SOIL AND GROUNDWATER INVESTIGATION REPORT FOR AREA OF FORMER USTS 5812 HOLLIS STREET Emeryville, California

Alameda County Environmental Health
Alameda, California

25 January 2010
Project No. 4823.02

Treadwell&Rollo
Environmental & Geotechnical Consultants

Treadwell&Rollo

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Mrs. Barbara Jakub
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502

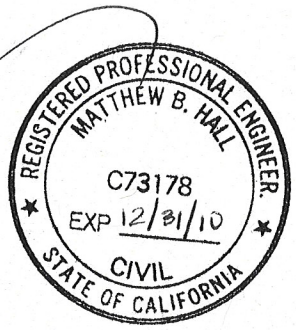
Subject: Soil and Groundwater Investigation Report for Area of Former USTs
5812 Hollis Street
Emeryville, California
RO# 201

Dear Ms. Jakub:

On behalf of EmeryStation Triangle LLC, Treadwell & Rollo, Inc. has prepared the enclosed Soil and Groundwater Investigation Report for the property located at 5812 Hollis Street in Emeryville, California.

We greatly appreciate your prompt consideration and assistance in this matter. Please call Matt Hall at (415) 955-9040 x267 if you have any questions.

Sincerely yours,
TREADWELL & ROLLO, INC.



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SOIL AND GROUNDWATER INVESTIGATION REPORT
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5812 Hollis Street
Emeryville, California

1.0 INTRODUCTION

On behalf of EmeryStation Triangle LLC, Treadwell & Rollo Inc. has prepared this *Soil and Groundwater Investigation Report,* to describe the activities performed to investigate potential contamination associated with the former underground storage tanks (USTs) and Fuel Leak Case RO000201 at the property at 5812 Hollis Street (Site) located in Emeryville, California (Figure 1). In addition, this report presents the extent of contamination relative to future site development.

The investigation activities described in this report were performed in general accordance with the scope of work presented in the 25 November 2008 *Revised Groundwater Investigation Workplan* prepared by Leong Environmental (Leong 2008) as requested in a 24 July 2008 letter from Alameda County Environmental Health (ACEH 2008). The revised work plan was approved with comment by ACEH in a letter dated 13 April 2009 (ACEH 2009a). Adjustments to locations of proposed borings were approved by ACEH in a 30 June 2009 email correspondence between Matt Hall of Treadwell & Rollo and Ms. Barbara Jakub (ACEH 2009b). Ms. Barbara Jakub and Mark Detterman of ACEH were onsite to oversee the beginning of field investigation activities.

The activities performed during the current investigation address ACEH concerns including the potential for residual contamination in the former UST tank excavation, the vertical extent of hydrocarbons in soil, the vertical and lateral extent of groundwater contamination in the area of the former UST tank excavation, and redevelopment and sampling of the monitoring well located in the presumed down-gradient direction from the former UST tank excavation.

2.0 BACKGROUND

2.1 Site Description

The Site consists of an approximately 40,000 square foot triangular-shaped lot which is occupied by a paved surface parking lot in the northern part of the Site; a vacant, paved, former dismantling yard in the center of the Site previously operated by Hydraulic Electro Service Corporation; and a single-story building in the southern part of the Site (Figure 2). The Site is bounded by Hollis Street to the west, a

commercial building to the north (at 5850 Hollis Street), and a public greenway approximately 25 feet wide to the east. The southern tip of the Site is at the intersection of Hollis Street and Powell Street.

2.2 Historical Information

The Site was undeveloped prior to construction of the single-story building at the Site in 1941 and was originally occupied by a pipe and valve company that used the Site for offices and storage. A machine shop was added to the northern end of the Site in the 1950s but was replaced by a paved parking lot in the 1960s. In 1977, the Alders family acquired the Site and conducted business as Hydraulic Electro Service Corporation. Site activities since 1977 included oil storage, battery storage, hazardous materials storage, and operation of two USTs located at the northern end of the Site (Figure 3). Two USTs (one 8,000-gallon gasoline tank and one 3,000-gallon diesel tank) and an associated dispenser island were installed at the northern end of the Site in 1977 and removed on 5 December 1989. During removal activities, residual total petroleum hydrocarbons were observed in soil and groundwater.

During UST removal, a hydrocarbon sheen was reportedly observed in the water that had collected in the excavation. Up to 23 milligrams per kilogram (mg/kg) of total petroleum hydrocarbons as diesel (TPH-d) were detected in soil samples from the excavation. Groundwater samples from the excavation reportedly contained the following maximum concentrations:

- TPH-d at 90,000 micrograms per liter (µg/L)
- Total petroleum hydrocarbons as gasoline (TPH-g) at 2,300 µg/L
- Benzene, toluene, ethylbenzene, and xylenes (BTEX) at 100 µg/L, 200 µg/L, 40 µg/L, and 310 µg/L, respectively.

The inferred down-gradient direction of groundwater flow at the Site was to the west-southwest. A groundwater monitoring well (MW-1) was installed approximately 10 feet southwest of the former USTs on 17 June 1993 by Summit Engineering (Figure 2).

During well installation in 1993, groundwater was first encountered at 12 feet below ground surface (bgs). Groundwater was measured at approximately 5 feet bgs, 48 hours after well construction. A groundwater sample collected from the well indicated analytical results reportedly below laboratory reporting limits. In a letter dated 10 November 1999, ACEH requested analysis of groundwater for methyl tert-butyl ether (MTBE) prior to Site closure. A groundwater sampled was collected and analyzed for MtBE in 2006. MtBE was not detected in the groundwater sample.

The property was acquired by EmeryStation Triangle LLC in 2008, and Hydraulic Electro Service Corporation ceased operations at the Site (Leong 2008).

2.3 Site Redevelopment Plan

The redevelopment plans include a multi-story commercial building occupying the northern three-quarters of the property. This building will sit atop one level of subgrade parking. The total excavation depth for the redevelopment is expected to be up to 15 feet bgs. The southern one-quarter of the property is planned to contain a paved and landscaped open area. The eastern, western, and northern boundaries of the proposed redevelopment are expected to be sidewalk with limited landscaped areas. A plan showing the outline of the structure is provided in Figure 2.

2.4 Regional Geology and Hydrogeology

According to the United States Geological Survey (USGS) 7.5-Minute Series Topographic Map of the Oakland West, California, Quadrangle (1959, photo revised 1980), the Site is located at elevations of approximately 20 feet above mean sea level (msl). The Site is in the Coast Ranges Geologic Province of California, characterized by northwest-trending mountain ranges and valleys. Effects of the Hayward Fault Zone and associated transpressional/transtensional structural features dominate the geology of western Alameda County. This general area is underlain by Jurassic and Cretaceous sedimentary and igneous rocks of the Franciscan Assemblage and the Quaternary Alameda formation. The Franciscan basement rocks generally do not contain significant water-producing units. Within the Coast Ranges Geologic Province of California, the Site is located within the flatlands of the East Bay Alluvial Plain near the shore of San Francisco Bay. The sediments of the East Bay Alluvial Plain slope gently westward from the Oakland-Berkeley Hills to San Francisco Bay.

Water-yielding zones in the Emeryville area are generally discontinuous and interspersed with less-permeable layers, as is typical of alluvial systems. The more permeable zones are composed of gently westward-sloping sand and gravel beds deposited by streams within the complex structure of the alluvial fan deposits, which shifted and braided over a period of hundreds of thousands of years. Because of the discontinuous and interspersed subsurface geological deposits typical of alluvial fan units, local groundwater gradients are complex and can be expected to change over short distances. The predominant regional direction of shallow groundwater flow is westward toward San Francisco Bay, which is located approximately 0.5 miles to the west.

The East Bay Municipal Utility District provides potable water for the Site and vicinity. Groundwater in the vicinity of the Site is not currently used as a source of drinking water, nor does the Site overlie a shallow aquifer used for drinking water. Based on regulatory guidance (State Water Resources Control Board [SWRQB] 1988 and San Francisco Bay Regional Water Quality Control Board [RWQCB] 1999), the portability of shallow groundwater in the vicinity of the Site is questionable because of the low permeability of sediments beneath the Site, elevated total dissolved solids (TDS) concentrations, possible saltwater intrusion, and susceptibility to pollution from area industries; however, the groundwater has not been undesignated for beneficial municipal supply use. Groundwater samples collected from the site detected TDS concentrations which exceed the Environmental Protection Agency (EPA) secondary maximum contaminant levels (MCL) for drinking water (500 mg/L), but do not exceed the guidance in the regulatory guidance (SWRQB 1988 and RWQCB 1999) for designation of 3,000 mg/L. Accordingly, groundwater at the site is considered as a current or potential source of drinking water.

Temescal Creek is the nearest perennial stream, located approximately 1 mile south of the Site. The creek flows through a U-shaped, concrete-lined channel about 30 feet wide and 12 feet deep. Temescal Creek drains into San Francisco Bay within the tidal marshes of Emeryville Crescent (Leong 2008).

2.5 Site Specific Geology and Hydrogeology

The hydrogeologic conditions noted below are based on observations made by Treadwell & Rollo during the drilling activities performed previously at the Site on 22-23 January 2008 and 4-5 March 2008 (T&R, 2008a), and during the investigation performed on 6-8 July 2009. Generally, the Site consists of an asphalt-concrete surface (approximately 3-inches thick) underlain by mixed fine and coarse-grained material.

During the July 2009 UST area investigation, a mixture of loose to medium dense sand and gravel was encountered in the former UST tank excavation from approximately 3 inches to 11 feet bgs. A stiff, light brown, clay was encountered from 11 to 19 feet bgs, and medium dense silty sand was encountered from 19 to 28 feet bgs. A light brown, medium dense, clay was encountered at 28 to 30 feet bgs, the maximum depth explored. Borings adjacent to the UST tank excavation (UST-01, UST-03, and UST-04), encountered primarily clay to sandy gravelly clay with thin interbeds of laterally discontinuous coarse-grained material.

The unstabilized depth to groundwater in grab groundwater sample borings was measured between 3 to 8 feet bgs during investigations performed in 2008 and approximately 7.5 feet bgs during the July 2009

investigation. Groundwater in temporary well borings was slow to recharge during grab groundwater sampling.

The direction of groundwater flow has not been measured for this Site. However, based on Site topography and the groundwater flow observed at nearby sites, the general groundwater flow direction is assumed to be westerly toward the San Francisco Bay.

3.0 FIELD INVESTIGATION

Treadwell & Rollo performed the following field investigation activities during April to July 2009:

- Redevelopment of MW-1
- Grab groundwater and soil sampling at four locations
- Sampling of MW-1.

The following sections describe the redevelopment of MW-1 and soil and groundwater sampling activities.

3.1 Redevelopment of MW-1

On 24 April 2009, Treadwell & Rollo measured the total depth and depth to groundwater in MW-1 and redeveloped MW-1 by surging for approximately 10 minutes followed by purging of approximately 11 casing volumes of water. Field parameters including temperature, pH, conductivity, turbidity, dissolved oxygen, and oxygen reduction potential were measured at regular intervals during purging. Total depth of MW-1 was measured relative to ground surface and the top of casing and the screen interval was calculated to be 4.6 to 19.6 feet bgs based upon field measurements.

3.2 Soil Sampling

Prior to drilling, boring permits were obtained from Alameda County Public Works Agency. Treadwell & Rollo also notified Underground Service Alert (USA) and subcontracted Precision Locating of Brentwood, California, to identify underground utilities at the work site.

On 6 July 2009, Treadwell & Rollo mobilized to the Site with Gregg Drilling & Testing, Inc., of Martinez, California (Gregg). Gregg hand augered each boring for the first 5 feet to ensure no underground utilities were present. Gregg advanced five soil borings (UST-01, UST-01-DEEP, UST-02, UST-03, and UST-04) to

depths ranging between 20 and 30 feet bgs by direct-push technology to collect soil samples. Gregg advanced UST-01 next to the former dispenser lines that are located north of and cross-gradient to the former USTs, UST-02 was advanced in the former UST backfill area, UST-03 approximately 1.5 feet downgradient of an excavation patch presumed to be a former sewer line, and UST-04 in the presumed downgradient direction of the former UST backfilled excavation. The locations of these borings are shown on Figures 2 and 3.

On 7 July 2009 Gregg advanced UST-01-DEEP, located approximately 1 foot from UST-01, to a total depth of 25 feet bgs to collect soil samples in order to vertically define the extent of potential TPH in UST-01 at 20 feet bgs.

A Treadwell & Rollo field geologist continuously logged each boring and classified the material in the field in accordance with the Unified Soil Classification System (ASTM Standard D 2487). Treadwell & Rollo collected soil samples at approximate 5-foot intervals and additionally at the capillary fringe, at lithologic changes, and at areas of obvious contamination. Soil samples were containerized, labeled, placed in chilled coolers, and transported under chain-of-custody procedures to McCampbell Analytical, Inc. (McCampbell) of Pittsburg, California, for analysis.

All drilling and sampling equipment was decontaminated prior to each use. Soil cuttings and decontamination rinsate were containerized in 55-gallon drums on Site. Borings were tremie grouted with neat cement upon completion of sampling activities.

3.3 Groundwater Sampling

3.3.1 Grab Groundwater Sampling

On 6 July 2009, Gregg advanced direct-push borings UST-01, UST-03, and UST-04 to a total depth of 9 feet bgs and placed a 5-foot length of ¾" diameter temporary PVC screen and corresponding length of blank casing in each boring. The UST-02 boring annulus would not stay open long enough (due to UST excavation backfill collapse) to accommodate placement of a temporary well screen and was subsequently drilled to its total depth of 30 feet bgs. Upon reaching total depth in UST-02, a screen was inserted into the rods, and the rods were retracted to expose a 3-foot long section of temporary well screen. Groundwater entered the borings and temporary well screen and was allowed to equilibrate for approximately 24 hours prior to sampling due to slow recharge.

On 7 July 2009, Treadwell & Rollo measured water levels and began collecting grab groundwater samples at borings UST-01, UST-02, UST-03, and UST-04. Depth to water was measured prior to sampling. Grab groundwater samples were collected in a bailer and decanted into 40-milliliter volatile organic analysis (VOA) vials preserved with hydrochloric acid, unpreserved 1 liter glass bottles, and 250 mL poly containers; and placed in a chilled cooler for transportation under chain-of-custody protocol to McCampbell for analysis. Depth to water measurements are presented in Table 1.

All drilling and sampling equipment was decontaminated prior to each use. Decontamination rinsate was containerized in 55-gallon drums on Site. The temporary screens were removed and the borings were tremie grouted with neat cement upon completion of groundwater sampling activities.

3.3.2 Monitoring Well Sampling

On 7 July 2009, Treadwell & Rollo gauged and sampled monitoring well MW-1. MW-1 was purged and sampled using low-flow procedures. Purge equipment included a peristaltic pump with new polyethylene tubing. The purge rate averaged 150 milliliters per minute (ml/min). Field parameters including depth to water, temperature, pH, conductivity, turbidity, dissolved oxygen, and oxygen reduction potential were measured at regular intervals during purging. After parameters stabilized, samples were collected in appropriate laboratory-supplied containers and placed on ice until they were delivered to McCampbell for analysis. Depth to water measurements of MW-1 are presented in Table 1. The groundwater sampling field form is presented in Appendix B.

4.0 LABORATORY ANALYTICAL RESULTS

Soil and groundwater samples were sent to McCampbell for analysis. Soil samples were analyzed for:

- total petroleum hydrocarbons as gasoline (TPH-g), total petroleum hydrocarbons as diesel and motor oil (TPH-d and TPH-mo) by EPA Method 8015B, with TPH-d and TPH-mo treated with silica gel cleanup
- BTEX compounds (benzene, toluene, ethylbenzene, and xylenes) by EPA Method 8260B
- fuel oxygenates: MTBE, tert-amyl methyl ether (TAME), diisopropyl ether (DIPE), ethyl tert-butyl ether (ETBE), and tert-butyl alcohol (TBA) by EPA Method 8260B.

Groundwater samples were analyzed for:

- TPH-g by EPA Methods 8015B or 8260B

- TPH-d and TPH-mo by EPA Method 8015B with silica gel cleanup
- BTEX by EPA Method 8260B
- MTBE, TAME, DIPE, ETBE, and TBA by EPA Method 8260B
- Total dissolved solids by EPA Method SM2540C.

The analytical results are summarized in Table 2 for soil samples and Table 3 for groundwater samples. Copies of the laboratory analytical reports and chain-of-custody documentation are presented in Appendix C.

4.1 Soil Analytical Results

TPH-g was detected in 4 of the 15 samples with concentrations ranging from 0.46 mg/kg to 1.9 mg/kg. TPH-d was detected in 9 of 15 samples with concentrations ranging from 1 mg/kg to 530 mg/kg. TPH-mo was detected in 9 of 15 samples with concentrations ranging from 7.5 mg/kg to 290 mg/kg. BTEX compounds and fuel oxygenates were not detected above the laboratory method reporting limits in any soil samples. The soil analytical results are presented in Table 2.

TPH-d concentrations exceeded the Residential Environmental Screening Levels (ESL) (83 mg/kg, Table A) in 4 of the 15 samples with concentrations in these samples ranging from 110 mg/kg to 530 mg/kg.

4.2 Groundwater Analytical Results

TPH-g was detected in groundwater samples from UST-02, UST-03, and UST-04 with concentrations ranging from 100 µg/L to 960 µg/L. Groundwater collected from UST-03 was initially analyzed for TPH-g by method 8260 on 7 July 2009, and the resulting concentration was below laboratory reporting limits (< 50 µg/L). Groundwater stabilized in UST-03 over night, was sampled again, and was subsequently analyzed for TPH-g using method 8015 on 9 July 2009; the result was 960 µg/L. TPH-d was detected in UST-01, UST-02, UST-03, and UST-04 at concentrations ranging from 110 µg/L to 29,000 µg/L. TPH-mo was detected in UST-02, UST-03, and UST-04 at concentrations ranging from 390 µg/L to 17,000 µg/L. Toluene was detected in groundwater from monitoring well MW-1 at a concentration of 1.2 µg/L. Otherwise, BTEX compounds were not detected in groundwater analyzed during the July 2009 investigation. TBA was detected in UST-02 at a concentration of 3.1 µg/L. No other fuel oxygenates were detected in groundwater samples from the July 2009 investigation. Total dissolved solid

concentrations in samples collected from MW-1, UST-01, UST-02, UST-03, and UST-04 ranged between 618 mg/L and 1,180 mg/L. The groundwater analytical results are presented in Table 3.

TPH-g was detected at concentrations that exceed the ESL (100 µg/L) in grab groundwater samples from UST-02, UST-03, and UST-04. TPH-d was detected at concentrations exceeding the ESLs (100 µg/L) in all four grab groundwater sample locations. TPH-mo was detected at concentrations exceeding the ESL (100 µg/L) in grab groundwater samples from UST-02, UST-03, and UST-04. BTEX and fuel oxygenates were not detected above their respective ESLs.

4.2.1 Difference in TPH-g Concentrations in Groundwater at UST-03

Due to slow recharge, groundwater was collected at two different times from UST-03 with a difference of approximately 9 hours between collection times. The first sample collected was submitted to McCampbell on 7 July 2009 and the second sample was submitted on 8 July 2009. Both samples were analyzed for TPH-g but by different methods (EPA 8260B and EPA 8015M). The sample submitted on 7 July 2009 did not contain TPH-g concentrations at or above the laboratory reporting limit of 50 µg/L. TPH-g concentration in the sample submitted on 8 July 2009 was 960 µg/L. TPH-d and TPH-mo were only analyzed in the 7 July 2009 sample.

The increase of TPH-g in groundwater collected from boring UST-03 over a period of 9 hours may indicate that hydrocarbons confined to the coarse-grained material in the adjacent excavation patch were gradually drawn into the temporary well screen at UST-03, and that the later groundwater sample is more representative of the backfill area than native soil.

5.0 DISCUSSION

5.1 Subsurface Conditions

The subsurface at the Site is predominantly silt and clay and sandy/silty clay with the exception of the following coarse units:

- clayey gravel at 10-14 feet bgs at MW-1
- silty sand at 19-28 feet bgs at UST-02
- sandy gravel and silty sand at 15-16 and clayey sand at 17.5-18.5 feet bgs at UST-03
- backfill material within the former UST excavation

- silty sand from 1-5 feet bgs at UST-04
- clayey sand and sand at 18-19 and 24-25 feet bgs at UST-01-DEEP.

The coarse units are thin or laterally discontinuous within the native soil (i.e., outside of the former UST excavation) at the Site. Due to the abundance of clay and silt and the discontinuous nature of the coarse units, the subsurface is considered to be low permeability in nature, with the exception of the former UST excavation and excavation patch backfill. An idealized subsurface profile (A-A') through the investigation area is included as Figure 4.

Stabilized groundwater ranged between approximately 5-6 feet bgs during July 2009 and previous groundwater gauging events. Measured depths to groundwater are presented in Table 1.

5.2 Petroleum Hydrocarbons in Soil

TPH-d was the only chemical detected in soil at concentrations exceeding ESLs. TPH-d was detected in samples from UST-03 and UST-04 at concentrations exceeding the ESLs for deep soils where groundwater is a current or potential source of drinking water (83 mg/kg). TPH-d concentrations detected in other samples were below the ESL. TPH-g and TPH-mo concentrations detected were lower than their respective ESLs in all soil samples. BTEX and fuel oxygenates were not detected in any soil samples.

In general, hydrocarbon contamination is concentrated at UST-03 between approximately 7-14 feet bgs and UST-04 between approximately 8.5-10.5 feet bgs. UST-04 is adjacent to coarse-grained backfill materials of the former UST excavation, and UST-03 is located approximately 1.5 feet downgradient of the excavation patch that extends southeast from the UST excavation. Samples with the highest hydrocarbon concentrations from UST-04 and UST-03, with the exception of the 13.5-14-foot sample from UST-03, were collected in fine-grained soil.

The relatively elevated concentrations of hydrocarbons at UST-03 and UST-04 indicate that hydrocarbons are likely concentrated in the coarse-grained backfill materials associated with the former UST excavation and the excavation patch that extends southeast from the UST excavation. Hydrocarbons appear to have sorbed to fine-grained material adjacent to, and immediately down-gradient of, the coarse backfill material, but the fine-grained soil has largely confined the residual hydrocarbons to within the excavation backfill material.

5.3 Petroleum Hydrocarbons in Groundwater

Grab groundwater samples were collected from screen intervals at 4-9 feet bgs, with the exception of UST-02, which was screened at 27-30 feet bgs. Analytical results from the grab groundwater samples were compared to the deep soil ESLs where groundwater is a current or potential source of drinking water.

TPH-g was detected in groundwater grab samples from UST-02, UST-03, and UST-04 at concentrations exceeding the ESL (100 µg/L). TPH-d detected in samples from UST-01, UST-02, UST-03, and UST-04, and TPH-mo detected in samples from UST-02, UST-03, and UST-04 exceeded their ESLs (100 µg/L). TPH-g, TPH-d, and TPH-mo were not detected in any other samples. Toluene was detected in MW-1 at concentrations lower than the ESL. All other BTEX constituents were not detected in any samples. TBA was detected in UST-02 at a concentration less than the ESL.

The highest concentrations of TPH-g, TPH-d, and TPH-mo were detected in groundwater from borings UST-03 and UST-04 at 4-9 feet bgs. Both UST-03 and UST-04 are located adjacent to the coarse-grained backfill material of the former UST excavation and the excavation patch that extends southeast from the corner of the former UST excavation. UST-01, which had a TPH-d concentration slightly above the ESL, is located adjacent to the former dispenser and product line. Down-gradient monitoring well MW-1 did not have detections of TPH-d or other contaminants, with the exception of a low detection of toluene.

Based upon the lateral distribution of hydrocarbons in groundwater, it appears that groundwater contamination is concentrated in the coarse-grained backfill materials associated with the former UST excavation, former dispenser island and associated product line backfill, and the excavation patch that extends southeast from the UST excavation to UST-03 and TR-4. The fine-grained material surrounding the former tank excavation appears to have confined residual contamination within the coarse-grained material of the former tank excavation.

6.0 CONCLUSIONS

Hydrocarbon contamination in soil is concentrated in coarse-grained materials of the former UST backfill and the patched excavation and, to a limited extent, the fine-grained materials that are immediately adjacent to the coarse backfill. Contaminated soil is limited to the upper 12 feet. This material will be removed during site redevelopment excavation. Confirmation sampling will be conducted during redevelopment activities to confirm that the affected soil has been removed.

Groundwater contamination is concentrated in the coarse-grained backfill materials associated with the former UST excavation, former dispenser island and associated product line backfill, and the excavation patch that extends southeast from the former UST excavation. Groundwater samples in borings adjacent to the former UST excavation are indicative of releases from the former USTs. However, data from further downgradient locations (MW-1) indicate that residual hydrocarbons in groundwater are restricted to the coarse-grained backfill of the excavations, and contaminants are likely not significantly migrating downgradient. Limited evidence of groundwater contamination may have been detected at depths below the former UST excavation. However, given that the sampler was left in the boring over night to allow water to enter, these slightly elevated TPH-d and TPH-mo detections may have traveled down the rods from the overlying excavation. Based on the low concentrations in the adjacent soil at this depth, it is unlikely that significant groundwater contamination exists at depth at this site.

7.0 SUMMARY AND RECOMMENDATIONS

The relatively low concentrations of hydrocarbons in soil and groundwater in down-gradient borings (MW-1), compared with borings adjacent to the former UST excavation (UST-03 and UST-04), indicate that contamination is laterally confined to the coarse material of the former UST excavation, former dispenser island and associated product line backfill, and the excavation patch, and to a limited extent, the fine-grained materials immediately down-gradient of the coarse-grained backfill materials.

Prior to redevelopment, targeted excavation will be performed in the area of the former USTs to remove impacted soil. When no additional evidence of field contamination is observed, confirmation samples will be collected from the sidewalls and floor of the excavation. Samples will be collected with a frequency of one sample for every 25 linear feet per 3 feet of depth along the sidewalls and one sample for every 2,500 square feet in the floor of the excavation. Samples will be analyzed for TPH-g, TPH-d, TPH-mo, benzene, toluene, ethyl benzene, and xylene. When soil concentrations are below the residential ESLs or the excavation reaches the maximum extent of the planned garage, the targeted excavation will cease.

Any groundwater with evidence of contamination will be pumped out of the excavation. Based on the results of this investigation, we anticipate this Site should be considered for closure as a low-risk petroleum hydrocarbon site following redevelopment.

REFERENCES

Alameda County Environmental Health (ACEH 2008). *Fuel Leak Case No. RO0000201 and Geotracker Global ID T0600101109, Hydraulic Electro Service, 5812 Hollis Street, Emeryville, CA*. 24 June 2008.

ACEH 2009a. *Fuel Leak Case No. RO0000201 and Geotracker Global ID T0600101109, Hydraulic Electro Service, 5812 Hollis Street, Emeryville, CA*. 13 April 2009.

ACEH 2009b. Email correspondence from Barbara Jakub, ACEH. Correspondence to Matthew Hall, Treadwell & Rollo, Inc. 30 June 2009.

Leong Environmental (Leong 2008). *Revised Groundwater Investigation Workplan, 5812 Hollis Street, Emeryville, California.* 25 November 2008.

San Francisco Bay Regional Water Quality Control Board (RWQCB 1999). *East Bay Plain Groundwater Basin Beneficial Use Evaluation Report*, Alameda and Contra Costa Counties, California. June 1999.

RWQCB 2008. *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*. November 2007 (Revised May 2008).

State Water Resources Control Board (SWRQB 1988). *Resolution No. 88-63, Adoption of Policy Entitled "Sources of Drinking Water".* May 1988.

Treadwell & Rollo, Inc., (T&R 2008a). *Phase II Environmental Site Assessment, 5812 Hollis Street, Emeryville, California.* 24 March 2008.

TABLES

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TABLE 1
Groundwater Levels
5812 Hollis Street
Emeryville, California

Well/Boring No.	Date	Screen Interval feet bgs	DTW feet bgs
MW-1	06/29/06	4.6-19.6	6.7
	04/24/09		5.25
	04/27/09		5.31
	05/19/09		4.85
	07/07/09		5.28
UST-01	07/07/09	4.0-9.0	6.37
UST-02	07/07/09	27-30	22.78*
UST-03	07/07/09	4.0-9.0	6.14
UST-04	07/07/09	4.0-9.0	5.86

Notes:
DTW = depth to water
bgs = below ground surface

*UST-2 was drilled to 30 feet bgs. The screen was exposed from 27-30 feet bgs in order to collect a depth discrete sample beneath the former UST backfill area.

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TABLE 2
Soil Analytical Results
5812 Hollis Street
Emeryville, CA

Location	Sample ID	Sample Date	Sample Depth feet (bgs)	TPH-g mg/kg	TPH-d mg/kg	TPH-mo mg/kg	Benzene mg/kg	Ethyl-benzene mg/kg	Toluene mg/kg	Xylenes mg/kg	Fuel Oxygenates mg/kg
UST-01	UST-01 8-8.5	07/06/09	8.0-8.5	< 0.25	15 e3,e7	16 e3,e7	< 0.005	< 0.005	< 0.005	< 0.005	ND
	UST-01 15-15.5	07/06/09	15.0-15.2	< 0.25	< 1.0	< 5.0	< 0.005	< 0.005	< 0.005	< 0.005	ND
	UST-01 19.5-20	07/06/09	19.5-20.0	< 0.25	15 e3,e7	11 e3,e7	< 0.005	< 0.005	< 0.005	< 0.005	ND
	UST-1-DEEP 20	07/07/09	20.0-20.5	< 1.0	< 1.0	< 5.0	< 0.005	< 0.005	< 0.005	< 0.005	ND
	UST-1-DEEP 24-25	07/07/09	24.0-25.0	< 1.0	< 1.0	< 5.0	< 0.005	< 0.005	< 0.005	< 0.005	ND
UST-02	UST-02 11.5-12	07/06/09	11.5-12.0	< 0.25	17 e2,e7	44 e2,e7	< 0.005	< 0.005	< 0.005	< 0.005	ND
	UST-02 19.5-20	07/06/09	19.5-20.0	< 0.25	< 1.0	< 5.0	< 0.005	< 0.005	< 0.005	< 0.005	ND
	UST-02 27.5-28	07/06/09	27.5-28.0	< 0.25	1.0 e2,e7	9.5 e2,e7	< 0.005	< 0.005	< 0.005	< 0.005	ND
UST-03	UST-03 4.5-5	07/06/09	4.5-5.0	< 0.25	< 1.0	7.5 e7	< 0.005	< 0.005	< 0.005	< 0.005	ND
	UST-03 7.5-8	07/06/09	7.5-8.0	0.86	**530** e1,e7	290 e1,e7	< 0.005	< 0.005	< 0.005	< 0.005	ND
	UST-03 13.5-14	07/06/09	13.5-14.0	0.46	**110** e3,e7	66 e3,e7	< 0.005	< 0.005	< 0.005	< 0.005	ND
	UST-03 15-15.5	07/06/09	15-15.5	<0.25	<1.0	<5.0	--	--	--	--	--
UST-04	UST-04 8.5-9	07/06/09	8.5-9.0	1.9	**260** e3,e7	190 e3,e7	< 0.005	< 0.005	< 0.005	< 0.005	ND
	UST-04 10-10.5	07/06/09	10.0-10.5	0.81	**290** e3,e7	160 e3,e7	< 0.005	< 0.005	< 0.005	< 0.005	ND
	UST-04 15-15.5	07/06/09	15.0-15.5	< 0.25	1.8 e2	< 5.0	< 0.005	< 0.005	< 0.005	< 0.005	ND
TR-1	TR-1-0.5	01/22/08	0.5-1.0	< 0.100	11	114	< 0.01	< 0.01	< 0.01	< 0.01	ND
	TR-1-5.0	01/22/08	5.0-5.5	< 0.100	<2.0	<4.0	< 0.01	< 0.01	< 0.01	< 0.01	ND
TR-4	TR-4-1.5	01/22/08	1.5-2.0	< 0.100	34.2x	309x	< 0.01	< 0.01	< 0.01	< 0.01	ND
	TR-4-5.0	01/22/08	5.0-5.5	0.44y	57.4x	58.4x	< 0.05	< 0.05	< 0.05	< 0.10	ND
TR-19	TR-19-2.5	04/17/08	2.5-3.0	< 0.100	< 2.0	22	< 0.01	< 0.01	< 0.01	< 0.01	ND
	TR-19-5.0	04/17/08	5.0-5.5	< 0.100	<2.0	<4.0	< 0.01	< 0.01	< 0.01	< 0.01	ND
TR-23	TR-23-2.5	04/17/08	2.5-3.0	< 0.100	<2.0	<4.0	< 0.01	< 0.01	< 0.01	< 0.01	ND
	TR-23-5.0	04/17/08	5.0-5.5	< 0.100	<2.0	<4.0	< 0.01	< 0.01	< 0.01	< 0.01	ND
TR-24	TR-24-2.5	04/17/08	2.5-3.0	< 0.100	<2.0	71.3	< 0.01	< 0.01	< 0.01	< 0.01	ND
	TR-24-5.0	04/17/08	5.0-5.5	< 0.100	<2.0	<4.0	< 0.01	< 0.01	< 0.01	< 0.01	ND
ESL-R (Table A)				83	83	370	0.044	2.3	2.9	2.3	NA

Notes:
-- = not analyzed bgs = below the ground surface mg/kg - milligrams per kilogram
< 0.25 = not detected above laboratory reporting limit
ND = not detected above laboratory reporting limit, reporting limit varies - see laboratory report
NA = not applicable
TPH-g = Total Petroleum Hydrocarbons quantified as gasoline by EPA Method 8260B
TPH-d = Total Petroleum Hydrocarbons quantified as diesel fuel by EPA Method 8015B
TPH-mo = Total Petroleum Hydrocarbons quantified as motor oil by EPA Method 8015B
ESL-R (Table A): Shallow soils (less than 10 feet bgs) where groundwater is a current or potential source of drinking water for residential land use (SF-RWQCB, May 2008)
ESL = Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater by the San Francisco Bay Regional Water Quality Control Board (2007, revised May 2008).
Concentrations in **bold** exceed their respective ESL

Footnotes:
e1 = unmodified or weakly modified diesel is significant
e2 = diesel range compounds are significant; no recognizable pattern
e3 = aged diesel is significant
e7 = oil range compounds are significant
x = laboratory reports that the sample chromatogram does not resemble typical diesel or motor oil pattern
y = laboratory reports that the sample is "not typical gasoline (heavy end hydrocabonic)

TABLE 3
Groundwater Analytical Results
5812 Hollis Street
Emeryville, California

Sample ID	Sample Date	TPH-g µg/l	TPH-d µg/l	TPH-mo µg/l	Benzene µg/l	Ethylbenzene µg/l	Toluene µg/l	Xylenes µg/l	Fuel Oxygenates µg/l	TDS mg/l
MW-01	07/07/09	< 50	< 50	< 250	< 0.5	< 0.5	1.2	< 0.5	ND	1,310
UST-01	07/07/09	< 50	**110** b1,e2	< 250	< 0.5	< 0.5	< 0.5	< 0.5	ND	618 b1
UST-02	07/07/09	**390**	**150** b1,e2,e7	**390** b1,e2,e7	< 0.5	< 0.5	< 0.5	< 0.5	3.1 = TBA others = ND	1,120 b1
UST-03	07/07/09	<50[1], **960** b1,b6,d7	**29,000** b1,e1	**17,000** b1,e1	< 0.5	< 0.5	< 0.5	< 0.5	ND	1,180 b1
UST-04	07/07/09	**100**	**2,000** b1,e3,e7	**1,700** b1,e3,e7	< 0.5	< 0.5	< 0.5	< 0.5	ND	659 b1
TR-1-GW	01/23/08	< 50	< 109	< 218	1.17	< 0.5	1.23	< 1.50	ND	--
TR-4-GW	01/23/08	< 50	< 103	< 206	< 0.5	< 0.5	1.61	< 1.50	ND	--
TR-17	03/05/08	--	--	--	< 5.5	< 5.5	< 5.5	< 16.5	DIPE = 352 Others = ND	--
TR-17[2]	03/17/08	656y	--	--	< 5.5	< 5.5	< 5.5	< 16.5	DIPE = 292 Others = ND	--
TR-18	03/04/08	--	--	--	< 0.74	< 0.74	3.07	2.35	ND	--
TR-19-GW	04/17/08	--	--	--	< 0.69	< 0.69	< 0.69	< 2.07	ND	--
ESL-R (Table A)		100	100	100	1	30	40	20	TBA = 12 DIPE = NE	

Notes:
-- = not analyzed µg/l -micrograms per liter mg/l - milligrams per liter
ND = not detected above laboratory reporting limit, reporting limit varies - see laboratory report
NE = not established
< 50 = not detected above laboratory reporting limit
TBA = t-Butyl alcohol
TPH-g = Total Petroleum Hydrocarbons quantified as gasoline by EPA Method 8260B
TPH-d = Total Petroleum Hydrocarbons quantified as diesel fuel by EPA Method 8015B
TPH-mo = Total Petroleum Hydrocarbons quantified as motor oil by EPA Method 8015B
TDS = total dissolved solids by EPA Method SM2540C
ESL = Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater by the San Francisco Bay Regional Water Quality Control Board (2007, revised May 2008).
ESL-R (Table A): Shallow soils (less than 10 feet bgs) where groundwater is a current or potential source of drinking water for residential land use (SF-RWQCB, May 2008)
Concentrations in **bold** exceed their respective ESL

Footnote:
1. Groundwater collected from UST-3 was initially analyzed for TPH-g by method 8260 and the resulting concentration was below laboratory reporting limits (< 50 µg/L). Groundwater stabilized in UST-3 over a period of 9 hours, was sampled again, and was subsequently analyzed for TPH-g using method 8015; the result was 960 ug/L
2. Groundwater sample from TR-17 was reanalyzed on 17 March 2008 for TPH-g, BTEX, and fuel oxygenates
b1 = aqueous sample that contains greater than ~1 vol. % sediment
b6 = lighter than water immiscible sheen/product is present
d7 = strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram
e1 = unmodified or weakly modified diesel is significant
e2 = diesel range compounds are significant; no recognizable pattern
e3 = aged diesel is significant
e7 = oil range compounds are significant
y = laboratory flag indicating that the reported concentration is DIPE which was detected within the TPH-g range

Treadwell&Rollo

FIGURES

Base map: The Thomas Guide
Alameda County
2002

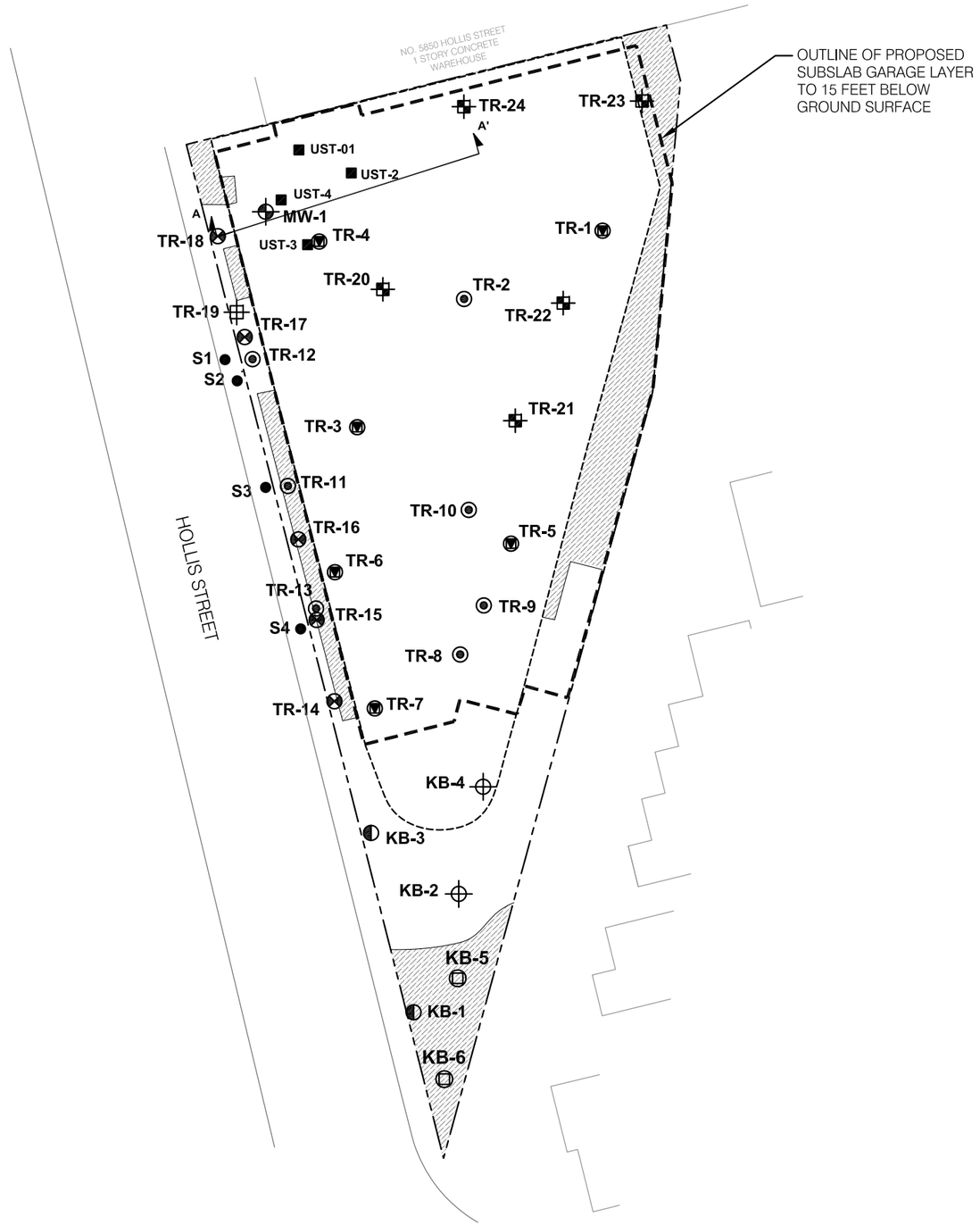
Approximate scale

5812 HOLLIS STREET
Emeryville, California

SITE LOCATION MAP

Treadwell&Rollo

Date 01/12/10	Project No. 4823.02	Figure 1



EXPLANATION

- Groundwater sampling locations by Treadwell & Rollo, Inc., March 2008
- Soil sampling location by Treadwell & Rollo, Inc., January 2008
- Soil and groundwater sampling location by Treadwell & Rollo, Inc., January 2008
- Soil sampling location by Treadwell & Rollo, Inc., April 2008
- Soil and groundwater sampling location by Treadwell & Rollo, Inc., April 2008
- Previous sampling locations by Kleinfelder in 2006
- Soil sampling location by Kleinfelder in March 2009
- Soil and groundwater sampling locations by Kleinfelder in March 2009
- Monitoring well installed by Summit Engineering, 1993
- Soil and groundwater sampling locations by Treadwell & Rollo, Inc., July 2009
- Soil sampling locations by Treadwell & Rollo, Inc., October 2009
- Property boundary
- A — A' Idealized cross section location

N

0 50 Feet

Approximate scale

Reference: www.terraserver-usc.com, 2006.

5812 HOLLIS STREET
Emeryville, California

SOIL AND GROUNDWATER SAMPLING LOCATIONS

Date 01/12/10	Project No. 4823.02	Figure 2

Treadwell&Rollo

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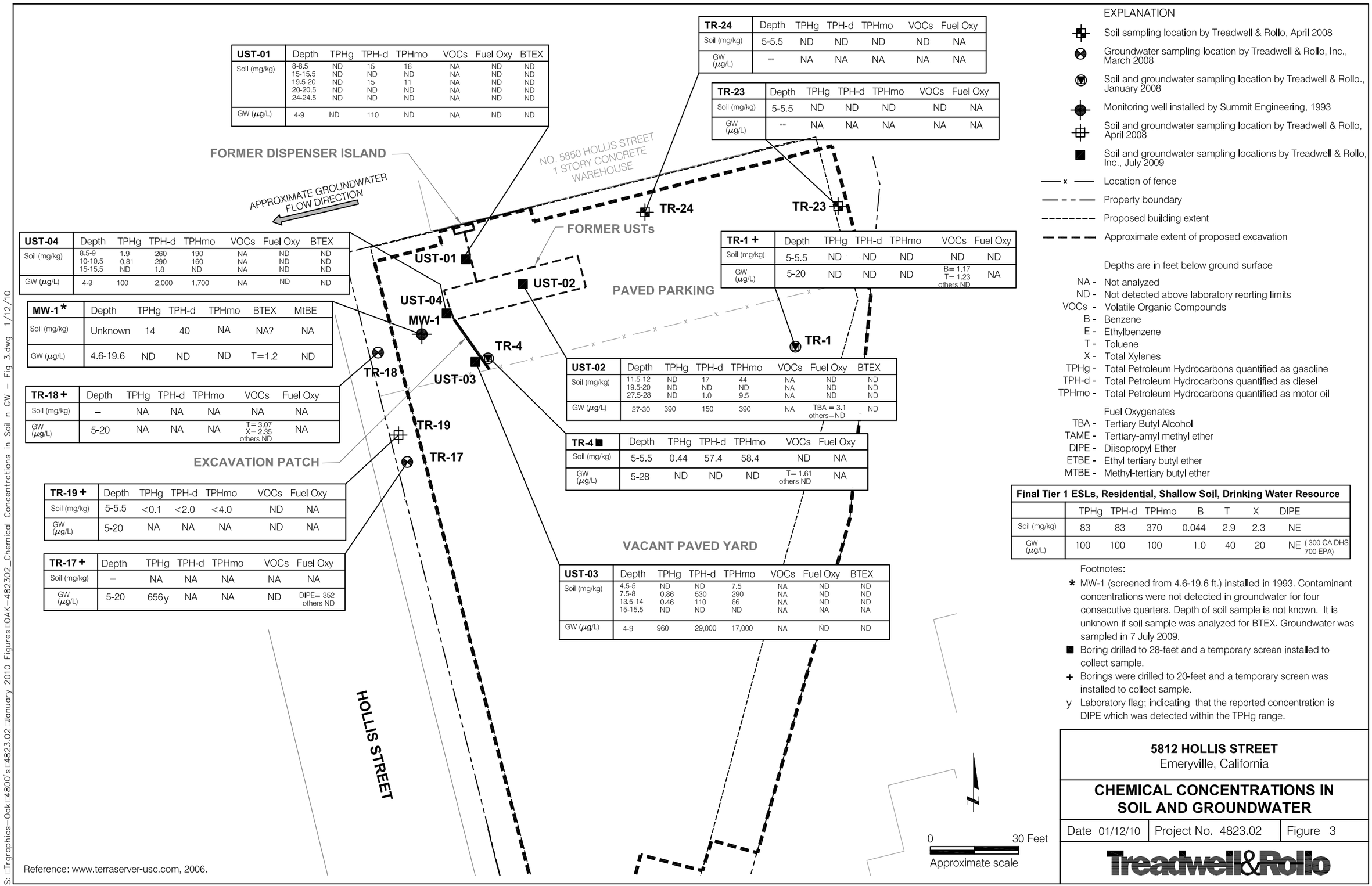

UST-01	Depth	TPHg	TPH-d	TPHmo	VOCs	Fuel Oxy	BTEX
Soil (mg/kg)	8-8.5	ND	15	16	NA	ND	ND
	15-15.5	ND	ND	ND	NA	ND	ND
	19.5-20	ND	15	11	NA	ND	ND
	20-20.5	ND	ND	ND	NA	ND	ND
	24-24.5	ND	ND	ND	NA	ND	ND
GW (µg/L)	4-9	ND	110	ND	NA	ND	ND

TR-24	Depth	TPHg	TPH-d	TPHmo	VOCs	Fuel Oxy
Soil (mg/kg)	5-5.5	ND	ND	ND	ND	NA
GW (µg/L)	--	NA	NA	NA	NA	NA

TR-23	Depth	TPHg	TPH-d	TPHmo	VOCs	Fuel Oxy
Soil (mg/kg)	5-5.5	ND	ND	ND	ND	NA
GW (µg/L)	--	NA	NA	NA	NA	NA

UST-04	Depth	TPHg	TPH-d	TPHmo	VOCs	Fuel Oxy	BTEX
Soil (mg/kg)	8.5-9	1.9	260	190	NA	ND	ND
	10-10.5	0.81	290	160	NA	ND	ND
	15-15.5	ND	1.8	ND	NA	ND	ND
GW (µg/L)	4-9	100	2,000	1,700	NA	ND	ND

TR-1 +	Depth	TPHg	TPH-d	TPHmo	VOCs	Fuel Oxy
Soil (mg/kg)	5-5.5	ND	ND	ND	ND	ND
GW (µg/L)	5-20	ND	ND	ND	B= 1.17 T= 1.23 others ND	NA

MW-1 *	Depth	TPHg	TPH-d	TPHmo	BTEX	MtBE
Soil (mg/kg)	Unknown	14	40	NA	NA?	NA
GW (µg/L)	4.6-19.6	ND	ND	ND	T=1.2	ND

UST-02	Depth	TPHg	TPH-d	TPHmo	VOCs	Fuel Oxy	BTEX
Soil (mg/kg)	11.5-12	ND	17	44	NA	ND	ND
	19.5-20	ND	ND	ND	NA	ND	ND
	27.5-28	ND	1.0	9.5	NA	ND	ND
GW (µg/L)	27-30	390	150	390	NA	TBA = 3.1 others=ND	ND

TR-18 +	Depth	TPHg	TPH-d	TPHmo	VOCs	Fuel Oxy
Soil (mg/kg)	--	NA	NA	NA	NA	NA
GW (µg/L)	5-20	NA	NA	NA	T= 3.07 X= 2.35 others ND	NA

TR-4 ■	Depth	TPHg	TPH-d	TPHmo	VOCs	Fuel Oxy
Soil (mg/kg)	5-5.5	0.44	57.4	58.4	ND	NA
GW (µg/L)	5-28	ND	ND	ND	T= 1.61 others ND	NA

TR-19 +	Depth	TPHg	TPH-d	TPHmo	VOCs	Fuel Oxy
Soil (mg/kg)	5-5.5	<0.1	<2.0	<4.0	ND	NA
GW (µg/L)	5-20	NA	NA	NA	ND	NA

UST-03	Depth	TPHg	TPH-d	TPHmo	VOCs	Fuel Oxy	BTEX
Soil (mg/kg)	4.5-5	ND	ND	7.5	NA	ND	ND
	7.5-8	0.86	530	290	NA	ND	ND
	13.5-14	0.46	110	66	NA	ND	ND
	15-15.5	ND	ND	ND	NA	NA	NA
GW (µg/L)	4-9	960	29,000	17,000	NA	ND	ND

TR-17 +	Depth	TPHg	TPH-d	TPHmo	VOCs	Fuel Oxy
Soil (mg/kg)	--	NA	NA	NA	NA	NA
GW (µg/L)	5-20	656y	NA	NA	ND	DIPE= 352 others ND

EXPLANATION

- Soil sampling location by Treadwell & Rollo, April 2008
- Groundwater sampling location by Treadwell & Rollo, Inc., March 2008
- Soil and groundwater sampling location by Treadwell & Rollo., January 2008
- Monitoring well installed by Summit Engineering, 1993
- Soil and groundwater sampling location by Treadwell & Rollo, April 2008
- Soil and groundwater sampling locations by Treadwell & Rollo, Inc., July 2009
- Location of fence
- Property boundary
- Proposed building extent
- Approximate extent of proposed excavation

Depths are in feet below ground surface

NA - Not analyzed
ND - Not detected above laboratory reorting limits
VOCs - Volatile Organic Compounds
B - Benzene
E - Ethylbenzene
T - Toluene
X - Total Xylenes
TPHg - Total Petroleum Hydrocarbons quantified as gasoline
TPH-d - Total Petroleum Hydrocarbons quantified as diesel
TPHmo - Total Petroleum Hydrocarbons quantified as motor oil

Fuel Oxygenates
TBA - Tertiary Butyl Alcohol
TAME - Tertiary-amyl methyl ether
DIPE - Diisopropyl Ether
ETBE - Ethyl tertiary butyl ether
MTBE - Methyl-tertiary butyl ether

Final Tier 1 ESLs, Residential, Shallow Soil, Drinking Water Resource							
	TPHg	TPH-d	TPHmo	B	T	X	DIPE
Soil (mg/kg)	83	83	370	0.044	2.9	2.3	NE
GW (µg/L)	100	100	100	1.0	40	20	NE (300 CA DHS 700 EPA)

Footnotes:
* MW-1 (screened from 4.6-19.6 ft.) installed in 1993. Contaminant concentrations were not detected in groundwater for four consecutive quarters. Depth of soil sample is not known. It is unknown if soil sample was analyzed for BTEX. Groundwater was sampled in 7 July 2009.
■ Boring drilled to 28-feet and a temporary screen installed to collect sample.
+ Borings were drilled to 20-feet and a temporary screen was installed to collect sample.
y Laboratory flag; indicating that the reported concentration is DIPE which was detected within the TPHg range.

5812 HOLLIS STREET
Emeryville, California

CHEMICAL CONCENTRATIONS IN SOIL AND GROUNDWATER

Date 01/12/10 | Project No. 4823.02 | Figure 3

Treadwell&Rollo

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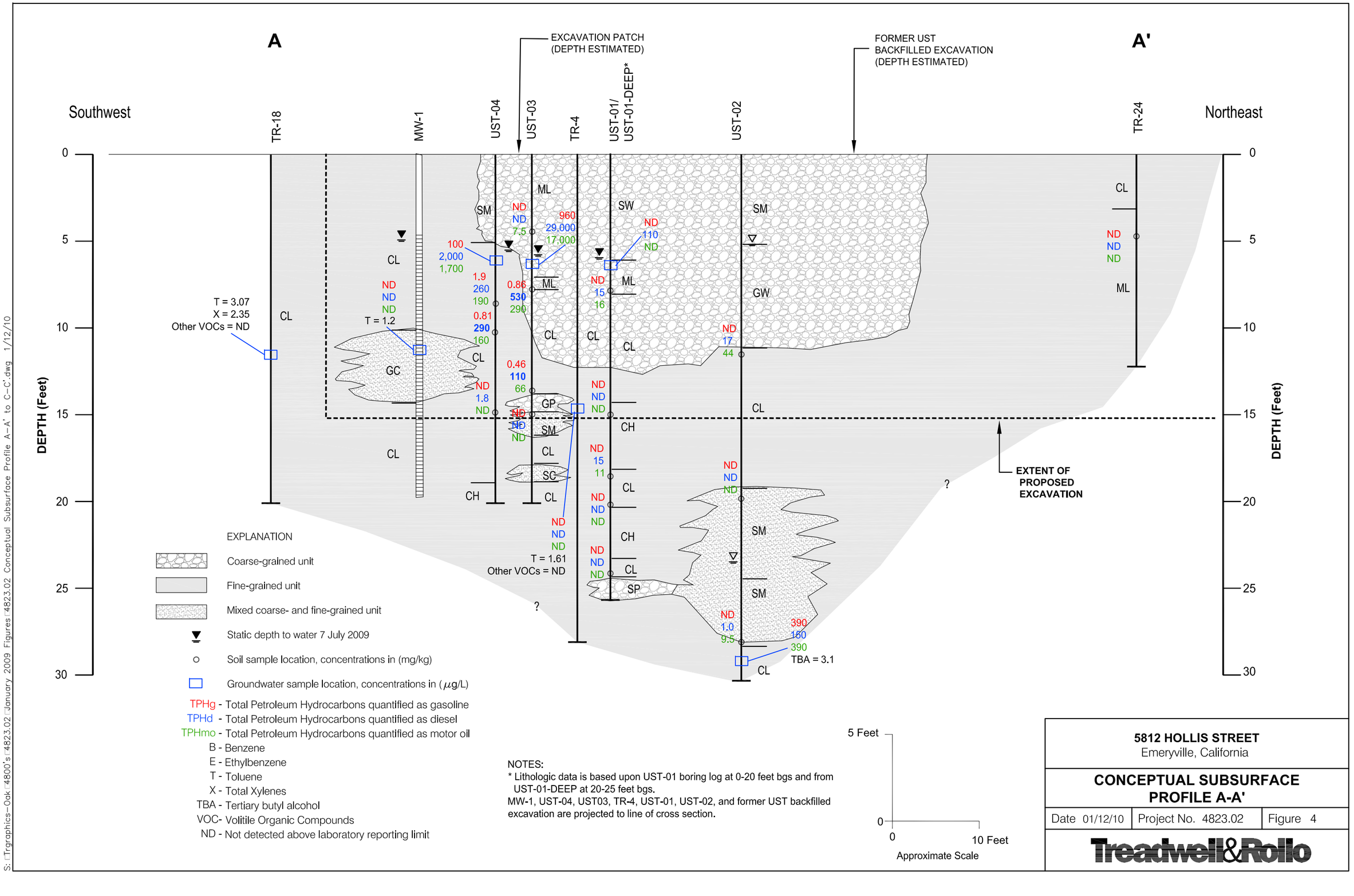

5812 HOLLIS STREET
Emeryville, California

CONCEPTUAL SUBSURFACE PROFILE A-A'

Date 01/12/10	Project No. 4823.02	Figure 4

Treadwell&Rollo

S:\Graphics-Oak\4800's\4823.02 January 2009 Figures\4823.02 Conceptual Subsurface Profile A-A' to C-C'.dwg 1/12/10

APPENDIX A

Boring Logs

PROJECT:	**ALDERS PROPERTY** Emeryville, California	**Log of Boring UST-01** PAGE 1 OF 1
Boring location: See Site Plan, Figure 2		Logged by: T. Campitelli
Date started: 7/6/09	Date finished: 7/6/09	
Drilling method: Geoprobe		
Hammer weight/drop: N/A	Hammer type: N/A	
Sampler: Continuous		

DEPTH (feet)	SAMPLES: Sample Number	SAMPLES: Sample	SAMPLES: Blow Count	SAMPLES: Recovery (inches)	OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
							Surface Conditions:
0							Asphaltic Concrete (AC)
1–5						SP	SAND and GRAVEL (SP) red-brown, wet, sub-rounded gravel, no odor
5							wet
6–7						ML	SANDY SILT (ML) brown, medium dense, moist, no odor GW (07/07/09)
8	UST-01 8-8.5						
8–14						CL	CLAY (CL) gray-brown, soft, moist, weak fuel odor and greenish staining at 8 to 9 feet
14–15						CH	SILTY CLAY (CH) red-brown, stiff, moist, no odor
15	UST-01 15-15.5						
15–19						CL	SANDY CLAY (CL) red-brown, stiff, wet, weak solvent/ fuel odor
19	UST-01 19.5-20						
20–30							

Boring terminated at a depth of 20 feet.
Boring backfilled with cement grout.
Groundwater not encountered during drilling

Treadwell&Rollo

Project No.:	Figure:
4823.02	A-1

TEST ENVIRONMENTAL 482302.GPJ TR.GDT 8/4/09

PROJECT:	**ALDERS PROPERTY** Emeryville, California	**Log of Boring UST-01-DEEP** PAGE 1 OF 1
Boring location: See Site Plan, Figure 2		Logged by: T Campitelli
Date started: 7/7/09	Date finished: 7/7/09	
Drilling method: Geoprobe		
Hammer weight/drop: N/A	Hammer type: N/A	
Sampler: Continuous		

DEPTH (feet)	SAMPLES: Sample Number	SAMPLES: Sample	SAMPLES: Blow Count	SAMPLES: Recovery (inches)	OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
							Surface Conditions:
1–7						CL	CLAY (CL) gray, medium dense, dry, no odor [FILL]
4–5						SP	CLAYEY SAND (SP) brown, medium dense, moist, no odor
6–7						CH	CLAY (CH) gray, soft, wet, no dor
7–13						CL	SANDY CLAY (CL) brown, medium stiff, moist, no odor
13–15						CH	CLAY (CH) gray, medium stiff, moist, no odor
15–18						CL	SANDY CLAY (CL) brown, stiff, moist, no odor
18–19						SP	▽ SANDY GRAVEL (SP) brown, dense, saturated, no odor
19–23	UST-01-DEEP 20-20.5					CH	CLAY (CH) brown, stiff, moist, no odor
23–24						CL	GRAVELLY CLAY (CL) brown, very stiff, moist, chert fragments, no odor
24–25	UST-01-DEEP 24-25					SP	SAND (SP) brown, medium dense, saturated, no odor
25–30							

Boring terminated at a depth of 25 feet
Boring backfilled with cement grout.
Groundwater encountered at 15 feet bgs during driling

Treadwell&Rollo

Project No.:	Figure:
4823.02	A-2

TEST ENVIRONMENTAL 482302.GPJ TR.GDT 8/4/09

PROJECT: **ALDERS PROPERTY**
Emeryville, California

Log of Boring UST-02

Boring location: See Site Plan, Figure 2 | Logged by: T. Campitelli

Date started: 7/6/09 | Date finished: 7/6/09

Drilling method: Geoprobe

Hammer weight/drop: N/A | Hammer type: N/A

Sampler: Continuous

DEPTH (feet)	SAMPLES: Sample Number	Sample	Blow Count	Recovery (inches)	OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
							Surface Conditions:
							Asphaltic Concrete (AC)
1–5						SP	SAND (SP) dark brown, loose, dry, no odor [FILL]
5–10						GP	GRAVEL (GP) gray, medium dense, saturated, no odor [FILL]
11–18	UST-02 11.5-12					CL	CLAY (CL) light brown, stiff, dry, no odor
19–24	UST-02 19.5-20					SP	GRAVELLY SAND (SP) dark brown, medium dense, wet, no odor GW (07/07/09) Groundwater depth measured in hydropunch sampler
25–28	UST-02 27.5-28					SP	SAND (SP) red-brown, medium dense, saturated, no odor
29–30						CL	CLAY (CL) light brown, medium dense, wet, gray mottling with black weathered clasts, no odor

Boring terminated at a depth of 30 feet.
Boring backfilled with cement grout.
Groundwater encountered at 5 feet bgs during driling

Treadwell&Rollo

Project No.: 4823.02 | Figure: A-3

TEST ENVIRONMENTAL 482302.GPJ TR.GDT 8/4/09

PROJECT:	**ALDERS PROPERTY** Emeryville, California	**Log of Boring UST-03**

PAGE 1 OF 1

Boring location: See Site Plan, Figure 2		Logged by: T. Campitelli
Date started: 7/6/09	Date finished: 7/6/09	
Drilling method: Geoprobe		
Hammer weight/drop: N/A	Hammer type: N/A	
Sampler: Continuous		

DEPTH (feet)	SAMPLES: Sample Number	SAMPLES: Sample	SAMPLES: Blow Count	SAMPLES: Recovery (inches)	OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
							Surface Conditions:
1–5	UST-03 4-4.5					CL	SANDY CLAY (CL) brown, loose, moist, no odor
6							▼ GW (07/07/09)
7–8	UST-03 7.5-8					ML	SILT (ML) brown, medium stiff, dry, no odor
8–9						CL	CLAY (CL) green, moist, weak fuel odor black staining
10–12						CL	CLAY (CL) gray-brown, very stiff, moist, no odor
13–14	UST-03 13.5-14					GP	SANDY GRAVEL (GP) green, brown, medium dense, moist, subrounded gravel, strong fuel odor
15	UST-03 15-15.5					SP	SAND with GRAVEL (SP) brown, dense, moist, no odor
16–17						CL	CLAY (CL) brown, stiff, moist, no odor
18						SP	SAND (SP) brown, loose, saturated, no odor
19–20						CL	CLAY (CL) brown, stiff, moist, no odor
21–30							

Boring terminated at a depth of 20 feet
Boring backfilled with cement grout.
Groundwater not encountered during driling

Treadwell&Rollo

Project No.:	Figure:
4823.02	A-4

TEST ENVIRONMENTAL 482302.GPJ TR.GDT 8/4/09

PROJECT: **ALDERS PROPERTY**
Emeryville, California

Log of Boring UST-04

Boring location: See Site Plan, Figure 2 | Logged by: T. Campitelli

Date started: 7/6/09 | Date finished: 7/6/09

Drilling method: Geoprobe

Hammer weight/drop: N/A | Hammer type: N/A

Sampler: Continuous

DEPTH (feet)	SAMPLES: Sample Number	Sample	Blow Count	Recovery (inches)	OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
							Surface Conditions:
							Asphaltic Concrete (AC)
1–5						SP	SAND (SP) brown, loose, wet, no odor
5–8						CL	CLAY (CL) light brown, medium stiff, moist, no odor ▼ GW (07/07/09)
8–10	UST-04 8.5-9					CL	CLAY (CL) green, medium stiff, moist, moderate fuel odor
10–12	UST-04 10-10.5					CL	GRAVELLY CLAY (CL) brown with gray mottling, very stiff, dry, no odor
12–16	UST-04 15-15.5					CL	SANDY CLAY (CL) brown, soft, wet, red weathered clasts, no odor
16–20						CH	CLAY (CH) brown, stiff, moist, no odor
20–30							

Boring terminated at a depth of 20 feet.
Boring backfilled with cement grout.
Groundwater not encountered during driling

Treadwell&Rollo

Project No.: 4823.02 | Figure: A-5

TEST ENVIRONMENTAL 482302.GPJ TR.GDT 8/4/09

UNIFIED SOIL CLASSIFICATION SYSTEM

Major Divisions		Symbols	Typical Names
Coarse-Grained Soils (more than half of soil > no. 200 sieve size)	Gravels (More than half of coarse fraction > no. 4 sieve size)	GW	Well-graded gravels or gravel-sand mixtures, little or no fines
		GP	Poorly-graded gravels or gravel-sand mixtures, little or no fines
		GM	Silty gravels, gravel-sand-silt mixtures
		GC	Clayey gravels, gravel-sand-clay mixtures
	Sands (More than half of coarse fraction < no. 4 sieve size)	SW	Well-graded sands or gravelly sands, little or no fines
		SP	Poorly-graded sands or gravelly sands, little or no fines
		SM	Silty sands, sand-silt mixtures
		SC	Clayey sands, sand-clay mixtures
Fine -Grained Soils (more than half of soil < no. 200 sieve size)	Silts and Clays LL = < 50	ML	Inorganic silts and clayey silts of low plasticity, sandy silts, gravelly silts
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, lean clays
		OL	Organic silts and organic silt-clays of low plasticity
	Silts and Clays LL = > 50	MH	Inorganic silts of high plasticity
		CH	Inorganic clays of high plasticity, fat clays
		OH	Organic silts and clays of high plasticity
Highly Organic Soils		PT	Peat and other highly organic soils

GRAIN SIZE CHART

Classification	Range of Grain Sizes	
	U.S. Standard Sieve Size	Grain Size in Millimeters
Boulders	Above 12"	Above 305
Cobbles	12" to 3"	305 to 76.2
Gravel	3" to No. 4	76.2 to 4.76
coarse	3" to 3/4"	76.2 to 19.1
fine	3/4" to No. 4	19.1 to 4.76
Sand	No. 4 to No. 200	4.76 to 0.075
coarse	No. 4 to No. 10	4.76 to 2.00
medium	No. 10 to No. 40	2.00 to 0.420
fine	No. 40 to No. 200	0.420 to 0.075
Silt and Clay	Below No. 200	Below 0.075

Unstabilized groundwater level

Stabilized groundwater level

SAMPLE DESIGNATIONS/SYMBOLS

Sample taken with Sprague & Henwood split-barrel sampler with a 3.0-inch outside diameter and a 2.43-inch inside diameter. Darkened area indicates soil recovered

Classification sample taken with Standard Penetration Test sampler

Undisturbed sample taken with thin-walled tube

Disturbed sample

Sampling attempted with no recovery

Core sample

Analytical laboratory sample

Sample taken with Direct Push sampler

Sonic

SAMPLER TYPE

C Core barrel

CA California split-barrel sampler with 2.5-inch outside diameter and a 1.93-inch inside diameter

D&M Dames & Moore piston sampler using 2.5-inch outside diameter, thin-walled tube

O Osterberg piston sampler using 3.0-inch outside diameter, thin-walled Shelby tube

PT Pitcher tube sampler using 3.0-inch outside diameter, thin-walled Shelby tube

S&H Sprague & Henwood split-barrel sampler with a 3.0-inch outside diameter and a 2.43-inch inside diameter

SPT Standard Penetration Test (SPT) split-barrel sampler with a 2.0-inch outside diameter and a 1.5-inch inside diameter

ST Shelby Tube (3.0-inch outside diameter, thin-walled tube) advanced with hydraulic pressure

ALDERS PROPERTY
Emeryville, California

CLASSIFICATION CHART

Treadwell&Rollo

Date 08/07/09 | Project No. 4823.02 | Figure A-6

Treadwell&Rollo

APPENDIX B

Groundwater Sampling and Well Development Field Forms

MONITORING WELL DEVELOPMENT FORM

Project Number: 4823.02
Project Name: 5812 Hollis, Alders
Well ID: MW-1
Date: 4-24-09
Developed by: J. Gekas

Depth to Water: 4.66
Total Depth of Well: 19.1
Well Diameter: 2"
Total Volume Removed: 27 gal.
Method of Developing: Surge + Pump

Minimum volume to be removed: V = (Total Depth of Well – Depth to Water) * (Volume gal/ft) * (# of Casing Volumes)

V = (19.1 ft – 4.66 ft) * (.164 gal/ft) * (10)

V = 24 gal

Well Diameter (in)	0.52"	1.0"	2.0"	3.0"	4.0"	5.0"	6.0"
Volume (gal/ft)	0.0157	0.0409	0.1636	0.3682	0.6545	1.0227	1.4726

WELL PURGING INFORMATION

TIME	CUMULATIVE VOL REMOVED	TEMP (°C)	D.O. (mg/L)	pH (units)	O.R.P. (mV)	COND (µS)	REMARKS (color, turbidity, sediment)
1447	0	23.2	3.73	7.10	160	2340	opaque brn
1451	2.4	21.6	1.72	7.09	177	2278	opaque brn
1455	5.0	20.9	1.38	7.11	196	2425	trans. brn
1458	7.5	21.0	1.50	7.00	170	2421	trans. brn
1502	10.0	20.3	1.26	6.92	172	2312	trans. brn
1504	13.0	20.6	1.25	6.81	148	2435	trans. brn
1509	16.0	20.4	1.23	6.91	150	2425	trans. brn.
1512	19.0	20.1	1.34	6.93	180	2546	trans. brn
1517	22.0	20.0	1.40	6.95	195	2375	trans. brn
1520	24.0	19.8	1.39	6.98	196	2380	lightly trans. brn
1523	27.0	19.7	1.34	6.96	197	2450	lightly trans. brn

Remarks:

Treadwell&Rollo
ENVIROMENTAL AND GEOTECHNICAL CONSULTANTS

SHEET 1 OF 1
JOB NO. 4823.02
DATE 7 JULY 2009
COMPUTED BY TAC
CHECKED BY

PROJECT ALDERS PROPERTY
SUBJECT MW-01 LOW FLOW SAMPLING DATA SHEET

Initial WL = 4.78 (tubing not yet in well)

Begin Pumping WL = 4.75

TIME	ft WL	PH	°C TEMP	s/m COND	mV ORP	mg/L DO	NTU TURB	mL/min FLOW
1800	4.97	6.3	19.7	0.22	242	1.6	15	250
1807	4.96	6.33	19.8	0.223	220	1.13	16	150
1810	4.96	6.32	19.80	0.223	216	1.07	15	150
1815	4.99	6.30	19.70	0.229	203	0.91	15.8	150
1820	5.01	6.29	19.63	0.229	196	0.85	31.2	150
1825	5.02	6.29	19.68	0.228	186	0.81	29.2	150
1830	5.04	6.29	19.80	0.226	177	0.77	23.9	150
1835	5.06	6.28	19.68	0.226	171	0.75	24.8	150
1840	5.07	6.28	19.73	0.225	166	0.73	22.5	150
1845	5.08	6.28	19.74	0.225	162	0.72	19.9	150
1850	5.09	6.28	19.62	0.225	157	0.72	20.5	150
1855	5.11	6.28	19.67	0.225	152	0.70	18.5	150
1900	5.11	6.28	19.63	0.226	150	0.71	18.8	150
1905	5.12	6.28	19.60	0.225	149	0.68	17.9	150
1910	5.13	6.28	19.52	0.227	149	0.67	17.7	150
1915	5.12	6.28	19.49	0.228	148	0.68	19.1	150
1920	5.12	6.27	19.41	0.229	150	0.68	21.5	150

1930 – Sample MW-01

Treadwell&Rollo

APPENDIX C

Laboratory Analytical Reports

McCampbell 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

Treadwell & Rollo 501 14Th Street, 3rd Floor Oakland, CA 94612	Client Project ID: #4823.02; 5812 Hollis-Alders Property	Date Sampled: 07/08/09
		Date Received: 07/08/09
	Client Contact: Matt Hall	Date Reported: 07/13/09
	Client P.O.:	Date Completed: 07/22/09

WorkOrder: 0907195

July 22, 2009

Dear Matt:

Enclosed within are:

1) The results of the **5** analyzed samples from your project: **#4823.02; 5812 Hollis-Alders Prope**
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

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

090719S

Treadwell&Rollo
Environmental and Geotechnical Consultant

CHAIN OF CUSTODY RECORD

Page ___ of ___

- [ ] 555 Montgomery Street, Suite 1300, San Francisco, CA 94111 Ph: 415.955.9040/Fax: 415.955.9041
- [x] 501 14th Street, Third Floor, Oakland CA 94612 Ph: 510.874.4500/Fax: 510.874.4507
- [ ] 777 Campus Commons Rd., Suite 200, Sacramento, CA 95825 Ph: 916.565.7412/Fax: 916.565.7412

Site Name: 5012 HOLLIS - ALPERS PROPERTY
Job Number: 4823.02
Project Manager\Contact: MATT HALL
Samplers: THOMAS CAMPITELLI
Recorder (Signature Required): Thomas A. Campitelli

Turnaround Time: 3 - DAY

Field Sample Identification No.	Date	Time	Lab Sample No.	Matrix: Soil	Matrix: Water	Matrix: Other	No. Containers & Preservative: HCL	H_2SO_4	HNO_3	Ice	Other	Analysis Requested: LEAD, CHROMIUM	STLC - LEAD, CHROME	TCLP - LEAD, CHROME	STLC Pb (Added 3-day per Mike)	STLC Cr	TCLP Pb	TCLP Cr						Silica gel clean-up	Hold	Remarks
T1 0-0.5	7/8/09	9:10		X						X		X	X	X												
T1 2.0-2.5	7/8/09	9:12		X						X		X			X	X	X	X								
T2 0-0.5	7/8/09	9:01		X						X		X	X	X												
T2 2.0-2.5	7/8/09	9:08		X						X		X														
T3 0-0.5	7/8/09	8:52		X						X		X	X	X												
T3 2.0-2.5	7/8/09	9:00		X						X		X														
T4 0-0.5	7/8/09	8:35		X						X		X	X	X												
T4 2.0-2.5	7/8/09	8:50		X						X		X				X		X								
T5 0-0.5	7/8/09	8:25		X						X		X	X	X												
T5 2.0-2.5	7/8/09	8:30		X						X		X				X		X								
T6 0-0.5	7/8/09	9:15		X						X		X			X	X	X	X								
T7 0-0.5	7/8/09	9:16		X						X		X				X	X	X								

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	7/8/09	15:10	[signature]	7/8/09	1510
[signature]	7/8/09	4/10	Mike Vall	7/8/09	4:10pm
Relinquished by: (Signature)	Date	Time	Received by Lab: (Signature)	Date	Time

Sent to Laboratory (Name): MC CAMPBELL
Laboratory Comments/Notes:

Method of Shipment [ ] Lab courier [ ] Fed Ex [ ] Airborne [ ] UPS [ ] Hand Carried [ ] Private Courier (Co. Name) ______

ICE/t° 4.2c ✓
GOOD CONDITION Y
HEAD SPACE ABSENT ___
DECHLORINATED IN LAB ___
APPROPRIATE CONTAINERS ✓
PRESERVED IN LAB ___
PRESERVATION VOAS | O & G | METALS | OTHER

White Copy - Original   Yellow Copy - Laboratory   Pink Copy - Field

COC Number: 006767

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 090719 A **ClientCode: TWRK**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Matt Hall
Treadwell & Rollo
501 14Th Street, 3rd Floor
Oakland, CA 94612
(510) 874-4500 FAX (510) 874-4507

Email: mbhall@treadwellrollo.com
cc: tacampitelli@treadwellrollo.com
PO:
ProjectNo: #4823.02; 5812 Hollis-Alders Property

Bill to:
Accounts Payable
Treadwell & Rollo
501 14Th Street, 3rd Floor
Oakland, CA 94612
SEND HARDCOPY

Requested TAT: 3 days
Date Received: 07/08/2009
Date Add-On: 07/17/2009
Date Printed: 07/17/2009

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
0907195-002	T1 2.0-2.5	Soil	7/8/2009 9:12	☐		A		A								
0907195-008	T4 2.0-2.5	Soil	7/8/2009 8:50	☐	A		A									
0907195-010	T5 2.0-2.5	Soil	7/8/2009 8:30	☐	A		A									
0907195-011	T6 0-0.5	Soil	7/8/2009 9:15	☐		A		A								
0907195-012	T7 0-0.5	Soil	7/8/2009 9:16	☐	A			A								

Test Legend:

1	STLC_METALS_Soil	2	STLC_PBCR_Soil	3	TCLP_METALS_Soil	4	TCLP_PBCR_Soil	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.

McCampbell Analytical, Inc.
"When Quality Counts"

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

Treadwell & Rollo	Client Project ID: #4823.02; 5812 Hollis-Alders Property	Date Sampled: 07/08/09
		Date Received: 07/08/09
501 14Th Street, 3rd Floor	Client Contact: Matt Hall	Date Extracted: 07/17/09-07/19/09
Oakland, CA 94612	Client P.O.:	Date Analyzed: 07/20/09

ICP Metals*

Extraction method: CA Title 22 Analytical methods: SW6010C Work Order: 0907195

Lab ID	Client ID	Matrix	Extraction Type	Chromium	DF	% SS	Comments
0907195-008A	T4 2.0-2.5	S	WET	0.11	1	N/A	
0907195-010A	T5 2.0-2.5	S	WET	0.24	1	N/A	
0907195-012A	T7 0-0.5	S	WET	0.45	1	N/A	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	TOTAL	NA	µg/L
	S	WET	0.05	mg/L

*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.

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

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Treadwell & Rollo	Client Project ID: #4823.02; 5812 Hollis-Alders Property	Date Sampled: 07/08/09
		Date Received: 07/08/09
501 14Th Street, 3rd Floor	Client Contact: Matt Hall	Date Extracted: 07/17/09-07/19/09
Oakland, CA 94612	Client P.O.:	Date Analyzed: 07/20/09

Lead & Chromium*

Extraction method: CA Title 22 Analytical methods: SW6010C Work Order: 0907195

Lab ID	Client ID	Matrix	Extraction Type	Chromium	Lead	DF	% SS	Comments
002A	T1 2.0-2.5	S	WET	0.63	5.6	1	N/A	
011A	T6 0-0.5	S	WET	0.23	37	1	N/A	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	TOTAL	NA	NA	NA
	S	WET	0.05	0.2	mg/L

*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.

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

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

Treadwell & Rollo	Client Project ID: #4823.02; 5812 Hollis-Alders Property	Date Sampled: 07/08/09
		Date Received: 07/08/09
501 14Th Street, 3rd Floor	Client Contact: Matt Hall	Date Extracted: 07/17/09-07/18/09
Oakland, CA 94612	Client P.O.:	Date Analyzed: 07/22/09

ICP Metals*

Extraction method: SW1311 Analytical methods: SW6010C Work Order: 0907195

Lab ID	Client ID	Matrix	Extraction Type	Chromium	DF	% SS	Comments
0907195-008A	T4 2.0-2.5	S	TCLP	ND	1	N/A	
0907195-010A	T5 2.0-2.5	S	TCLP	ND	1	N/A	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	TOTAL	NA	µg/L
	S	TCLP	0.05	mg/L

*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.

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

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

Treadwell & Rollo	Client Project ID: #4823.02; 5812 Hollis-Alders Property	Date Sampled: 07/08/09
		Date Received: 07/08/09
501 14Th Street, 3rd Floor	Client Contact: Matt Hall	Date Extracted: 07/17/09-07/18/09
Oakland, CA 94612	Client P.O.:	Date Analyzed: 07/22/09

Chromium & Lead*

Extraction method: SW1311 Analytical methods: SW6010C Work Order: 0907195

Lab ID	Client ID	Matrix	Extraction Type	Chromium	Lead	DF	% SS	Comments
002A	T1 2.0-2.5	S	TCLP	ND	ND	1	N/A	
011A	T6 0-0.5	S	TCLP	ND	0.44	1	N/A	
012A	T7 0-0.5	S	TCLP	ND	12	1	N/A	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	TOTAL	NA	NA	NA
	S	TCLP	0.05	0.2	mg/L

*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.

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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

QC SUMMARY REPORT FOR SW6010C

W.O. Sample Matrix: Soil QC Matrix: Soil BatchID: 44593 WorkOrder: 0907195

EPA Method SW6010C **Extraction CA Title 22** **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
Chromium	N/A	1	N/A	N/A	N/A	98	101	2.58	N/A	N/A	80 - 120	20
Lead	N/A	1	N/A	N/A	N/A	99.5	104	4.42	N/A	N/A	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 44593 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0907195-002A	07/08/09 9:12 AM	07/17/09	07/20/09 2:23 PM	0907195-008A	07/08/09 8:50 AM	07/17/09	07/20/09 2:26 PM
0907195-010A	07/08/09 8:30 AM	07/17/09	07/20/09 2:29 PM	0907195-011A	07/08/09 9:15 AM	07/17/09	07/20/09 2:37 PM
0907195-012A	07/08/09 9:16 AM	07/17/09	07/20/09 2:40 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.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell 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 SW6010C

W.O. Sample Matrix: Soil QC Matrix: Soil BatchID: 44630 WorkOrder 0907195

EPA Method SW6010C **Extraction SW1311** **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
Chromium	N/A	1	N/A	N/A	N/A	96.1	96.6	0.488	N/A	N/A	80 - 120	20
Lead	N/A	1	N/A	N/A	N/A	92.4	98.5	6.46	N/A	N/A	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 44630 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0907195-002A	07/08/09 9:12 AM	07/17/09	07/22/09 10:13 AM	0907195-008A	07/08/09 8:50 AM	07/17/09	07/22/09 10:16 AM
0907195-010A	07/08/09 8:30 AM	07/17/09	07/22/09 10:19 AM	0907195-011A	07/08/09 9:15 AM	07/17/09	07/22/09 10:22 AM
0907195-012A	07/08/09 9:16 AM	07/17/09	07/22/09 10:30 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.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell 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

Treadwell & Rollo 501 14Th Street, 3rd Floor Oakland, CA 94612	Client Project ID: #4823.02; 5812 Hollis-Alders Property	Date Sampled: 07/07/09-07/08/09
		Date Received: 07/08/09
	Client Contact: Matt Hall	Date Reported: 07/13/09
	Client P.O.:	Date Completed: 07/13/09

WorkOrder: 0907195

July 13, 2009

Dear Matt:

Enclosed within are:

1) The results of the **39** analyzed samples from your project: **#4823.02; 5812 Hollis-Alders Prope**
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 McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

0907195

Treadwell&Rollo
Environmental and Geotechnical Consultant

CHAIN OF CUSTODY RECORD

Page ___ of ___

☐ 555 Montgomery Street, Suite 1300, San Francisco, CA 94111 Ph: 415.955.9040/Fax: 415.955.9041
☒ 501 14th Street, Third Floor, Oakland CA 94612 Ph: 510.874.4500/Fax: 510.874.4507
☐ 777 Campus Commons Rd., Suite 200, Sacramento, CA 95825 Ph: 916.565.7412/Fax: 916.565.7412

Site Name: 502 HOLLIS - AUSERS PROPERTY
Job Number: 4823.02
Project Manager\Contact: MATT HALL
Samplers: THOMAS CAMPITELLI
Recorder (Signature Required): Thomas A Campitelli

Turnaround Time: 3 - DAY

Field Sample Identification No.	Date	Time	Lab Sample No.	Matrix: Soil	Water	Other	No. Containers & Preservative: HCL	H_2SO_4	HNO_3	Ice	Other	Analysis Requested: LEAD, CHROMIUM	SOLUBLE - LEAD, CHROMIUM	TCLP - LEAD, CHROMIUM	Silica gel clean-up	Hold	Remarks
T1 0-0.5	7/8/09	9:10		X						X		X	X	X			
T1 2.0-2.5	7/8/09	9:12		X						X		X					
T2 0-0.5	7/8/09	9:01		X						X		X	X	X			
T2 2.0-2.5	7/8/09	9:08		X						X		X					
T3 0-0.5	7/8/09	8:52		X						X		X	X	X			
T3 2.0-2.5	7/8/09	9:00		X						X		X					
T4 0-0.5	7/8/09	8:35		X						X		X	X	X			
T4 2.0-2.5	7/8/09	8:50		X						X		X					
T5 0-0.5	7/8/09	8:25		X						X		X	X	X			
T5 2.0-2.5	7/8/09	8:30		X						X		X					
T6 0-0.5	7/8/09	9:15		X						X		X					
T7 0-0.5	7/8/09	9:16		X						X		X					

Relinquished by: (Signature)	Date 7/8/09	Time 15:10	Received by: (Signature)	Date 7/8/09	Time 1510
Relinquished by: (Signature)	Date 7/8/09	Time 410	Received by: (Signature)	Date 7/8/09	Time 4:10pm
Relinquished by: (Signature)	Date	Time	Received by Lab: (Signature)	Date	Time

Sent to Laboratory (Name): MC CAMPBELL
Laboratory Comments/Notes:

Method of Shipment ☐ Lab courier ☐ Fed Ex ☐ Airborne ☐ UPS ☐ Hand Carried ☐ Private Courier (Co. Name)

ICE / t° 4.2C
GOOD CONDITION Y APPROPRIATE Y
HEAD SPACE ABSENT ___ CONTAINERS Y
DECHLORINATED IN LAB ___ PRESERVED IN LAB ___
PRESERVATION | VOAS | O & G | METALS | OTHER |

White Copy - Original Yellow Copy - Laboratory Pink Copy - Field

COC Number: 006767

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)

Report To: Matthew Hall	Bill To: Matthew Hall
Company: Treadwell & Rollo, Inc.	
501 14th Street, 3rd Floor, Oakland, CA 94612	
	E-Mail: mbhall@treadwellrollo.com
Tele: (510) 874-4500	Fax: (510) 874-4507
Project #: 4823.02	Project Name: Alders Property
Project Location: 5812 Hollis Street, Emeryville, CA	
Sampler Signature:	

SAMPLE ID	LOCATION/ Field Point Name	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED ICE	METHOD PRESERVED HCL	METHOD PRESERVED HNO_3	METHOD PRESERVED Other	Analysis Request: TOTAL LEAD	LEAD STLC	LEAD - TCLP	TPH - G, D, MO	VOC BTEX	VOC - FUEL OXYGENATES	TDS	SVOC	Other: Silica Gel Cleanup	Other: Hold	Comments
	TR-20E 30-35	7/7/09	14:00	1	SS		X				X				X										
	TR-20E 25-30	7/7/09	13:45	1	SS		X				X				X	X	X								
	TR-21A 25-30	7/7/09	14:35	1	SS		X				X				X	X	X								
	TR-21A 30-35	7/7/09	14:40	1	SS		X				X				X										
	TR-21B 25-30	7/7/09	14:55	1	SS		X				X				X	X	X								
	TR-21B 30-35	7/7/09	15:10	1	G		X				X				X										
	TR-21C 30 35	7/7/09	15 50	1	G		X				X				X										
	TR-21C 25-30	7/7/09	15:60	1	G		X				X				X	X	X								
	TR-21D 25-30	7/7/09	15 30	1	G		X				X				X	X	X								
	TR-21D 30 35	7/7/09	15 45	1	G		X				X				X										
	~~TR-21E 25-30~~	~~7/7/09~~	~~16:05~~	~~1~~	~~G~~		~~X~~				~~X~~				~~X~~	~~X~~	~~X~~		~~BTEX~~	~~X~~					
	UST-1 - DEEP 20-	7/7/09	16:30	1	G		X				X							X	X	X			X		
	UST-1 - DEEP 25-30	7/7/09	16 40	1	P		X				X							X	X	X			X		
+	MW-01	7/7/09	19 30	5	—	X					X	X						X	X	X	X		X		

Relinquished By:	Date: 7/7/09	Time: 15:10	Received By:
Relinquished By:	Date: 7/7/09	Time: 4:10	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/t°_____
GOOD CONDITION_____
HEAD SPACE ABSENT_____
DECHLORINATED IN LAB_____
APPROPRIATE CONTAINERS_____
PRESERVED IN LAB_____

VOAS O&G METALS OTHER
PRESERVATION pH<2

COMMENTS:
Please send all scanned COCs for this WO and yesterday's Alders WO to tucampbell@treadwellrollo.com

Filter Samples for Metals analysis: Yes / No

Treadwell&Rollo
Environmental and Geotechnical Consultant

CHAIN OF CUSTODY RECORD

Page ___ of ___

555 Montgomery Street, Suite 1300, San Francisco, CA 94111 Ph: 415.955.9040/Fax: 415.955.9041
☒ 501 14th Street, Third Floor, Oakland CA 94612 Ph: 510.874.4500/Fax: 510.874.4507
777 Campus Commons Rd., Suite 200, Sacramento, CA 95825 Ph: 916.565.7412/Fax: 916.565.7412

Site Name: ALDERS PROPERTY - 5812 HOLLIS
Job Number: 4623.02
Project Manager\Contact: MATT HALL
Samplers: TOM CAMPITELLI
Recorder (Signature Required): [signature]

Turnaround Time: 3-DAY

Field Sample Identification No.	Date	Time	Lab Sample No.	Matrix: Soil	Water	Other	No. Containers & Preservative: HCL	H_2SO_4	HNO_3	Ice	Other	NONE	Analysis Requested: TOTAL LEAD	LEAD - STLC	LEAD - TCLP	TPH-G, D, MO	TDS	TPH-D	Silica gel clean-up	Hold	Remarks
TR-21E 25-30	7/7/09	10:00		X						X			X	X	X						
TR-21E 30-35	7/7/09	16:05		X						X			X								
UST-03	7/7/09	10:05			X					X		2				X	X		X		
KB-4A 8.5-9.0	7/8/09	10:15		X						X								X	X		
KB-4A 9.0-9.25	7/8/09	10:20		X						X								X	X		
KB-4B 6.5-7.0	7/8/09	12:45		X						X								X	X		
KB-4B 9.5-9.0	7/8/09	12:55		X						X								X	X		
KB-4B 10.5-11	7/8/09	13:05		X						X								X	X		
KB-4C 10.5-11	7/8/09	12:00		X						X								X	X		
KB-4D 7.5-8.0	7/8/09	11:15		X						X								X	X		
KB-4D 8.5-9.0	7/8/09	11:24		X						X								X	X		
KB-4D 9.5-10.0	7/8/09	11:30		X						X								X	X		
KB-4E 10-10.5	7/8/09	12:30		X						X								X	X		
KB-4 DRUM	7/8/09	13:10		X						X								X	X	X	

Relinquished by: (Signature) [signature]	Date 7/8/09	Time 15:10	Received by: (Signature) [signature]	Date 7/8/09	Time 15:10
Relinquished by: (Signature) [signature]	Date 7/8/09	Time 4:10	Received by: (Signature) [signature]	Date 7/8/09	Time 4:10pm
Relinquished by: (Signature)	Date	Time	Received by Lab: (Signature)	Date	Time

Sent to Laboratory (Name): MC CAMPBELL
Laboratory Comments/Notes:

Method of Shipment: ☒ Lab courier ☐ Fed Ex ☐ Airborne ☐ UPS ☐ Hand Carried ☐ Private Courier (Co. Name)

White Copy - Original Yellow Copy - Laboratory Pink Copy - Field COC Number: 006766

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0907195 **ClientCode: TWRK**

☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Matt Hall
Treadwell & Rollo
501 14Th Street, 3rd Floor
Oakland, CA 94612
(510) 874-4500 FAX (510) 874-4507

Email: mbhall@treadwellrollo.com
cc: tacampitelli@treadwellrollo.com
PO:
ProjectNo: #4823.02; 5812 Hollis-Alders Property

Bill to:
Accounts Payable
Treadwell & Rollo
501 14Th Street, 3rd Floor
Oakland, CA 94612
SEND HARDCOPY

Requested TAT: 3 days

Date Received: 07/08/2009
Date Printed: 07/08/2009

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
0907195-001	T1 0-0.5	Soil	7/8/2009 9:10	☐				A				A		A		
0907195-002	T1 2.0-2.5	Soil	7/8/2009 9:12	☐				A								
0907195-003	T2 0-0.5	Soil	7/8/2009 9:01	☐				A				A		A		
0907195-004	T2 2.0-2.5	Soil	7/8/2009 9:08	☐				A								
0907195-005	T3 0-0.5	Soil	7/8/2009 8:52	☐				A				A		A		
0907195-006	T3 2.0-2.5	Soil	7/8/2009 9:00	☐				A								
0907195-007	T4 0-0.5	Soil	7/8/2009 8:35	☐				A				A		A		
0907195-008	T4 2.0-2.5	Soil	7/8/2009 8:50	☐				A								
0907195-009	T5 0-0.5	Soil	7/8/2009 8:25	☐				A				A		A		
0907195-010	T5 2.0-2.5	Soil	7/8/2009 8:30	☐				A								
0907195-011	T6 0-0.5	Soil	7/8/2009 9:15	☐				A								
0907195-012	T7 0-0.5	Soil	7/8/2009 9:16	☐						A						
0907195-013	TR-20E 3.0-3.5	Soil	7/8/2009 14:00	☐					A							
0907195-014	TR-20E 2.5-3.0	Soil	7/7/2009 13:45	☐					A		A		A			

Test Legend:

1	G-MBTEX_W	2	MBTEXOXY-8260B_S	3	MBTEXOXY-8260B_W	4	METALSMS_S	5	PBMS_S
6	PBMS_SOLID	7	STLC_PB_S	8	STLC_PBCR_Soil	9	TCLP_PB_S	10	TCLP_PBCR_Soil
11	TDS_W	12	TPH(D)WSG_S						

The following SampIDs: 023A, 024A, 025A, 028A contain testgroup.

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.

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0907195 **ClientCode: TWRK**

☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Matt Hall
Treadwell & Rollo
501 14Th Street, 3rd Floor
Oakland, CA 94612
(510) 874-4500 FAX (510) 874-4507

Email: mbhall@treadwellrollo.com
cc: tacampitelli@treadwellrollo.com
PO:
ProjectNo: #4823.02; 5812 Hollis-Alders Property

Bill to:
Accounts Payable
Treadwell & Rollo
501 14Th Street, 3rd Floor
Oakland, CA 94612
SEND HARDCOPY

Requested TAT: 3 days

Date Received: 07/08/2009
Date Printed: 07/08/2009

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
0907195-015	TR-21A 2.5-3.0	Soil	7/7/2009 14:35	☐					A		A		A			
0907195-016	TR-21A 3.0-3.5	Soil	7/7/2009 14:40	☐					A							
0907195-017	TR-21B 2.5-3.0	Soil	7/7/2009 14:55	☐					A		A		A			
0907195-018	TR-21B 3.0-3.5	Soil	7/7/2009 15:10	☐					A							
0907195-019	TR-21C 3.0-3.5	Soil	7/7/2009 15:50	☐					A							
0907195-020	TR-21C 2.5-3.0	Soil	7/7/2009 15:55	☐					A		A		A			
0907195-021	TR-21D 2.5-3.0	Soil	7/7/2009 15:30	☐					A		A		A			
0907195-022	TR-21D 3.0-3.5	Soil	7/7/2009 15:45	☐					A							
0907195-023	UST-1-Deep-20	Soil	7/7/2009 16:30	☐		A										
0907195-024	UST-1-Deep 24-25	Soil	7/7/2009 16:40	☐		A										
0907195-025	MW-01	Water	7/7/2009 19:30	☐	A		B								C	
0907195-026	TR-21E 2.5-3.0	Soil	7/7/2009 16:00	☐					A		A		A			
0907195-027	TR-21E 3.0-3.5	Soil	7/7/2009 16:05	☐					A							
0907195-028	UST-03	Water	7/7/2009 10:05	☐	A										B	

Test Legend:

1	G-MBTEX_W	2	MBTEXOXY-8260B_S	3	MBTEXOXY-8260B_W	4	METALSMS_S	5	PBMS_S
6	PBMS_SOLID	7	STLC_PB_S	8	STLC_PBCR_Soil	9	TCLP_PB_S	10	TCLP_PBCR_Soil
11	TDS_W	12	TPH(D)WSG_S						

The following SampIDs: 023A, 024A, 025A, 028A contain testgroup.

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).
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McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0907195 **ClientCode: TWRK**

☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Matt Hall
Treadwell & Rollo
501 14Th Street, 3rd Floor
Oakland, CA 94612
(510) 874-4500 FAX (510) 874-4507

Email: mbhall@treadwellrollo.com
cc: tacampitelli@treadwellrollo.com
PO:
ProjectNo: #4823.02; 5812 Hollis-Alders Property

Bill to:
Accounts Payable
Treadwell & Rollo
501 14Th Street, 3rd Floor
Oakland, CA 94612
SEND HARDCOPY

Requested TAT: 3 days

Date Received: 07/08/2009
Date Printed: 07/08/2009

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
0907195-029	KB-4A 8.5-9.0	Soil	7/8/2009 10:15	☐												A
0907195-030	KB-4A 9.0-9.25	Soil	7/8/2009 10:20	☐												A
0907195-031	KB-4B 6.5-7.0	Soil	7/8/2009 12:45	☐												A
0907195-032	KB-4B 8.5-9.0	Soil	7/8/2009 12:55	☐												A
0907195-033	KB-4B 10.5-11	Soil	7/8/2009 13:05	☐												A
0907195-034	KB-4C 10.5-11	Soil	7/8/2009 12:00	☐												A
0907195-035	KB-4D 7.5-8.0	Soil	7/8/2009 11:15	☐												A
0907195-036	KB-4D 8.5-9.0	Soil	7/8/2009 11:24	☐												A
0907195-037	KB-4D 9.5-10.0	Soil	7/8/2009 11:30	☐												A
0907195-038	KB-4E 10-10.5	Soil	7/8/2009 12:30	☐												A
0907195-039	KB-4 Drum	Soil	7/8/2009 13:10	☐												A

Test Legend:

1	G-MBTEX_W	2	MBTEXOXY-8260B_S	3	MBTEXOXY-8260B_W	4	METALSMS_S	5	PBMS_S
6	PBMS_SOLID	7	STLC_PB_S	8	STLC_PBCR_Soil	9	TCLP_PB_S	10	TCLP_PBCR_Soil
11	TDS_W	12	TPH(D)WSG_S						

The following SampIDs: 023A, 024A, 025A, 028A contain testgroup.

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.

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0907195 **ClientCode: TWRK**

☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Matt Hall
Treadwell & Rollo
501 14Th Street, 3rd Floor
Oakland, CA 94612
(510) 874-4500 FAX (510) 874-4507

Email: mbhall@treadwellrollo.com
cc: tacampitelli@treadwellrollo.com
PO:
ProjectNo: #4823.02; 5812 Hollis-Alders Property

Bill to:
Accounts Payable
Treadwell & Rollo
501 14Th Street, 3rd Floor
Oakland, CA 94612
SEND HARDCOPY

Requested TAT: 3 days

Date Received: **07/08/2009**
Date Printed: **07/08/2009**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					13	14	15	16	17	18	19	20	21	22	23	24
0907195-001	T1 0-0.5	Soil	7/8/2009 9:10	☐												
0907195-002	T1 2.0-2.5	Soil	7/8/2009 9:12	☐												
0907195-003	T2 0-0.5	Soil	7/8/2009 9:01	☐												
0907195-004	T2 2.0-2.5	Soil	7/8/2009 9:08	☐												
0907195-005	T3 0-0.5	Soil	7/8/2009 8:52	☐												
0907195-006	T3 2.0-2.5	Soil	7/8/2009 9:00	☐												
0907195-007	T4 0-0.5	Soil	7/8/2009 8:35	☐												
0907195-008	T4 2.0-2.5	Soil	7/8/2009 8:50	☐												
0907195-009	T5 0-0.5	Soil	7/8/2009 8:25	☐												
0907195-010	T5 2.0-2.5	Soil	7/8/2009 8:30	☐												
0907195-011	T6 0-0.5	Soil	7/8/2009 9:15	☐												
0907195-012	T7 0-0.5	Soil	7/8/2009 9:16	☐												
0907195-013	TR-20E 3.0-3.5	Soil	7/8/2009 14:00	☐												
0907195-014	TR-20E 2.5-3.0	Soil	7/7/2009 13:45	☐												

Test Legend:

13	TPH(DMO)WSG_S	14		15		16		17	
18		19		20		21		22	
23		24							

The following SampIDs: 023A, 024A, 025A, 028A contain testgroup.

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).
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McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0907195 **ClientCode: TWRK**

☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Matt Hall
Treadwell & Rollo
501 14Th Street, 3rd Floor
Oakland, CA 94612
(510) 874-4500 FAX (510) 874-4507

Email: mbhall@treadwellrollo.com
cc: tacampitelli@treadwellrollo.com
PO:
ProjectNo: #4823.02; 5812 Hollis-Alders Property

Bill to:
Accounts Payable
Treadwell & Rollo
501 14Th Street, 3rd Floor
Oakland, CA 94612
SEND HARDCOPY

Requested TAT: 3 days

Date Received: 07/08/2009
Date Printed: 07/08/2009

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					13	14	15	16	17	18	19	20	21	22	23	24
0907195-015	TR-21A 2.5-3.0	Soil	7/7/2009 14:35	☐												
0907195-016	TR-21A 3.0-3.5	Soil	7/7/2009 14:40	☐												
0907195-017	TR-21B 2.5-3.0	Soil	7/7/2009 14:55	☐												
0907195-018	TR-21B 3.0-3.5	Soil	7/7/2009 15:10	☐												
0907195-019	TR-21C 3.0-3.5	Soil	7/7/2009 15:50	☐												
0907195-020	TR-21C 2.5-3.0	Soil	7/7/2009 15:55	☐												
0907195-021	TR-21D 2.5-3.0	Soil	7/7/2009 15:30	☐												
0907195-022	TR-21D 3.0-3.5	Soil	7/7/2009 15:45	☐												
0907195-023	UST-1-Deep-20	Soil	7/7/2009 16:30	☐	A											
0907195-024	UST-1-Deep 24-25	Soil	7/7/2009 16:40	☐	A											
0907195-025	MW-01	Water	7/7/2009 19:30	☐												
0907195-026	TR-21E 2.5-3.0	Soil	7/7/2009 16:00	☐												
0907195-027	TR-21E 3.0-3.5	Soil	7/7/2009 16:05	☐												
0907195-028	UST-03	Water	7/7/2009 10:05	☐												

Test Legend:

13	TPH(DMO)WSG_S	14		15		16		17	
18		19		20		21		22	
23		24							

The following SampIDs: 023A, 024A, 025A, 028A contain testgroup.

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.

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0907195 **ClientCode: TWRK**

☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Matt Hall
Treadwell & Rollo
501 14Th Street, 3rd Floor
Oakland, CA 94612
(510) 874-4500 FAX (510) 874-4507

Email: mbhall@treadwellrollo.com
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PO:
ProjectNo: #4823.02; 5812 Hollis-Alders Property

Bill to:
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SEND HARDCOPY

Requested TAT: 3 days

Date Received: **07/08/2009**
Date Printed: **07/08/2009**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					13	14	15	16	17	18	19	20	21	22	23	24
0907195-029	KB-4A 8.5-9.0	Soil	7/8/2009 10:15	☐												
0907195-030	KB-4A 9.0-9.25	Soil	7/8/2009 10:20	☐												
0907195-031	KB-4B 6.5-7.0	Soil	7/8/2009 12:45	☐												
0907195-032	KB-4B 8.5-9.0	Soil	7/8/2009 12:55	☐												
0907195-033	KB-4B 10.5-11	Soil	7/8/2009 13:05	☐												
0907195-034	KB-4C 10.5-11	Soil	7/8/2009 12:00	☐												
0907195-035	KB-4D 7.5-8.0	Soil	7/8/2009 11:15	☐												
0907195-036	KB-4D 8.5-9.0	Soil	7/8/2009 11:24	☐												
0907195-037	KB-4D 9.5-10.0	Soil	7/8/2009 11:30	☐												
0907195-038	KB-4E 10-10.5	Soil	7/8/2009 12:30	☐												
0907195-039	KB-4 Drum	Soil	7/8/2009 13:10	☐												

Test Legend:

13	TPH(DMO)WSG_S	14		15		16		17	
18		19		20		21		22	
23		24							

The following SampIDs: 023A, 024A, 025A, 028A contain testgroup.

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.

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

Sample Receipt Checklist

Client Name: **Treadwell & Rollo**
Date and Time Received: **7/8/09 4:55:00 PM**
Project Name: **#4823.02; 5812 Hollis-Alders Property**
Checklist completed and reviewed by: Melissa Valles
WorkOrder N°: **0907195** Matrix Soil/Water
Carrier: Rob Pringle (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: 4.2°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: All samples in proper containers except for for the Tph (g) for UST-03. Tph (g) should be collected in VOAs preserved w/HCl zero headspace.

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Treadwell & Rollo	Client Project ID: #4823.02; 5812 Hollis-Alders Property	Date Sampled: 07/07/09
		Date Received: 07/08/09
501 14Th Street, 3rd Floor	Client Contact: Matt Hall	Date Extracted: 07/08/09-07/09/09
Oakland, CA 94612	Client P.O.:	Date Analyzed 07/09/09

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

Extraction method SW5030B Analytical methods SW8015Bm Work Order: 0907195

Lab ID	Client ID	Matrix	TPH(g)	DF	% SS	Comments
023A	UST-1-Deep-20	S	ND	1	83	
024A	UST-1-Deep 24-25	S	ND	1	81	
025A	MW-01	W	ND	1	102	
028A	UST-03	W	960	10	101	d7,b6,b1

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

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

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

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

b1) aqueous sample that contains greater than ~1 vol. % sediment
b6) lighter than water immiscible sheen/product is present
d7) strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram

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Angela Rydelius, Lab Manager

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501 14Th Street, 3rd Floor		Date Received: 07/08/09
	Client Contact: Matt Hall	Date Extracted: 07/08/09
Oakland, CA 94612	Client P.O.:	Date Analyzed: 07/09/09

Oxygenates and BTEX by GC/MS*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0907195

					Reporting Limit for DF =1	
Lab ID	0907195-023A	0907195-024A				
Client ID	UST-1-Deep-20	UST-1-Deep 24-25				
Matrix	S	S				
DF	1	1			S	W
Compound	**Concentration**				mg/kg	ug/L
tert-Amyl methyl ether (TAME)	ND	ND			0.005	NA
Benzene	ND	ND			0.005	NA
t-Butyl alcohol (TBA)	ND	ND			0.05	NA
Diisopropyl ether (DIPE)	ND	ND			0.005	NA
Ethylbenzene	ND	ND			0.005	NA
Ethyl tert-butyl ether (ETBE)	ND	ND			0.005	NA
Methyl-t-butyl ether (MTBE)	ND	ND			0.005	NA
Toluene	ND	ND			0.005	NA
Xylenes	ND	ND			0.005	NA
Surrogate Recoveries (%)						
%SS1:	83	83				
%SS2:	108	110				
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 coelutes with another peak, &) low surrogate due to matrix interference.

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Treadwell & Rollo	Client Project ID: #4823.02; 5812 Hollis-Alders Property	Date Sampled: 07/07/09
501 14Th Street, 3rd Floor		Date Received: 07/08/09
	Client Contact: Matt Hall	Date Extracted: 07/09/09
Oakland, CA 94612	Client P.O.:	Date Analyzed: 07/09/09

Oxygenates and BTEX by GC/MS*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0907195

					Reporting Limit for DF =1	
Lab ID	0907195-025B					
Client ID	MW-01					
Matrix	W					
DF	1				S	W
Compound	**Concentration**				ug/kg	µg/L
tert-Amyl methyl ether (TAME)	ND				NA	0.5
Benzene	ND				NA	0.5
t-Butyl alcohol (TBA)	ND				NA	2.0
Diisopropyl ether (DIPE)	ND				NA	0.5
Ethylbenzene	ND				NA	0.5
Ethyl tert-butyl ether (ETBE)	ND				NA	0.5
Methyl-t-butyl ether (MTBE)	ND				NA	0.5
Toluene	1.2				NA	0.5
Xylenes	ND				NA	0.5
Surrogate Recoveries (%)						
%SS1:	85					
%SS2:	107					
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 coelutes with another peak, &) low surrogate due to matrix interference.

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Treadwell & Rollo	Client Project ID: #4823.02; 5812 Hollis-Alders Property	Date Sampled: 07/08/09
		Date Received: 07/08/09
501 14Th Street, 3rd Floor	Client Contact: Matt Hall	Date Extracted: 07/08/09
Oakland, CA 94612	Client P.O.:	Date Analyzed: 07/09/09-07/10/09

Metals*

Extraction method: SW3050B Analytical methods: 6020A Work Order: 0907195

Lab ID	Client ID	Matrix	Extraction Type	Chromium	Lead	DF	% SS	Comments
001A	T1 0-0.5	S	TOTAL	63	420	10	96	
002A	T1 2.0-2.5	S	TOTAL	55	160	10	97	
003A	T2 0-0.5	S	TOTAL	47	430	10	98	
004A	T2 2.0-2.5	S	TOTAL	38	13	10	101	
005A	T3 0-0.5	S	TOTAL	62	850	10	96	
006A	T3 2.0-2.5	S	TOTAL	44	5.7	1	97	
007A	T4 0-0.5	S	TOTAL	45	71	10	99	
008A	T4 2.0-2.5	S	TOTAL	50	31	10	103	
009A	T5 0-0.5	S	TOTAL	46	130	10	98	
010A	T5 2.0-2.5	S	TOTAL	57	29	10	100	
011A	T6 0-0.5	S	TOTAL	68	750	10	100	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	TOTAL	NA	NA	NA
	S	TOTAL	0.5	0.5	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.

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Treadwell & Rollo	Client Project ID: #4823.02; 5812 Hollis-Alders Property	Date Sampled: 07/07/09-07/08/09
501 14Th Street, 3rd Floor		Date Received: 07/08/09
	Client Contact: Matt Hall	Date Extracted: 07/08/09
Oakland, CA 94612	Client P.O.:	Date Analyzed: 07/09/09-07/10/09

Lead by ICP-MS*

Extraction method: SW3050B Analytical methods: 6020A Work Order: 0907195

Lab ID	Client ID	Matrix	Extraction Type	Lead	DF	% SS	Comments
0907195-013A	TR-20E 3.0-3.5	S	TOTAL	12	10	100	
0907195-014A	TR-20E 2.5-3.0	S	TOTAL	5.5	10	93	
0907195-015A	TR-21A 2.5-3.0	S	TOTAL	6.3	10	97	
0907195-016A	TR-21A 3.0-3.5	S	TOTAL	5.1	1	108	
0907195-017A	TR-21B 2.5-3.0	S	TOTAL	5.0	1	102	
0907195-018A	TR-21B 3.0-3.5	S	TOTAL	6.7	10	104	
0907195-019A	TR-21C 3.0-3.5	S	TOTAL	4.5	1	104	
0907195-020A	TR-21C 2.5-3.0	S	TOTAL	6.0	1	105	
0907195-021A	TR-21D 2.5-3.0	S	TOTAL	5.7	1	105	
0907195-022A	TR-21D 3.0-3.5	S	TOTAL	8.1	10	101	
0907195-026A	TR-21E 2.5-3.0	S	TOTAL	5.3	1	101	
0907195-027A	TR-21E 3.0-3.5	S	TOTAL	7.2	1	99	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	TOTAL	NA	µg/L
	S	TOTAL	0.5	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.

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501 14Th Street, 3rd Floor		Date Received: 07/08/09
	Client Contact: Matt Hall	Date Extracted: 07/08/09
Oakland, CA 94612	Client P.O.:	Date Analyzed: 07/10/09

Lead by ICP-MS*

Extraction method: SW3050B Analytical methods: 6020A Work Order: 0907195

Lab ID	Client ID	Matrix	Extraction Type	Lead	DF	% SS	Comments
0907195-012A	T7 0-0.5	S	TOTAL	3500	100	117	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	TOTAL	NA	µg/L
	S	TOTAL	0.5	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.
TRM = total recoverable metals by "direct analysis".
DISS = dissolved metals by suitable filtration and acid preservation
WET = Waste Extraction Test (STLC).
DI WET = Waste Extraction Test using de-ionized water.

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Treadwell & Rollo	Client Project ID: #4823.02; 5812 Hollis-Alders Property	Date Sampled: 07/07/09
		Date Received: 07/08/09
501 14Th Street, 3rd Floor	Client Contact: Matt Hall	Date Extracted: 07/08/09-07/10/09
Oakland, CA 94612	Client P.O.:	Date Analyzed: 07/13/09

Lead by ICP*

Extraction method: CA Title 22 Analytical methods. SW6010C Work Order: 0907195

Lab ID	Client ID	Matrix	Extraction Type	Lead	DF	% SS	Comments
0907195-014A	TR-20E 2.5-3.0	S	WET	0.25	1	N/A	
0907195-015A	TR-21A 2.5-3.0	S	WET	ND	1	N/A	
0907195-017A	TR-21B 2.5-3.0	S	WET	ND	1	N/A	
0907195-020A	TR-21C 2.5-3.0	S	WET	ND	1	N/A	
0907195-021A	TR-21D 2.5-3.0	S	WET	0.20	1	N/A	
0907195-026A	TR-21E 2.5-3.0	S	WET	0.31	1	N/A	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	TOTAL	NA	µg/L
	S	WET	0.2	mg/L

*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.

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501 14Th Street, 3rd Floor		Date Received: 07/08/09
	Client Contact: Matt Hall	Date Extracted: 07/08/09-07/10/09
Oakland, CA 94612	Client P.O.:	Date Analyzed: 07/13/09

Lead & Chromium*

Extraction method: CA Title 22 Analytical methods: SW6010C Work Order: 0907195

Lab ID	Client ID	Matrix	Extraction Type	Chromium	Lead	DF	% SS	Comments
001A	T1 0-0.5	S	WET	0.41	19	1	N/A	
003A	T2 0-0.5	S	WET	0.17	28	1	N/A	
005A	T3 0-0.5	S	WET	0.41	44	1	N/A	
007A	T4 0-0.5	S	WET	0.15	4.1	1	N/A	
009A	T5 0-0.5	S	WET	0.18	8.0	1	N/A	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	TOTAL	NA	NA	NA
	S	WET	0.05	0.2	mg/L

*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.

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Treadwell & Rollo	Client Project ID: #4823.02; 5812 Hollis-Alders Property	Date Sampled: 07/07/09
501 14Th Street, 3rd Floor		Date Received: 07/08/09
	Client Contact: Matt Hall	Date Extracted: 07/08/09-07/09/09
Oakland, CA 94612	Client P.O.:	Date Analyzed: 07/09/09

Lead by ICP*

Extraction method: SW1311 Analytical methods: SW6010C Work Order: 0907195

Lab ID	Client ID	Matrix	Extraction Type	Lead	DF	% SS	Comments
0907195-014A	TR-20E 2.5-3.0	S	TCLP	ND	1	N/A	
0907195-015A	TR-21A 2.5-3.0	S	TCLP	ND	1	N/A	
0907195-017A	TR-21B 2.5-3.0	S	TCLP	ND	1	N/A	
0907195-020A	TR-21C 2.5-3.0	S	TCLP	ND	1	N/A	
0907195-021A	TR-21D 2.5-3.0	S	TCLP	ND	1	N/A	
0907195-026A	TR-21E 2.5-3.0	S	TCLP	ND	1	N/A	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	TOTAL	NA	µg/L
	S	TCLP	0.2	mg/L

*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.

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

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

Treadwell & Rollo	Client Project ID: #4823.02; 5812 Hollis-Alders Property	Date Sampled: 07/08/09
		Date Received: 07/08/09
501 14Th Street, 3rd Floor	Client Contact: Matt Hall	Date Extracted: 07/08/09-07/09/09
Oakland, CA 94612	Client P.O.:	Date Analyzed: 07/09/09

Chromium & Lead*

Extraction method: SW1311 Analytical methods: SW6010C Work Order: 0907195

Lab ID	Client ID	Matrix	Extraction Type	Chromium	Lead	DF	% SS	Comments
001A	T1 0-0.5	S	TCLP	ND	ND	1	N/A	
003A	T2 0-0.5	S	TCLP	ND	ND	1	N/A	
005A	T3 0-0.5	S	TCLP	ND	1.6	1	N/A	
007A	T4 0-0.5	S	TCLP	ND	ND	1	N/A	
009A	T5 0-0.5	S	TCLP	ND	ND	1	N/A	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	TOTAL	NA	NA	NA
	S	TCLP	0.05	0.2	mg/L

*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.

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Treadwell & Rollo	Client Project ID: #4823.02; 5812 Hollis-Alders Property	Date Sampled: 07/07/09
		Date Received: 07/08/09
501 14Th Street, 3rd Floor	Client Contact: Matt Hall	Date Extracted: 07/08/09
Oakland, CA 94612	Client P.O.:	Date Analyzed 07/09/09

Total Dissolved Solids*

Analytical Method: SM2540C Work Order: 0907195

Lab ID	Client ID	Matrix	Total Dissolved Solids	DF	Comments
0907195-025C	MW-01	W	1310	1	
0907195-028B	UST-03	W	1180	2	b1

Reporting Limit for DF = 1; ND means not detected at or above the reporting limit	W	10 mg/L	
	S	NA	

* water samples reported in mg/L.

b1) aqueous sample that contains greater than ~1 vol. % sediment

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Treadwell & Rollo	Client Project ID: #4823.02; 5812 Hollis-Alders Property	Date Sampled: 07/08/09
		Date Received: 07/08/09
501 14Th Street, 3rd Floor	Client Contact: Matt Hall	Date Extracted: 07/08/09
Oakland, CA 94612	Client P.O.:	Date Analyzed 07/09/09-07/10/09

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up*

Extraction method: SW3550C/3630C Analytical methods: SW8015B Work Order: 0907195

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	DF	% SS	Comments
0907195-029A	KB-4A 8.5-9.0	S	400	1	116	e1
0907195-030A	KB-4A 9.0-9.25	S	4900	100	103	e1
0907195-031A	KB-4B 6.5-7.0	S	570	1	114	e1
0907195-032A	KB-4B 8.5-9.0	S	1600	50	110	e1
0907195-033A	KB-4B 10.5-11	S	81	1	113	e1
0907195-034A	KB-4C 10.5-11	S	3.9	1	115	e1
0907195-035A	KB-4D 7.5-8.0	S	270	1	114	e1
0907195-036A	KB-4D 8.5-9.0	S	410	1	106	e1
0907195-037A	KB-4D 9.5-10.0	S	45	1	104	e1
0907195-038A	KB-4E 10-10.5	S	13	1	116	e1
0907195-039A	KB-4 Drum	S	250	1	107	e1

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 McCampbell Analytical is not responsible for their interpretation:

e1) unmodified or weakly modified diesel is significant

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Treadwell & Rollo	Client Project ID: #4823.02; 5812 Hollis-Alders Property	Date Sampled: 07/07/09
		Date Received: 07/08/09
501 14Th Street, 3rd Floor	Client Contact: Matt Hall	Date Extracted: 07/08/09
Oakland, CA 94612	Client P.O.:	Date Analyzed: 07/10/09-07/13/09

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up*

Extraction method: SW3510C/3630C/SW3550C/36 Analytical methods: SW8015B Work Order: 0907195

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	TPH-Motor Oil (C18-C36)	DF	% SS	Comments
0907195-023A	UST-1-Deep-20	S	ND	ND	1	112	
0907195-024A	UST-1-Deep 24-25	S	ND	ND	1	110	
0907195-025A	MW-01	W	ND	ND	1	109	
0907195-028A	UST-03	W	29,000	17,000	10	104	e1,b1

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	250	µg/L
	S	1.0	5.0	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 McCampbell Analytical is not responsible for their interpretation:

b1) aqueous sample that contains greater than ~1 vol. % sediment
e1) unmodified or weakly modified diesel is significant

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QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Soil QC Matrix: Soil BatchID: 44360 WorkOrder 0907195

EPA Method SW8015Bm **Extraction SW5030B** **Spiked Sample ID: 0907165-001A**

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)£	ND	0.60	116	114	1.55	115	114	0.367	70 - 130	20	70 - 130	20
MTBE	ND	0.10	93.4	96.2	2.98	94.9	94.2	0.746	70 - 130	20	70 - 130	20
Benzene	ND	0.10	94.2	96.2	2.13	94.1	94.5	0.377	70 - 130	20	70 - 130	20
Toluene	ND	0.10	94.4	95.8	1.52	94.4	95.5	1.14	70 - 130	20	70 - 130	20
Ethylbenzene	ND	0.10	93.8	93.7	0.156	92.8	93.7	0.943	70 - 130	20	70 - 130	20
Xylenes	ND	0.30	94	94.7	0.732	93.6	94.7	1.16	70 - 130	20	70 - 130	20
%SS:	99	0.10	82	83	1.66	82	83	1.04	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 44360 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0907195-023A	07/07/09 4:30 PM	07/08/09	07/09/09 3:14 PM	0907195-024A	07/07/09 4:40 PM	07/08/09	07/09/09 3:45 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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QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water QC Matrix: Water BatchID: 44376 WorkOrder 0907195

EPA Method SW8015Bm **Extraction SW5030B** **Spiked Sample ID: 0907195-025A**

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	110	106	4.34	117	108	7.40	70 - 130	20	70 - 130	20
MTBE	ND	10	117	106	9.72	106	109	3.31	70 - 130	20	70 - 130	20
Benzene	ND	10	96.3	94.7	1.67	97.3	99.2	2.00	70 - 130	20	70 - 130	20
Toluene	0.77	10	90.7	90.8	0.0784	99.7	102	2.70	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	99.9	96.5	3.34	96.8	102	5.35	70 - 130	20	70 - 130	20
Xylenes	1.0	30	108	109	1.58	112	116	3.11	70 - 130	20	70 - 130	20
%SS:	102	10	102	102	0	102	104	1.91	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 44376 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0907195-025A	07/07/09 7:30 PM	07/09/09	07/09/09 4:34 AM	0907195-028A	07/07/09 10:05 AM	07/09/09	07/09/09 5:03 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, or inconsistency in sample containers.

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QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Soil QC Matrix: Soil BatchID: 44352 WorkOrder 0907195

EPA Method SW8260B **Extraction SW5030B** **Spiked Sample ID: 0907192-001A**

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
tert-Amyl methyl ether (TAME)	ND	0.050	88.9	86.8	2.34	87.6	87.9	0.266	60 - 130	30	60 - 130	30
Benzene	ND	0.050	109	107	2.11	108	108	0	60 - 130	30	60 - 130	30
t-Butyl alcohol (TBA)	ND	0.25	88.9	87.6	1.45	85.8	87.4	1.86	60 - 130	30	60 - 130	30
1,2-Dibromoethane (EDB)	ND	0.050	98.1	94.3	3.86	97.6	98.9	1.30	60 - 130	30	60 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	0.050	98.2	92.9	5.55	95.4	95	0.359	60 - 130	30	60 - 130	30
Diisopropyl ether (DIPE)	ND	0.050	103	101	2.52	100	99	1.46	60 - 130	30	60 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	0.050	95.7	93.5	2.33	93.8	93.8	0	60 - 130	30	60 - 130	30
Methyl-t-butyl ether (MTBE)	ND	0.050	94.4	93.4	1.08	93.1	93.4	0.360	60 - 130	30	60 - 130	30
Toluene	ND	0.050	110	107	2.48	109	111	1.07	60 - 130	30	60 - 130	30
%SS1:	88	0.12	94	94	0	94	94	0	70 - 130	30	70 - 130	30
%SS2:	115	0.12	107	106	0.527	108	108	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 44352 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0907195-023A	07/07/09 4:30 PM	07/08/09	07/09/09 10:18 PM	0907195-024A	07/07/09 4:40 PM	07/08/09	07/09/09 11:02 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

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.

DHS ELAP Certification 1644

QA/QC Officer

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QC SUMMARY REPORT FOR SW8260B

W.O Sample Matrix: Water QC Matrix: Water BatchID: 44356 WorkOrder 0907195

EPA Method SW8260B **Extraction SW5030B** **Spiked Sample ID: 0907143-020B**

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
tert-Amyl methyl ether (TAME)	ND	10	103	103	0	115	117	1.72	70 - 130	30	70 - 130	30
Benzene	ND	10	107	110	1.97	121	124	1.84	70 - 130	30	70 - 130	30
t-Butyl alcohol (TBA)	ND	50	104	100	3.80	104	111	5.69	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND	10	109	108	0.990	120	122	1.78	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	10	103	104	1.54	115	116	1.14	70 - 130	30	70 - 130	30
Diisopropyl ether (DIPE)	ND	10	107	109	1.92	121	122	1.14	70 - 130	30	70 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	10	105	106	1.29	117	118	0.530	70 - 130	30	70 - 130	30
Methyl-t-butyl ether (MTBE)	ND	10	106	107	0.631	117	119	2.14	70 - 130	30	70 - 130	30
Toluene	ND	10	101	102	0.757	115	117	2.01	70 - 130	30	70 - 130	30
%SS1:	86	25	98	98	0	97	98	0.596	70 - 130	30	70 - 130	30
%SS2:	106	25	101	101	0	102	102	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 44356 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0907195-025B	07/07/09 7:30 PM	07/09/09	07/09/09 11:45 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

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

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

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

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QC SUMMARY REPORT FOR 6020A

W.O. Sample Matrix: Soil/Solid QC Matrix: Soil WorkOrder: 0907195

EPA Method 6020A			Extraction SW3050B			BatchID: 44351			Spiked Sample ID: 0907162-002A			
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
Chromium	75	50	NR	NR	NR	10	97.4	96.8	0.607	75 - 125	20	75 - 125	20
Lead	32	50	96.8	96.9	0.0501	10	93.2	93.4	0.178	75 - 125	20	75 - 125	20
%SS:	98	250	99	97	1.72	250	100	98	1.61	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 44351 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0907195-001A	07/08/09 9:10 AM	07/08/09	07/09/09 5:19 PM	0907195-002A	07/08/09 9:12 AM	07/08/09	07/09/09 5:25 PM
0907195-003A	07/08/09 9:01 AM	07/08/09	07/09/09 5:32 PM	0907195-004A	07/08/09 9:08 AM	07/08/09	07/09/09 5:38 PM
0907195-005A	07/08/09 8:52 AM	07/08/09	07/09/09 5:44 PM	0907195-006A	07/08/09 9:00 AM	07/08/09	07/09/09 5:50 PM
0907195-006A	07/08/09 9:00 AM	07/08/09	07/10/09 6:06 PM	0907195-007A	07/08/09 8:35 AM	07/08/09	07/09/09 5:56 PM
0907195-008A	07/08/09 8:50 AM	07/08/09	07/09/09 6:28 PM	0907195-009A	07/08/09 8:25 AM	07/08/09	07/09/09 6:34 PM
0907195-010A	07/08/09 8:30 AM	07/08/09	07/09/09 6:40 PM	0907195-011A	07/08/09 9:15 AM	07/08/09	07/09/09 6:46 PM
0907195-012A	07/08/09 9:16 AM	07/08/09	07/10/09 2:45 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.

DHS ELAP Certification 1644

QA/QC Officer

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QC SUMMARY REPORT FOR 6020A

W.O Sample Matrix: Soil QC Matrix: Soil WorkOrder 0907195

EPA Method 6020A			Extraction SW3050B			BatchID: 44351			Spiked Sample ID: 0907162-002A				
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	32	50	96.8	96.9	0.0501	10	93.2	93.4	0.178	75 - 125	20	75 - 125	20
%SS:	98	250	99	97	1.72	250	100	98	1.61	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 44351 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0907195-013A	07/08/09 2:00 PM	07/08/09	07/09/09 6:57 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

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.

McCampbell Analytical, Inc.
"When Quality Counts"

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

QC SUMMARY REPORT FOR 6020A

W.O Sample Matrix: Soil QC Matrix: Soil WorkOrder 0907195

EPA Method 6020A		Extraction SW3050B			BatchID: 44379		Spiked Sample ID: 0907195-027A					
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	7.2	50	96.1	97.3	1.11	10	91.4	91.6	0.184	75 - 125	20	75 - 125	20
%SS:	99	250	96	97	1.74	250	99	100	0.805	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 44379 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0907195-014A	07/07/09 1:45 PM	07/08/09	07/09/09 7:02 PM	0907195-015A	07/07/09 2:35 PM	07/08/09	07/09/09 7:07 PM
0907195-016A	07/07/09 2:40 PM	07/08/09	07/10/09 6:14 PM	0907195-017A	07/07/09 2:55 PM	07/08/09	07/10/09 3:23 PM
0907195-018A	07/07/09 3:10 PM	07/08/09	07/09/09 7:49 PM	0907195-019A	07/07/09 3:50 PM	07/08/09	07/10/09 3:29 PM
0907195-020A	07/07/09 3:55 PM	07/08/09	07/10/09 3:35 PM	0907195-021A	07/07/09 3:30 PM	07/08/09	07/10/09 3:41 PM
0907195-022A	07/07/09 3:45 PM	07/08/09	07/09/09 8:09 PM	0907195-026A	07/07/09 4:00 PM	07/08/09	07/10/09 3:48 PM
0907195-027A	07/07/09 4:05 PM	07/08/09	07/09/09 3:49 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.

DHS ELAP Certification 1644

QA/QC Officer

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QC SUMMARY REPORT FOR SW6010C

W.O. Sample Matrix: Soil | QC Matrix: Soil | BatchID: 44332 | WorkOrder: 0907195

EPA Method SW6010C | **Extraction CA Title 22** | **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
Chromium	N/A	1	N/A	N/A	N/A	89.3	92	2.96	N/A	N/A	80 - 120	20
Lead	N/A	1	N/A	N/A	N/A	88.3	90.2	2.12	N/A	N/A	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 44332 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0907195-001A	07/08/09 9:10 AM	07/08/09	07/13/09 10:29 AM	0907195-003A	07/08/09 9:01 AM	07/08/09	07/13/09 10:32 AM
0907195-005A	07/08/09 8:52 AM	07/08/09	07/13/09 10:35 AM	0907195-007A	07/08/09 8:35 AM	07/08/09	07/13/09 10:38 AM
0907195-009A	07/08/09 8:25 AM	07/08/09	07/13/09 10:40 AM	0907195-014A	07/07/09 1:45 PM	07/08/09	07/13/09 10:43 AM
0907195-015A	07/07/09 2:35 PM	07/08/09	07/13/09 10:46 AM	0907195-017A	07/07/09 2:55 PM	07/08/09	07/13/09 10:55 AM
0907195-020A	07/07/09 3:55 PM	07/08/09	07/13/09 10:57 AM	0907195-021A	07/07/09 3:30 PM	07/08/09	07/13/09 11:00 AM
0907195-026A	07/07/09 4:00 PM	07/08/09	07/13/09 11:03 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

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.

DHS ELAP Certification 1644

QA/QC Officer

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QC SUMMARY REPORT FOR SW6010C

W.O. Sample Matrix: Soil | QC Matrix: Soil | BatchID: 44380 | WorkOrder 0907195

EPA Method SW6010C **Extraction SW1311** **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
Chromium	N/A	1	N/A	N/A	N/A	101	102	1.58	N/A	N/A	80 - 120	20
Lead	N/A	1	N/A	N/A	N/A	100	99.7	0.570	N/A	N/A	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 44380 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0907195-001A	07/08/09 9:10 AM	07/08/09	07/09/09 6:30 PM	0907195-003A	07/08/09 9:01 AM	07/08/09	07/09/09 6:33 PM
0907195-005A	07/08/09 8:52 AM	07/08/09	07/09/09 6:36 PM	0907195-007A	07/08/09 8:35 AM	07/08/09	07/09/09 6:39 PM
0907195-009A	07/08/09 8:25 AM	07/08/09	07/09/09 6:42 PM	0907195-014A	07/07/09 1:45 PM	07/08/09	07/09/09 6:44 PM
0907195-015A	07/07/09 2:35 PM	07/08/09	07/09/09 6:47 PM	0907195-017A	07/07/09 2:55 PM	07/08/09	07/09/09 6:50 PM
0907195-020A	07/07/09 3:55 PM	07/08/09	07/09/09 6:53 PM	0907195-021A	07/07/09 3:30 PM	07/08/09	07/09/09 6:56 PM
0907195-026A	07/07/09 4:00 PM	07/08/09	07/09/09 7:04 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.

DHS ELAP Certification 1644

QA/QC Officer

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QC SUMMARY REPORT FOR WET CHEMISTRY TESTS

Test Method: Total Dissolved Solids **Matrix: W** **WorkOrder: 0907195**

Method Name: SM2540C			Units mg/L			BatchID: 44355
Lab ID	Sample	DF	Dup / Ser. Dil.	DF	% RPD	Acceptance Criteria (%)
0907195-025C	1310	1	1290	2	1.15	<20
0907195-028B	1180	2	1170	5	1.28	<20

BATCH 44355 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0907195-025C	07/07/09 7:30 PM	07/08/09	07/09/09 1:55 PM	0907195-028B	07/07/09 10:05 AM	07/08/09	07/09/09 1:35 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 SW8015B

W.O. Sample Matrix: Water QC Matrix: Water BatchID: 44354 WorkOrder: 0907195

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	84.6	84.2	0.471	N/A	N/A	70 - 130	30
%SS:	N/A	2500	N/A	N/A	N/A	111	111	0	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 44354 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0907195-025A	07/07/09 7:30 PM	07/08/09	07/11/09 12:02 AM	0907195-028A	07/07/09 10:05 AM	07/08/09	07/13/09 12:36 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.

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.

DHS ELAP Certification 1644

QA/QC Officer

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QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Soil QC Matrix: Soil BatchID: 44381 WorkOrder: 0907195

EPA Method SW8015B **Extraction SW3550C/3630C** **Spiked Sample ID: 0907195-039A**

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)	250	20	NR	NR	NR	92.3	83.1	10.4	70 - 130	30	70 - 130	30
%SS:	107	50	93	93	0	119	93	24.5	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 44381 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0907195-023A	07/07/09 4:30 PM	07/08/09	07/10/09 8:19 PM	0907195-024A	07/07/09 4:40 PM	07/08/09	07/10/09 9:30 PM
0907195-029A	07/08/09 10:15 AM	07/08/09	07/09/09 9:50 PM	0907195-030A	07/08/09 10:20 AM	07/08/09	07/10/09 10:41 PM
0907195-031A	07/08/09 12:45 PM	07/08/09	07/09/09 11:10 AM	0907195-032A	07/08/09 12:55 PM	07/08/09	07/10/09 7:07 PM
0907195-033A	07/08/09 1:05 PM	07/08/09	07/09/09 1:36 PM	0907195-034A	07/08/09 12:00 PM	07/08/09	07/09/09 2:44 PM
0907195-035A	07/08/09 11:15 AM	07/08/09	07/09/09 6:25 PM	0907195-036A	07/08/09 11:24 AM	07/08/09	07/09/09 5:16 PM
0907195-037A	07/08/09 11:30 AM	07/08/09	07/10/09 12:06 AM	0907195-038A	07/08/09 12:30 PM	07/08/09	07/09/09 8:41 PM
0907195-039A	07/08/09 1:10 PM	07/08/09	07/09/09 2:44 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.

DHS ELAP Certification 1644

QA/QC Officer

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

Treadwell & Rollo 501 14Th Street, 3rd Floor Oakland, CA 94612	Client Project ID: #4823.02; Alders Property	Date Sampled: 07/06/09-07/07/09
		Date Received: 07/07/09
	Client Contact: Matthew Hall	Date Reported: 07/10/09
	Client P.O.:	Date Completed: 07/10/09

WorkOrder: 0907143

July 10, 2009

Dear Matthew:

Enclosed within are:

1) The results of the **16** analyzed samples from your project: **#4823.02; Alders Property,**
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 McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

0907143

McCAMPBELL ANALYTICAL, INC.
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PITTSBURG, CA 94565-1701
Website: www.mccampbell.com Email: main@mccampbell.com
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CHAIN OF CUSTODY RECORD

RUSH

TURN AROUND TIME: ☐ RUSH ☐ 24 HR ☐ 48 HR ☑ 72 HR ☐ 5 DAY

☐ GeoTracker EDF ☐ PDF ☑ Excel ☐ Write On (DW)

Report To: Matthew Hall | Bill To: Matthew Hall
Company: Treadwell & Rollo, Inc.
501 14th Street, 3rd Floor, Oakland, CA 94612
E-Mail: mbhall@treadwellrollo.com
Tele: (510) 874-4500 | Fax: (510) 874-4507
Project #: 4823.02 | Project Name: Alders Property
Project Location: 5812 Hollis Street, Emeryville, CA
Sampler Signature:

SAMPLE ID	LOCATION/ Field Point Name	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED ICE	METHOD PRESERVED HCL	METHOD PRESERVED HNO_3	METHOD PRESERVED Other	TPH-D, Mo (SW 8015M)	TPH-G, BTEX (SW 8260)	Fuel Oxygenates (SW 8260)	SVOC (SW 8270)	Other: Silica Gel Cleanup	Other: Hold	Comments
	UST-01 8-8.5	7/6/09	11:30	1			x				x				X	X	X		x	x	
	UST-01 12-12.2	7/6/09	11:40	1			x				x								x	x	
	UST-01 15-15.2	7/6/09	11:50	1			x				x				X	X	X		x	x	
	UST-01 19.5-20	7/6/09	12:00	1			x				x				X	X	X		x	x	
	UST-02 11.5-12	7/6/09	9:45	1			x				x				X	X	X		x	x	
	UST-02 15-15.5	7/6/09	9:55	1			x				x								x	x	
	UST-02 19.5-20	7/6/09	10:05	1			x				x				X	X	X		x	x	
	UST-02 27.5-28	7/6/09	10:15	1			x				x				X	X	X		x	x	
	UST-02 29.5-30	7/6/09	10:20	1			x				x								x	x	
	UST-03 4.5-5	7/6/09	13:30	1			x				x				X	X	X		x	x	
	UST-03 7.5-8	7/6/09	13:35	1			x				x				X	X	X		x	x	
	UST-03 10-10.5	7/6/09	13:40	1			x				x								x	x	
	UST-03 13.5-14	7/6/09	13:45	1			x				x				X	X	X		x	x	
	UST-03 15-15.5	7/6/09	13:50	1			x				x								x	x	

Comments: Filter Samples for Metals analysis: Yes / No

Relinquished By:	Date:	Time:	Received By:
[signature]	7/7	13:45	[signature]
[signature]	7/7/09	2:30	[signature]

ICE/t° 3.5°C
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
DECHLORINATED IN LAB NA
APPROPRIATE CONTAINERS ✓
PRESERVED IN LAB NA

COMMENTS:

VOAS O&G METALS OTHER
PRESERVATION ________ pH<2 ________

1/2

McCAMPBELL ANALYTICAL, INC.

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PITTSBURG, CA 94565-1701 0907K3
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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)

Report To: Matthew Hall	Bill To: Matthew Hall
Company: Treadwell & Rollo, Inc.	
501 14th Street, 3rd Floor, Oakland, CA 94612	
	E-Mail: mbhall@treadwellrollo.com
Tele: (510) 874-4500	Fax: (510) 874-4507
Project #: 4823.02	Project Name: Alders Property
Project Location: 5812 Hollis Street, Emeryville, CA	
Sampler Signature:	

SAMPLE ID	LOCATION/ Field Point Name	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED ICE	METHOD PRESERVED HCL	METHOD PRESERVED HNO_3	METHOD PRESERVED Other	Analysis Request: TPH-D, Mo (SW 8015M)	TPH-G, BTEX (SW 8260)	Fuel Oxygenates (SW 8260)	SVOC (SW 8270)	Total Dissolved Solids	Other: Silica Gel Cleanup	Other: Hold	Comments
	UST-03 19.5-20	7/6/09	14:00	1			x				x									x	x	
	UST-04 8.5-9	7/6/09	12:40	1			x				x				x	x	x			x	x	
	UST-04 10-10.5	7/6/09	12:45	1			x				x				x	x	x			x	x	
	UST-04 15-15.5	7/6/09	12:55	1			x				x				x	x	x			x	x	
	UST-04 19.5-20	7/6/09	13:05	1			x				x									x	x	
	UST-01	7/7/09	9:45	5		x									x	x	x		x	x		
	UST-02	7/7/09	10:20	4		x									x	x	x		x	x		
	UST-03	7/7/09	10:00	3		x										x	x					
	UST-04	7/7/09	9:55	5		x									x	x	x		x	x		

+50
+10
+5
+10

Relinquished By:	Date: 7/7	Time: 1340	Received By:
Relinquished By:	Date: 7/7/09	Time: 25	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/t 1655.2°
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
DECHLORINATED IN LAB N/A
APPROPRIATE CONTAINERS ✓
PRESERVED IN LAB N/A

COMMENTS:

VOAS O&G METALS OTHER
PRESERVATION pH<2

Filter Samples for Metals analysis: Yes / No

2/2

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0907143 **ClientCode: TWRK**

☐ WriteOn ☐ EDF ☑ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Matthew Hall
Treadwell & Rollo
501 14Th Street, 3rd Floor
Oakland, CA 94612
(510) 874-4500 FAX (510) 874-4507

Email:
cc:
PO:
ProjectNo: #4823.02; Alders Property

Bill to:
Accounts Payable
Treadwell & Rollo
501 14Th Street, 3rd Floor
Oakland, CA 94612
SEND HARDCOPY

Requested TAT: 3 days

Date Received: 07/07/2009
Date Printed: 07/07/2009

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
0907143-001	UST-01 8-8.5	Soil	7/6/2009 11:30	☐	A			A								
0907143-003	UST-01 15-15.2	Soil	7/6/2009 11:50	☐	A			A								
0907143-004	UST-01 19.5-20	Soil	7/6/2009 12:00	☐	A			A								
0907143-005	UST-02 11.5-12	Soil	7/6/2009 9:45	☐	A			A								
0907143-007	UST-02 19.5-20	Soil	7/6/2009 10:05	☐	A			A								
0907143-008	UST-02 27.5-28	Soil	7/6/2009 10:15	☐	A			A								
0907143-010	UST-03 4.5-5	Soil	7/6/2009 13:30	☐	A			A								
0907143-011	UST-03 7.5-8	Soil	7/6/2009 13:35	☐	A			A								
0907143-013	UST-03 13.5-14	Soil	7/6/2009 13:45	☐	A			A								
0907143-016	UST-04 8.5-9	Soil	7/6/2009 12:40	☐	A			A								
0907143-017	UST-04 10-10.5	Soil	7/6/2009 12:45	☐	A			A								
0907143-018	UST-04 15-15.5	Soil	7/6/2009 12:55	☐	A			A								
0907143-020	UST-01	Water	7/7/2009 9:45	☐		B	C		A							
0907143-021	UST-02	Water	7/7/2009 10:30	☐		B	C		A							

Test Legend:

1	GMBTEXOXYPb_S	2	GMBTEXOXYPB_W	3	TDS_W	4	TPH(DMO)WSG_S	5	TPH(DMO)WSG_W
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.

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0907143 **ClientCode: TWRK**

☐ WriteOn ☐ EDF ☑ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Matthew Hall
Treadwell & Rollo
501 14Th Street, 3rd Floor
Oakland, CA 94612
(510) 874-4500 FAX (510) 874-4507

Email:
cc:
PO:
ProjectNo: #4823.02; Alders Property

Bill to:
Accounts Payable
Treadwell & Rollo
501 14Th Street, 3rd Floor
Oakland, CA 94612
SEND HARDCOPY

Requested TAT: 3 days

Date Received: 07/07/2009
Date Printed: 07/07/2009

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
0907143-022	UST-03	Water	7/7/2009 10:05	☐		A										
0907143-023	UST-04	Water	7/7/2009 9:55	☐		B	C		A							

Test Legend:

1	GMBTEXOXYPb_S	2	GMBTEXOXYPB_W	3	TDS_W	4	TPH(DMO)WSG_S	5	TPH(DMO)WSG_W
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.

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

Sample Receipt Checklist

Client Name: **Treadwell & Rollo**
Date and Time Received: **07/07/09 7:47:34 PM**

Project Name: **#4823.02; Alders Property**
Checklist completed and reviewed by: Samantha Arbuckle

WorkOrder N°: **0907143** Matrix Soil/Water
Carrier: Rob Pringle (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: 5.2°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☑	No ☐	No VOA vials submitted ☐
Sample labels checked for correct preservation?	Yes ☑	No ☐	
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

Treadwell & Rollo	Client Project ID: #4823.02; Alders Property	Date Sampled: 07/06/09
		Date Received: 07/07/09
501 14Th Street, 3rd Floor	Client Contact: Matthew Hall	Date Extracted: 07/07/09
Oakland, CA 94612	Client P.O.:	Date Analyzed: 07/08/09-07/09/09

TPH(g) & MBTEX by P&T and GC/MS *

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0907143

Lab ID	0907143-001A	0907143-003A	0907143-004A	0907143-005A	Reporting Limit for DF =1	
Client ID	UST-01 8-8.5	UST-01 15-15.2	UST-01 19.5-20	UST-02 11.5-12		
Matrix	S	S	S	S		
DF	1	1	1	1	S	W
Compound	**Concentration**				mg/kg	ug/L
TPH(g)	ND	ND	ND	ND	0.25	NA
tert-Amyl methyl ether (TAME)	ND	ND	ND	ND	0.005	NA
Benzene	ND	ND	ND	ND	0.005	NA
t-Butyl alcohol (TBA)	ND	ND	ND	ND	0.05	NA
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	0.004	NA
1,2-Dichloroethane (1,2-DCA)	ND	ND	ND	ND	0.004	NA
Diisopropyl ether (DIPE)	ND	ND	ND	ND	0.005	NA
Ethylbenzene	ND	ND	ND	ND	0.005	NA
Ethyl tert-butyl ether (ETBE)	ND	ND	ND	ND	0.005	NA
Methyl-t-butyl ether (MTBE)	ND	ND	ND	ND	0.005	NA
Toluene	ND	ND	ND	ND	0.005	NA
Xylenes	ND	ND	ND	ND	0.005	NA
Surrogate Recoveries (%)						
%SS1:	83	82	86	84		
%SS2:	108	109	108	110		
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 coelutes with another peak; &) low surrogate due to matrix interference.

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Treadwell & Rollo	Client Project ID: #4823.02; Alders Property	Date Sampled: 07/06/09
		Date Received: 07/07/09
501 14Th Street, 3rd Floor	Client Contact: Matthew Hall	Date Extracted: 07/07/09
Oakland, CA 94612	Client P.O.:	Date Analyzed: 07/08/09-07/09/09

TPH(g) & MBTEX by P&T and GC/MS *

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0907143

Lab ID	0907143-007A	0907143-008A	0907143-010A	0907143-011A	Reporting Limit for DF =1	
Client ID	UST-02 19.5-20	UST-02 27.5-28	UST-03 4.5-5	UST-03 7.5-8		
Matrix	S	S	S	S		
DF	1	1	1	1	S	W
Compound	**Concentration**				mg/kg	ug/L
TPH(g)	ND	ND	ND	0.86	0.25	NA
tert-Amyl methyl ether (TAME)	ND	ND	ND	ND	0.005	NA
Benzene	ND	ND	ND	ND	0.005	NA
t-Butyl alcohol (TBA)	ND	ND	ND	ND	0.05	NA
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	0.004	NA
1,2-Dichloroethane (1,2-DCA)	ND	ND	ND	ND	0.004	NA
Diisopropyl ether (DIPE)	ND	ND	ND	ND	0.005	NA
Ethylbenzene	ND	ND	ND	ND	0.005	NA
Ethyl tert-butyl ether (ETBE)	ND	ND	ND	ND	0.005	NA
Methyl-t-butyl ether (MTBE)	ND	ND	ND	ND	0.005	NA
Toluene	ND	ND	ND	ND	0.005	NA
Xylenes	ND	ND	ND	ND	0.005	NA
Surrogate Recoveries (%)						
%SS1:	82	84	85	87		
%SS2:	109	106	108	106		
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 coelutes with another peak; &) low surrogate due to matrix interference.

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Angela Rydelius, Lab Manager

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Treadwell & Rollo	Client Project ID: #4823.02; Alders Property	Date Sampled: 07/06/09
		Date Received: 07/07/09
501 14Th Street, 3rd Floor	Client Contact: Matthew Hall	Date Extracted: 07/07/09
Oakland, CA 94612	Client P.O.:	Date Analyzed: 07/08/09-07/09/09

TPH(g) & MBTEX by P&T and GC/MS *

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0907143

Lab ID	0907143-013A	0907143-016A	0907143-017A	0907143-018A	Reporting Limit for DF =1	
Client ID	UST-03 13.5-14	UST-04 8.5-9	UST-04 10-10.5	UST-04 15-15.5		
Matrix	S	S	S	S		
DF	1	1	1	1	S	W
Compound	**Concentration**				mg/kg	ug/L
TPH(g)	0.46	1.9	0.81	ND	0.25	NA
tert-Amyl methyl ether (TAME)	ND	ND	ND	ND	0.005	NA
Benzene	ND	ND	ND	ND	0.005	NA
t-Butyl alcohol (TBA)	ND	ND	ND	ND	0.05	NA
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	0.004	NA
1,2-Dichloroethane (1,2-DCA)	ND	ND	ND	ND	0.004	NA
Diisopropyl ether (DIPE)	ND	ND	ND	ND	0.005	NA
Ethylbenzene	ND	ND	ND	ND	0.005	NA
Ethyl tert-butyl ether (ETBE)	ND	ND	ND	ND	0.005	NA
Methyl-t-butyl ether (MTBE)	ND	ND	ND	ND	0.005	NA
Toluene	ND	ND	ND	ND	0.005	NA
Xylenes	ND	ND	ND	ND	0.005	NA
Surrogate Recoveries (%)						
%SS1:	85	87	87	83		
%SS2:	110	106	105	108		
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 coelutes with another peak; &) low surrogate due to matrix interference.

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Treadwell & Rollo	Client Project ID: #4823.02; Alders Property	Date Sampled: 07/07/09
		Date Received: 07/07/09
501 14Th Street, 3rd Floor	Client Contact: Matthew Hall	Date Extracted: 07/08/09-07/09/09
Oakland, CA 94612	Client P.O.:	Date Analyzed: 07/08/09-07/09/09

TPH(g)MBTEX + Oxygenates + EDB and 1,2-DCA*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0907143

Lab ID	0907143-020B	0907143-021B	0907143-022A	0907143-023B	Reporting Limit for DF =1	
Client ID	UST-01	UST-02	UST-03	UST-04		
Matrix	W	W	W	W		
DF	1	1	1	1	S	W
Compound	**Concentration**				ug/kg	µg/L
TPH(g)	ND	390	ND	100	NA	50
tert-Amyl methyl ether (TAME)	ND	ND	ND	ND	NA	0.5
Benzene	ND	ND	ND	ND	NA	0.5
t-Butyl alcohol (TBA)	ND	3.1	ND	ND	NA	2.0
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND	ND	ND	ND	NA	0.5
Diisopropyl ether (DIPE)	ND	ND	ND	ND	NA	0.5
Ethylbenzene	ND	ND	ND	ND	NA	0.5
Ethyl tert-butyl ether (ETBE)	ND	ND	ND	ND	NA	0.5
Methyl-t-butyl ether (MTBE)	ND	ND	ND	ND	NA	0.5
Toluene	ND	ND	ND	ND	NA	0.5
Xylenes	ND	ND	ND	ND	NA	0.5
Surrogate Recoveries (%)						
%SS1:	86	87	87	87		
%SS2:	106	106	106	107		
Comments	b1	b1	b6,b1	b1		

* 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 coelutes with another peak, &) low surrogate due to matrix interference.

b1) aqueous sample that contains greater than ~1 vol. % sediment
b6) lighter than water immiscible sheen/product is present

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Treadwell & Rollo	Client Project ID: #4823.02; Alders Property	Date Sampled: 07/07/09
		Date Received: 07/07/09
501 14Th Street, 3rd Floor	Client Contact: Matthew Hall	Date Extracted: 07/08/09-07/09/09
Oakland, CA 94612	Client P.O.:	Date Analyzed 07/09/09-07/10/09

Total Dissolved Solids*

Analytical Method: SM2540C Work Order: 0907143

Lab ID	Client ID	Matrix	Total Dissolved Solids	DF	Comments
0907143-020C	UST-01	W	618	1	b1
0907143-021C	UST-02	W	1120	2	b1
0907143-023C	UST-04	W	659	1	b1

Reporting Limit for DF = 1; ND means not detected at or above the reporting limit	W	10 mg/L	
	S	NA	

* water samples reported in mg/L.

b1) aqueous sample that contains greater than ~1 vol. % sediment

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Treadwell & Rollo	Client Project ID: #4823.02; Alders Property	Date Sampled:	07/06/09-07/07/09
		Date Received:	07/07/09
501 14Th Street, 3rd Floor	Client Contact: Matthew Hall	Date Extracted:	07/07/09
Oakland, CA 94612	Client P.O.:	Date Analyzed:	07/08/09-07/10/09

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up*

Extraction method: SW3510C/3630C/SW3550C/36 Analytical methods: SW8015B Work Order: 0907143

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	TPH-Motor Oil (C18-C36)	DF	% SS	Comments
0907143-001A	UST-01 8-8.5	S	15	16	1	113	e7,e3
0907143-003A	UST-01 15-15.2	S	ND	ND	1	113	
0907143-004A	UST-01 19.5-20	S	15	11	1	111	e3,e7
0907143-005A	UST-02 11.5-12	S	17	44	2	111	e7,e2
0907143-007A	UST-02 19.5-20	S	ND	ND	1	115	
0907143-008A	UST-02 27.5-28	S	1.0	9.5	1	112	e7,e2
0907143-010A	UST-03 4.5-5	S	ND	7.5	1	114	e7
0907143-011A	UST-03 7.5-8	S	530	290	5	112	e1,e7
0907143-013A	UST-03 13.5-14	S	110	66	1	111	e3,e7
0907143-016A	UST-04 8.5-9	S	260	190	5	110	e3,e7
0907143-017A	UST-04 10-10.5	S	290	160	5	108	e3,e7
0907143-018A	UST-04 15-15.5	S	1.8	ND	1	111	e2
0907143-020A	UST-01	W	110	ND	1	111	e2,b1
0907143-021A	UST-02	W	150	390	1	115	e7,e2,b1
0907143-023A	UST-04	W	2000	1700	1	113	e3,e7,b1

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	250	µg/L
	S	1.0	5.0	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 McCampbell Analytical is not responsible for their interpretation:

b1) aqueous sample that contains greater than ~1 vol. % sediment
e1) unmodified or weakly modified diesel is significant
e2) diesel range compounds are significant; no recognizable pattern
e3) aged diesel is significant
e7) oil range compounds are significant

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Angela Rydelius, Lab Manager

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QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Soil QC Matrix: Soil BatchID: 44322 WorkOrder 0907143

EPA Method SW8260B **Extraction SW5030B** **Spiked Sample ID: 0907143-008A**

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
tert-Amyl methyl ether (TAME)	ND	0.050	88.8	87.9	0.994	86.6	86.4	0.274	60 - 130	30	60 - 130	30
Benzene	ND	0.050	110	108	1.84	107	106	0.989	60 - 130	30	60 - 130	30
t-Butyl alcohol (TBA)	ND	0.25	87.4	88.2	0.865	86.2	85.7	0.530	60 - 130	30	60 - 130	30
Chlorobenzene	ND	0.050	110	108	1.27	110	109	0.561	60 - 130	30	60 - 130	30
1,2-Dibromoethane (EDB)	ND	0.050	96.5	96.8	0.330	96.8	96.5	0.292	60 - 130	30	60 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	0.050	95.5	96.2	0.737	93	91.5	1.67	60 - 130	30	60 - 130	30
1,1-Dichloroethene	ND	0.050	110	107	3.19	109	108	0.899	60 - 130	30	60 - 130	30
Diisopropyl ether (DIPE)	ND	0.050	102	101	0.984	97.6	98	0.410	60 - 130	30	60 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	0.050	96	94.3	1.81	92.4	91.6	0.809	60 - 130	30	60 - 130	30
Methyl-t-butyl ether (MTBE)	ND	0.050	94.5	92	2.59	92.8	91.6	1.37	60 - 130	30	60 - 130	30
Toluene	ND	0.050	108	107	1.49	107	107	0	60 - 130	30	60 - 130	30
Trichloroethene	ND	0.050	111	109	2.22	113	111	2.12	60 - 130	30	60 - 130	30
%SS1:	84	0.12	94	94	0	94	95	1.20	70 - 130	30	70 - 130	30
%SS2:	106	0.12	107	107	0	107	107	0	70 - 130	30	70 - 130	30
%SS3:	110	0.012	105	105	0	105	105	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 44322 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0907143-001A	07/06/09 11:30 AM	07/07/09	07/08/09 4:04 PM	0907143-003A	07/06/09 11:50 AM	07/07/09	07/08/09 2:36 PM
0907143-004A	07/06/09 12:00 PM	07/07/09	07/08/09 4:48 PM	0907143-005A	07/06/09 9:45 AM	07/07/09	07/08/09 5:32 PM
0907143-007A	07/06/09 10:05 AM	07/07/09	07/08/09 3:20 PM	0907143-008A	07/06/09 10:15 AM	07/07/09	07/08/09 1:09 PM
0907143-010A	07/06/09 1:30 PM	07/07/09	07/08/09 6:15 PM	0907143-011A	07/06/09 1:35 PM	07/07/09	07/09/09 5:55 PM
0907143-013A	07/06/09 1:45 PM	07/07/09	07/09/09 3:04 AM	0907143-016A	07/06/09 12:40 PM	07/07/09	07/09/09 6:39 PM
0907143-017A	07/06/09 12:45 PM	07/07/09	07/09/09 7:22 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

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

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

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

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QA/QC Officer

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

QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Soil QC Matrix: Soil BatchID: 44352 WorkOrder 0907143

EPA Method SW8260B **Extraction SW5030B** **Spiked Sample ID: 0907192-001A**

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
tert-Amyl methyl ether (TAME)	ND	0.050	88.9	86.8	2.34	87.6	87.9	0.266	60 - 130	30	60 - 130	30
Benzene	ND	0.050	109	107	2.11	108	108	0	60 - 130	30	60 - 130	30
t-Butyl alcohol (TBA)	ND	0.25	88.9	87.6	1.45	85.8	87.4	1.86	60 - 130	30	60 - 130	30
Chlorobenzene	ND	0.050	110	109	0.894	113	114	1.07	60 - 130	30	60 - 130	30
1,2-Dibromoethane (EDB)	ND	0.050	98.1	94.3	3.86	97.6	98.9	1.30	60 - 130	30	60 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	0.050	98.2	92.9	5.55	95.4	95	0.359	60 - 130	30	60 - 130	30
1,1-Dichloroethene	ND	0.050	107	105	2.01	109	111	1.27	60 - 130	30	60 - 130	30
Diisopropyl ether (DIPE)	ND	0.050	103	101	2.52	100	99	1.46	60 - 130	30	60 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	0.050	95.7	93.5	2.33	93.8	93.8	0	60 - 130	30	60 - 130	30
Methyl-t-butyl ether (MTBE)	ND	0.050	94.4	93.4	1.08	93.1	93.4	0.360	60 - 130	30	60 - 130	30
Toluene	ND	0.050	110	107	2.48	109	111	1.07	60 - 130	30	60 - 130	30
Trichloroethene	ND	0.050	111	109	2.07	114	113	0.891	60 - 130	30	60 - 130	30
%SS1:	88	0.12	94	94	0	94	94	0	70 - 130	30	70 - 130	30
%SS2:	115	0.12	107	106	0.527	108	108	0	70 - 130	30	70 - 130	30
%SS3:	106	0.012	106	105	0.297	106	105	0.659	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 44352 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0907143-018A	07/06/09 12:55 PM	07/07/09	07/08/09 1:53 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons. a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery

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

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

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

DHS ELAP Certification 1644

QA/QC Officer

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QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water QC Matrix: Water BatchID: 44356 WorkOrder 0907143

EPA Method SW8260B **Extraction SW5030B** **Spiked Sample ID: 0907143-020B**

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
tert-Amyl methyl ether (TAME)	ND	10	103	103	0	115	117	1.72	70 - 130	30	70 - 130	30
Benzene	ND	10	107	110	1.97	121	124	1.84	70 - 130	30	70 - 130	30
t-Butyl alcohol (TBA)	ND	50	104	100	3.80	104	111	5.69	70 - 130	30	70 - 130	30
Chlorobenzene	ND	10	107	109	1.31	122	124	1.32	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND	10	109	108	0.990	120	122	1.78	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	10	103	104	1.54	115	116	1.14	70 - 130	30	70 - 130	30
1,1-Dichloroethene	ND	10	103	106	2.87	118	120	1.56	70 - 130	30	70 - 130	30
Diisopropyl ether (DIPE)	ND	10	107	109	1.92	121	122	1.14	70 - 130	30	70 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	10	105	106	1.29	117	118	0.530	70 - 130	30	70 - 130	30
Methyl-t-butyl ether (MTBE)	ND	10	106	107	0.631	117	119	2.14	70 - 130	30	70 - 130	30
Toluene	ND	10	101	102	0.757	115	117	2.01	70 - 130	30	70 - 130	30
Trichloroethene	ND	10	109	109	0	124	124	0	70 - 130	30	70 - 130	30
%SS1:	86	25	98	98	0	97	98	0.596	70 - 130	30	70 - 130	30
%SS2:	106	25	101	101	0	102	102	0	70 - 130	30	70 - 130	30
%SS3:	119	2.5	104	104	0	104	103	1.28	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 44356 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0907143-020B	07/07/09 9:45 AM	07/08/09	07/08/09 10:44 PM	0907143-021B	07/07/09 10:30 AM	07/08/09	07/08/09 11:27 PM
0907143-022A	07/07/09 10:05 AM	07/09/09	07/09/09 3:00 PM	0907143-023B	07/07/09 9:55 AM	07/09/09	07/09/09 12:54 AM

MS = Matrix Spike, MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons. a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery

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.

DHS ELAP Certification 1644

QA/QC Officer

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QC SUMMARY REPORT FOR WET CHEMISTRY TESTS

Test Method: Total Dissolved Solids **Matrix: W** **WorkOrder: 0907143**

Method Name: SM2540C Units mg/L BatchID: 44355

Lab ID	Sample	DF	Dup / Ser. Dil.	DF	% RPD	Acceptance Criteria (%)
0907143-020C	618	1	650	2	5.05	<20
0907143-021C	1120	2	1140	2	1.06	<20
0907143-023C	659	1	650	2	1.37	<20

BATCH 44355 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0907143-020C	07/07/09 9:45 AM	07/08/09	07/09/09 1:15 PM	0907143-021C	07/07/09 10:30 AM	07/09/09	07/10/09 1:15 PM
0907143-023C	07/07/09 9:55 AM	07/08/09	07/09/09 1:45 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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QA/QC Officer

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QC SUMMARY REPORT FOR SW8015B

W.O Sample Matrix: Soil QC Matrix: Soil BatchID: 44313 WorkOrder: 0907143

EPA Method SW8015B **Extraction SW3550C/3630C** **Spiked Sample ID: 0907117-003A**

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)	400	20	NR	NR	NR	78.7	78.8	0.111	70 - 130	30	70 - 130	30
%SS:	90	50	88	93	5.66	115	115	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 44313 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0907143-001A	07/06/09 11:30 AM	07/07/09	07/08/09 10:48 PM	0907143-003A	07/06/09 11:50 AM	07/07/09	07/08/09 8:26 PM
0907143-004A	07/06/09 12:00 PM	07/07/09	07/09/09 12:57 PM	0907143-005A	07/06/09 9:45 AM	07/07/09	07/10/09 8:58 AM
0907143-007A	07/06/09 10:05 AM	07/07/09	07/09/09 3:25 AM	0907143-008A	07/06/09 10:15 AM	07/07/09	07/10/09 10:09 AM
0907143-010A	07/06/09 1:30 PM	07/07/09	07/09/09 4:33 AM	0907143-011A	07/06/09 1:35 PM	07/07/09	07/09/09 9:32 PM
0907143-013A	07/06/09 1:45 PM	07/07/09	07/09/09 2:16 AM	0907143-016A	07/06/09 12:40 PM	07/07/09	07/09/09 5:58 PM
0907143-017A	07/06/09 12:45 PM	07/07/09	07/09/09 4:46 PM	0907143-018A	07/06/09 12:55 PM	07/07/09	07/09/09 11:35 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.

DHS ELAP Certification 1644

QA/QC Officer

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QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Water QC Matrix: Water BatchID: 44354 WorkOrder: 0907143

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	84.6	84.2	0.471	N/A	N/A	70 - 130	30
%SS:	N/A	2500	N/A	N/A	N/A	111	111	0	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 44354 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0907143-020A	07/07/09 9:45 AM	07/07/09	07/08/09 9:37 PM	0907143-021A	07/07/09 10:30 AM	07/07/09	07/10/09 12:59 AM
0907143-023A	07/07/09 9:55 AM	07/07/09	07/09/09 7:58 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

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.

DHS ELAP Certification 1644


QA/QC Officer

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

Treadwell & Rollo 501 14Th Street, 3rd Floor Oakland, CA 94612	Client Project ID: #4823.02; Alders Property	Date Sampled: 07/06/09
		Date Received: 07/07/09
	Client Contact: Matthew Hall	Date Reported: 07/17/09
	Client P.O.:	Date Completed: 07/17/09

WorkOrder: 0907143

July 17, 2009

Dear Matthew:

Enclosed within are:

1) The results of the **1** analyzed sample from your project: **#4823.02; Alders Property,**
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

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

0907143

McCAMPBELL ANALYTICAL, INC.

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PITTSBURG, CA 94565-1701
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CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☑ 72 HR ☐ 5 DAY
☐ GeoTracker EDF ☐ PDF ☑ Excel ☐ Write On (DW)

Report To: Matthew Hall	**Bill To:** Matthew Hall
Company: Treadwell & Rollo, Inc.	
501 14th Street, 3rd Floor, Oakland, CA 94612	
	E-Mail: mbhall@treadwellrollo.com
Tele: (510) 874-4500	**Fax:** (510) 874-4507
Project #: 4823.02	**Project Name:** Alders Property
Project Location: 5812 Hollis Street, Emeryville, CA	
Sampler Signature:	

SAMPLE ID	LOCATION/ Field Point Name	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED ICE	METHOD PRESERVED HCL	METHOD PRESERVED HNO_3	METHOD PRESERVED Other	Analysis Request: TPH-D, Mo (SW 8015M)	TPH-G, BTEX (SW 8260)	Fuel Oxygenates (SW 8260)	SVOC (SW 8270)	TPH(D+MO) added per Matt	TPH(G) by 8260 72hrs 07/15/09	Other: Silica Gel Cleanup	Other: Hold	Comments
	UST-01 8-8.5	7/6/09	11:30	1			x				x				X	X	X				x	x	
	UST-01 12-12.2	7/6/09	11:40	1			x				x										x	x	
	UST-01 15-15.2	7/6/09	11:50	1			x				x				X	X	X				X	X	
	UST-01 19.5-20	7/6/09	12:00	1			x				x				X	X	X				x	x	
	UST-02 11.5-12	7/6/09	9:45	1			x				x				X	X	X				X	X	
	UST-02 15-15.5	7/6/09	9:55	1			x				x										x	x	
	UST-02 19.5-20	7/6/09	10:05	1			x				x				X	X	X				x	x	
	UST-02 27.5-28	7/6/09	10:15	1			x				x				X	X	X				X	X	
	UST-02 29.5-30	7/6/09	10:20	1			x				x										x	x	
	UST-03 4.5-5	7/6/09	13:30	1			x				x				X	X	X				X	X	
	UST-03 7.5-8	7/6/09	13:35	1			x				x				X	X	X				X	X	
	UST-03 10-10.5	7/6/09	13:40	1			x				x										x	x	
	UST-03 13.5-14	7/6/09	13:45	1			x				x				X	X	X				X	X	
	UST-03 15-15.5	7/6/09	13:50	1			x				x										x	x	

Relinquished By:	Date: 7/7	Time: (3:45	Received By:
Relinquished By:	Date: 7/8/09	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/t° 3.5
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
DECHLORINATED IN LAB ✓
APPROPRIATE CONTAINERS ✓
PRESERVED IN LAB ✓

COMMENTS:

VOAS O&G METALS OTHER
PRESERVATION pH<2

Filter Samples for Metals analysis: Yes / No

1/2

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 090714 A **ClientCode: TWRK**

☐ WriteOn ☐ EDF ☑ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Matthew Hall
Treadwell & Rollo
501 14Th Street, 3rd Floor
Oakland, CA 94612
(510) 874-4500 FAX (510) 874-4507

Email: mbhall@treadwellrollo.com
cc: tacampitelli@treadwellrollo.com
PO:
ProjectNo: #4823.02; Alders Property

Bill to:
Accounts Payable
Treadwell & Rollo
501 14Th Street, 3rd Floor
Oakland, CA 94612
SEND HARDCOPY

Requested TAT: 3 days
Date Received: 07/07/2009
Date Add-On: 07/15/2009
Date Printed: 07/15/2009

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
0907143-014	UST-03 15-15.5	Soil	7/6/2009 13:50	☐	A	A										

Test Legend:

1	GAS8260_S	2	TPH(DMO)WSG_S	3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Samantha Arbuckle

Comments: TPH(d&mo) WSG and TPHg by 8260 added to UST 3 15-15.5, 72hr per Matt 07/15/09.

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.

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Treadwell & Rollo	Client Project ID: #4823.02; Alders Property	Date Sampled: 07/06/09
		Date Received: 07/07/09
501 14Th Street, 3rd Floor	Client Contact: Matthew Hall	Date Extracted: 07/15/09
Oakland, CA 94612	Client P.O.:	Date Analyzed 07/16/09

TPH(g) by GC/MS*

Extraction method SW5030B Analytical methods SW8260B Work Order: 0907143

Lab ID	Client ID	Matrix	TPH(g)	DF	% SS	Comments
014A	UST-03 15-15.5	S	ND	1	113	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA
	S	0.25	mg/kg

* 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 coelutes with another peak, &) low surrogate due to matrix interference.

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Angela Rydelius, Lab Manager

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Treadwell & Rollo	Client Project ID: #4823.02; Alders Property	Date Sampled: 07/06/09
		Date Received: 07/07/09
501 14Th Street, 3rd Floor	Client Contact: Matthew Hall	Date Extracted: 07/15/09
Oakland, CA 94612	Client P.O.:	Date Analyzed: 07/17/09

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up*

Extraction method: SW3550C/3630C Analytical methods: SW8015B Work Order: 0907143

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	TPH-Motor Oil (C18-C36)	DF	% SS	Comments
0907143-014A	UST-03 15-15.5	S	ND	ND	1	105	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA	ug/L
	S	1.0	5.0	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 McCampbell Analytical is not responsible for their interpretation:

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Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
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QC SUMMARY REPORT FOR SW8260B

W.O Sample Matrix: Soil QC Matrix: Soil BatchID: 44523 WorkOrder: 0907143

EPA Method SW8260B **Extraction SW5030B** **Spiked Sample ID: 0907335-072A**

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
tert-Amyl methyl ether (TAME)	ND	0.050	85.4	84.4	1.13	98.8	98.8	0	60 - 130	30	60 - 130	30
Benzene	ND	0.050	102	101	1.05	109	115	5.64	60 - 130	30	60 - 130	30
t-Butyl alcohol (TBA)	ND	0.25	83.3	84.7	1.70	94.8	98.4	3.70	60 - 130	30	60 - 130	30
Chlorobenzene	ND	0.050	113	110	2.56	122	126	3.70	60 - 130	30	60 - 130	30
1,2-Dibromoethane (EDB)	ND	0.050	90.3	89.8	0.614	104	103	0.949	60 - 130	30	60 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	0.050	90.8	89.3	1.73	102	105	2.24	60 - 130	30	60 - 130	30
Diisopropyl ether (DIPE)	ND	0.050	93.5	93.5	0	101	106	4.77	60 - 130	30	60 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	0.050	90.1	90.2	0.0584	102	105	2.24	60 - 130	30	60 - 130	30
Methyl-t-butyl ether (MTBE)	ND	0.050	89.4	88.1	1.51	104	105	1.11	60 - 130	30	60 - 130	30
Toluene	ND	0.050	111	110	1.08	122	127	4.34	60 - 130	30	60 - 130	30
Trichloroethene	ND	0.050	112	110	1.33	116	125	6.87	60 - 130	30	60 - 130	30
%SS1:	85	0.12	100	99	0.458	103	102	1.44	70 - 130	30	70 - 130	30
%SS2:	118	0.12	109	109	0	107	109	1.53	70 - 130	30	70 - 130	30
%SS3:	117	0.012	108	108	0	108	107	0.0592	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 44523 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0907143-014A	07/06/09 1:50 PM	07/15/09	07/16/09 10:34 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 and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery The LCS and LCSD are spikes into a clean, known, similar matrix and they and the surrogate standards reflect the overall validity of their extraction batch Our control limits are 70-130% recovery and a 30% RPD for the LCS-LCSD and for the Surrogate Standards.

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QA/QC Officer

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QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Soil QC Matrix: Soil BatchID: 44440 WorkOrder 0907143

EPA Method SW8015B **Extraction SW3550C/3630C** **Spiked Sample ID: 0907263-003A**

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	95.1	93.7	1.48	98.6	98.5	0.0586	70 - 130	30	70 - 130	30
%SS:	94	50	115	114	0.945	100	95	5.47	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 44440 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0907143-014A	07/06/09 1:50 PM	07/15/09	07/17/09 9:11 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.

DHS ELAP Certification 1644

QA/QC Officer