ₄	O ₂	CO ₂	TPHg	MTBE	Benzene	Toluene	Ethyl	Xylenes											
													Eagle meter					8015	8021B				
													(in. H ₂ O)	(ppmv)	(%)	(%)	(%)	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
SVE-1	4/27/2009	13.5	60	0	10.7	7.7	51	<2.5	<0.25	<0.25	<0.25	<0.25											
	6/24/2009	20.0	0	0	14.4	6.1	----	----	----	----	----	----											
SVE-2	4/27/2009	13.0	60	0	9.0	8.1	48	<2.5	0.29	<0.25	0.26	1.1											
	6/24/2009	20.0	0	0	14.2	6.0	----	----	----	----	----	----											
SVE-3	4/27/2009	12.5	55	0	8.9	8.5	<25	<2.5	<0.25	<0.25	<0.25	<0.25											
	6/24/2009	20.0	0	0	13.9	6.0	----	----	----	----	----	----											

ppmv
mg/kg milligrams per kilogram
TPH-g total petroleum hydrocarbons as gasoline
MTBE methyl tertiary butyl ether
< not detected at or above laboratory reporting limit

Table 4: Miscellaneous Groundwater Sample Analytical Data
3442 Adeline Street St. Oakland, CA 94608
AEI Project 281939

Sample ID	Date	TPH-g	MTBE	Benzene	Toluene	Ethyl benzene	Xylenes	Field Oxygen Reading mg/L
		<i>Method 8015</i>		<i>Method 8021B</i>				
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
Poly Tank	03/11/09	3,500	<90	750	24	15	180	2.1
	04/15/09	200	5.7	30	1.5	0.6	11	1.1
	04/30/09	<50	<5.0	2.6	0.57	<0.5	3	3.5
BF-1	03/27/09	19,000	<250	890	27	460	1,200	0.75
	04/01/09	After circulating hydrogen peroxide through permeable bridge						15.1
	06/11/09	6,700	<150	840	19	170	150	1.75
	08/10/09	11,000	<120	710	14	440	290	0.82
		After re-circulating from BF-1 to BF-3 tor 1.5 hour						5.85
BF-5	08/10/09	170	<25	32	0.55	4.2	0.72	0.89
		After re-circulating from BF-5 to BF-3 tor 1.5 hour						5.51
ESL - Res DW		100	5.0	1.0	40	30	20	----

Notes:

µg/L = micrograms per liter

ESL = Environmental Screening Level

TPH-g = total petroleum hydrocarbons as gasoline

MTBE = methyl tert-butyl ether

APPENDIX A

“Clean” Stockpile Analyses



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #281939; Zimmerman, 3442 Adeline, Oakland	Date Sampled: 03/09/09
	Client Contact: Robert Flory	Date Received: 03/09/09
	Client P.O.: WC081405	Date Reported: 03/10/09
		Date Completed: 03/10/09

WorkOrder: 0903203

March 10, 2009

Dear Robert:

Enclosed within are:

- 1) The results of the **4** analyzed samples from your project: **#281939; Zimmerman, 3442 Adeline**
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

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.

McC Campbell Analytical, Inc.



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0903203

ClientCode: AEL

WriteOn EDF Excel Fax Email HardCopy ThirdParty J-flag

Report to: Robert Flory
 AEI Consultants
 2500 Camino Diablo, Ste. #200
 Walnut Creek, CA 94597
 (925) 283-6000 FAX (925) 283-6121

Email: rflory@aeiconsultants.com
 cc:
 PO: WC081405
 ProjectNo: #281939; Zimmerman, 3442 Adeline,
 Oakland

Bill to: Denise Mockel
 AEI Consultants
 2500 Camino Diablo, Ste. #200
 Walnut Creek, CA 94597
 dmockel@aeiconsultants.com

Requested TAT: 1 day
Date Received: 03/09/2009
Date Printed: 03/09/2009

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	
0903203-001	ST1-A-D	Soil	3/9/2009 8:30	<input type="checkbox"/>	A	A											
0903203-002	ST2-A-D	Soil	3/9/2009 8:55	<input type="checkbox"/>	A	A											
0903203-003	ST3-A-D	Soil	3/9/2009 9:15	<input type="checkbox"/>	A	A											
0903203-004	ST4-A-D	Soil	3/9/2009 9:30	<input type="checkbox"/>	A	A											

Test Legend:

1	G-MBTX_S	2	TPH(D)WSG_S	3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Ana Venegas

Comments: 24hr rush

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: **3/9/2009 6:22:04 PM**
Project Name: **#281939; Zimmerman, 3442 Adeline, Oakland** Checklist completed and reviewed by: **Ana Venegas**
WorkOrder N°: **0903203** Matrix Soil 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: 6.4°C NA
Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
Sample labels checked for correct preservation? Yes No
TTLC 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.

Client contacted: Date contacted: Contacted by:

Comments:



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AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #281939; Zimmerman, 3442 Adeline, Oakland	Date Sampled: 03/09/09
	Client Contact: Robert Flory	Date Received: 03/09/09
	Client P.O.: WC081405	Date Extracted: 03/09/09
		Date Analyzed 03/10/09

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method: SW5030B

Analytical methods: SW8021B/8015Bm

Work Order: 0903203

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	ST1-A-D	S	3.9,d1	ND	0.071	0.023	0.064	0.22	1	112
002A	ST2-A-D	S	5.0,d1	ND	0.057	0.036	0.069	0.21	1	105
003A	ST3-A-D	S	9.0,d1	ND	0.18	0.049	0.087	0.27	1	112
004A	ST4-A-D	S	6.0,d1	ND	0.066	0.031	0.078	0.27	1	111

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	ug/L
	S	1	0.05	0.005	0.005	0.005	0.005	mg/Kg

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

cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference.

+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



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AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #281939; Zimmerman, 3442 Adeline, Oakland	Date Sampled: 03/09/09
	Client Contact: Robert Flory	Date Received: 03/09/09
	Client P.O.: WC081405	Date Analyzed: 03/10/09
		Date Extracted: 03/09/09

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up*

Extraction method SW3550C/3630C

Analytical methods: SW8015B

Work Order: 0903203

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	DF	% SS
0903203-001A	ST1-A-D	S	2.6,e7,e2,e4	1	95
0903203-002A	ST2-A-D	S	2.2,e7,e2,e4	1	93
0903203-003A	ST3-A-D	S	1.3,e7,e2,e4	1	99
0903203-004A	ST4-A-D	S	1.7,e2,e4	1	99

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA
	S	1.0	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.

+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.
 e7) oil range compounds are significant



QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 41874

WorkOrder: 0903203

Analyte	EPA Method SW8021B/8015Bm		Extraction SW5030B						Spiked Sample ID: 0903162-001A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) _f	ND	0.60	103	106	3.16	102	103	0.587	70 - 130	20	70 - 130	20
MTBE	ND	0.10	112	113	0.588	108	105	2.18	70 - 130	20	70 - 130	20
Benzene	ND	0.10	93.2	98.6	5.69	93	95.3	2.38	70 - 130	20	70 - 130	20
Toluene	ND	0.10	104	109	4.75	104	107	2.91	70 - 130	20	70 - 130	20
Ethylbenzene	ND	0.10	102	108	5.41	103	106	2.57	70 - 130	20	70 - 130	20
Xylenes	ND	0.30	114	119	4.38	114	117	2.69	70 - 130	20	70 - 130	20
%SS:	81	0.10	75	90	18.9	91	95	3.77	70 - 130	20	70 - 130	20

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

BATCH 41874 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903203-001A	03/09/09 8:30 AM	03/09/09	03/10/09 3:34 AM	0903203-002A	03/09/09 8:55 AM	03/09/09	03/10/09 4:03 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.



QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 41912

WorkOrder: 0903203

Analyte	EPA Method SW8021B/8015Bm		Extraction SW5030B						Spiked Sample ID: 0903208-009A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) _f	ND	0.60	99.8	96	3.88	105	103	1.76	70 - 130	20	70 - 130	20
MTBE	ND	0.10	112	118	5.34	101	106	4.49	70 - 130	20	70 - 130	20
Benzene	ND	0.10	92.1	98.1	6.32	98.9	100	1.27	70 - 130	20	70 - 130	20
Toluene	ND	0.10	102	108	5.67	110	113	2.08	70 - 130	20	70 - 130	20
Ethylbenzene	ND	0.10	100	108	7.41	109	110	1.16	70 - 130	20	70 - 130	20
Xylenes	ND	0.30	113	116	2.71	120	122	1.23	70 - 130	20	70 - 130	20
%SS:	77	0.10	80	98	20.0	98	100	1.83	70 - 130	20	70 - 130	20

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

BATCH 41912 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903203-003A	03/09/09 9:15 AM	03/09/09	03/10/09 5:03 AM	0903203-004A	03/09/09 9:30 AM	03/09/09	03/10/09 5:33 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.



QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 41864

WorkOrder 0903203

Analyte	EPA Method SW8015B		Extraction SW3550C/3630C						Spiked Sample ID: 0903134-001A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH-Diesel (C10-C23)	250	20	NR	NR	NR	94.5	92.8	1.88	70 - 130	30	70 - 130	30
%SS:	94	50	93	96	2.66	99	97	2.00	70 - 130	30	70 - 130	30

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

BATCH 41864 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903203-001A	03/09/09 8:30 AM	03/09/09	03/10/09 4:02 AM	0903203-002A	03/09/09 8:55 AM	03/09/09	03/10/09 5:10 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.



QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 41911

WorkOrder 0903203

Analyte	EPA Method SW8015B			Extraction SW3550C/3630C					Spiked Sample ID: 0903203-004A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH-Diesel (C10-C23)	2.0	20	94.9	97.8	2.78	86	85.2	0.944	70 - 130	30	70 - 130	30
%SS:	96	50	99	102	3.35	83	81	3.15	70 - 130	30	70 - 130	30

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

BATCH 41911 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903203-003A	03/09/09 9:15 AM	03/09/09	03/10/09 12:08 PM	0903203-004A	03/09/09 9:30 AM	03/09/09	03/10/09 10:55 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.

APPENDIX B

Excavation Confirmation Sample Analyses



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Web: www.mcccampbell.com E-mail: main@mcccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #281939; Zimmerman	Date Sampled: 03/04/09-03/06/09
		Date Received: 03/06/09
	Client Contact: Robert Flory	Date Reported: 03/13/09
	Client P.O.: #WC081403	Date Completed: 03/12/09

WorkOrder: 0903163

March 13, 2009

Dear Robert:

Enclosed within are:

- 1) The results of the **13** analyzed samples from your project: **#281939; Zimmerman,**
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

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.

0903163

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560

Telephone: (925) 798-1620

Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME

RUSH 24 HR 48 HR 72 HR 5 DAY

EDF Required? Yes No

Report To: Robert Flory Bill To: same
Company: AEI Consultants
2500 Camino Diablo
Walnut Creek, CA 94597 E-Mail: rflory@aeiconsultants.com
Tele: (925) 746-6000 Fax: (925) 746-6099
Project #: 281939 PO: WC081403 Project Name Zimmerman
Project Location: 3442 Adeline, Oakland, CA
Sampler Signature: *[Signature]*

Analysis Request

Other

Comments

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED									
		Date	Time			Water	Soil	Air	Sludge	Other	Ice	HCl	HNO ₃	Other						
1 SW1-7		3/4/09	1215	1	2x6	X					X									
SW1-11.5			1230																	
SW2-8			0945																	
SW2-12			0940																	
SW3-7.5			1050																	
SW3-11.5			1130																	
B1-13			1215																	
B2-13			1300																	
SW4-6		3/5/09	0830																	
SW4-11.5			1300																	
SW5-6.5			1210																	
SW6-6.5			1400																	
13 SW7-6.5		3/6/09	1200																	

BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015) nitrocel/band	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8080	EPA 608 / 8080 PCB's ONLY	EPA 624 / 8260	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals	LUFT 5 Metals	Lead (7240/7421/239.2/6010)	RCI
--	------------------------------------	---	--------------------------------------	----------------	----------------------------	----------------	---------------------------	----------------	----------------	--	---------------	---------------	-----------------------------	-----

Relinquished By: <i>[Signature]</i>	Date: 3/6/09	Time: 1420	Received By: <i>[Signature]</i>
Relinquished By: <i>[Signature]</i>	Date: 3/6/09	Time: 1534	Received By: <i>[Signature]</i>
Relinquished By:	Date:	Time:	Received By:

ICE/° 3.8

GOOD CONDITION PRESERVATION VOAS O&G METALS OTHER

HEAD SPACE ABSENT APPROPRIATE CONTAINERS

DECLORINATED IN LAB PERSERVED IN LAB

McC Campbell Analytical, Inc.



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0903163

ClientCode: AEL

WriteOn
 EDF
 Excel
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 Email
 HardCopy
 ThirdParty
 J-flag

Report to:	Robert Flory	Email: rflory@aeiconsultants.com	Bill to:	Denise Mockel	Requested TAT: 5 days
	AEI Consultants	cc:		AEI Consultants	Date Received: 03/06/2009
	2500 Camino Diablo, Ste. #200	PO: #WC081403		2500 Camino Diablo, Ste. #200	Date Printed: 03/06/2009
	Walnut Creek, CA 94597	ProjectNo: #281939; Zimmerman		Walnut Creek, CA 94597	
	(925) 283-6000 FAX (925) 283-6121			dmockel@aeiconsultants.com	

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
0903163-001	SW1-7	Soil	3/4/2009 12:15	<input type="checkbox"/>	A	A	A									
0903163-002	SW1-11.5	Soil	3/4/2009 12:30	<input type="checkbox"/>	A		A									
0903163-003	SW2-8	Soil	3/4/2009 9:45	<input type="checkbox"/>	A		A									
0903163-004	SW2-12	Soil	3/4/2009 9:40	<input type="checkbox"/>	A		A									
0903163-005	SW3-7.5	Soil	3/4/2009 10:50	<input type="checkbox"/>	A		A									
0903163-006	SW3-11.5	Soil	3/4/2009 11:30	<input type="checkbox"/>	A		A									
0903163-007	B1-13	Soil	3/4/2009 12:15	<input type="checkbox"/>	A		A									
0903163-008	B2-13	Soil	3/4/2009 13:00	<input type="checkbox"/>	A		A									
0903163-009	SW4-6	Soil	3/5/2009 8:30	<input type="checkbox"/>	A		A									
0903163-010	SW4-11.5	Soil	3/5/2009 13:00	<input type="checkbox"/>	A		A									
0903163-011	SW5-6.5	Soil	3/5/2009 12:40	<input type="checkbox"/>	A		A									
0903163-012	SW6-6.5	Soil	3/5/2009 14:00	<input type="checkbox"/>	A		A									
0903163-013	SW7-6.5	Soil	3/6/2009 12:00	<input type="checkbox"/>	A		A									

Test Legend:

1	G-MBTEX_S	2	PREDF REPORT	3	TPH(D)WSG_S	4		5	
6		7		8		9		10	
11		12							

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: **03/06/09 3:43:24 PM**

Project Name: **#281939; Zimmerman**

Checklist completed and reviewed by: **Maria Venegas**

WorkOrder N°: **0903163** Matrix Soil

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: 3.8°C NA
- Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
- Sample labels checked for correct preservation? Yes No
- TTLC 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.

Client contacted:

Date contacted:

Contacted by:

Comments:



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #281939; Zimmerman	Date Sampled: 03/04/09-03/06/09
	Client Contact: Robert Flory	Date Received: 03/06/09
	Client P.O.: #WC081403	Date Extracted: 03/06/09
		Date Analyzed: 03/07/09-03/12/09

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method SW5030B

Analytical methods SW8021B/8015Bm

Work Order: 0903163

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	SW1-7	S	ND	ND	ND	ND	ND	ND	1	80
002A	SW1-11.5	S	ND	ND	ND	ND	ND	ND	1	79
003A	SW2-8	S	ND	ND	ND	ND	ND	ND	1	80
004A	SW2-12	S	24,d1	ND	0.17	ND	0.26	0.19	1	93
005A	SW3-7.5	S	180,d1	ND<1.0	0.88	0.28	2.9	4.2	20	103
006A	SW3-11.5	S	ND	ND	ND	ND	ND	ND	1	78
007A	B1-13	S	ND	ND	ND	ND	ND	ND	1	88
008A	B2-13	S	ND	ND	ND	ND	ND	ND	1	84
009A	SW4-6	S	ND	ND	ND	ND	ND	ND	1	92
010A	SW4-11.5	S	100,d1	ND<1.0	0.49	0.10	1.5	4.2	20	89
011A	SW5-6.5	S	87,d1	ND<0.50	0.23	0.11	0.62	0.49	10	109
012A	SW6-6.5	S	17,d7,d9	ND<0.10	0.020	ND<0.010	ND<0.010	0.032	2	82
013A	SW7-6.5	S	200,d7,d9	ND<1.0	0.20	ND<0.10	0.49	0.71	20	103

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	ug/L
	S	1	0.05	0.005	0.005	0.005	0.005	mg/Kg

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

cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference.

+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
- d7) strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram
- d9) no recognizable pattern



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AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #281939; Zimmerman	Date Sampled: 03/04/09-03/06/09
	Client Contact: Robert Flory	Date Received: 03/06/09
	Client P.O.: #WC081403	Date Analyzed 03/07/09-03/10/09
		Date Extracted: 03/06/09

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up*

Extraction method SW3550C/3630C

Analytical methods: SW8015B

Work Order: 0903163

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	DF	% SS
0903163-001A	SW1-7	S	ND	1	104
0903163-002A	SW1-11.5	S	ND	1	101
0903163-003A	SW2-8	S	ND	1	102
0903163-004A	SW2-12	S	5.8,e4	1	103
0903163-005A	SW3-7.5	S	65,e4	1	103
0903163-006A	SW3-11.5	S	ND	1	100
0903163-007A	B1-13	S	ND	1	98
0903163-008A	B2-13	S	ND	1	98
0903163-009A	SW4-6	S	ND	1	99
0903163-010A	SW4-11.5	S	21,e4	1	102
0903163-011A	SW5-6.5	S	16,e4	1	110
0903163-012A	SW6-6.5	S	ND	1	107
0903163-013A	SW7-6.5	S	210,e11	1	108

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA
	S	1.0	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.

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

e4) gasoline range compounds are significant.

e11) stoddard solvent/mineral spirit (?)



QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 41843

WorkOrder 0903163

Analyte	EPA Method SW8021B/8015Bm		Extraction SW5030B						Spiked Sample ID: 0903094-018A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) [£]	ND	0.60	109	103	6.15	103	107	4.15	70 - 130	20	70 - 130	20
MTBE	ND	0.10	89.3	96.2	7.39	96.6	104	7.16	70 - 130	20	70 - 130	20
Benzene	ND	0.10	89.3	99.8	11.2	100	96.9	3.37	70 - 130	20	70 - 130	20
Toluene	ND	0.10	112	94.8	16.4	112	111	1.04	70 - 130	20	70 - 130	20
Ethylbenzene	ND	0.10	100	105	5.05	111	107	4.01	70 - 130	20	70 - 130	20
Xylenes	ND	0.30	113	116	2.50	123	118	3.65	70 - 130	20	70 - 130	20
%SS:	77	0.10	87	97	11.3	98	95	2.57	70 - 130	20	70 - 130	20

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

BATCH 41843 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903163-001A	03/04/09 12:15 PM	03/06/09	03/07/09 12:12 PM	0903163-002A	03/04/09 12:30 PM	03/06/09	03/07/09 1:54 PM
0903163-003A	03/04/09 9:45 AM	03/06/09	03/10/09 6:15 AM	0903163-004A	03/04/09 9:40 AM	03/06/09	03/09/09 6:35 PM
0903163-005A	03/04/09 10:50 AM	03/06/09	03/10/09 10:28 PM	0903163-006A	03/04/09 11:30 AM	03/06/09	03/11/09 11:36 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.



QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 41874

WorkOrder 0903163

Analyte	EPA Method SW8021B/8015Bm		Extraction SW5030B						Spiked Sample ID: 0903162-001A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) [£]	ND	0.60	103	106	3.16	102	103	0.587	70 - 130	20	70 - 130	20
MTBE	ND	0.10	112	113	0.588	108	105	2.18	70 - 130	20	70 - 130	20
Benzene	ND	0.10	93.2	98.6	5.69	93	95.3	2.38	70 - 130	20	70 - 130	20
Toluene	ND	0.10	104	109	4.75	104	107	2.91	70 - 130	20	70 - 130	20
Ethylbenzene	ND	0.10	102	108	5.41	103	106	2.57	70 - 130	20	70 - 130	20
Xylenes	ND	0.30	114	119	4.38	114	117	2.69	70 - 130	20	70 - 130	20
%SS:	81	0.10	75	90	18.9	91	95	3.77	70 - 130	20	70 - 130	20

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

BATCH 41874 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903163-007A	03/04/09 12:15 PM	03/06/09	03/09/09 9:07 PM	0903163-008A	03/04/09 1:00 PM	03/06/09	03/09/09 9:37 PM
0903163-009A	03/05/09 8:30 AM	03/06/09	03/10/09 6:25 PM	0903163-010A	03/05/09 1:00 PM	03/06/09	03/10/09 11:29 PM
0903163-011A	03/05/09 12:40 PM	03/06/09	03/10/09 11:59 PM	0903163-012A	03/05/09 2:00 PM	03/06/09	03/12/09 12:08 AM
0903163-013A	03/06/09 12:00 PM	03/06/09	03/11/09 1:29 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.



QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 41838

WorkOrder 0903163

EPA Method SW8015B		Extraction SW3550C/3630C							Spiked Sample ID: 0903091-018A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH-Diesel (C10-C23)	ND	20	92.2	94.2	2.13	93.6	94.5	0.968	70 - 130	30	70 - 130	30
%SS:	108	50	107	109	2.08	107	108	0.750	70 - 130	30	70 - 130	30

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

BATCH 41838 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903163-001A	03/04/09 12:15 PM	03/06/09	03/07/09 9:33 AM	0903163-002A	03/04/09 12:30 PM	03/06/09	03/07/09 10:44 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.



QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 41864

WorkOrder 0903163

Analyte	Extraction SW3550C/3630C								Spiked Sample ID: 0903134-001A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH-Diesel (C10-C23)	250	20	NR	NR	NR	94.5	92.8	1.88	70 - 130	30	70 - 130	30
%SS:	94	50	93	96	2.66	99	97	2.00	70 - 130	30	70 - 130	30

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

BATCH 41864 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903163-003A	03/04/09 9:45 AM	03/06/09	03/07/09 11:54 AM	0903163-004A	03/04/09 9:40 AM	03/06/09	03/07/09 1:05 PM
0903163-005A	03/04/09 10:50 AM	03/06/09	03/09/09 11:28 PM	0903163-006A	03/04/09 11:30 AM	03/06/09	03/10/09 10:55 AM
0903163-007A	03/04/09 12:15 PM	03/06/09	03/07/09 8:22 AM	0903163-008A	03/04/09 1:00 PM	03/06/09	03/07/09 9:33 AM
0903163-009A	03/05/09 8:30 AM	03/06/09	03/07/09 10:44 AM	0903163-010A	03/05/09 1:00 PM	03/06/09	03/07/09 11:54 AM
0903163-011A	03/05/09 12:40 PM	03/06/09	03/09/09 1:47 PM	0903163-012A	03/05/09 2:00 PM	03/06/09	03/09/09 2:55 PM
0903163-013A	03/06/09 12:00 PM	03/06/09	03/07/09 2:16 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.



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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #281939; Zimmerman	Date Sampled: 03/10/09
		Date Received: 03/18/09
	Client Contact: Robert Flory	Date Reported: 03/24/09
	Client P.O.: WC081414	Date Completed: 03/20/09

WorkOrder: 0903478

March 24, 2009

Dear Robert:

Enclosed within are:

- 1) The results of the **1** analyzed sample from your project: **#281939; Zimmerman,**
- 2) A QC report for the above sample,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

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.

McC Campbell Analytical, Inc.


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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0903478

ClientCode: AEL

WriteOn
 EDF
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Report to:	Robert Flory	Email: rflory@aeiconsultants.com	Bill to:	Denise Mockel	Requested TAT:	5 days
	AEI Consultants	cc:		AEI Consultants	Date Received:	03/18/2009
	2500 Camino Diablo, Ste. #200	PO: WC081414		2500 Camino Diablo, Ste. #200	Date Printed:	03/18/2009
	Walnut Creek, CA 94597	ProjectNo: #281939; Zimmerman		Walnut Creek, CA 94597		
	(925) 283-6000 FAX (925) 283-6121			dmockel@aeiconsultants.com		

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	
0903478-001	SW5-11.5	Soil	3/10/2009 10:45	<input type="checkbox"/>	A	A	A										

Test Legend:

1	G-MBTX_S	2	PREDF REPORT	3	TPH(D)WSG_S	4		5	
6		7		8		9		10	
11		12							

Prepared by: Ana 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: **3/18/2009 8:08:43 PM**
 Project Name: **#281939; Zimmerman** Checklist completed and reviewed by: **Ana Venegas**
 WorkOrder N°: **0903478** Matrix Soil 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: 6.2°C NA
 Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
 Sample labels checked for correct preservation? Yes No
 TTLC 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.

Client contacted: Date contacted: Contacted by:

Comments:



QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 42062

WorkOrder 0903478

Analyte	Extraction SW3550C/3630C		Spiked Sample ID: 0903380-005A									
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH-Diesel (C10-C23)	430	20	NR	NR	NR	106	106	0	70 - 130	30	70 - 130	30
%SS:	108	50	83	82	0.793	109	110	1.11	70 - 130	30	70 - 130	30

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

BATCH 42062 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903478-001A	03/10/09 10:45 AM	03/18/09	03/19/09 9:14 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.



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 42120

WorkOrder 0903478

EPA Method SW8021B/8015Bm		Extraction SW5030B							Spiked Sample ID: 0903454-001A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) ^f	ND	0.60	102	93.6	8.40	107	108	0.917	70 - 130	20	70 - 130	20
MTBE	ND	0.10	84.8	85.5	0.874	96.7	92.5	4.48	70 - 130	20	70 - 130	20
Benzene	ND	0.10	84.1	82.2	2.23	97.3	91.2	6.51	70 - 130	20	70 - 130	20
Toluene	ND	0.10	87.4	93.9	7.17	99.3	94.5	4.95	70 - 130	20	70 - 130	20
Ethylbenzene	ND	0.10	89	93.8	5.27	99.3	94.7	4.73	70 - 130	20	70 - 130	20
Xylenes	ND	0.30	100	103	2.91	111	107	3.76	70 - 130	20	70 - 130	20
%SS:	85	0.10	94	85	10.2	106	100	5.67	70 - 130	20	70 - 130	20

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

BATCH 42120 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903478-001A	03/10/09 10:45 AM	03/18/09	03/19/09 3:15 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.



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1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mcccampbell.com E-mail: main@mcccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #281939; Zimmerman, 3442 Adeline, Oakland	Date Sampled: 03/09/09
	Client Contact: Robert Flory	Date Received: 03/09/09
	Client P.O.: WC081403	Date Reported: 03/13/09
		Date Completed: 03/13/09

WorkOrder: 0903204

March 13, 2009

Dear Robert:

Enclosed within are:

- 1) The results of the **2** analyzed samples from your project: **#281939; Zimmerman, 3442 Adeline**
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

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.

McC Campbell Analytical, Inc.


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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0903204

ClientCode: AEL

WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Report to: Robert Flory AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597 (925) 283-6000 FAX (925) 283-6121	Email: rflory@aeiconsultants.com cc: PO: WC081403 ProjectNo: #281939; Zimmerman, 3442 Adeline, Oakland	Bill to: Denise Mockel AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597 dmockel@aeiconsultants.com	Requested TAT: 5 days Date Received: 03/09/2009 Date Printed: 03/09/2009
---	--	--	--

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	
0903204-001	SW7-11.5	Soil	3/9/2009 9:00	<input type="checkbox"/>	A	A											
0903204-002	B-3-11	Soil	3/9/2009 9:50	<input type="checkbox"/>	A	A											

Test Legend:

1	G-MBTX S	2	TPH(D) S	3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Ana 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: **3/9/2009 6:33:33 PM**
Project Name: **#281939; Zimmerman, 3442 Adeline, Oakland** Checklist completed and reviewed by: **Ana Venegas**
WorkOrder N°: **0903204** Matrix Soil 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: 7.6°C NA
Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
Sample labels checked for correct preservation? Yes No
TTLC 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.

Client contacted: Date contacted: Contacted by:

Comments:

0903205

McCAMPBELL ANALYTICAL, INC.

1534 Willow Pass Road
 Pittsburg, CA 94565-1701
 Website: www.mccampbell.com Email: main@mccampbell.com
 Telephone: (877) 252-9262 Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

TURN AROUND TIME
 RUSH 24 HR 48 HR 72 HR 5 DAY
 GeoTracker EDF PDF Excel Write On (DW)
 Check if sample is effluent and "J" flag is required

Report To: PATRICK ALBINI Bill To: SAME
 Company: Chevron
 E-Mail: ALBP@Chevron.com
 Tele: (925) 595 7695 Cell # Fax: (925) 827 6290
 Project #: Project Name: Door Project
 Project Location: 2003 Diamond Blvd Concord
 Sampler Signature: Pat Albini

SAMPLE ID	LOCATION/ Field Point Name	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED		Analysis Request	Other	Comments
		Date	Time			Water	Soil	Air	Sludge	Other	ICE	HCL			
B-2 South	Stucco														Filter Samples for Metals analysis: Yes / No
B-2 East	Stucco														
B-2 East	Sheet Rock														
B-3 North	Stucco														
PLEASE CONTACT FOR PAYMENT VIA CREDIT CARD															

BTEX & TPH as Gas (602 / 8021 + 8015) / MTBE
 TPH as Diesel (8015)
 Total Petroleum Oil & Grease (1664 / 5520 E/B&F)
 Total Petroleum Hydrocarbons (418.1)
 EPA 502.2 / 601 / 8010 / 8021 (HVOCs)
 MTBE / BTEX ONLY (EPA 602 / 8021)
 EPA 505 / 608 / 8081 (CI Pesticides)
 EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners
 EPA 507 / 8141 (NP Pesticides)
 EPA 515 / 8151 (Acidic CI Herbicides)
 EPA 524.2 / 624 / 8260 (VOCs)
 EPA 525.2 / 625 / 8270 (SVOCs)
 EPA 8270 SIM / 8310 (PAHs / PNA)
 CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)
 LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)
 Lead (200.7 / 200.8 / 6010 / 6020)

Asbestos
 ✓
 ✓
 ✓
 ✓

Relinquished By: Pat Albini Date: 3/9/09 Time: 9-50 Received By: ENVIRO-TECH SERVICES AA
 Relinquished By: ENVIRO-TECH SERVICES AA Date: 5/26/09 Time: 110 Received By:
 Relinquished By: Date: 5/9/09 Time: 130 Received By:

ICE/ NO COMMENTS:
 GOOD CONDITION _____
 HEAD SPACE ABSENT _____
 DECHLORINATED IN LAB _____
 APPROPRIATE CONTAINERS _____
 PRESERVED IN LAB _____
 VOAS O&G METALS OTHER
 PRESERVATION pH<2



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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #281939; Zimmerman, 3442 Adeline, Oakland	Date Sampled: 03/09/09
	Client Contact: Robert Flory	Date Received: 03/09/09
	Client P.O.: WC081403	Date Analyzed: 03/11/09-03/12/09
		Date Extracted: 03/09/09

Total Extractable Petroleum Hydrocarbons*

Extraction method SW3550C

Analytical methods: SW8015B

Work Order: 0903204

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	DF	% SS
0903204-001A	SW7-11.5	S	310,e4	10	115
0903204-002A	B-3-11	S	3.6,e4	1	104

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA
	S	1.0	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.

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

e4) gasoline range compounds are significant.



QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 41912

WorkOrder 0903204

EPA Method SW8021B/8015Bm		Extraction SW5030B							Spiked Sample ID: 0903208-009A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) ^f	ND	0.60	99.8	96	3.88	105	103	1.76	70 - 130	20	70 - 130	20
MTBE	ND	0.10	112	118	5.34	101	106	4.49	70 - 130	20	70 - 130	20
Benzene	ND	0.10	92.1	98.1	6.32	98.9	100	1.27	70 - 130	20	70 - 130	20
Toluene	ND	0.10	102	108	5.67	110	113	2.08	70 - 130	20	70 - 130	20
Ethylbenzene	ND	0.10	100	108	7.41	109	110	1.16	70 - 130	20	70 - 130	20
Xylenes	ND	0.30	113	116	2.71	120	122	1.23	70 - 130	20	70 - 130	20
%SS:	77	0.10	80	98	20.0	98	100	1.83	70 - 130	20	70 - 130	20

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

BATCH 41912 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903204-001A	03/09/09 9:00 AM	03/09/09	03/11/09 4:16 PM	0903204-002A	03/09/09 9:50 AM	03/09/09	03/11/09 6:32 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.



QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 41827

WorkOrder 0903204

EPA Method SW8015B		Extraction SW3550C							Spiked Sample ID: 0903070-001A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH-Diesel (C10-C23)	34	20	77.4	77.6	0.0964	105	104	0.252	70 - 130	30	70 - 130	30
%SS:	101	50	101	102	0.105	99	99	0	70 - 130	30	70 - 130	30

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

BATCH 41827 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903204-001A	03/09/09 9:00 AM	03/09/09	03/11/09 8:51 PM	0903204-002A	03/09/09 9:50 AM	03/09/09	03/12/09 10:09 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.



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Web: www.mcccampbell.com E-mail: main@mcccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #281939; Zimmerman, 3442 Adeline	Date Sampled: 03/11/09
		Date Received: 03/11/09
	Client Contact: Robert Flory	Date Reported: 03/17/09
	Client P.O.: WC081414	Date Completed: 03/17/09

WorkOrder: 0903287

March 17, 2009

Dear Robert:

Enclosed within are:

- 1) The results of the 7 analyzed samples from your project: **#281939; Zimmerman, 3442 Adeline**
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

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.

0903287

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560

Telephone: (925) 798-1620

Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME

RUSH 24 HR 48 HR 72 HR 5 DAY

EDF Required? Yes No

Report To: Robert Flory Bill To: Same
Company: AEI Consultants
2500 Camino Diablo
Walnut Creek, CA 94597 E-Mail: rflory@aeiconsultants.com
Tele: (925) 746-6000 Fax: (925) 746-6099
Project #: 281939 PO: WC081414 Project Name Zimmerman
Project Location: 3442 Adeline, Oakland, CA
Sampler Signature: *[Signature]*

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED				Analysis Request	Other	Comments	
		Date	Time			Water	Soil	Air	Sludge	Other	Ice	HCl	HNO ₃	Other				
B-3		3/11/09	12:50	1	Bios	X												
SW9-6.5		3/11/09	08:30	1	"	X												
SW10-6.5		"	12:30	1	"	X												
SW9-12		"	9:50	1	"	X												
SW6-12		"	10:45	1	"	X												
SW8-12		"	10:00	1	"	X												
SW10-6.5		"	12:15															
SW8-6.5		"	12:00	1	"	X												

Relinquished By: *[Signature]* Date: 3/11/09 Time: 5:15 Received By: *[Signature]*
Relinquished By: Date: Time: Received By:
Relinquished By: Date: Time: Received By:

ICE/r *NA*
GOOD CONDITION _____
HEAD SPACE ABSENT _____
DECHLORINATED IN LAB _____
PRESERVATION _____
APPROPRIATE _____
CONTAINERS _____
PERSERVED IN LAB _____
VOAS O&G METALS OTHER

McC Campbell Analytical, Inc.



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0903287

ClientCode: AEL

WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:	Robert Flory	Email: rflory@aeiconsultants.com	Bill to:	Denise Mockel	Requested TAT: 5 days
	AEI Consultants	cc:		AEI Consultants	Date Received: 03/11/2009
	2500 Camino Diablo, Ste. #200	PO: WC081414		2500 Camino Diablo, Ste. #200	Date Printed: 03/11/2009
	Walnut Creek, CA 94597	ProjectNo: #281939; Zimmerman, 3442 Adeline		Walnut Creek, CA 94597	
	(925) 283-6000 FAX (925) 283-6121			dmockel@aeiconsultants.com	

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	
0903287-001	B-3	Soil	3/11/2009 12:40	<input type="checkbox"/>	A	A											
0903287-002	SW9-6.5	Soil	3/11/2009 8:30	<input type="checkbox"/>	A	A											
0903287-003	SW10-6.5	Soil	3/11/2009 12:30	<input type="checkbox"/>	A	A											
0903287-004	SW9-12	Soil	3/11/2009 9:50	<input type="checkbox"/>	A	A											
0903287-005	SW6-12	Soil	3/11/2009 10:45	<input type="checkbox"/>	A	A											
0903287-006	SW8-12	Soil	3/11/2009 10:00	<input type="checkbox"/>	A	A											
0903287-007	SW8-6.5	Soil	3/11/2009 12:00	<input type="checkbox"/>	A	A											

Test Legend:

1	G-MBTX_S	2	TPH(D)WSG_S	3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Ana 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: **3/11/2009 7:55:54 PM**
Project Name: **#281939; Zimmerman, 3442 Adeline** Checklist completed and reviewed by: **Ana Venegas**
WorkOrder N°: **0903287** Matrix Soil 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
TTLC 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.

Client contacted: Date contacted: Contacted by:

Comments:



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mcccampbell.com E-mail: main@mcccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #281939; Zimmerman, 3442 Adeline	Date Sampled: 03/11/09
	Client Contact: Robert Flory	Date Received: 03/11/09
	Client P.O.: WC081414	Date Analyzed 03/12/09-03/16/09
		Date Extracted: 03/11/09

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method SW5030B

Analytical methods SW8021B/8015Bm

Work Order: 0903287

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	B-3	S	130,d1	ND<0.50	0.81	0.12	1.5	2.5	10	118
002A	SW9-6.5	S	ND	ND	ND	ND	ND	ND	1	90
003A	SW10-6.5	S	5.6,d1	ND	0.045	0.0062	0.0089	0.012	1	81
004A	SW9-12	S	5.0,d1	ND	0.82	ND	0.20	0.20	1	84
005A	SW6-12	S	4.9,d1	ND	0.54	ND	0.15	0.16	1	78
006A	SW8-12	S	12,d1	ND	0.58	0.0091	0.15	0.19	1	104
007A	SW8-6.5	S	12,d7,d9	ND	0.085	0.0084	0.027	0.070	1	85

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	ug/L
	S	1	0.05	0.005	0.005	0.005	0.005	mg/Kg

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

cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference.

+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
- d7) strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram
- d9) no recognizable pattern



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AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #281939; Zimmerman, 3442 Adeline	Date Sampled: 03/11/09
	Client Contact: Robert Flory	Date Received: 03/11/09
	Client P.O.: WC081414	Date Analyzed: 03/12/09-03/13/09
		Date Extracted: 03/11/09

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up*

Extraction method SW3550C/3630C

Analytical methods: SW8015B

Work Order: 0903287

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	DF	% SS
0903287-001A	B-3	S	13,e4	5	96
0903287-002A	SW9-6.5	S	ND	1	92
0903287-003A	SW10-6.5	S	ND	1	95
0903287-004A	SW9-12	S	ND	1	95
0903287-005A	SW6-12	S	ND	1	97
0903287-006A	SW8-12	S	1.1,e4	1	105
0903287-007A	SW8-6.5	S	5.2,e11,e2	1	96

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA
	S	1.0	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.

+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.
 e11) stoddard solvent/mineral spirit (?)



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 41945

WorkOrder 0903287

EPA Method SW8021B/8015Bm		Extraction SW5030B							Spiked Sample ID: 0903236-006A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) ^f	ND	0.60	104	101	3.11	114	101	11.9	70 - 130	20	70 - 130	20
MTBE	ND	0.10	109	115	5.57	109	108	0.677	70 - 130	20	70 - 130	20
Benzene	ND	0.10	93.7	96.4	2.78	99.1	100	1.23	70 - 130	20	70 - 130	20
Toluene	ND	0.10	103	106	2.74	111	113	1.86	70 - 130	20	70 - 130	20
Ethylbenzene	ND	0.10	102	104	2.36	110	111	0.433	70 - 130	20	70 - 130	20
Xylenes	ND	0.30	114	116	2.24	118	123	3.92	70 - 130	20	70 - 130	20
%SS:	81	0.10	96	87	10.4	98	100	1.79	70 - 130	20	70 - 130	20

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

BATCH 41945 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903287-001A	03/11/09 12:40 PM	03/11/09	03/16/09 4:02 PM	0903287-002A	03/11/09 8:30 AM	03/11/09	03/13/09 10:00 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.



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 41973

WorkOrder 0903287

Analyte	EPA Method SW8021B/8015Bm		Extraction SW5030B						Spiked Sample ID: 0903297-015A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) ^f	ND	0.60	99.3	111	10.8	102	103	0.855	70 - 130	20	70 - 130	20
MTBE	ND	0.10	102	111	8.93	116	113	2.49	70 - 130	20	70 - 130	20
Benzene	ND	0.10	108	99.6	7.94	102	99	2.88	70 - 130	20	70 - 130	20
Toluene	ND	0.10	95.9	89.5	6.99	114	111	2.99	70 - 130	20	70 - 130	20
Ethylbenzene	ND	0.10	107	101	5.60	112	108	3.54	70 - 130	20	70 - 130	20
Xylenes	ND	0.30	102	98.4	3.24	121	118	2.69	70 - 130	20	70 - 130	20
%SS:	92	0.10	78	78	0	100	96	3.82	70 - 130	20	70 - 130	20

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

BATCH 41973 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903287-003A	03/11/09 12:30 PM	03/11/09	03/12/09 11:39 PM	0903287-004A	03/11/09 9:50 AM	03/11/09	03/13/09 12:13 AM
0903287-005A	03/11/09 10:45 AM	03/11/09	03/16/09 5:46 PM	0903287-006A	03/11/09 10:00 AM	03/11/09	03/13/09 1:19 AM
0903287-007A	03/11/09 12:00 PM	03/11/09	03/14/09 4:08 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.



QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 41911

WorkOrder 0903287

EPA Method SW8015B		Extraction SW3550C/3630C							Spiked Sample ID: 0903203-004A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH-Diesel (C10-C23)	2.0	20	94.9	97.8	2.78	86	85.2	0.944	70 - 130	30	70 - 130	30
%SS:	96	50	99	102	3.35	83	81	3.15	70 - 130	30	70 - 130	30

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

BATCH 41911 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903287-001A	03/11/09 12:40 PM	03/11/09	03/13/09 1:19 AM	0903287-002A	03/11/09 8:30 AM	03/11/09	03/12/09 4:12 PM
0903287-003A	03/11/09 12:30 PM	03/11/09	03/12/09 5:21 PM	0903287-004A	03/11/09 9:50 AM	03/11/09	03/12/09 6:29 PM
0903287-005A	03/11/09 10:45 AM	03/11/09	03/12/09 7:37 PM	0903287-006A	03/11/09 10:00 AM	03/11/09	03/13/09 7:48 PM
0903287-007A	03/11/09 12:00 PM	03/11/09	03/13/09 12:11 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.

APPENDIX C

**SVE Casing Testing SOP
And
Field Data Sheets**

AEI CONSULTANTS
OPERATIONS & MAINTENANCE WORK ORDER

Project Name: Zimmerman
Project Number: 281939

Activity	Hours	
	Budget	Actual

Client Contact: _____
Project Manager: Bob Flory

Gate / System Combo: _____
PO Number: WC081571

Scheduled Work Date: April ~~20~~^{27th}, 2009
Flexible: YES NO

Site Contact: _____
Site Phone: _____
Site Address: 3442 Adeline Street
Oakland, CA 94608

Summary of Work Requested

Horizontal extraction/injection well field screening.
Screen three (3) horizontal wells (SVE-1, 2, & 3) for TVH, CH4, O2, & CO2 w/ RKI Eagle.
Collect a 1-Liter Tedlar bag from each horizontal well (SVE-1, 2, & 3).
*Note: record the initial (highest) and stabilized TVH, CH4, O2, & CO2 readings.
*Note: use the 115VAC, 1/3HP GAST DOA vacuum pump (~1.8 CFM free air flow).
Readings should stabilize within 5 to 10 minutes. Stop / record readings after 10 minutes.

Completed Not Completed

- 1. Screen horizontal wells (SVE-1, 2, & 3) for TVH, CH4, O2, & CO2 w/ RKI Eagle gas detector.
- 2. Record the initial (highest) and stabilized TVH, CH4, O2, & CO2 readings.
- 3. Once readings stabilize, collect a 1-Liter Tedlar bag from each horizontal well for lab analysis.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9. Call office to check in with status and update project manager before leaving the site.
- 10. Deliver the 1-liter Tedlar bags to McCampbell Analytical, Inc. of Pittsburg, CA for lab analysis.

Analyses: None TPH-g TPH-d MBTEX VOCs HVOCs

Turnaround Time: Rush 24 hours 48 hours 72 hours Standard

Consumables Used: # of Tedlar Bags: 3 Tygon Tubing (ft): 10FT PVC Tubing (ft): 10FT

Drums/Waste: # of Water: _____ # of Soil: _____ # of Other: _____

Requested by PM: [Signature]

Completed by Tech: [Signature]

DATE: 4/27/09

AEI CONSULTANTS
SOIL GAS PROBE FIELD SCREENING DATA SHEET

PAGE: 1 OF: 1

Project Name: ZIMMERMAN
Location: _____
Project No.: _____

Field Technician: JOHN SIGG
Project Manager: _____
Conditions: _____

Soil Gas Probe ID	Date/Time	*Vacuum/Pressure (in-H2O)	Purge Vacuum (in-H2O)	PID (ppmv)	**TVH (ppmv)	CH ₄ (%)	O ₂ (%)	CO ₂ (%)
SVE-1	0945 (1)	0.0	13.5		0	0	10.4	8.1
	(3)	↓	↓		40	0	10.5	8.0
	(5)	↓	↓		50	0	10.6	7.9
	(7)	↓	↓		60	0	10.7	7.7
	(9)	↓	↓		60	0	10.7	7.7
	(10)	↓	↓		60	0	10.7	7.7
SVE-2	1030 (1)	0.0	13.0		0	0	9.5	8.3
	(3)	↓	↓		40	0	10.6	7.9
	(5)	↓	↓		55	0	8.9	8.1
	(7)	↓	↓		60	0	8.9	8.1
	(9)	↓	↓		60	0	9.0	8.1
	(10)	↓	↓		60	0	9.0	8.1
SVE-3	1115 (1)	0.0	12.5		0	0	10.6	7.9
	(3)	↓	↓		55	0	9.2	8.3
	(5)	↓	↓		55	0	8.9	8.5
	(7)	↓	↓		55	0	8.9	8.5
	(9)	↓	↓		55	0	8.9	8.5
	(10)	↓	↓		55	0	8.9	8.5

NOTES:

*Use a plus sign (+) to indicate a positive pressure reading

in-H2O = inches of water (gauge)
ppmv = parts per million by volume
% = percent concentration by volume

**Use 1:1 or 3:1 dilution fitting if oxygen level falls below 8%, or TVH reading is greater than 11,000 ppmv; record initial TVH, CH₄, O₂, & CO₂ readings w/o dilution fitting first, then record final readings w/ dilution fitting on next line; multiply TVH reading only by 2 for 1:1 dilution fitting and by 4 for 3:1 dilution fitting

AEI CONSULTANTS
DAILY FIELD REPORT

Project Name: Zimmerman

Field Person: John Sigg

Location: _____

Project Manager: _____

Project No.: _____ Date: 4/27/09

Weather: _____

Daily Summary: _____

Subcontractors: _____

Materials: _____

Equipment: _____

TIME	SUMMARIZE FIELD ACTIVITIES
0830	LEAVE OFFICE
0900	ARRIVE @ SITE SCREEN SVE-1, 2 & 3 & COLLECT T.B SAMPLES FROM DATA.
1115	LEAVE SITE
1145	ARRIVE @ OFFICE
	+ 1 HR TO DROP SAMPLES @ McCampbells

Field Person Signature: 
Project Manager Signature: _____

DATE: 6/24/09

AEI CONSULTANTS
SOIL GAS FIELD SCREENING DATA SHEET

PAGE: ___ OF: ___

Project Name: Zimmerman
Location: 3442 Adeline Street, Oakland, CA
Project No.: 281939

Field Technician: J. Sigg
Project Manager: R. Flory
Conditions: _____

Well ID	Date/Time	*Vacuum/Pressure (in-H2O)	Purge Vacuum (in-H2O)	**TVH (ppmv)	CH ₄ (%)	O ₂ (%)	CO ₂ (%)
SVE-1	1100		20	0	0	14.4	6.1
SVE-2	1030		20	0	0	14.2	6.0
SVE-3	1045		10	0	0	13.9	6.0

NOTES:

*Use a plus sign (+) to indicate a positive pressure reading

in-H2O = inches of water (gauge)
ppmv = parts per million by volume
% = percent concentration by volume

**Use 1:1 or 3:1 dilution fitting if oxygen level falls below 8%, or TVH reading is greater than 11,000 ppmv; record initial TVH, CH₄, O₂, & CO₂ readings w/o dilution fitting first, then record final readings w/ dilution fitting on next line; multiply TVH reading only by 2 for 1:1 dilution fitting and by 4 for 3:1 dilution fitting



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AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #281939; Zimmerman	Date Sampled: 04/27/09
		Date Received: 04/27/09
	Client Contact: Robert Flory	Date Reported: 04/30/09
	Client P.O.: #WC081571	Date Completed: 04/28/09

WorkOrder: 0904638

April 30, 2009

Dear Robert:

Enclosed within are:

- 1) The results of the **3** analyzed samples from your project: **#281939; Zimmerman,**
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

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.

McC Campbell Analytical, Inc.



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0904638

ClientCode: AEL

WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Report to: Robert Flory AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597 (925) 283-6000 FAX (925) 283-6121	Email: rflory@aeiconsultants.com cc: PO: #WC081571 ProjectNo: #281939; Zimmerman	Bill to: Denise Mockel AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597 dmockel@aeiconsultants.com	Requested TAT: 5 days Date Received: 04/27/2009 Date Printed: 04/27/2009
--	---	---	---

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	
0904638-001	SVE-1	Air	4/27/2009 9:45	<input type="checkbox"/>	A	A											
0904638-002	SVE-2	Air	4/27/2009 10:30	<input type="checkbox"/>	A												
0904638-003	SVE-3	Air	4/27/2009 11:15	<input type="checkbox"/>	A												

Test Legend:

1	G-MBTEX AIR	2	PREDF REPORT	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: **04/27/09 1:52:09 PM**

Project Name: **#281939; Zimmerman**

Checklist completed and reviewed by: **Maria Venegas**

WorkOrder N°: **0904638** Matrix Air

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
- TTLC 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.

Client contacted:

Date contacted:

Contacted by:

Comments:



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AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #281939; Zimmerman	Date Sampled: 04/27/09
		Date Received: 04/27/09
	Client Contact: Robert Flory	Date Extracted: 04/27/09
	Client P.O.: #WC081571	Date Analyzed: 04/27/09

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method: SW5030B

Analytical methods: SW8021B/8015Bm

Work Order: 0904638

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	SVE-1	A	51	ND	ND	ND	ND	0.62	1	114	d1
002A	SVE-2	A	48	ND	0.29	ND	0.26	1.1	1	115	d1
003A	SVE-3	A	ND	ND	ND	ND	ND	ND	1	100	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	25	2.5	0.25	0.25	0.25	0.25	0.25	μg/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	0.005	mg/Kg

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

+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



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AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #281939; Zimmerman	Date Sampled: 04/27/09
		Date Received: 04/27/09
	Client Contact: Robert Flory	Date Extracted: 04/27/09
	Client P.O.: #WC081571	Date Analyzed: 04/27/09

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with MTBE and BTEX in ppmv*

Extraction method: SW5030B

Analytical methods: SW8021B/8015Bm

Work Order: 0904638

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	SVE-1	A	14	ND	ND	ND	ND	0.14	1	114	d1
002A	SVE-2	A	14	ND	0.089	ND	0.059	0.25	1	115	d1
003A	SVE-3	A	ND	ND	ND	ND	ND	ND	1	100	

ppm (mg/L) to ppmv (ul/L) conversion for TPH(g) assumes the molecular weight of gasoline to be equal to that of hexane.

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	7.0	0.68	0.077	0.065	0.057	0.057	1	uL/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

+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



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Air

QC Matrix: Water

BatchID: 42911

WorkOrder: 0904638

Analyte	EPA Method SW8021B/8015Bm		Extraction SW5030B						Spiked Sample ID: 0904636-005A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) ^f	ND	60	105	106	1.41	76.2	81.3	6.51	70 - 130	20	70 - 130	20
MTBE	ND	10	95.8	102	6.02	98	86	13.1	70 - 130	20	70 - 130	20
Benzene	ND	10	85.4	85.9	0.622	106	110	3.80	70 - 130	20	70 - 130	20
Toluene	ND	10	84.4	84.7	0.425	99.3	108	8.49	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	83.7	83.4	0.288	96.4	102	5.70	70 - 130	20	70 - 130	20
Xylenes	ND	30	84.8	84.2	0.697	89.4	99.6	10.8	70 - 130	20	70 - 130	20
%SS:	102	10	97	96	0.764	108	105	2.80	70 - 130	20	70 - 130	20

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

BATCH 42911 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0904638-001A	04/27/09 9:45 AM	04/27/09	04/27/09 6:32 PM	0904638-002A	04/27/09 10:30 AM	04/27/09	04/27/09 7:02 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 = 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.



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Air

QC Matrix: Water

BatchID: 42913

WorkOrder: 0904638

EPA Method SW8021B/8015Bm		Extraction SW5030B							Spiked Sample ID: 0904677-002B			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) ^f	ND	60	111	103	7.53	113	120	6.00	70 - 130	20	70 - 130	20
MTBE	ND	10	87.3	95.4	8.88	73.6	82.3	11.2	70 - 130	20	70 - 130	20
Benzene	ND	10	98.6	102	3.22	82	89.4	8.57	70 - 130	20	70 - 130	20
Toluene	ND	10	99	99.3	0.287	79.9	89	10.7	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	102	104	1.60	84.9	92.5	8.66	70 - 130	20	70 - 130	20
Xylenes	ND	30	101	105	2.99	93.9	102	8.54	70 - 130	20	70 - 130	20
%SS:	100	10	102	97	5.18	94	93	1.47	70 - 130	20	70 - 130	20

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

BATCH 42913 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0904638-003A	04/27/09 11:15 AM	04/27/09	04/27/09 7:33 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 = 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.

APPAPPENDIX D

Water Disposal Permit and Analyses



May 20, 2009

DAVID R. WILLIAMS
DIRECTOR OF WASTEWATER

CERTIFIED MAIL
(Return Receipt Requested)
Certified Mail No. 7005 2570 0000 6629 8528

Mr. Kirby Fernando
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597

Dear Mr. Fernando:

Re: Wastewater Discharge Permit No. 50642901

Enclosed is the Special Discharge Permit (Permit) for discharge at site 3442 Adeline Street, Oakland to be used for your information and records. Please read the Permit terms and conditions and the enclosed *Special Discharge Permit Standard Terms and Conditions*. As a Permit Holder, you are legally responsible for complying with all Permit conditions and requirements.

AEI Consultants shall contact the Environmental Services Division at least three working days prior to start-up of the permitted discharge and when the discharge is completed.

AEI Consultants shall report to the Environmental Services Division any changes, permanent or temporary, to the premises or operations that significantly affect the quality or volume of permitted discharge or deviate from the terms and conditions under which the Permit was granted.

If you have any questions regarding this Permit, please contact Angelee Cari of the Environmental Services Division at (510) 287-0290.

Sincerely,

A handwritten signature in black ink, appearing to read 'Bennett K. Horenstein'.

BENNETT K. HORENSTEIN
Manager of Environmental Services

BKH:ADC:adc



PERMIT NUMBER 50642901

**SPECIAL DISCHARGE PERMIT
Terms and Conditions**

GENERAL CONDITIONS

- I. AEI Consultants shall comply with all items of the attached *Special Discharge Permit Standard Terms and Conditions*.
- II. AEI Consultants shall discharge Special Discharge Wastewater only from the specific source described in the *Special Discharge Permit Terms & Conditions, Criteria and Fees* form. The discharge of all other wastewater must comply with EBMUD Ordinance No. 311A-03.
- III. AEI Consultants shall immediately cease discharge of treated or managed Special Discharge Wastewater if not in compliance with any of the terms and conditions of this Special Discharge Permit.
- IV. This Special Discharge Permit is considered a waiver of EBMUD Ordinance No. 311A-03, prohibiting:
 - o Discharge of wastewater directly into a manhole or other opening into the community sewer system, contingent upon approval from the City of Oakland.
 - o Discharge of stormwater, drainage water, and groundwater to the community sewer, contingent upon compliance with Permit terms and conditions regarding those discharges.
- V. AEI Consultants shall not discharge Special Discharge Wastewater authorized by this Special Discharge Permit after the expiration date.

COMPLIANCE REQUIREMENTS

- I. AEI Consultants shall pre-treat or manage all Special Discharge Wastewater prior to discharge to the side sewer. Pretreatment or management shall be sufficient to achieve compliance with the limits established in this Special Discharge Permit.
- II. AEI Consultants shall post a sign in the work area stating "All Wastewater Discharge must comply with the Special Discharge Permit."
- III. AEI Consultants shall not discharge to the sanitary sewer during a rain event or within 24 hours after a rain event, which is defined as any precipitation greater than a drizzle.
- IV. AEI Consultants shall not discharge wastewater at a flow rate greater than 100 gallons per minute.
- V. AEI Consultants is responsible for obtaining local permits for use of manholes or cleanouts for discharge.
- VI. AEI Consultants shall obtain approval if required from the City of Oakland for the side sewer discharge location through which the special discharge wastewater is to be discharged, and shall comply with the terms and conditions set by this public agency owning the sanitary sewer system at the subject location.

WASTEWATER DISCHARGE LIMITS

AEI Consultants shall not discharge Special Discharge Wastewater into the community sewer if the strength of the wastewater exceeds:

- Benzene = 5 µg/L; Toluene = 5 µg/L; Ethylbenzene = 5 µg/L; Total Xylenes = 5 µg/L
- Limits derived from EBMUD Ordinance No. 311A-03.

INSPECTIONS

The District may conduct random, unannounced inspections to verify compliance with the terms and conditions of this Special Discharge Permit. AEI Consultants shall grant District personnel access to the facility and discharge logs to conduct inspections and collect Special Discharge Wastewater samples.

ENFORCEMENT AND PENALTIES

Failure to comply with the terms and conditions of this Special Discharge Permit and *Special Discharge Permit Standard Terms and Conditions* may result in enforcement actions, including violation follow-up fees, civil enforcement penalties, and administrative fines of up to \$5,000 per day.

RATES AND CHARGES

This Special Discharge Permit may be amended to include changes to rates and charges that may be established by the District during the term of this Special Discharge Permit. The estimated volume of discharge is 6,500 gallons. The discharge shall be charged \$0.02 per gallon for the entire volume of discharge and the permit fee is \$900.



PERMIT NUMBER 50642901

SPECIAL DISCHARGE PERMIT

Terms and Conditions

AUTHORIZATION

Special Discharger AEI Consultants is hereby authorized to discharge Special Discharge Wastewater to the community sewer, subject to compliance with EBMUD Ordinance No. 311A-03, Special Discharge Permit Terms and Conditions, and billing conditions.

Effective: May 20, 2009

Expiration: August 20, 2009

A handwritten signature in cursive script, appearing to read 'D. Hansen for', is written over a horizontal line.

Director, Wastewater Department

5/20/09
Date

**ALL WASTEWATER
DISCHARGED MUST
COMPLY WITH THE
SPECIAL DISCHARGE PERMIT**

**AEI Consultants
Permit # 50642901
Effective: 5/20/09 – 8/20/09**

**PREVENT POLLUTION
Help Us Keep the Bay Clean**

**IN CASE OF SPILL
Call 510 287-1651**

**Or 1-866-40-EBMUD during Non-Business Hours
(toll free 1-866-403-2683)**





SPECIAL DISCHARGE PERMIT

PERMIT NUMBER _____

APPLICANT FORM

APPLICANT BUSINESS NAME AEI Consultants	SIC CODE 8711
--	------------------

ADDRESS OF SITE DISCHARGING WASTEWATER 3442 Adeline STREET ADDRESS Oakland CITY 94608 ZIP CODE	APPLICANT MAILING ADDRESS 2500 Camino Diablo #200 STREET ADDRESS Walnut Creek CITY 94597 ZIP CODE
--	---

CONTACT PERSONS

APPLICANT

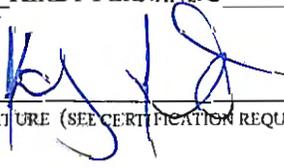
KIRBY FERNANDO NAME	PROJECT MANAGER TITLE	925-746-6000 /594-2899 PHONE NUMBER
SAME AS ABOVE NAME	 TITLE	 PHONE NUMBER
SAME AS ABOVE NAME	 TITLE	 PHONE NUMBER

CERTIFICATION

I understand that issuance of a Special Discharge Permit does not exempt or preclude the facility from being issued a Discharge Minimization or Pollution Prevention Permit.

I understand that I am legally responsible for discharge of wastewater from the facility and for complying with the Terms and Conditions of this Special Discharge Permit.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that the qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

KIRBY FERNANDO
NAME

SIGNATURE (SEE CERTIFICATION REQUIREMENTS ON INSTRUCTIONS)

PROJECT MANAGER
TITLE
4/1/09
DATE

RECEIVED
APR 03 2009
ENVIRONMENTAL SVCS DIV

IMPORTANT

If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

DISCLAIMER

The Certificate of Insurance on the reverse side of this form does not constitute a contract between the issuing insurer(s), authorized representative or producer, and the certificate holder, nor does it affirmatively or negatively amend, extend or alter the coverage afforded by the policies listed thereon.



LEGEND

-  **N**
-  Subject Property Line
-  Manhole #52-400-20
-  6,500 gallon storage tank
-  Discharge Hoses (route)

SITE PLAN

3442 Adeline Street
Oakland, California 94608

FIGURE A
Job No: 281939





Sample Receipt Checklist

Client Name: **AEI Consultants**

Date and Time Received: **04/30/09 1:43:58 PM**

Project Name: **#281939; Zimmerman**

Checklist completed and reviewed by: **Samantha Arbuckle**

WorkOrder N°: **0904717** 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: 5.6°C NA
- Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
- Sample labels checked for correct preservation? Yes No
- TTLIC 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.

Client contacted:

Date contacted:

Contacted by:

Comments:



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 42978

WorkOrder: 0904717

Analyte	EPA Method SW8021B/8015Bm Extraction SW5030B								Spiked Sample ID: N/A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) [£]	N/A	60	N/A	N/A	N/A	98.4	102	3.69	N/A	N/A	70 - 130	20
MTBE	N/A	10	N/A	N/A	N/A	98	92.8	5.48	N/A	N/A	70 - 130	20
Benzene	N/A	10	N/A	N/A	N/A	101	98.4	2.34	N/A	N/A	70 - 130	20
Toluene	N/A	10	N/A	N/A	N/A	98.1	96.3	1.84	N/A	N/A	70 - 130	20
Ethylbenzene	N/A	10	N/A	N/A	N/A	103	101	2.41	N/A	N/A	70 - 130	20
Xylenes	N/A	30	N/A	N/A	N/A	103	102	1.21	N/A	N/A	70 - 130	20
%SS:	N/A	10	N/A	N/A	N/A	101	97	4.32	N/A	N/A	70 - 130	20

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

BATCH 42978 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0904717-001A	04/30/09 9:20 AM	05/01/09	05/01/09 7:52 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.

**McC Campbell Analytical, Inc.**

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #281939; Zimmerman	Date Sampled: 04/15/09
		Date Received: 04/15/09
	Client Contact: Robert Flory	Date Reported: 04/20/09
	Client P.O.: #WC081551	Date Completed: 04/17/09

WorkOrder: 0904368

April 20, 2009

Dear Robert:

Enclosed within are:

- 1) The results of the 1 analyzed sample from your project: **#281939; Zimmerman,**
- 2) A QC report for the above sample,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

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.

McC Campbell Analytical, Inc.



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0904368

ClientCode: AEL

WriteOn EDF Excel Fax Email HardCopy ThirdParty J-flag

Report to:

Robert Flory
 AEI Consultants
 2500 Camino Diablo, Ste. #200
 Walnut Creek, CA 94597
 (925) 283-6000 FAX (925) 283-6121

Email: rflory@aeiconsultants.com
 cc:
 PO: #WC081551
 ProjectNo: #281939; Zimmerman

Bill to:

Denise Mockel
 AEI Consultants
 2500 Camino Diablo, Ste. #200
 Walnut Creek, CA 94597
 dmockel@aeiconsultants.com

Requested TAT: 5 days

Date Received: 04/15/2009

Date Printed: 04/15/2009

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	
0904368-001	Poly Tank	Water	4/15/2009 13:30	<input type="checkbox"/>	A												

Test Legend:

1	G-MBTEX_W	2		3		4		5	
6		7		8		9		10	
11		12							

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: **04/15/09 4:30:30 PM**
 Project Name: **#281939; Zimmerman** Checklist completed and reviewed by: **Maria Venegas**
 WorkOrder N°: **0904368** 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: 9.2°C NA
 Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
 Sample labels checked for correct preservation? Yes No
 TTLC 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.

Client contacted: _____ Date contacted: _____ Contacted by: _____
 Comments: _____



McC Campbell Analytical, Inc.

"When Quality Counts"

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Web: www.mcccampbell.com E-mail: main@mcccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 42663

WorkOrder 0904368

Analyte	EPA Method SW8021B/8015Bm Extraction SW5030B								Spiked Sample ID: 0904375-002A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) ^f	ND	60	106	104	2.33	106	110	3.61	70 - 130	20	70 - 130	20
MTBE	ND	10	110	105	4.43	117	112	4.37	70 - 130	20	70 - 130	20
Benzene	ND	10	83.8	90.2	7.35	92.2	91.6	0.661	70 - 130	20	70 - 130	20
Toluene	ND	10	89.9	92.6	2.98	95	94	1.13	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	93.4	93.6	0.262	94.5	93.4	1.25	70 - 130	20	70 - 130	20
Xylenes	ND	30	105	105	0	106	105	0.991	70 - 130	20	70 - 130	20
%SS:	93	10	103	103	0	103	104	1.43	70 - 130	20	70 - 130	20

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

BATCH 42663 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0904368-001A	04/15/09 1:30 PM	04/16/09	04/16/09 5:57 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.

^f 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.

EBMUD

ALL WASTEWATER DISCHARGE

MUST COMPLY WITH

THE SPECIAL DISCHARGE

PERMIT NO. 50642901



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mcccampbell.com E-mail: main@mcccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #281939; Zimmerman	Date Sampled: 03/11/09
		Date Received: 03/11/09
	Client Contact: Robert Flory	Date Reported: 03/12/09
	Client P.O.: #WC081414	Date Completed: 03/12/09

WorkOrder: 0903276

March 12, 2009

Dear Robert:

Enclosed within are:

- 1) The results of the **1** analyzed sample from your project: **#281939; Zimmerman,**
- 2) A QC report for the above sample,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

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.

McC Campbell Analytical, Inc.



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0903276

ClientCode: AEL

WriteOn
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Report to:	Robert Flory	Email: rflory@aeiconsultants.com	Bill to:	Denise Mockel	Requested TAT:	1 day
	AEI Consultants	cc:		AEI Consultants	Date Received:	03/11/2009
	2500 Camino Diablo, Ste. #200	PO: #WC081414		2500 Camino Diablo, Ste. #200	Date Printed:	03/11/2009
	Walnut Creek, CA 94597	ProjectNo: #281939; Zimmerman		Walnut Creek, CA 94597		
	(925) 283-6000 FAX (925) 283-6121			dmockel@aeiconsultants.com		

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
0903276-001	Purge Tank	Water	3/11/2009 9:30	<input type="checkbox"/>	F	G	D	C	E	A	B	B	D	B	B	D

Test Legend:

1	1664A_SG_W	2	1664A_W	3	608_W	4	624_W	5	625_W
6	G-MBTEX_W	7	HG_W	8	METALS_W	9	PH_W	10	PHENOLICS_W
11	TPH(D)WSG_W	12	TSS_W						

Prepared by: Melissa Valles

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: **3/11/09 6:32:50 PM**
Project Name: **#281939; Zimmerman** Checklist completed and reviewed by: **Melissa Valles**
WorkOrder N°: **0903276** 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: 4.6°C NA
Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
Sample labels checked for correct preservation? Yes No
TTLC 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.

Client contacted: Date contacted: Contacted by:

Comments: Metals was received unpreserved. Sample had to be preserved and sit or 16hrs prior to extracting and analyzing.



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mcccampbell.com E-mail: main@mcccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #281939; Zimmerman	Date Sampled: 03/11/09
		Date Received: 03/11/09
	Client Contact: Robert Flory	Date Extracted: 03/11/09
	Client P.O.: #WC081414	Date Analyzed: 03/11/09

Organochlorine Pesticides (608 Basic Target List) and PCBs*

Extraction Method: E608

Analytical Method: E608

Work Order: 0903276

Lab ID	0903276-001D				Reporting Limit for DF =1	
Client ID	Purge Tank				S	W
Matrix	W					
DF	1					

Compound	Concentration				µg/kg	µg/L
Aldrin	ND				NA	0.005
a-BHC	ND				NA	0.01
b-BHC	ND				NA	0.005
d-BHC	ND				NA	0.005
g-BHC	ND				NA	0.02
Chlordane (Technical)	ND				NA	0.1
a-Chlordane	ND				NA	0.05
g-Chlordane	ND				NA	0.05
p,p-DDD	ND				NA	0.01
p,p-DDE	ND				NA	0.01
p,p-DDT	ND				NA	0.01
Dieldrin	ND				NA	0.01
Endosulfan I	ND				NA	0.02
Endosulfan II	ND				NA	0.01
Endosulfan sulfate	ND				NA	0.05
Endrin	ND				NA	0.01
Endrin aldehyde	ND				NA	0.05
Heptachlor	ND				NA	0.01
Heptachlor epoxide	ND				NA	0.01
Hexachlorobenzene	ND				NA	0.5
Hexachlorocyclopentadiene	ND				NA	1.0
Toxaphene	ND				NA	0.5
Aroclor1016	ND				NA	0.5
Aroclor1221	ND				NA	0.5
Aroclor1232	ND				NA	0.5
Aroclor1242	ND				NA	0.5
Aroclor1248	ND				NA	0.5
Aroclor1254	ND				NA	0.5
Aroclor1260	ND				NA	0.5
PCBs, total	ND				NA	0.5

Surrogate Recoveries (%)

%SS:	94			
------	----	--	--	--

Comments

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

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

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



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AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #281939; Zimmerman	Date Sampled: 03/11/09
		Date Received: 03/11/09
	Client Contact: Robert Flory	Date Extracted: 03/12/09
	Client P.O.: #WC081414	Date Analyzed 03/12/09

Volatile Organics by P&T and GC/MS (624 Basic Target List)*

Extraction Method: E624

Analytical Method: E624

Work Order: 0903276

Lab ID	0903276-001C
Client ID	Purge Tank
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Benzene	650	20	0.5	Bromodichloromethane	ND<10	20	0.5
Bromoform	ND<10	20	0.5	Bromomethane	ND<10	20	0.5
Carbon tetrachloride	ND<10	20	0.5	Chlorobenzene	ND<10	20	0.5
Chloroethane	ND<10	20	0.5	Chloroform	ND<10	20	0.5
Chloromethane	ND<10	20	0.5	Dibromochloromethane	ND<10	20	0.5
1,2-Dichlorobenzene	ND<10	20	0.5	1,3-Dichlorobenzene	ND<10	20	0.5
1,4-Dichlorobenzene	ND<10	20	0.5	1,1-Dichloroethane	ND<10	20	0.5
1,2-Dichloroethane (1,2-DCA)	ND<10	20	0.5	1,1-Dichloroethene	ND<10	20	0.5
cis-1,2-Dichloroethene	ND<10	20	0.5	trans-1,2-Dichloroethene	ND<10	20	0.5
1,2-Dichloropropane	ND<10	20	0.5	cis-1,3-Dichloropropene	ND<10	20	0.5
trans-1,3-Dichloropropene	ND<10	20	0.5	Ethylbenzene	20	20	0.5
Freon 113	ND<200	20	10	Hexachlorobutadiene	ND<10	20	0.5
Hexachloroethane	ND<10	20	0.5	Methyl-t-butyl ether (MTBE)	ND<10	20	0.5
Methylene chloride	ND<10	20	0.5	Naphthalene	10	20	0.5
Styrene	ND<10	20	0.5	1,1,2,2-Tetrachloroethane	ND<10	20	0.5
Tetrachloroethene	ND<10	20	0.5	Toluene	30	20	0.5
1,2,4-Trichlorobenzene	ND<10	20	0.5	1,1,1-Trichloroethane	ND<10	20	0.5
1,1,2-Trichloroethane	ND<10	20	0.5	Trichloroethene	ND<10	20	0.5
Trichlorofluoromethane	ND<10	20	0.5	Vinyl chloride	ND<10	20	0.5
Xylenes	180	20	0.5				

Surrogate Recoveries (%)

%SS1:	79	%SS2:	102
%SS3:	98		

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; N/A means analyte not applicable to this analysis.

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



AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #281939; Zimmerman	Date Sampled: 03/11/09
		Date Received: 03/11/09
	Client Contact: Robert Flory	Date Extracted: 03/11/09
	Client P.O.: #WC081414	Date Analyzed 03/12/09

Semi-Volatile Organics by GC/MS (625 Basic Target List)*

Extraction Method: E625

Analytical Method: E625

Work Order: 0903276

Lab ID	0903276-001E
Client ID	Purge Tank
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acenaphthene	ND<20	20	1.0	Acenaphthylene	ND<20	20	1.0
Anthracene	ND<20	20	1.0	Benzidine	ND<100	20	5.0
Benzo(a)anthracene	ND<20	20	1.0	Benzo(b)fluoranthene	ND<20	20	1.0
Benzo(k)fluoranthene	ND<20	20	1.0	Benzo(g,h,i)perylene	ND<20	20	1.0
Benzo(a)pyrene	ND<20	20	1.0	Bis (2-chloroethoxy) Methane	ND<20	20	1.0
Bis (2-chloroethyl) Ether	ND<20	20	1.0	Bis (2-chloroisopropyl) Ether	ND<20	20	1.0
Bis (2-ethylhexyl) Adipate	ND<20	20	1.0	Bis (2-ethylhexyl) Phthalate	ND<100	20	5.0
4-Bromophenyl Phenyl Ether	ND<20	20	1.0	Butylbenzyl Phthalate	ND<20	20	1.0
4-Chloro-3-methylphenol	ND<20	20	1.0	2-Chloronaphthalene	ND<20	20	1.0
2-Chlorophenol	ND<20	20	1.0	4-Chlorophenyl Phenyl Ether	ND<20	20	1.0
Chrysene	ND<20	20	1.0	Dibenzo(a,h)anthracene	ND<20	20	1.0
Di-n-butyl Phthalate	ND<200	20	10	1,2-Dichlorobenzene	ND<20	20	1.0
1,3-Dichlorobenzene	ND<20	20	1.0	1,4-Dichlorobenzene	ND<20	20	1.0
3,3-Dichlorobenzidine	ND<40	20	2.0	2,4-Dichlorophenol	ND<20	20	1.0
Diethyl Phthalate	ND<20	20	1.0	2,4-Dimethylphenol	ND<20	20	1.0
Dimethyl Phthalate	ND<20	20	1.0	4,6-Dinitro-2-methylphenol	ND<100	20	5.0
2,4-Dinitrophenol	ND<100	20	5.0	2,4-Dinitrotoluene	ND<20	20	1.0
2,6-Dinitrotoluene	ND<20	20	1.0	Di-n-octyl Phthalate	ND<20	20	1.0
1,2-Diphenylhydrazine	ND<20	20	1.0	Fluoranthene	ND<20	20	1.0
Fluorene	ND<20	20	1.0	Hexachlorobenzene	ND<20	20	1.0
Hexachlorobutadiene	ND<20	20	1.0	Hexachlorocyclopentadiene	ND<100	20	5.0
Hexachloroethane	ND<20	20	1.0	Indeno (1,2,3-cd) pyrene	ND<20	20	1.0
Isophorone	ND<20	20	1.0	3 &/or 4-Methylphenol (m,p-Cres	ND<20	20	1.0
Naphthalene	ND<20	20	1.0	Nitrobenzene	ND<20	20	1.0
2-Nitrophenol	ND<100	20	5.0	4-Nitrophenol	ND<100	20	5.0
N-Nitrosodimethylamine	ND<100	20	5.0	N-Nitrosodiphenylamine	ND<20	20	1.0
N-Nitrosodi-n-propylamine	ND<20	20	1.0	Pentachlorophenol	ND<100	20	5.0
Phenanthrene	ND<20	20	1.0	Phenol	110	20	1.0
Pyrene	ND<20	20	1.0	1,2,4-Trichlorobenzene	ND<20	20	1.0
2,4,6-Trichlorophenol	ND<20	20	1.0				

Surrogate Recoveries (%)

%SS1:	62	%SS2:	63
%SS3:	88	%SS4:	100
%SS5:	105	%SS6:	105

Comments:

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

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

#) surrogate diluted out of range; &) low or no surrogate due to matrix interference.



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AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #281939; Zimmerman	Date Sampled: 03/11/09
		Date Received: 03/11/09
	Client Contact: Robert Flory	Date Extracted: 03/11/09
	Client P.O.: #WC081414	Date Analyzed 03/12/09

Metals*

Extraction Method: E200.7

Analytical Method: E200.7

Work Order: 0903276

Lab ID	0903276-001B				Reporting Limit for DF =1	
Client ID	Purge Tank					
Matrix	Water					
DF	1					
Extraction Type	TOTAL				S	W
Compound	Concentration				µg/kg	µg/L
Arsenic	ND				NA	20
Cadmium	ND				NA	5.0
Chromium	ND				NA	5.0
Copper	7.1				NA	5.0
Iron	930				NA	50
Lead	ND				NA	20
Nickel	10				NA	5.0
Silver	ND				NA	5.0
Zinc	ND				NA	20

Surrogate Recoveries (%)

%SS:	103			
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Comments				
-----------------	--	--	--	--

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

means surrogate diluted out of range; ND means not detected above the reporting limit; N/A means not applicable to this sample or instrument.

TOTAL = acid digestion.

WET = Waste Extraction Test (STLC).

DI WET = Waste Extraction Test using de-ionized water.



QC SUMMARY REPORT FOR E1664A

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 41892

WorkOrder: 0903276

EPA Method: E1664A		Extraction: E1664A							Spiked Sample ID: N/A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/L	mg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
HEMSGT	N/A	20.83	N/A	N/A	N/A	110	107	3.03	N/A	N/A	70 - 130	30

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

BATCH 41892 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903276-001F	03/11/09 9:30 AM	03/11/09	03/12/09 1:20 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 therefore unable to comply with method.
 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.



QC SUMMARY REPORT FOR E1664A

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 41968

WorkOrder: 0903276

EPA Method: E1664A		Extraction: E1664A							Spiked Sample ID: N/A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/L	mg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
HEMSGT	N/A	20.83	N/A	N/A	N/A	97.3	91	6.70	N/A	N/A	70 - 130	30

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

BATCH 41968 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903276-001G	03/11/09 9:30 AM	03/11/09	03/12/09 1:15 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.



QC SUMMARY REPORT FOR E625

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 41932

WorkOrder 0903276

EPA Method E625 Analyte	Extraction E625								Spiked Sample ID: N/A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Acenaphthene	N/A	5	N/A	N/A	N/A	66.3	65.7	1.05	N/A	N/A	47 - 145	20
4-Chloro-3-methylphenol	N/A	10	N/A	N/A	N/A	81.6	87.1	6.62	N/A	N/A	22 - 147	20
2-Chlorophenol	N/A	10	N/A	N/A	N/A	62.4	62.5	0.280	N/A	N/A	23 - 134	20
1,4-Dichlorobenzene	N/A	5	N/A	N/A	N/A	56.5	55.9	1.07	N/A	N/A	20 - 124	20
2,4-Dinitrotoluene	N/A	5	N/A	N/A	N/A	79.2	80.6	1.79	N/A	N/A	39 - 139	20
4-Nitrophenol	N/A	10	N/A	N/A	N/A	51	52.9	3.56	N/A	N/A	1 - 132	20
N-Nitrosodi-n-propylamine	N/A	5	N/A	N/A	N/A	66.3	68.6	3.41	N/A	N/A	1 - 230	20
Pentachlorophenol	N/A	10	N/A	N/A	N/A	65.8	66.7	1.31	N/A	N/A	14 - 176	20
Phenol	N/A	10	N/A	N/A	N/A	47.4	49.3	3.94	N/A	N/A	5 - 112	20
Pyrene	N/A	5	N/A	N/A	N/A	71.9	72.4	0.638	N/A	N/A	52 - 115	20
1,2,4-Trichlorobenzene	N/A	5	N/A	N/A	N/A	63.2	62.3	1.29	N/A	N/A	44 - 142	20
%SS1:	N/A	500	N/A	N/A	N/A	49	48	2.12	N/A	N/A	23 - 134	20
%SS2:	N/A	500	N/A	N/A	N/A	49	52	5.54	N/A	N/A	5 - 112	20
%SS3:	N/A	500	N/A	N/A	N/A	67	68	1.01	N/A	N/A	35 - 180	20
%SS4:	N/A	500	N/A	N/A	N/A	78	76	2.53	N/A	N/A	30 - 130	20
%SS5:	N/A	500	N/A	N/A	N/A	83	84	0.315	N/A	N/A	37 - 144	20
%SS6:	N/A	500	N/A	N/A	N/A	80	80	0	N/A	N/A	30 - 130	20

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

BATCH 41932 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903276-001E	03/11/09 9:30 AM	03/11/09	03/12/09 10:41 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.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

The percent recovery criteria for each analyte in the LCS/LCSD and MS/MSD is derived from Table 6-QC Acceptance Criteria in EPA Method 625.

The surrogate recovery criteria is derived from the criteria for the analyte that most closely resembles the surrogate found in Table 6.



QC SUMMARY REPORT FOR E608

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 41933

WorkOrder 0903276

Analyte	EPA Method E608		Extraction E608						Spiked Sample ID: N/A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Aldrin	N/A	0.50	N/A	N/A	N/A	96.9	97.1	0.203	N/A	N/A	70 - 130	30
g-BHC	N/A	0.50	N/A	N/A	N/A	112	112	0	N/A	N/A	70 - 130	30
p,p-DDT	N/A	1.25	N/A	N/A	N/A	110	110	0	N/A	N/A	70 - 130	30
Dieldrin	N/A	1.25	N/A	N/A	N/A	112	112	0	N/A	N/A	70 - 130	30
Endrin	N/A	1.25	N/A	N/A	N/A	119	120	0.839	N/A	N/A	70 - 130	30
Heptachlor	N/A	0.50	N/A	N/A	N/A	84.1	84.3	0.188	N/A	N/A	70 - 130	30
%SS:	N/A	2.5	N/A	N/A	N/A	82	83	0.996	N/A	N/A	70 - 130	30

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

BATCH 41933 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903276-001D	03/11/09 9:30 AM	03/11/09	03/11/09 10:09 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.



QC SUMMARY REPORT FOR E624

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 41955

WorkOrder: 0903276

Analyte	EPA Method E624 Extraction E624								Spiked Sample ID: 0903260-005B			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Benzene	ND	10	104	104	0	114	112	1.41	70 - 130	30	70 - 130	30
Chlorobenzene	ND	10	97.2	99	1.76	101	102	0.965	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND	10	95.1	101	6.49	106	108	1.86	70 - 130	30	70 - 130	30
1,1-Dichloroethene	ND	10	75.1	74.8	0.437	73.9	73.3	0.859	70 - 130	30	70 - 130	30
Methyl-t-butyl ether (MTBE)	21	10	80.3	86.6	2.16	109	110	0.656	70 - 130	30	70 - 130	30
Toluene	0.76	10	102	103	0.312	106	108	1.95	70 - 130	30	70 - 130	30
Trichloroethene	ND	10	99.4	98.4	1.00	106	104	2.00	70 - 130	30	70 - 130	30
%SS1:	81	25	80	82	2.11	80	79	0.570	70 - 130	30	70 - 130	30
%SS2:	100	25	95	96	1.50	98	99	1.33	70 - 130	30	70 - 130	30
%SS3:	83	2.5	86	84	2.92	86	86	0	70 - 130	30	70 - 130	30

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

BATCH 41955 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903276-001C	03/11/09 9:30 AM	03/12/09	03/12/09 7:43 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.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.



QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 41954

WorkOrder 0903276

EPA Method SW8021B/8015Bm		Extraction SW5030B							Spiked Sample ID: 0903264-011A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) [£]	ND	60	104	96.1	7.47	89.9	95.5	6.07	70 - 130	20	70 - 130	20
MTBE	ND	10	95.8	101	5.23	89.6	96	6.91	70 - 130	20	70 - 130	20
Benzene	ND	10	92.9	95.7	3.02	106	96.4	9.42	70 - 130	20	70 - 130	20
Toluene	ND	10	104	106	2.40	96.7	87.9	9.55	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	103	104	1.14	109	96.4	12.2	70 - 130	20	70 - 130	20
Xylenes	ND	30	115	115	0	103	94.8	8.30	70 - 130	20	70 - 130	20
%SS:	99	10	95	98	2.71	107	100	6.60	70 - 130	20	70 - 130	20

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

BATCH 41954 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903276-001A	03/11/09 9:30 AM	03/12/09	03/12/09 6:47 AM	0903276-001A	03/11/09 9:30 AM	03/12/09	03/12/09 9:58 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 SW8015B

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 41956

WorkOrder 0903276

EPA Method SW8015B		Extraction SW3510C/3630C							Spiked Sample ID: N/A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH-Diesel (C10-C23)	N/A	1000	N/A	N/A	N/A	87.2	87.4	0.309	N/A	N/A	70 - 130	30
%SS:	N/A	2500	N/A	N/A	N/A	81	84	3.83	N/A	N/A	70 - 130	30

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

BATCH 41956 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903276-001B	03/11/09 9:30 AM	03/11/09	03/12/09 1:39 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.



QC SUMMARY REPORT FOR E245.2

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 41871

WorkOrder 0903276

EPA Method E245.1		Extraction E245.1							Spiked Sample ID: 0903001-008A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Mercury	ND	1	106	95.1	11.3	97.3	88.2	9.81	70 - 130	30	80 - 120	20

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

BATCH 41871 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903276-001B	03/11/09 9:30 AM	03/11/09	03/12/09 2:50 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 applicable to this method.
 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.



QC SUMMARY REPORT FOR E200.7

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 41909

WorkOrder: 0903276

EPA Method: E200.7		Extraction: E200.7							Spiked Sample ID: 0903001-009A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Arsenic	ND	100	79.1	75.7	4.38	88.5	93.6	5.59	70 - 130	20	85 - 115	20
Cadmium	ND	100	103	101	1.47	104	102	1.45	70 - 130	20	85 - 115	20
Chromium	ND	100	103	102	0.681	104	97.3	6.39	70 - 130	20	85 - 115	20
Copper	46	100	106	105	0.528	106	106	0	70 - 130	20	85 - 115	20
Iron	ND	1000	91.2	91.9	0.808	98.6	98.7	0.0203	75 - 125	20	80 - 120	20
Lead	ND	100	100	106	5.64	100	106	6.20	70 - 130	20	85 - 115	20
Nickel	ND	100	103	98.9	4.37	101	102	1.18	70 - 130	20	85 - 115	20
Silver	ND	100	116	114	2.52	108	108	0	70 - 130	20	85 - 115	20
Zinc	ND	1000	99.6	105	4.89	104	101	2.93	70 - 130	20	85 - 115	20
%SS:	106	750	104	105	0.896	99	100	1.38	70 - 130	20	70 - 130	20

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

BATCH 41909 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903276-001B	03/11/09 9:30 AM	03/11/09	03/12/09 3:32 PM	0903276-001B	03/11/09 9:30 AM	03/11/09	03/12/09 5:16 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 applicable to this method.
 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.



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mcccampbell.com E-mail: main@mcccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

QC SUMMARY REPORT FOR WET CHEMISTRY TESTS

Test Method: pH

Matrix: W

WorkOrder: 0903276

Method Name: SM4500H+B			Units ±, pH units @ °C			BatchID: 41969
Lab ID	Sample	DF	Dup / Ser. Dil.	DF	Precision	Acceptance Criteria
0903276-001D	7.37 @ 19.0°C	1	7.36 @ 19.1°C	1	0.01	0.02

BATCH 41969 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903276-001D	03/11/09 9:30 AM	03/11/09	03/11/09 8:37 PM				

Dup = Duplicate; Ser. Dil. = Serial Dilution; MS = Matrix Spike; RD = Relative Difference; RPD = Relative Percent Deviation.

Precision = Absolute Value (Sample - Duplicate)

RPD = 100 * (Sample - Duplicate) / [(Sample + Duplicate) / 2]

%RPD is calculated using results of up to 10 significant figures, however the reported results are rounded to 2 or 3 significant figures. Therefore there may be a slight discrepancy between the %RPD displayed above and %RPD calculated using the reported results. MAI considers %RPD based upon more significant figures to be more accurate.



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QC SUMMARY REPORT FOR WET CHEMISTRY TESTS

Test Method: pH

Matrix: W

WorkOrder: 0903276

Method Name: SM4500H+B		Units ±, pH units @ °C			BatchID: 41969	
Lab ID	Sample	DF	Dup / Ser. Dil.	DF	Precision	Acceptance Criteria
0903276-001D	7.37 @ 19.0°C	1	7.36 @ 19.1°C	1	0.01	0.02

BATCH 41969 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903276-001D	03/11/09 9:30 AM	03/11/09	03/11/09 8:37 PM				

Dup = Duplicate; Ser. Dil. = Serial Dilution; MS = Matrix Spike; RD = Relative Difference; RPD = Relative Percent Deviation.

Precision = Absolute Value (Sample - Duplicate)

RPD = 100 * (Sample - Duplicate) / [(Sample + Duplicate) / 2]

%RPD is calculated using results of up to 10 significant figures, however the reported results are rounded to 2 or 3 significant figures. Therefore there may be a slight discrepancy between the %RPD displayed above and %RPD calculated using the reported results. MAI considers %RPD based upon more significant figures to be more accurate.



QC SUMMARY REPORT FOR E420.2

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 41893

WorkOrder 0903276

EPA Method E420.4		Extraction E420.4							Spiked Sample ID: 0903168-001E			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Phenolics	3.5	40	97.5	97.1	0.436	99.8	102	2.45	70 - 130	30	80 - 120	20

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

BATCH 41893 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903276-001B	03/11/09 9:30 AM	03/12/09	03/12/09 11:57 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 applicable to this method.

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.



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QC SUMMARY REPORT FOR WET CHEMISTRY TESTS

Test Method: Total Suspended Solids

Matrix: W

WorkOrder: 0903276

Method Name: SM2540D			Units mg/L			BatchID: 41927
Lab ID	Sample	DF	Dup / Ser. Dil.	DF	% RPD	Acceptance Criteria (%)
0903276-001D	23.8	2	23.4	2	1.69	<15

BATCH 41927 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903276-001D	03/11/09 9:30 AM	03/12/09	03/12/09 3:15 PM				

Dup = Duplicate; Ser. Dil. = Serial Dilution; MS = Matrix Spike; RD = Relative Difference; RPD = Relative Percent Deviation.

Precision = Absolute Value (Sample - Duplicate)

$RPD = 100 * (Sample - Duplicate) / [(Sample + Duplicate) / 2]$

%RPD is calculated using results of up to 10 significant figures, however the reported results are rounded to 2 or 3 significant figures. Therefore there may be a slight discrepancy between the %RPD displayed above and %RPD calculated using the reported results. MAI considers %RPD based upon more significant figures to be more accurate.



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AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #281939; Zimmerman	Date Sampled: 03/13/09
		Date Received: 03/13/09
	Client Contact: Kirby Fernando	Date Reported: 03/17/09
	Client P.O.:	Date Completed: 03/17/09

WorkOrder: 0903362

March 17, 2009

Dear Kirby:

Enclosed within are:

- 1) The results of the **1** analyzed sample from your project: **#281939; Zimmerman,**
- 2) A QC report for the above sample,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

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.

0903362



McCAMPBELL ANALYTICAL, INC.
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RUSH

CHAIN OF CUSTODY RECORD

TURN AROUND TIME
 RUSH 24 HR 48 HR 72 HR 5 DAY
 GeoTracker EDF PDF Excel Write On (DW)
 Check if sample is effluent and "J" flag is required

Report To: Kirby Fernando Bill To: AEI Consultants
 Company: AEI Consultants
 2500 Camino Diablo #200, Walnut Creek 94597
 E-Mail: kfernando@aeiconsultants.com
 Tele: (925) 944-2899 x123 Fax: (925) 944-2895
 Project #: 281939 Project Name: Zimmerman
 Project Location: 3442 Adeline, Oakland
 Sampler Signature: [Signature]

Analysis Request											Other	Comments						
BTEX & TPH as Gas (602 / 8021 + 8015) / MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 502.2 / 601 / 8010 / 8021 (HVOCs)	MTBE / BTEX ONLY (EPA 602 / 8021)	EPA 505/ 608 / 8081 (CI Pesticides)	EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic CI Herbicides)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAS)	CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	Lead (200.7 / 200.8 / 6010 / 6020)	CUDF	Cyanide total & amenable	Filter Samples for Metals analysis: Yes / No
WTANK	Water	3/13	12:26	3	VOA	X										X	X	.

Relinquished By: [Signature] Date: 3/13 Time: 1:15 Received By: [Signature] Date: Time: Received By:
 Relinquished By: [Signature] Date: Time: Received By:
 Relinquished By: Date: Time: Received By:

ICE/P# 230 ✓
 GOOD CONDITION ✓
 HEAD SPACE ABSENT ✓
 DECHLORINATED IN LAB ✓
 APPROPRIATE CONTAINERS ✓
 PRESERVED IN LAB ✓
 COMMENTS:
 VOAS ✓ O&G METALS OTHER
 PRESERVATION ✓ pH < 2 ✓

McC Campbell Analytical, Inc.



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0903362

ClientCode: AEL

WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:		Bill to:	Requested TAT: 2 days
Kirby Fernando	Email: kfernando@aeiconsultants.com	Denise Mockel	
AEI Consultants	cc:	AEI Consultants	<i>Date Received: 03/13/2009</i>
2500 Camino Diablo, Ste. #200	PO:	2500 Camino Diablo, Ste. #200	<i>Date Printed: 03/13/2009</i>
Walnut Creek, CA 94597	ProjectNo: #281939; Zimmerman	Walnut Creek, CA 94597	
(925) 283-6000 FAX (925) 283-6121		dmockel@aeiconsultants.com	

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	
0903362-001	Wtank	Water	3/13/2009 12:26	<input type="checkbox"/>	B	B	A										

Test Legend:

1	CN_AMEN_W	2	CN_TOTAL_W	3	CODF_W	4		5	
6		7		8		9		10	
11		12							

Prepared by: Melissa Valles

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: **3/13/09 2:11:15 PM**
 Project Name: **#281939; Zimmerman** Checklist completed and reviewed by: **Melissa Valles**
 WorkOrder N°: **0903362** 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: 23°C NA
 Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
 Sample labels checked for correct preservation? Yes No
 TTLC 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.

Client contacted: Date contacted: Contacted by:

Comments:



QC SUMMARY REPORT FOR E335.1/ Kelada-01

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 42044

WorkOrder 0903362

EPA Method E335.1 / Kelada-01		Extraction E335.1 / Kelada-01							Spiked Sample ID: 0903362-001B			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Amenable Cyanide	ND	40	95.6	95.3	0.314	99.9	100	0.0700	80 - 120	20	90 - 110	20

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

BATCH 42044 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903362-001B	03/13/09 12:26 PM	03/16/09	03/16/09 3:32 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.



QC SUMMARY REPORT FOR Kelada-01

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 42043

WorkOrder 0903362

EPA Method Kelada-01		Extraction Kelada-01							Spiked Sample ID: 0903367-001Q			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Total Cyanide	ND	40	99.8	104	3.86	102	110	7.15	80 - 120	20	90 - 110	20

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

BATCH 42043 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903362-001B	03/13/09 12:26 PM	03/16/09	03/16/09 1:31 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.



QC SUMMARY REPORT FOR SM5220D

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 42045

WorkOrder 0903362

Analyte	EPA Method SM5220D			Extraction SM5220D					Spiked Sample ID: 0903362-001A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/L	mg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
CODF	32	400	100	97.7	2.31	101	99	2.47	80 - 120	20	90 - 110	20

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

BATCH 42045 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903362-001A	03/13/09 12:26 PM	03/16/09	03/16/09 3:01 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.



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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #281939; Zimmerman	Date Sampled: 04/15/09
		Date Received: 04/15/09
	Client Contact: Robert Flory	Date Reported: 04/20/09
	Client P.O.: #WC081551	Date Completed: 04/17/09

WorkOrder: 0904368

April 20, 2009

Dear Robert:

Enclosed within are:

- 1) The results of the **1** analyzed sample from your project: **#281939; Zimmerman,**
- 2) A QC report for the above sample,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

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.

McC Campbell Analytical, Inc.



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 Pittsburg, CA 94565-1701
 (925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0904368

ClientCode: AEL

WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:

Robert Flory
 AEI Consultants
 2500 Camino Diablo, Ste. #200
 Walnut Creek, CA 94597
 (925) 283-6000 FAX (925) 283-6121

Email: rflory@aeiconsultants.com
 cc:
 PO: #WC081551
 ProjectNo: #281939; Zimmerman

Bill to:

Denise Mockel
 AEI Consultants
 2500 Camino Diablo, Ste. #200
 Walnut Creek, CA 94597
 dmockel@aeiconsultants.com

Requested TAT: 5 days

Date Received: 04/15/2009

Date Printed: 04/15/2009

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		
0904368-001	Poly Tank	Water	4/15/2009 13:30	<input type="checkbox"/>	A													

Test Legend:

1	G-MBTX_W	2		3		4		5	
6		7		8		9		10	
11		12							

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: **04/15/09 4:30:30 PM**

Project Name: **#281939; Zimmerman**

Checklist completed and reviewed by: **Maria Venegas**

WorkOrder N°: **0904368** 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: 9.2°C NA
 - Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
 - Sample labels checked for correct preservation? Yes No
 - TTLC 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.

Client contacted:

Date contacted:

Contacted by:

Comments:



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 42663

WorkOrder 0904368

EPA Method SW8021B/8015Bm		Extraction SW5030B							Spiked Sample ID: 0904375-002A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) [£]	ND	60	106	104	2.33	106	110	3.61	70 - 130	20	70 - 130	20
MTBE	ND	10	110	105	4.43	117	112	4.37	70 - 130	20	70 - 130	20
Benzene	ND	10	83.8	90.2	7.35	92.2	91.6	0.661	70 - 130	20	70 - 130	20
Toluene	ND	10	89.9	92.6	2.98	95	94	1.13	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	93.4	93.6	0.262	94.5	93.4	1.25	70 - 130	20	70 - 130	20
Xylenes	ND	30	105	105	0	106	105	0.991	70 - 130	20	70 - 130	20
%SS:	93	10	103	103	0	103	104	1.43	70 - 130	20	70 - 130	20

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

BATCH 42663 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0904368-001A	04/15/09 1:30 PM	04/16/09	04/16/09 5:57 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.



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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #281939; Zimmerman	Date Sampled: 04/30/09
		Date Received: 04/30/09
	Client Contact: Robert Flory	Date Reported: 05/01/09
	Client P.O.:	Date Completed: 05/01/09

WorkOrder: 0904717

May 01, 2009

Dear Robert:

Enclosed within are:

- 1) The results of the **1** analyzed sample from your project: **#281939; Zimmerman,**
- 2) A QC report for the above sample,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

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.

McC Campbell Analytical, Inc.



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 Pittsburg, CA 94565-1701
 (925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0904717

ClientCode: AEL

WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:	Robert Flory	Email: rflory@aeiconsultants.com	Bill to:	Denise Mockel	Requested TAT:	1 day
	AEI Consultants	cc:		AEI Consultants	Date Received:	04/30/2009
	2500 Camino Diablo, Ste. #200	PO:		2500 Camino Diablo, Ste. #200	Date Printed:	04/30/2009
	Walnut Creek, CA 94597	ProjectNo: #281939; Zimmerman		Walnut Creek, CA 94597		
	(925) 283-6000 FAX (925) 283-6121			dmockel@aeiconsultants.com		

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	
0904717-001	Poly water tank	Water	4/30/2009 9:20	<input type="checkbox"/>	A												

Test Legend:

1	G-MBTX_W	2		3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Samantha Arbuckle

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: **04/30/09 1:43:58 PM**
 Project Name: **#281939; Zimmerman** Checklist completed and reviewed by: **Samantha Arbuckle**
 WorkOrder N°: **0904717** 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: 5.6°C NA
 Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
 Sample labels checked for correct preservation? Yes No
 TTLC 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.

Client contacted: Date contacted: Contacted by:

Comments:



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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #281939; Zimmerman	Date Sampled: 04/30/09
		Date Received: 04/30/09
	Client Contact: Robert Flory	Date Extracted: 05/01/09
	Client P.O.:	Date Analyzed: 05/01/09

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method: SW5030B

Analytical methods: SW8021B/8015Bm

Work Order: 0904717

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	Poly water tank	W	ND	ND	2.6	0.57	ND	3.1	1	106	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	0.5	µg/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	0.005	mg/Kg

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 42978

WorkOrder: 0904717

EPA Method SW8021B/8015Bm		Extraction SW5030B							Spiked Sample ID: 0904718-002B			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) ^f	ND	60	101	93.8	6.99	98.4	102	3.69	70 - 130	20	70 - 130	20
MTBE	ND	10	97.9	97.7	0.176	98	92.8	5.48	70 - 130	20	70 - 130	20
Benzene	ND	10	86.5	85.2	1.51	101	98.4	2.34	70 - 130	20	70 - 130	20
Toluene	ND	10	84.6	82.8	2.19	98.1	96.3	1.84	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	82.2	81	1.51	103	101	2.41	70 - 130	20	70 - 130	20
Xylenes	ND	30	83.7	80.5	3.90	103	102	1.21	70 - 130	20	70 - 130	20
%SS:	100	10	96	101	5.06	101	97	4.32	70 - 130	20	70 - 130	20

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

BATCH 42978 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0904717-001A	04/30/09 9:20 AM	05/01/09	05/01/09 7:52 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.

APPENDIX E

Impacted Soil Stockpile Analyses



McC Campbell Analytical, Inc.

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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #281939; Zimmerman, 3442 Adeline, Oakland	Date Sampled: 03/11/09
	Client Contact: Kirby Fernando	Date Received: 03/11/09
	Client P.O.:	Date Reported: 03/17/09
		Date Completed: 03/17/09

WorkOrder: 0903283

March 17, 2009

Dear Kirby:

Enclosed within are:

- 1) The results of the **3** analyzed samples from your project: **#281939; Zimmerman, 3442 Adeline**
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

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.

McC Campbell Analytical, Inc.



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 Pittsburg, CA 94565-1701
 (925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0903283

ClientCode: AEL

WriteOn EDF Excel Fax Email HardCopy ThirdParty J-flag

Report to:
 Kirby Fernando
 AEI Consultants
 2500 Camino Diablo, Ste. #200
 Walnut Creek, CA 94597
 (925) 283-6000 FAX (925) 283-6121

Email: kfernando@aeiconsultants.com
cc:
PO:
ProjectNo: #281939; Zimmerman, 3442 Adeline,
 Oakland

Bill to:
 Denise Mockel
 AEI Consultants
 2500 Camino Diablo, Ste. #200
 Walnut Creek, CA 94597
 dmockel@aeiconsultants.com

Requested TAT: 5 days
Date Received: 03/11/2009
Date Printed: 03/11/2009

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	
0903283-001	STKA1234	Soil	3/11/2009 15:00	<input type="checkbox"/>	A	A											
0903283-002	STKB1234	Soil	3/11/2009 15:10	<input type="checkbox"/>	A	A											
0903283-003	STKC1234	Soil	3/11/2009 15:20	<input type="checkbox"/>	A	A											

Test Legend:

1	G-MBTX_S	2	PB_S	3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Ana 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: **3/11/2009 7:24:57 PM**
 Project Name: **#281939; Zimmerman, 3442 Adeline, Oakland** Checklist completed and reviewed by: **Ana Venegas**
 WorkOrder N°: **0903283** Matrix Soil Carrier: Benjamin Yslas (MAI Courier)

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: 3.4°C NA
 Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
 Sample labels checked for correct preservation? Yes No
 TTLC 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.

Client contacted: Date contacted: Contacted by:

Comments:



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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #281939; Zimmerman, 3442 Adeline, Oakland	Date Sampled: 03/11/09
	Client Contact: Kirby Fernando	Date Received: 03/11/09
	Client P.O.:	Date Extracted: 03/11/09
		Date Analyzed 03/12/09-03/13/09

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method SW5030B

Analytical methods SW8021B/8015Bm

Work Order: 0903283

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	STKA1234	S	43,d1	ND<0.10	0.17	0.069	0.32	0.82	2	90
002A	STKB1234	S	31,d7,d9	ND	0.044	0.019	0.13	0.40	1	107
003A	STKC1234	S	60,d7,d9	ND	0.25	0.032	0.59	1.3	1	102

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	ug/L
	S	1	0.05	0.005	0.005	0.005	0.005	mg/Kg

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

cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference.

+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
 d7) strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram
 d9) no recognizable pattern



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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #281939; Zimmerman, 3442 Adeline, Oakland	Date Sampled: 03/11/09
	Client Contact: Kirby Fernando	Date Received: 03/11/09
	Client P.O.:	Date Extracted: 03/11/09
		Date Analyzed 03/12/09

Lead by ICP*

Extraction method SW3050B

Analytical methods 6010C

Work Order: 0903283

Lab ID	Client ID	Matrix	Extraction Type	Lead	DF	% SS
0903283-001A	STKA1234	S	TOTAL	17	1	108
0903283-002A	STKB1234	S	TOTAL	12	1	105
0903283-003A	STKC1234	S	TOTAL	10	1	98

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	TOTAL	NA	µg/L
	S	TOTAL	5.0	mg/Kg

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

means surrogate diluted out of range; ND means not detected above the reporting limit; N/A means not applicable to this sample or instrument.

TOTAL = acid digestion.
WET = Waste Extraction Test (STLC).
DI WET = Waste Extraction Test using de-ionized water.



QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 41945

WorkOrder 0903283

Analyte	EPA Method SW8021B/8015Bm		Extraction SW5030B						Spiked Sample ID: 0903236-006A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) [£]	ND	0.60	104	101	3.11	114	101	11.9	70 - 130	20	70 - 130	20
MTBE	ND	0.10	109	115	5.57	109	108	0.677	70 - 130	20	70 - 130	20
Benzene	ND	0.10	93.7	96.4	2.78	99.1	100	1.23	70 - 130	20	70 - 130	20
Toluene	ND	0.10	103	106	2.74	111	113	1.86	70 - 130	20	70 - 130	20
Ethylbenzene	ND	0.10	102	104	2.36	110	111	0.433	70 - 130	20	70 - 130	20
Xylenes	ND	0.30	114	116	2.24	118	123	3.92	70 - 130	20	70 - 130	20
%SS:	81	0.10	96	87	10.4	98	100	1.79	70 - 130	20	70 - 130	20

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

BATCH 41945 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903283-001A	03/11/09 3:00 PM	03/11/09	03/13/09 11:10 PM	0903283-002A	03/11/09 3:10 PM	03/11/09	03/12/09 6:33 PM
0903283-003A	03/11/09 3:20 PM	03/11/09	03/12/09 9:58 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 / %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.



QC SUMMARY REPORT FOR 6010C

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0903283

EPA Method 6010C			Extraction SW3050B				BatchID: 41886			Spiked Sample ID 0903157-001A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	Spiked	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	mg/Kg	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Lead	9.9	50	107	91.9	12.4	10	97.9	96.4	1.49	75 - 125	20	80 - 120	20
%SS:	104	250	114	110	4.19	250	100	102	1.96	70 - 130	20	70 - 130	20

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

BATCH 41886 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903283-001A	03/11/09 3:00 PM	03/11/09	03/12/09 12:55 PM	0903283-002A	03/11/09 3:10 PM	03/11/09	03/12/09 12:57 PM
0903283-003A	03/11/09 3:20 PM	03/11/09	03/12/09 12:59 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 applicable to this method.

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.

APPENDIX F

Soil Disposal Manifests



GENERATOR WASTE PROFILE SHEET

Requested Disposal Facility: Keller Canyon
an Allied Waste Company

Waste Profile #
AWI Sales Rep:
Date:

I. Generator Information

Generator Name: Steffi Zimmerman
Generator Site Address: 3442 Adeline Street
City: Oakland County: Alameda State: CA Zip: 94608
State ID/Reg No: State Approval/Waste Code: (if applicable) SIC Code:
Generator Mailing Address (if different): 3289 Lomas Verdes Place
City: Lafayette County: Contra Costa State: CA Zip: 94549
Generator Contact Name: Kirby Fernando
Phone Number: 925-746-6000 Fax Number: 925-746-6099

Ila. Transporter Information

Transporter Name: AEI Consultants Contact Name: Kirby Fernando
Transporter Address: 2500 Camino Diablo #200
City: Walnut Creek County: Contra Costa State: CA Zip: 94597
Phone Number: 925-746-6000 Fax Number: 925-746-6099 State Transportation Number:

Ilb. Billing Information

Bill To: AEI Consultants Contact Name: Kirby Fernando
Billing Address: 2500 Camino Diablo #200
City: Walnut Creek State: CA Zip: 94597 Phone Number: 925-746-6000

III. Waste Stream Information

Name of Waste: Soil
Process Generating Waste: Gasoline fuel release from former underground storage tank
Type of Waste: [X] INDUSTRIAL PROCESS WASTE or [] POLLUTION CONTROL WASTE
Physical State: [X] SOLID [] SEMI-SOLID [] POWDER [] LIQUID [] OTHER:
Method of Shipment: [X] BULK [] DRUM [] BAGGED [] OTHER:
Estimated Annual Volume: [] CUBIC YARDS: [] TONS: 900 [] GALLONS [] OTHER:
Frequency: [X] ONE TIME [] DAILY [] WEEKLY [] MONTHLY [] OTHER:
Special Handling Instructions:

IV. Representative Sample Certification

[] NO SAMPLE TAKEN
Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent rules? [X] YES or [] NO
Sample Date: 3/11/09 Type of Sample: [X] COMPOSITE SAMPLE [] GRAB SAMPLE
Laboratory: McCampbell Analytical Sample ID Numbers: STKC1234
Sampler's Employer: AEI Consultants
Sampler's Name (printed): Kirby Fernando Signature: [Handwritten Signature]



Waste Profile #

V. Physical Characteristics of Waste

Characteristic Components		% by Weight (range)				
1. Soil		100				
2.						
3.						
4.						
5.						
Color	Odor (describe)	Free Liquids <input type="checkbox"/> YES or <input checked="" type="checkbox"/> NO Content _____%	% Solids	pH:	Flash Point	Phenol
Dark Brown	Slight petroleum hydrocarbos		100	0	0 <input type="checkbox"/> F	0ppm

Attach Laboratory Analytical Report (and/or Material Safety Data Sheet) Including Required Parameters Provided for this Profile

Does this waste or generating process contain regulated concentrations of the following Pesticides and/or Herbicides: Chlordane, Endrin, Heptachlor (and it epoxides), Lindane, Methoxychlor, Toxaphene, 2,4-D, or 2,4,5-TP Silvex as defined in 40 CFR 261.33?	<input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No
Does this waste or generating process cause it to exceed OSHA exposure limits from high levels of Hydrogen Sulfide or Hydrogen Cyanide as defined in 40 CFR 261.23?	<input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No
Does this waste contain regulated concentrations of Polychlorinated Biphenyls (PCBs) as defined in 40 CFR Part 761?	<input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No
Does this waste contain regulated concentrations of listed hazardous wastes defined in 40 CFR 261.31, 261.32, 261.33, including RCRA F-Listed Solvents?	<input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No
Does this waste contain regulated concentrations of 2,3,7,8-Tetrachlorodibenzodioxin (2,3,7,8-TCDD), or any other dioxin as defined in 40 CFR 261.31?	<input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No
Is this a regulated Toxic Material as defined by Federal and/or State regulations?	<input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No
Is this a regulated Radioactive Waste as defined by Federal and/or State regulations?	<input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No
Is this a regulated Medical or Infectious Waste as defined by Federal and/or State regulations?	<input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No
Is this waste generated at a Federal Superfund Clean Up Site?	<input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No

VI. Generator Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true, complete and accurate description of the waste material being offered for disposal and all known or suspected hazards have been disclosed. All Analytical Results/Material Safety Data Sheets submitted are truthful and complete and are representative of the waste. I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. I shall immediately give written notice of any change or condition pertaining to the waste not provided herein. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue. I further certify that the company has not altered the form or content of this profile sheet as provided by Allied Waste.

<p><u>Kirby Fernando, Project Manager</u> <small>Authorized Representative Name And Title (Printed)</small></p> <p> <small>Authorized Representative Signature</small></p>	<p><u>AEI Consultants</u> <small>Company Name</small></p> <p><u>4/1/09</u> <small>Date</small></p>
---	--

VII. Allied Waste Decision

<input type="checkbox"/> Approved <input type="checkbox"/> Rejected	Expiration: _____	
Conditions:		
Name, Title	Signature	Date



GENERATOR WASTE PROFILE SHEET

Requested Disposal Facility: West Contra Costa
an Allied Waste Company

Waste Profile #
AWI Sales Rep:
Date:

I. Generator Information

Generator Name: Steffi Zimmerman
Generator Site Address: 3442 Adeline Street
City: Oakland County: Alameda State: CA Zip: 94608
State ID/Reg No: State Approval/Waste Code: (if applicable) SIC Code:
Generator Mailing Address (if different): 3289 Lomas Verdes Place
City: Lafayette County: Contra Costa State: CA Zip: 94549
Generator Contact Name: Kirby Fernando
Phone Number: 925-746-6000 Fax Number: 925-746-6099

IIa. Transporter Information

Transporter Name: AEI Consultants Contact Name: Kirby Fernando
Transporter Address: 2500 Camino Diablo #200
City: Walnut Creek County: Contra Costa State: CA Zip: 94597
Phone Number: 925-746-6000 Fax Number: 925-746-6099 State Transportation Number:

IIb. Billing Information

Bill To: AEI Consultants Contact Name: Kirby Fernando
Billing Address: 2500 Camino Diablo #200
City: Walnut Creek State: CA Zip: 94597 Phone Number: 925-746-6000

III. Waste Stream Information

Name of Waste: Soil
Process Generating Waste: Gasoline fuel release from former underground storage tank
Type of Waste [X] INDUSTRIAL PROCESS WASTE or [] POLLUTION CONTROL WASTE
Physical State: [X] SOLID [] SEMI-SOLID [] POWDER [] LIQUID [] OTHER:
Method of Shipment: [X] BULK [] DRUM [] BAGGED [] OTHER:
Estimated Annual Volume: [] CUBIC YARDS: [] TONS: 300 [] GALLONS [] OTHER:
Frequency: [X] ONE TIME [] DAILY [] WEEKLY [] MONTHLY [] OTHER:
Special Handling Instructions:

IV. Representative Sample Certification

[] NO SAMPLE TAKEN

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent rules? [X] YES or [] NO
Sample Date: 3/11/09 Type of Sample: [X] COMPOSITE SAMPLE [] GRAB SAMPLE
Laboratory: McCampbell Analytical Sample ID Numbers: STKA1234, STKB1234
Sampler's Employer: AEI Consultants
Sampler's Name (printed): Kirby Fernando Signature: [Handwritten Signature]



Waste Profile #

V. Physical Characteristics of Waste

Characteristic Components		% by Weight (range)				
1. Soil		100				
2.						
3.						
4.						
5.						
Color	Odor (describe)	Free Liquids <input type="checkbox"/> YES or <input checked="" type="checkbox"/> NO Content _____%	% Solids	pH:	Flash Point	Phenol
Dark Brown	Slight petroleum hydrocarbos		100	0	0 <input type="checkbox"/> F	0ppm

Attach Laboratory Analytical Report (and/or Material Safety Data Sheet) Including Required Parameters Provided for this Profile

Does this waste or generating process contain regulated concentrations of the following Pesticides and/or Herbicides: Chlordane, Endrin, Heptachlor (and it epoxides), Lindane, Methoxychlor, Toxaphene, 2,4-D, or 2,4,5-TP Silvex as defined in 40 CFR 261.33?	<input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No
Does this waste or generating process cause it to exceed OSHA exposure limits from high levels of Hydrogen Sulfide or Hydrogen Cyanide as defined in 40 CFR 261.23?	<input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No
Does this waste contain regulated concentrations of Polychlorinated Biphenyls (PCBs) as defined in 40 CFR Part 761?	<input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No
Does this waste contain regulated concentrations of listed hazardous wastes defined in 40 CFR 261.31, 261.32, 261.33, including RCRA F-Listed Solvents?	<input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No
Does this waste contain regulated concentrations of 2,3,7,8-Tetrachlorodibenzodioxin (2,3,7,8-TCDD), or any other dioxin as defined in 40 CFR 261.31?	<input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No
Is this a regulated Toxic Material as defined by Federal and/or State regulations?	<input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No
Is this a regulated Radioactive Waste as defined by Federal and/or State regulations?	<input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No
Is this a regulated Medical or Infectious Waste as defined by Federal and/or State regulations?	<input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No
Is this waste generated at a Federal Superfund Clean Up Site?	<input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No

VI. Generator Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true, complete and accurate description of the waste material being offered for disposal and all known or suspected hazards have been disclosed. All Analytical Results/Material Safety Data Sheets submitted are truthful and complete and are representative of the waste. I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. I shall immediately give written notice of any change or condition pertaining to the waste not provided herein. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue. I further certify that the company has not altered the form or content of this profile sheet as provided by Allied Waste.

Kirby Fernando, Project Manager
 Authorized Representative Name And Title (Printed)

AEI Consultants
 Company Name

Authorized Representative Signature

4/1/09
 Date

VII. Allied Waste Decision

<input type="checkbox"/> Approved	<input type="checkbox"/> Rejected	Expiration: _____
Conditions:		
_____	_____	_____
Name, Title	Signature	Date



THIRD PARTY SIGNATURE AUTHORIZATION for Solid Waste Disposal

Date: 3/25/09

To Whom It May Concern:

Please be advised that the following company/individual has been appointed to work as our agent for purposes of managing waste materials that we may generate.

Name of Authorized Agent Kirby Fernando	Title Project Manager
Name of Company AEI Consultants	Telephone Number 925-746-6000

The above broker/individual is authorized to act as our authorized agent for the following purposes:

- Complete and sign Generator Waste Profile Sheets.
- Complete and sign Generator Waste Profile Sheet-Recertifications.
- Authorize amendments to Generator Waste Profile Sheets.
- Sign contracts to dispose and/or transport material.
- Sign certifications necessary to comply with landfill requirements.
- Sign manifests to initiate shipment to disposal facilities.

Our authorized broker/agent will notify us prior to any action stated above, and will provide us with copies of any documents bearing our name.

Name of Generator (printed) <i>Steffi Zimmerman</i>	Title <i>Owner</i>
Name of Company	Mailing Address <i>1740 RELIEZ VLY. Rd.</i>
Signature <i>Steffi Zimmerman</i>	Telephone Number <i>LAF. CA. 94589</i> <i>925-457-5607</i>

Keller Canyon Sanitary Landfill
 901 Bailey Road
 Pittsburg, CA 94565
 Phone (925) 458-9800
 Fax (925) 458-9891

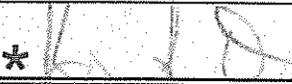
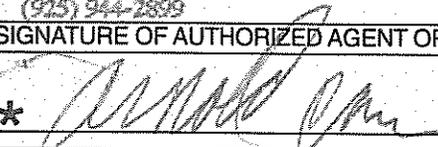
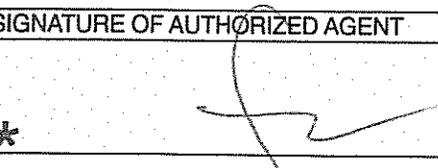
Coffin Butte Landfill
 28972 Coffin Butte Road
 Corvallis, OR 97330
 Phone (541) 745-2018
 Fax (541) 745-3826

Ox Mountain Sanitary Landfill
 12310 San Mateo Road
 Half Moon Bay, CA 94019
 Phone (650) 726-1819
 Fax (650) 726-9183

Newby Island Sanitary Landfill
 1601 Dixon Landing Road
 Milpitas, CA 95035
 Phone (408) 945-2800
 Fax (408) 262-2871

Forward Landfill
 9999 S. Austin Road
 Manteca, CA 95336
 Phone (209) 982-4298
 Fax (209) 982-1009

NON-HAZARDOUS WASTE MANIFEST

GENERATOR Steffi Zimmerman		WASTE ACCEPTANCE NO. - 212Y93777	
MAILING ADDRESS 3289 Lomas Verdes Place		REQUIRED PERSONAL PROTECTIVE EQUIPMENT	
CITY, STATE, ZIP Lafayette, CA 94549		<input type="checkbox"/> GLOVES <input type="checkbox"/> GOGGLES <input type="checkbox"/> RESPIRATOR <input checked="" type="checkbox"/> HARD HAT <input type="checkbox"/> TY-VEK <input type="checkbox"/> SAFETY VEST	
PHONE (925) 746-6000		SPECIAL HANDLING PROCEDURES:	
CONTACT PERSON Steffi Zimmerman		RECEIVING FACILITY 	
SIGNATURE OF AUTHORIZED AGENT / TITLE	DATE		
* 	4/23/09		
<small>GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or title 22 of the California code of regulations, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.</small>			
WASTE TYPE:			
<input type="checkbox"/> DISPOSAL <input type="checkbox"/> SLUDGE <input type="checkbox"/> CONSTRUCTION <input type="checkbox"/> WOOD <input type="checkbox"/> DEBRIS <input type="checkbox"/> OTHER <input type="checkbox"/> SPECIAL WASTE			
GENERATING FACILITY 3442 Adeline Street OAKLAND			
TRANSPORTER ATI Consultants		NOTES:	VEHICLE LICENSE NUMBER 9C38429
ADDRESS 2500 Camino Diablo Suite 200			TRUCK NUMBER C-1
CITY, STATE, ZIP Walnut Creek, CA 94597		CARR TRANSPORTATION	
PHONE (925) 944-2899		<input checked="" type="checkbox"/> END DUMP <input type="checkbox"/> BOTTOM DUMP <input type="checkbox"/> TRANSFER <input type="checkbox"/> ROLL-OFF(S) <input type="checkbox"/> FLAT-BED <input type="checkbox"/> VAN <input type="checkbox"/> DRUMS	
SIGNATURE OF AUTHORIZED AGENT OR DRIVER			
* 		4-23-09	
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.		CUBIC YARDS 20	
		DISPOSAL METHOD: (TO BE COMPLETED BY LANDFILL)	
REMARKS		<input checked="" type="checkbox"/> SOIL	<input checked="" type="checkbox"/> DISPOSE
FACILITY TICKET NUMBER		<input type="checkbox"/> CONSTRUCTION DEBRIS	<input type="checkbox"/> OTHER
SIGNATURE OF AUTHORIZED AGENT		<input type="checkbox"/> NON-FRIABLE ASBESTOS	
* 		<input type="checkbox"/> WOOD	
DATE		<input type="checkbox"/> ASH	
		<input type="checkbox"/> SPECIAL OTHER	

SCHEDULING MUST BE MADE PRIOR TO 3:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL. ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE.

Keller Canyon
Sanitary Landfill
 901 Bailey Road
 Pittsburg, CA 94565
 Phone (925) 458-9800
 Fax (925) 458-9891

Coffin Butte
Landfill
 28972 Coffin Butte Road
 Corvallis, OR 97330
 Phone (541) 745-2018
 Fax (541) 745-3826

Ox Mountain
Sanitary Landfill
 12310 San Mateo Road
 Half Moon Bay, CA 94019
 Phone (650) 726-1819
 Fax (650) 726-9183

Newby Island
Sanitary Landfill
 1601 Dixon Landing Road
 Milpitas, CA 95035
 Phone (408) 945-2800
 Fax (408) 262-2871

Forward
Landfill
 9999 S. Austin Road
 Manteca, CA 95336
 Phone (209) 982-4298
 Fax (209) 982-1009

NON-HAZARDOUS WASTE MANIFEST

GENERATOR Steffi Zimmerman		WASTE ACCEPTANCE NO. - 212Y93777	
MAILING ADDRESS 3189 Lorne Verdes Place		REQUIRED PERSONAL PROTECTIVE EQUIPMENT	
CITY, STATE, ZIP Lafayette, CA 94549		<input type="checkbox"/> GLOVES <input type="checkbox"/> GOGGLES <input type="checkbox"/> RESPIRATOR <input type="checkbox"/> HARD HAT <input type="checkbox"/> TY-VEK <input type="checkbox"/> SAFETY VEST	
PHONE (925) 746-6000		SPECIAL HANDLING PROCEDURES:	
CONTACT PERSON Steffi Zimmerman		RECEIVING FACILITY	
SIGNATURE OF AUTHORIZED AGENT / TITLE			
DATE 4/24/09			
<small>GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or title 22 of the California code of regulations, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.</small>			
WASTE TYPE:			
<input type="checkbox"/> DISPOSAL <input type="checkbox"/> SLUDGE <input type="checkbox"/> CONSTRUCTION <input type="checkbox"/> WOOD <input type="checkbox"/> DEBRIS <input type="checkbox"/> OTHER <input type="checkbox"/> SPECIAL WASTE			
GENERATING FACILITY 3442 Adeline Street OAKLAND			
TRANSPORTER ART Consultants		NOTES:	
ADDRESS 2500 Camino Diablo Suite 200		VEHICLE LICENSE NUMBER TRUCK NUMBER 9C38429 C-1	
CITY, STATE, ZIP Walnut Creek, CA 94597			
PHONE (925) 944-2899		<input checked="" type="checkbox"/> END DUMP <input type="checkbox"/> BOTTOM DUMP <input type="checkbox"/> TRANSFER <input type="checkbox"/> ROLL-OFF(S) <input type="checkbox"/> FLAT-BED <input type="checkbox"/> VAN <input type="checkbox"/> DRUMS	
SIGNATURE OF AUTHORIZED AGENT OR DRIVER			
DATE 4-24-09			
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.		CUBIC YARDS 20	
		DISPOSAL METHOD: (TO BE COMPLETED BY LANDFILL)	
REMARKS		<input checked="" type="checkbox"/> SOIL <input checked="" type="checkbox"/> DISPOSE <input type="checkbox"/> OTHER <input type="checkbox"/> CONSTRUCTION DEBRIS <input type="checkbox"/> NON-FRIABLE ASBESTOS <input type="checkbox"/> WOOD <input type="checkbox"/> ASH <input type="checkbox"/> SPECIAL OTHER	
FACILITY TICKET NUMBER			
SIGNATURE OF AUTHORIZED AGENT			
DATE 4-24-09			

SCHEDULING MUST BE MADE PRIOR TO 3:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL • ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE.

Keller Canyon Sanitary Landfill
 901 Bailey Road
 Pittsburg, CA 94565
 Phone (925) 458-9800
 Fax (925) 458-9891

Coffin Butte Landfill
 28972 Coffin Butte Road
 Corvallis, OR 97330
 Phone (541) 745-2018
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Ox Mountain Sanitary Landfill
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Newby Island Sanitary Landfill
 1601 Dixon Landing Road
 Milpitas, CA 95035
 Phone (408) 945-2800
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Forward Landfill
 9999 S. Austin Road
 Manteca, CA 95336
 Phone (209) 982-4298
 Fax (209) 982-1009

NON-HAZARDOUS WASTE MANIFEST

GENERATOR Steffi Zimmerman		WASTE ACCEPTANCE NO. - 212Y93777	
MAILING ADDRESS 3289 Lomas Verdes Place		REQUIRED PERSONAL PROTECTIVE EQUIPMENT	
CITY, STATE, ZIP Lafayette, CA 94549		<input type="checkbox"/> GLOVES <input type="checkbox"/> GOGGLES <input type="checkbox"/> RESPIRATOR <input checked="" type="checkbox"/> HARD HAT <input type="checkbox"/> TY-VEK <input type="checkbox"/> SAFETY VEST	
PHONE (925) 745-6000		SPECIAL HANDLING PROCEDURES:	
CONTACT PERSON Steffi Zimmerman		RECEIVING FACILITY 	
SIGNATURE OF AUTHORIZED AGENT / TITLE	DATE		
* <i>[Signature]</i>		4/24/09	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or title 22 of the California code of regulations, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.			
WASTE TYPE:			
<input type="checkbox"/> DISPOSAL <input type="checkbox"/> SLUDGE <input type="checkbox"/> CONSTRUCTION <input type="checkbox"/> WOOD <input type="checkbox"/> DEBRIS <input type="checkbox"/> OTHER <input type="checkbox"/> SPECIAL WASTE			
GENERATING FACILITY			
3442 Adelina Street OAKLAND			
TRANSPORTER AEI Consultants		NOTES:	VEHICLE LICENSE NUMBER 9A94037
ADDRESS 2500 Camino Diablo Suite 200			TRUCK NUMBER LT131
CITY, STATE, ZIP Walnut Creek, CA 94597			
PHONE (925) 944-2899		END DUMP <input checked="" type="checkbox"/>	BOTTOM DUMP <input type="checkbox"/>
SIGNATURE OF AUTHORIZED AGENT OR DRIVER		ROLL-OFF(S) <input type="checkbox"/>	TRANSFER <input type="checkbox"/>
* <i>[Signature]</i>		FLAT-BED <input type="checkbox"/>	VAN <input type="checkbox"/>
DATE 4-24-09		DRUMS <input type="checkbox"/>	
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.		CUBIC YARDS 20	
		DISPOSAL METHOD: (TO BE COMPLETED BY LANDFILL)	
REMARKS		<input checked="" type="checkbox"/> SOIL	<input type="checkbox"/> DISPOSE
FACILITY TICKET NUMBER		<input type="checkbox"/> CONSTRUCTION DEBRIS	<input type="checkbox"/> OTHER
SIGNATURE OF AUTHORIZED AGENT		<input type="checkbox"/> NON-FRIABLE ASBESTOS	
* <i>[Signature]</i>		<input type="checkbox"/> WOOD	
DATE 4-24-09		<input type="checkbox"/> ASH	
		<input type="checkbox"/> SPECIAL OTHER	

SCHEDULING MUST BE MADE PRIOR TO 3:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL • ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE.

Keller Canyon Sanitary Landfill
 901 Bailey Road
 Pittsburg, CA 94565
 Phone (925) 458-9800
 Fax (925) 458-9891

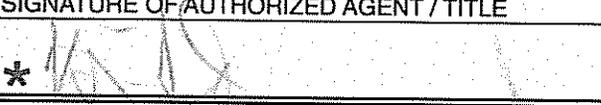
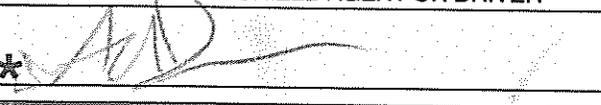
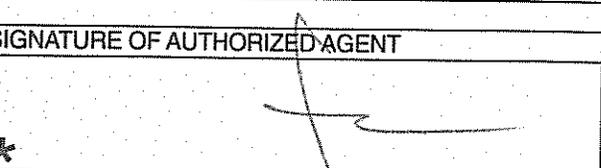
Coffin Butte Landfill
 28972 Coffin Butte Road
 Corvallis, OR 97330
 Phone (541) 745-2018
 Fax (541) 745-3826

Ox Mountain Sanitary Landfill
 12310 San Mateo Road
 Half Moon Bay, CA 94019
 Phone (650) 726-1819
 Fax (650) 726-9183

Newby Island Sanitary Landfill
 1601 Dixon Landing Road
 Milpitas, CA 95035
 Phone (408) 945-2800
 Fax (408) 262-2871

Forward Landfill
 9999 S. Austin Road
 Manteca, CA 95336
 Phone (209) 982-4298
 Fax (209) 982-1009

NON-HAZARDOUS WASTE MANIFEST

GENERATOR Steffi Zimmerman		WASTE ACCEPTANCE NO. - 212Y93777	
MAILING ADDRESS 3289 Loma Verde Place			
CITY, STATE, ZIP Lafayette, CA 94549		REQUIRED PERSONAL PROTECTIVE EQUIPMENT	
PHONE (925) 746-6000		<input type="checkbox"/> GLOVES <input type="checkbox"/> GOGGLES <input type="checkbox"/> RESPIRATOR <input checked="" type="checkbox"/> HARD HAT <input type="checkbox"/> TY-VEK <input type="checkbox"/> SAFETY VEST	
CONTACT PERSON Steffi Zimmerman		SPECIAL HANDLING PROCEDURES:	
SIGNATURE OF AUTHORIZED AGENT / TITLE		RECEIVING FACILITY	
* 			
DATE 4/24/09			
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or title 22 of the California code of regulations, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.			
WASTE TYPE:			
<input type="checkbox"/> DISPOSAL <input type="checkbox"/> SLUDGE <input type="checkbox"/> CONSTRUCTION <input type="checkbox"/> WOOD <input type="checkbox"/> DEBRIS <input type="checkbox"/> OTHER <input type="checkbox"/> SPECIAL WASTE			
GENERATING FACILITY 3442 Adeline Street OAKLAND			
TRANSPORTER AEI Consultants		NOTES:	
ADDRESS 2500 Camino Diablo Suite 200		VEHICLE LICENSE NUMBER 9B42551	
CITY, STATE, ZIP Walnut Creek, CA 94597		TRUCK NUMBER DV 31	
PHONE (925) 944-2899		ADAM DEVORE	
SIGNATURE OF AUTHORIZED AGENT OR DRIVER		END DUMP BOTTOM DUMP TRANSFER	
* 		<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> ROLL-OFF(S) FLAT-BED VAN DRUMS	
DATE 4-24-09		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
REMARKS		CUBIC YARDS 20	
FACILITY TICKET NUMBER		DISPOSAL METHOD: (TO BE COMPLETED BY LANDFILL)	
SIGNATURE OF AUTHORIZED AGENT		<input checked="" type="checkbox"/> SOIL <input checked="" type="checkbox"/> DISPOSE <input type="checkbox"/> OTHER <input type="checkbox"/> CONSTRUCTION DEBRIS <input type="checkbox"/> NON-FRIABLE ASBESTOS <input type="checkbox"/> WOOD <input type="checkbox"/> ASH <input type="checkbox"/> SPECIAL OTHER	
* 			
DATE 4-24-09			

SCHEDULING MUST BE MADE PRIOR TO 3:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL. ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE.

Keller Canyon
Sanitary Landfill
 901 Bailey Road
 Pittsburg, CA 94565
 Phone (925) 458-9800
 Fax (925) 458-9891

Coffin Butte
Landfill
 28972 Coffin Butte Road
 Corvallis, OR 97330
 Phone (541) 745-2018
 Fax (541) 745-3826

Ox Mountain
Sanitary Landfill
 12310 San Mateo Road
 Half Moon Bay, CA 94019
 Phone (650) 726-1819
 Fax (650) 726-9183

Newby Island
Sanitary Landfill
 1601 Dixon Landing Road
 Milpitas, CA 95035
 Phone (408) 945-2800
 Fax (408) 262-2871

Forward
Landfill
 9999 S. Austin Road
 Manteca, CA 95336
 Phone (209) 982-4298
 Fax (209) 982-1009

NON-HAZARDOUS WASTE MANIFEST

GENERATOR Steffi Zimmerman		WASTE ACCEPTANCE NO. - 212Y93777	
MAILING ADDRESS 3285 Lomas Verdes Place		REQUIRED PERSONAL PROTECTIVE EQUIPMENT	
CITY, STATE, ZIP Lafayette, CA 94549		<input type="checkbox"/> GLOVES <input type="checkbox"/> GOGGLES <input type="checkbox"/> RESPIRATOR <input type="checkbox"/> HARD HAT <input type="checkbox"/> TY-VEK <input type="checkbox"/> SAFETY VEST	
PHONE (925) 745-6000		SPECIAL HANDLING PROCEDURES:	
CONTACT PERSON Steffi Zimmerman		RECEIVING FACILITY	
SIGNATURE OF AUTHORIZED AGENT / TITLE	DATE		
* <i>[Signature]</i>	4/24/09		
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or title 22 of the California code of regulations, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.			
WASTE TYPE:			
<input type="checkbox"/> DISPOSAL <input type="checkbox"/> SLUDGE <input type="checkbox"/> CONSTRUCTION <input type="checkbox"/> WOOD <input type="checkbox"/> DEBRIS <input type="checkbox"/> OTHER <input type="checkbox"/> SPECIAL WASTE			
GENERATING FACILITY 3442 Adeline Street OAKLAND			
TRANSPORTER AET Consultants		NOTES:	VEHICLE LICENSE NUMBER 9B58508
ADDRESS 2500 Camino Diablo Suite 200			TRUCK NUMBER K-95
CITY, STATE, ZIP Walnut Creek, CA 94597			
PHONE (925) 944-2899			
SIGNATURE OF AUTHORIZED AGENT OR DRIVER		END DUMP <input checked="" type="checkbox"/>	BOTTOM DUMP <input type="checkbox"/>
DATE		TRANSFER <input type="checkbox"/>	
* <i>[Signature]</i>		ROLL-OFF(S) <input type="checkbox"/>	FLAT-BED <input type="checkbox"/>
4-24-09		VAN <input type="checkbox"/>	DRUMS <input type="checkbox"/>
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.		CUBIC YARDS 20	
		DISPOSAL METHOD: (TO BE COMPLETED BY LANDFILL)	
REMARKS		<input checked="" type="checkbox"/> SOIL	DISPOSE
FACILITY TICKET NUMBER		<input type="checkbox"/> CONSTRUCTION DEBRIS	OTHER
SIGNATURE OF AUTHORIZED AGENT		<input type="checkbox"/> NON-FRIABLE ASBESTOS	
DATE		<input type="checkbox"/> WOOD	
* <i>[Signature]</i>		<input type="checkbox"/> ASH	
4-24-09		<input type="checkbox"/> SPECIAL OTHER	

SCHEDULING MUST BE MADE PRIOR TO 3:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL • ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE.

Keller Canyon
Sanitary Landfill
 901 Bailey Road
 Pittsburg, CA 94565
 Phone (925) 458-9800
 Fax (925) 458-9891

Coffin Butte
Landfill
 28972 Coffin Butte Road
 Corvallis, OR 97330
 Phone (541) 745-2018
 Fax (541) 745-3826

Ox Mountain
Sanitary Landfill
 12310 San Mateo Road
 Half Moon Bay, CA 94019
 Phone (650) 726-1819
 Fax (650) 726-9183

Newby Island
Sanitary Landfill
 1601 Dixon Landing Road
 Milpitas, CA 95035
 Phone (408) 945-2800
 Fax (408) 262-2871

Forward
Landfill
 9999 S. Austin Road
 Manteca, CA 95336
 Phone (209) 982-4298
 Fax (209) 982-1009

NON-HAZARDOUS WASTE MANIFEST

GENERATOR Steve Zimmerman		WASTE ACCEPTANCE NO. 21249 -3777	
MAILING ADDRESS 3254 Lomas Verde Dr #11		REQUIRED PERSONAL PROTECTIVE EQUIPMENT	
CITY, STATE, ZIP Livermore CA 94549		<input type="checkbox"/> GLOVES <input type="checkbox"/> GOGGLES <input type="checkbox"/> RESPIRATOR <input type="checkbox"/> HARD HAT <input type="checkbox"/> TY-VEK <input type="checkbox"/> SAFETY VEST	
PHONE 925 746 6000		SPECIAL HANDLING PROCEDURES:	
CONTACT PERSON Karl Fernandez			
SIGNATURE OF AUTHORIZED AGENT / TITLE	DATE		
* [Signature]	4/24/09	RECEIVING FACILITY	
<small>GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or title 22 of the California code of regulations, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.</small>			
WASTE TYPE:			
<input type="checkbox"/> DISPOSAL <input type="checkbox"/> SLUDGE <input type="checkbox"/> CONSTRUCTION <input type="checkbox"/> WOOD <input type="checkbox"/> DEBRIS <input type="checkbox"/> OTHER <input type="checkbox"/> SPECIAL WASTE			
GENERATING FACILITY 3442 Adeline St. Oakland			
TRANSPORTER L. TORRANCO TRG.	NOTES:	VEHICLE LICENSE NUMBER	TRUCK NUMBER
ADDRESS P.O. Box 1919		9A94037	LTT 131
CITY, STATE, ZIP PITTSBURG, CA. 94565			
PHONE (925) 754-2107			
SIGNATURE OF AUTHORIZED AGENT OR DRIVER	DATE	END DUMP	BOTTOM DUMP
* [Signature]	4-24-09	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		ROLL-OFF(S)	FLAT-BED
		<input type="checkbox"/>	<input type="checkbox"/>
		VAN	DRUMS
		<input type="checkbox"/>	<input type="checkbox"/>
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.		CUBIC YARDS 20	
		DISPOSAL METHOD: (TO BE COMPLETED BY LANDFILL)	
REMARKS		<input checked="" type="checkbox"/> SOIL	<input type="checkbox"/> OTHER
FACILITY TICKET NUMBER		<input type="checkbox"/> CONSTRUCTION DEBRIS	
SIGNATURE OF AUTHORIZED AGENT		<input type="checkbox"/> NON-FRIABLE ASBESTOS	
DATE		<input type="checkbox"/> WOOD	
		<input type="checkbox"/> ASH	
		<input type="checkbox"/> SPECIAL OTHER	

SCHEDULING MUST BE MADE PRIOR TO 3:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL • ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE.

APPENDIX G

Backfill Casing Water Analyses



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mcccampbell.com E-mail: main@mcccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #281939; Zimmerman	Date Sampled: 03/27/09
		Date Received: 03/27/09
	Client Contact: Robert Flory	Date Reported: 03/30/09
	Client P.O.: #WC081473	Date Completed: 03/30/09

WorkOrder: 0903702

March 30, 2009

Dear Robert:

Enclosed within are:

- 1) The results of the **1** analyzed sample from your project: **#281939; Zimmerman,**
- 2) A QC report for the above sample,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

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.

McC Campbell Analytical, Inc.



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0903702

ClientCode: AEL

WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:

Robert Flory
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
(925) 283-6000 FAX (925) 283-6121

Email: rflory@aeiconsultants.com
cc:
PO: #WC081473
ProjectNo: #281939; Zimmerman

Bill to:

Denise Mockel
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
dmockel@aeiconsultants.com

Requested TAT: 1 day

Date Received: 03/27/2009

Date Printed: 03/30/2009

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	
0903702-001	BF-1	Water	3/27/2009 9:00	<input type="checkbox"/>	A	A											

Test Legend:

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

Prepared by: Samantha Arbuckle

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: **03/27/09 9:07:53 PM**
Project Name: **#281939; Zimmerman** Checklist completed and reviewed by: **Samantha Arbuckle**
WorkOrder N°: **0903702** 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: 6.1°C NA
Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
Sample labels checked for correct preservation? Yes No
TTLC 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.

Client contacted: Date contacted: Contacted by:

Comments:



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 42329

WorkOrder: 0903702

EPA Method SW8021B/8015Bm		Extraction SW5030B							Spiked Sample ID: 0903693-003A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) ^f	ND	60	108	97.8	9.96	104	108	3.09	70 - 130	20	70 - 130	20
MTBE	ND	10	107	103	4.15	96.6	92.6	4.19	70 - 130	20	70 - 130	20
Benzene	ND	10	98.4	98.5	0.0780	88.7	93.1	4.90	70 - 130	20	70 - 130	20
Toluene	ND	10	109	110	1.00	91.8	95.3	3.83	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	110	109	0.818	92.9	96.9	4.23	70 - 130	20	70 - 130	20
Xylenes	ND	30	119	122	2.53	107	111	3.80	70 - 130	20	70 - 130	20
%SS:	93	10	87	91	3.89	98	101	3.06	70 - 130	20	70 - 130	20

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

BATCH 42329 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903702-001A	03/27/09 9:00 AM	03/30/09	03/30/09 4:07 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.



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mcccampbell.com E-mail: main@mcccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #281939; Zimmerman	Date Sampled: 06/17/09
		Date Received: 06/17/09
	Client Contact: Robert Flory	Date Reported: 06/22/09
	Client P.O.: #WC081729	Date Completed: 06/19/09

WorkOrder: 0906533

June 22, 2009

Dear Robert:

Enclosed within are:

- 1) The results of the **1** analyzed sample from your project: **#281939; Zimmerman,**
- 2) A QC report for the above sample,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

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.

McC Campbell Analytical, Inc.



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0906533

ClientCode: AEL

WriteOn EDF Excel Fax Email HardCopy ThirdParty J-flag

Report to:
 Robert Flory
 AEI Consultants
 2500 Camino Diablo, Ste. #200
 Walnut Creek, CA 94597
 (925) 283-6000 FAX (925) 283-6121

Email: rflory@aeiconsultants.com
cc:
PO: #WC081729
ProjectNo: #281939; Zimmerman

Bill to:
 Denise Mockel
 AEI Consultants
 2500 Camino Diablo, Ste. #200
 Walnut Creek, CA 94597
 dmockel@aeiconsultants.com

Requested TAT: 5 days
Date Received: 06/17/2009
Date Printed: 06/17/2009

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	
0906533-001	BF-1	Water	6/17/2009 10:15	<input type="checkbox"/>	A	A											

Test Legend:

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

Prepared by: Samantha Arbuckle

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: **06/17/09 7:27:55 PM**
 Project Name: **#281939; Zimmerman** Checklist completed and reviewed by: **Samantha Arbuckle**
 WorkOrder N°: **0906533** 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: 6.6°C NA
 Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
 Sample labels checked for correct preservation? Yes No
 TTLC 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.

Client contacted: Date contacted: Contacted by:

Comments:



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 43927

WorkOrder 0906533

EPA Method SW8021B/8015Bm		Extraction SW5030B							Spiked Sample ID: 0906525-003C			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) ^f	ND	60	117	123	5.31	125	125	0	70 - 130	20	70 - 130	20
MTBE	ND	10	94.5	95.1	0.681	99.7	94.3	5.53	70 - 130	20	70 - 130	20
Benzene	ND	10	97.5	101	3.78	92.9	97.6	4.93	70 - 130	20	70 - 130	20
Toluene	ND	10	97	101	4.18	96.4	97.8	1.38	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	95	99.3	4.40	99	96.2	2.87	70 - 130	20	70 - 130	20
Xylenes	ND	30	96.1	101	4.98	100	97.6	2.45	70 - 130	20	70 - 130	20
%SS:	102	10	99	99	0	100	99	0.956	70 - 130	20	70 - 130	20

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

BATCH 43927 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0906533-001A	06/17/09 10:15 AM	06/19/09	06/19/09 4:38 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.



McC Campbell Analytical, Inc.

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1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mcccampbell.com E-mail: main@mcccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #281939; Zimmerman	Date Sampled: 08/10/09
		Date Received: 08/10/09
	Client Contact: Robert Flory	Date Reported: 08/13/09
	Client P.O.: #WC081870	Date Completed: 08/12/09

WorkOrder: 0908229

August 13, 2009

Dear Robert:

Enclosed within are:

- 1) The results of the **2** analyzed samples from your project: **#281939; Zimmerman,**
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

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.

McC Campbell Analytical, Inc.



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0908229

ClientCode: AEL

WaterTrax
 WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:

Robert Flory
 AEI Consultants
 2500 Camino Diablo, Ste. #200
 Walnut Creek, CA 94597
 (925) 283-6000 FAX (925) 283-6121

Email: rflory@aeiconsultants.com
 cc:
 PO: #WC081870
 ProjectNo: #281939; Zimmerman

Bill to:

Denise Mockel
 AEI Consultants
 2500 Camino Diablo, Ste. #200
 Walnut Creek, CA 94597
 dmockel@aeiconsultants.com

Requested TAT: 5 days

Date Received: 08/10/2009

Date Printed: 08/10/2009

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	
0908229-001	BF-1	Water	8/10/2009 10:55	<input type="checkbox"/>	A	A											
0908229-002	BF-5	Water	8/10/2009 12:55	<input type="checkbox"/>	A												

Test Legend:

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

Prepared by: Samantha Arbuckle

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: **8/10/2009 8:47:00 PM**
Project Name: **#281939; Zimmerman** Checklist completed and reviewed by: **Samantha Arbuckle**
WorkOrder N°: **0908229** 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: 7°C NA
Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
Sample labels checked for correct preservation? Yes No
TTLC 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.

Client contacted: Date contacted: Contacted by:

Comments:



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 45065

WorkOrder 0908229

Analyte	EPA Method SW8021B/8015Bm		Extraction SW5030B						Spiked Sample ID: 0908209-004A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) ^f	ND	60	109	104	5.12	102	89.4	13.4	70 - 130	20	70 - 130	20
MTBE	ND	10	111	113	1.23	105	93.3	12.0	70 - 130	20	70 - 130	20
Benzene	ND	10	106	113	5.99	114	108	5.07	70 - 130	20	70 - 130	20
Toluene	ND	10	104	109	4.81	112	106	5.03	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	105	110	4.39	112	106	5.78	70 - 130	20	70 - 130	20
Xylenes	ND	30	103	108	5.34	110	100	9.46	70 - 130	20	70 - 130	20
%SS:	96	10	97	100	3.00	101	105	3.82	70 - 130	20	70 - 130	20

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

BATCH 45065 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0908229-001A	08/10/09 10:55 AM	08/11/09	08/11/09 6:38 PM	0908229-002A	08/10/09 12:55 PM	08/12/09	08/12/09 2:40 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.