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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



25 January 2010 Project No. 4823.02

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. C73178 EXP 12/31/10 Matthew B/ Hall, PE Senior Project Engineer CALIFO OF 48230205.MBH

Philip G. Smith Vice President

Geoff Sears, EmeryStation Triangle LLC, c/o Wareham Development Markus Niebanck, City of Emeryville Redevelopment Agency Helen Bean, City of Emeryville Redevelopment Agency



TABLE OF CONTENTS

1.0	INTRODUCTION1
2.0	BACKGROUND 1 2.1 Site Description 1 2.2 Historical Information 2 2.3 Site Redevelopment Plan 3 2.4 Regional Geology and Hydrogeology 3 2.5 Site Specific Geology and Hydrogeology 4
3.0	FIELD INVESTIGATION. 5 3.1 Redevelopment of MW-1
4.0	LABORATORY ANALYTICAL RESULTS 7 4.1 Soil Analytical Results 8 4.2 Groundwater Analytical Results 8 4.2.1 Difference in TPH-g Concentrations in Groundwater at UST-03 9
5.0	DISCUSSION.95.1Subsurface Conditions.5.2Petroleum Hydrocarbons in Soil5.3Petroleum Hydrocarbons in Groundwater.11
6.0	CONCLUSIONS 11
7.0	SUMMARY AND RECOMMENDATIONS
REFERE	INCES

TABLES

FIGURES

APPENDICES



LIST OF TABLES

Table 1	Groundwater Levels
Table 2	Soil Analytical Results
Table 3	Groundwater Analytical Results

LIST OF FIGURES

Figure 1	Site Location Map
Figure 2	Soil and Groundwater Sampling Locations
Figure 3	Chemical Concentrations in Soil and Groundwater
Figure 4	Conceptual Subsurface Profile A-A'

LIST OF APPENDICES

Appendix A	Boring Logs
Appendix B	Groundwater Sampling and Well Development Field Forms
Appendix C	Laboratory Analytical Reports

SOIL AND GROUNDWATER INVESTIGATION REPORT FOR AREA OF FORMER USTS 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 lesspermeable 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 3/4" 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.

6



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 μ g/L to 960 μ g/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 μ g/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 μ g/L. TPH-d was detected in UST-01, UST-02, UST-03, and UST-04 at concentrations ranging from 110 μ g/L to 29,000 μ g/L. TPH-mo was detected in UST-03, and UST-04 at concentrations ranging from 390 μ g/L to 17,000 μ g/L. Toluene was detected in groundwater from monitoring well MW-1 at a concentration of 1.2 μ g/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 μ g/L. No other fuel oxygenates were detected in groundwater samples from the July 2009 investigation. Total dissolved solid

8



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 μ g/L) in grab groundwater samples from UST-02, UST-03, and UST-04. TPH-d was detected at concentrations exceeding the ESLs (100 μ g/L) in all four grab groundwater sample locations. TPH-mo was detected at concentrations exceeding the ESL (100 μ g/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.

10



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 μ g/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 μ g/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



TABLE 1 Groundwater Levels 5812 Hollis Street Emeryville, California

Wall / Daring No	Data	Screen Interval	DTW
weil/boring No.	Date	feet bgs	feet bgs
MW-1	06/29/06		6.7
	04/24/09		5.25
	04/27/09	4.6-19.6	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.

TABLE 2Soil Analytical Results5812 Hollis StreetEmeryville, CA

			Sample					Ethyl-			Fuel
Location	Sample	Sample	Depth	TPH-g	TPH-d	TPH-mo	Benzene	benzene	Toluene	Xylenes	Oxygenates
	ID	Date	feet (bgs)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	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 (Ta	ble A)			83	83	370	0.044	2.3	2.9	2.3	NA

Notes:

-- = not analyzed bgs = below the ground surface

< 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).

mg/kg - milligrams per kilogram

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

									Fuel	
Sample	Sample	TPH-g	TPH-d	TPH-mo	Benzene	Ethylbenzene	Toluene	Xylenes	Oxygenates	TDS
ID	Date	µg∕l	µg∕I	µg∕l	µg∕I	µg∕I	µg∕I	µg∕l	µg∕I	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	1,120 ^{b1}
									others = ND	
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	
									DIPE = 352	
TR-17	03/05/08				< 5.5	< 5.5	< 5.5	< 16.5	Others = ND	
									DIPE = 292	
TR-17 ²	03/17/08	656y			< 5.5	< 5.5	< 5.5	< 16.5	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	
FSL-R (Table A)		100	100	100	1	30	40	20	TBA = 12	
		100	100	130		50	10	20	DIPE = NE	

Notes:

-- = not analyzed µg/I -micrograms per liter mg/I - 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

b1 = aqueous sample that contains greater than ~ 1 vol. % seem 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

FIGURES





	EXPLANATION
•	Groundwater sampling locations by Treadwell & Rollo, Inc., March 2008
۲	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
Φ	Soil sampling location by Kleinfelder in March 2009
D	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
O	Soil sampling locations by Treadwell & Rollo, Inc., October 2009
· 	Property boundary
A '	Idealized cross section location



	TR-24DepthTPHgTPH-dTPHmoVOCsFuel OxySoil (mg/kg)5-5.5NDNDNDNDNA
UST-01DepthTPHgTPH-dTPHmoVOCsFuel OxyBTEXSoil (mg/kg)8-8.5ND1516NANDND15-15.5NDNDNDNANDND19.5-20ND1511NANDND	GW NA NA NA NA NA
20-20.5 ND ND ND NA ND ND 24-24.5 ND ND	TR-23 Depth TPHg TPH-d TPHmo VOCs Fuel Oxy Soil (mg/kg) 5-5.5 ND ND ND ND NA
FORMER DISPENSER ISLAND	
TO STORY CHOUSE WAREHOUSE	
APPROXIMU DIRECTION FLOW FLOW FLOW FLOW FLOW FLOW FLOW FLOW	TR-23
UST-04 Depth TPHg TPH-d TPHmo VOCs Fuel Oxy BTEX Soil (mg/kg) 8.5-9 1.9 260 190 NA ND ND Soil (mg/kg) 10-10.5 0.81 290 160 NA ND ND ND ND ND ND ND ND ND	TR-1 + Depth TPHg TPH-d TPHmo VOCs Fuel Oxy Soil (mg/kg) 5-5.5 ND ND ND ND
GW (µg/L) 4-9 100 2,000 1,700 NA ND ND UST-02) PAVED PARK	$ING \xrightarrow{(W)}{(\mu g/L)} \underbrace{5-20 \text{ ND ND ND }}_{X} \underbrace{1-1.23 \text{ NA}}_{others \text{ ND}}$
MW-1* Depth TPHg TPH-d TPHmo BTEX MtBE Soil (mg/kg) Unknown 14 40 NA NA	TR-1
GW (μg/L) 4.6-19.6 ND ND ND T=1.2 ND TR-18 UST-03 UST-02 Depth TPHg Soil (mg/kg) 11.5-12 ND	TPH-d TPHmo VOCs FuelOxy BTEX 17 44 NA ND ND
TR-18+ Depth TPHg TPH-d TPHmo VOCs Fuel Oxy Soil (mg/kg) NA NA NA NA NA	ND NA ND ND 1.0 9.5 NA ND ND 150 390 NA TBA = 3.1 others=ND ND
$\begin{bmatrix} GW\\ (\mu g/L) \end{bmatrix} 5-20 \text{ NA NA NA } NA = \begin{array}{c} 1 = 3.07\\ x = 2.35\\ \text{others ND} \end{array}$ $TR-4 \blacksquare Depth TPHg$ Soil (mg/kg) 5-5 5 0.44	TPH-d TPHmo VOCs Fuel Oxy
EXCAVATION PATCH TR-19 + Depth TPHg TPH-d TPHmo VOCs Fuel Oxy	ND ND T= 1.61 NA
Soil (mg/kg) 5-5.5 <0.1	Soil (m
TR-17 + Depth TPHg TPH-d TPHmo VOCs Fuel Oxy	
Soil (mg/kg) NA NA	PH-d IPHmo VOCs Fuel Oxy BTEX ND 7.5 NA ND ND 530 290 NA ND ND 110 66 NA ND ND ND ND ND ND ND
GW (µg/L) 4-9 960	29,000 17,000 NA ND ND
E L	
Reference: www.terraserver-usc.com, 2006.	0 30 Fe Approximate scale

		EXPLAN	NATION								
	-∰	Soil sam	pling loc	cation by ⁻	Freadw	ell & Ro	ollo, April 2008				
	Θ	Groundwater sampling location by Treadwell & Rollo, Inc., March 2008									
		Soil and January	groundv 2008	vater sam	pling la	ocation	by Treadwell &	k Rollo.,			
	-	Monitori	ng well ir	nstalled by	y Sumn	nit Engi	neering, 1993				
	⊕	Soil and groundwater sampling location by Treadwell & Rollo, April 2008									
		Soil and groundwater sampling locations by Treadwell & Rollo, Inc., July 2009									
	x	Location of fence									
—		Property	bounda	ry							
		Propose	d buildir	ig extent							
		Approxir	mate exte	ent of pro	posed	excava	tion				
		Depths a	are in fee	et below g	round :	surface					
	NA - ND - VOCs - E - T - X - TPHa -	Not analyzed Not detected above laboratory reorting limits Volatile Organic Compounds Benzene Ethylbenzene Toluene Total Xylenes									
_	TPH-d -	Total Petroleum Hydrocarbons quantified as gasoline Total Petroleum Hydrocarbons quantified as diesel									
	FPHmo -	Total Petroleum Hydrocarbons quantified as motor oil									
	TBA - TAME - DIPE - ETBE - MTBE -	Fuel Oxy Tertiary Tertiary- Diisopro Ethyl ter Methyl-te	genates Butyl Alc amyl me pyl Ethe tiary buty ertiary bu	eohol hthyl ether r vl ether utyl ether							
nal Tier	1 ESLs,	Residen	tial, Sha	allow Soi	l, Drin	king W	ater Resourc	e			
	TPHo	g TPH-d	TPHmo	b B	Т	Х	DIPE				
il (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 700 EPA)	DHS			
	Foot MW- conc cons unkn samp Borir colle Horir insta y Labc DIPE	notes: 1 (screen centration: ecutive q own if so oled in 7 ong drilled ct sample ngs were lled to co oratory flag	ed from s were n uarters. il sample July 2009 to 28-fee drilled to llect sam g; indica as detec	4.6-19.6 f ot detecte Depth of s was ana 9. et and a te 20-feet a nple. ting that ted within	t.) insta ed in gr soil san lyzed fo empora nd a te the rep the TP	Illed in oundwa nple is or BTEX ry scree mporar orted c Hg ran	1993. Contami ater for four not known. It i (. Groundwater en installed to y screen was oncentration is ge.	nant s r was			
			581 2 En	2 HOLL neryville	IS ST , Calif	REE ornia	Г				

CHEMICAL CONCENTRATIONS IN SOIL AND GROUNDWATER

Feet

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





APPENDIX A

Boring Logs

PRC	JECT:			Log of E	Boring UST-01						
Borin	g location	: Se	e Site I	Plan	Figur	ə 2	1	Logged by: T. Campitelli			
Date	started:	7/6/09				Date finished: 7/6/09					
Drillin	Drilling method: Geoprobe										
Hamr	Hammer weight/drop: N/A Hammer type: N/A										
Sam	oler: Co	ntinuou	 S					· · · · ·			
-	S	AMPLES		Ê	2			· · · · · · · · · · · · · · · · · · ·			
DEPTH (feet)	Sample Number	Sample Błow	Count ecovery inches)	IDAM (ppr	THOLOG	MATE		PTION			
			<u> </u>			Asphaltic Concrete (AC)	Surface Conditions	•			
1- 2- 3-						SAND and GRAVEL (SP) red-brown, wet, sub-rounded	gravel, no odor				
3 4 5	-				SP	wet		-			
6- 7-					ML	SANDY SILT (ML) brown, medium dense, moist GW (07/07/09)	, no odor				
8 9	UST-01 - 8-8.5					CLAY (CL) gray-brown, soft, moist, weak	fuel odor and gree	enish staining at 8 to 9 feet			
10 11 12	-				CL			-			
13— 14— 15—	UST-01					SILTY CLAY (CH) red-brown, stiff, moist, no od	or				
16— 17—	15-15.5 •				сн			-			
18— 19— 20—	UST-01				CL	SANDY CLAY (CL) red-brown, stiff, wet, weak so	lvent/ fuel odor	-			
20 21- 22-							,	-			
23-								-			
24-								-			
2- 1											
25-								-			
26—								-			
27 —								-			
28-			-					-			
20_											
29											
30 Borin Borin Grou	ng terminateo ng backfilled ndwater not	at a depth with ceme encountere	n of 20 fee nt grout. ed during	t. driling	ı			Project No.: 4823.02			

•

PRC	DJECT:			Log of Boring UST-	01-DEEP PAGE 1 OF 1						
Borin	g location	: Se	e Site	Plan,	Figur	e 2	Logged by: T Ca	Impitelli			
Date	started:	7/7/09				Date finished: 7/7/09					
Drillir	Drilling method: Geoprobe										
Ham	Hammer weight/drop: N/A Hammer type: N/A										
Sam	oler: Co	ntinuous	.		·	· · ·					
t H	SA	AMPLES		(mď	QG√	MATERI	DESCRIPTION				
JEP (fee	Sample	ample 3low	cover cover	VM (F	HOL						
		, vi u	J & j	0		Surf	ce Conditions:				
1-		Λ				gray, medium dense, dry, no odd	r (FILL)	_			
		/									
2		X									
3-											
4-		$ \langle \rangle $				CLAYEY SAND (SP)					
5-	-				SP	brown, medium dense, moist, no	odor				
6-											
7-					СН	gray, soft, wet, no dor					
						SANDY CLAY (CL)	or.				
0.						brown, medium sun, moist, no oc	Oi				
9-	-							_			
10-					CL			_			
11											
12-											
13-	_										
14_					СЦ	CLAY (CH) grav. medium stiff. moist. no odd					
14					011	<u>.</u> ,					
15-						SANDY CLAY (CL)					
16—					CI	brown, stiff, moist, no odor					
17—	-										
18—											
19					SP	brown, dense, saturated, no odo					
20-	197-01-055					CLAY (CH) brown stiff moist no odor		_			
	20-20.5			1		brown, sun, moist, ho oudi					
21-	-							_			
22-											
23-				1		GRAVELLY CLAY (CL)					
3 24-	UST-01-DEEL			1		brown, very stiff, moist, chert fra	ments, no odor				
25-	24-20	FT-			or	brown, medium dense, saturated	, no odor				
26-											
				1				_			
28-											
29-								_			
30-						L					
Bori Bori	ng terminated ng backfilled	l at a depth with cemer	of 25 fee it grout.	et bas du	ring defi	20	Tready	vell&Rollo			
	mawater enci	ouniered a	TO REEL	սցե նա	ang uilil	ng	Project No.:	Figure:			
<u>п</u>							4823.0	A-2			

PRC	JECT:				A	LDE Emer	RS PROPERTY yville, California	Log of B	oring UST-02 PAGE 1 OF 1
Borin	g location	- 1:	See	Site F	Plan, I	Figur	e 2		Logged by: T. Campitelli
Date	started:	7/6/0)9				Date finished: 7/6/09		
Drillin	g methoc	l: Ge	eopro	be			········		
Hami	ner weigl	ht/dro	p: N	J/A			Hammer type: N/A		
Samp	oler: Co	ntinu	ous				I		
T	S	AMPL	ES.		Ê	5			
EPT	Samole	pie	s ti	very es)	Idd) V	OTO	MATERI	AL DESCRIP	TION
ũ t	Number	Sam	Blo Cot	(inch	۶ ا	E	Sur	ace Conditions:	
	•		-				Asphaltic Concrete (AC)		
1		\mathbb{N} /					SAND (SP)		_
2—		V					dark brown, loose, dry, no odor	רוגנן	_
2		X				SP			_
З.		$ /\rangle$							
4-		$ \setminus$							-
5—	•	<u>/ '</u>	-		-		.∇ GRAVEL (GP)		
6	-		┢				gray, medium dense, saturated,	no odor [FILL]	-
7									_
8-						GP			-
9-									-
10-	-		-						_
44									
	UST-02	9161-433					CLAY (CL)		
12-	11.5-12						light brown, still, dry, no odor		-
13-									-
14-	-		-						_
45						~			
15-						UL			
16									-
17-									-
18-	-	\square	-						-
10_									
19	UST-02						GRAVELLY SAND (SP)	no odor	
20-	19.5-20		8				dark brown, medium dense, we		-
21-						0.5			-
22-	-	\square	Ļ			52			-
22									-
23-							Groundwater depth measured in	hydropunch sar	mpler
24							SAND (SP)	· · ·	· · · · · · · · · · · · · · · · · · ·
25—							red-brown, medium dense, satu	rated, no odor	-
26-	-		L			SP			-
27									
21	UST-02								_
28	27.5-28						CLAY (CL)		
29—						CL	light brown, medium dense, we	, gray mottling w	ith black weathered clasts, no odor
30			L						
Borin	g terminated	latad	epth of	30 fee	t.				
Borin Grou	g backfilled ndwater enc	with ce ountere	ement g ed at 5	feet bg	s durin	g drilin	g		
									Project No Figure: 4823.02 A-3
:L									

Boring location:	See Site Pl	an, Figure :	2		Logged by: T. Campitelli
Date started: 7/6/	09		Date finished: 7/6/09		_
Drilling method: O	Beoprobe		_		
Hammer weight/dr	op: N/A		Hammer type: N/A		
Sampler: Continu	Jous				
E a SAMP	LES	(ppm)	MA	ATERIAL DESCRI	PTION
DE Sample de Romanne de Sample de Sa	Blow Count ecove				
	<u> </u>	L V	SANDY CLAY (CL)	Surface Conditions	S:
1- \	/		brown, loose, moisť, no o	dor	
2					
з і Å					
		CL			
UST-03					
D 4-4.3	T		_		
6-			GW (07/07/09)		
7-		ML	SILT (ML)		
8 7.5-8			brown, medium stiff, dry,	no odor	
9-		CL	green, moist, weak fuel o	dor	
10-			black staining		
11_			gray-brown, very stiff, mo	vist, no odor	
		CL			
	TII				
13 UST-03					
14 13.5-14		GP	green, brown, medium de	ense, moist, subround	led gravel, strong fuel odor
15-UST-03		SP	SAND with GRAVEL (SF	r) odor	
16-	+		CLAY (CL)		· · · · · · · · · · · · · · · · · · ·
17-		CL	brown, stiff, moist, no ode	or	
18-		SP	SAND (SP)	·······	
19-			CLAY (CL)	no odor	
20			brown, stiff, moist, no ode	or	
21					
21					
22					
23-					
24-					
25-					
26-					
27					
28-					
29					
30	depth of 20 feat		······································		

•

						y viii c , 'Ot				-
Boring	location	n: S	See Sit	e Plan	, Figur	e 2		2/00		Logged by: T. Campite
Date s	arted:	1/6/05) oproba			Da	ite finisned: 7/6	5/09		
Drilling	method	1: Geo		•			Hommor tuno:	NI/A		
Sample	er weigi	ntinuo		\			riammer type.	IN/A		
- Jampi	SI. OC	AMPLE	S	Ê	Z					<u> </u>
feet)	Sample	nple		hes) M (ppn	JOLOG			MATERI	AL DESCRIP	TION
	Number	Sar		ē S	É.			Sur	face Conditions:	·····
1		Λ				As	phaltic Concret	e (AC)		· · · · · · · · · · · · · · · · · · ·
2		$\left A \right $				bro	own, loose, wet,	no odo r		
2		XI			SP					
3		/								
4-										
5-	-	+	·			CL	AY (CL)			
6-						L lig G\	ht brown, mediu N (07/07/09)	ım stiff, moist,	no odor	
7-							(
8-	-		,				AY (CL)			· · · · · · · · · · · · · · · · · · ·
9	UST-04 8.5-9					gr	een, medium sti	ff, moist, mode	erate fuel odor	
10-	UST-04				CL					
11	10-10.5									
12_	-					Gl	RAVELLY CLA own with grav n	r (CL) 10ttlina. verv sl	tiff. drv. no odor	
12	_									
14-										
15-	UST-04 15-15.5					SA	NDY CLAY (C	L)	-1	
16	-					DFO	own, soπ, wet; r	ed weathered	clasts, no odor	
17-										
18-				ł						
19—					СН	CL	_AY (CH)	. no odor		·
20-	-	┝┶┼			<u> </u>				<u></u>	
21-										
22-										
23-			ĺ							
24-										
25-										
26										
27										
21										
28										
29										
30 Boring	lerminated	lata dep	 th of 20	l feet.	I					
Boring Ground	backfilled water not	with cem encounte	ent grou red duri	t. ng driling						Treadwel
										Project No.: Fi

			UNIFIED SOIL CLASSIFICATION SYSTEM				
M	Major Divisions		Typical Names				
200	_	GW	Well-graded gravels or gravel-sand mixtures, little or no fines				
no.2	Gravels (More than half of	GP	Poorly-graded gravels or gravel-sand mixtures, little or no fines				
d S ^ 10	coarse fraction >	GM	Silty gravels, gravel-sand-silt mixtures				
of so	no. 4 sieve size)	GC	Clayey gravels, gravel-sand-clay mixtures				
half	Sande	SW	Well-graded sands or gravelly sands, little or no fines				
Coarse	(More than half of coarse fraction <	SP	Poorly-graded sands or gravelly sands, little or no fines				
		SM	Silty sands, sand-silt mixtures				
ŭ	110. 4 Sieve Size)	SC	Clayey sands, sand-clay mixtures				
e li		ML	Inorganic silts and clayey silts of low plasticity, sandy silts, gravelly silts				
Soi of s size	Silts and Clays $11 = < 50$	CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, lean clays				
half sieve		OL	Organic silts and organic silt-clays of low plasticity				
Grai		МН	Inorganic silts of high plasticity				
no. 2	Silts and Clays $11 = 50$	СН	Inorganic clays of high plasticity, fat clays				
ĒĒV		ОН	Organic silts and clays of high plasticity				
High	y Organic Soils	PT	Peat and other highly organic soils				

	(GRAIN SIZE CHA	RT		Sample t	aken with Sprague & Henwood split-barrel sampler with a			
		Range of Gra	ain Sizes	146	3.0-inch	outside diameter and a 2.43-inch inside diameter. Darkened			
Class	ification	U.S. Standard	Grain Size		area Indi	cates soil recovered			
Bould	dore	Above 12"	Above 305		Classifica	ation sample taken with Standard Penetration Test sampler			
Cobh		12" to 3"	305 to 76.2		Indisturbed sample taken with thin-walled tube				
Grave	el	3" to No. 4	76.2 to 4.76		Undistan	seu sample taken with thin-walleu tube			
coa fine	rse	3" to 3/4" 3/4" to No. 4	76.2 to 19.1 19.1 to 4.76		Disturbe	d sample			
Sand coa	l Irse dium	No. 4 to No. 200 No. 4 to No. 10 No. 10 to No. 40	4.76 to 0.075 4.76 to 2.00 2.00 to 0.420	0	Sampling	g attempted with no recovery			
fine		No. 40 to No. 200	0.420 to 0.075		Core san	nple			
Silt a	nd Clay	Below No. 200	Below 0.075						
				•	Analytica	I laboratory sample			
<u> </u>	Unstabili	zed groundwater lev	el		Sample t	aken with Direct Push sampler			
<u> </u>	Stabilize	d groundwater level			Sonic				
				SAMPL	ERTYPE	Ξ			
С	Core bar	rel			PT	Pitcher tube sampler using 3.0-inch outside diameter, thin-walled Shelby tube			
CA	California	a split-barrel sample and a 1.93-inch insi	r with 2.5-inch outs ide diameter	side	S&H	Sprague & Henwood split-barrel sampler with a 3 0-inch			
	_				0011	outside diameter and a 2.43-inch inside diameter			
D&M	Dames 8 diameter	A Moore piston samp , thin-walled tube	pler using 2.5-inch	outside	SPT	Standard Penetration Test (SPT) split-barrel sampler with a 2.0-inch outside diameter and a 1.5-inch inside diameter			
0	Osterber	g piston sampler usi	ing 3.0-inch outside	e diameter,	_				
	thin-walle	ed Shelby tube			ST	Shelby Tube (3.0-inch outside diameter, thin-walled tube) advanced with hydraulic pressure			
		ALDERS PRO Emeryville, C	DPERTY california			CLASSIFICATION CHART			

SAMPLE DESIGNATIONS/SYMBOLS

Date 08/07/09 Project No. 4823.02

Figure A-6

APPENDIX B

Groundwater Sampling and Well Development Field Forms

MONITORING WELL DEVELOPMENT FORM

Project Numl Project Name Well ID: Date: Developed by	ber: <u>4823</u> . e: <u>58121611</u> 1 <u>W/-1</u> -24-09 y: J. Gek	02 is, Ald a	ers	Depth to Water: <u>4,66</u> Total Depth of Well: <u>19,1</u> , Well Diameter: <u>2"</u> Total Volume Removed: <u>27gal</u> . Method of Developing: <u>Surge + Pump</u>							
Minimum vo to be remove	lume $V = (Td)$ d: $V = (\underline{A})$	otal Depth of $\frac{19.1}{7.4}$ f	of Well – De t – <u>4.66</u>	ft) * (er) * (Volum <u>/64 g</u> /686	ne gal/ft) * (al/ft),* ((# of Casin 	ng Volumes)			
(<u> </u>	· · · · · · · · · · · · · · · · · · ·		5***	****(*U							
Well Diam	eter (in)	0.52"	1.0"	2.0"	`3.0"	4.0"	5.0"	6.0"			
Volume (g	al/ft)	0.0157	0.0409	0.1636	0.3682	0.6545	1.0227	1.4726			
		WELL	PURGIN	G INFOI	RMATIO	N ,					
TIME	CUMULATIVE VOL REMOVED	TEMP (°C)	D.O. (mg/L)	pH (units)	O.R.P. (mV)	COND (MS)	R (cole) s	EMARKS or, turbidity, ediment)			
1447	0	23.2	3.73	7.10	160	7340	ging	ie brn			
1451	2.4	21.6	1.72	7.09	117	2278	Openge	e km			
1455	5.0	20.9	1.38	7.11	196	2425	frans	. bron			
1458	7.5	21.0	1.50	7.00	170	7421	Jonn	s. brn			
1502	10.0	20.3	1.26	6.92	172	2312	homes	. ber			
1504	13.0	26.6	1.25	6.81	148	2435	- tions	.ben			
1509	16.0	20.4	1,73	6.91	150	2425	5 han	s. ben.			
1512	19.0	20.1	1.34	6.93	18-0	2546	Kenns	- bran			
1517	22.0	20.0	1.40	6.95	195	2375	- train	s. brn			
1570	24.0	19.8	1.39	6.98	196	2380) light	hems. E			
1253	27.0	19.7	1.34	6.96	197	2450	lighte	hens, br.			

Remarks:

ł

Treachell& Rollo Environmental and Geotechnical Consultants 147

,

UBJECT	<u>Mw</u> -	·DI LOW	со ЕТ сн	COMPUTED BY				
Initi Begi	al Wi 9 Pun ft	- = 4.7 Iping W	18 (tub) L = 4.7 °C	ng not yet 5 3/m	t in well	`		
LIME	WL	PH	TEMP	COND	ORP	My/L DU	TURR	mc/ma
1807	4.9 + 4.96	63 6.32	19.7 19.8	0.22	242	1.6	15	250
1810	4,96	6-32	19.80	0.223	220	1.13	16	150
1815	4.99	6-35	19.70	0,229	203	0.91	15	150
1825	5.01	6.29 6.29	19.63	0.229	196	0.85	31.2	150
1830	5.04	6,29	19.80	0.228	186	0-81	29.2	021
1835	5.06	6-28	19.68	0.126	171	0.75	23.9	150
1840	5.07	6-28	19.73	0.225	166	0.73	22.5	120
873 873	5.08	6-28	19.74	0.225	162	0.12	19.9	150
855	5.11	6-28	14.62	0.225	157	0.72	20.5	15v
900	5.11	6-23	19.63	0 - 276	152	070	18 5	150
905	5.12	6,28	19.60	0.225	149	0.68	18.8	150
9 10	5.13	6.28	19.52	0.227	149	0.07	17.7	150
97,0	512	G.28 G.27	19.49	0.228	148	0.68	19.1	120
130	- 5	ample h	111-11 1W-01	0.047	120	6 68	21.5	150
Treadwell&Rollo

APPENDIX C

Laboratory Analytical Reports

McCampbell A "When Quality	nalytical, Inc. ty 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	Client Project ID: #4823.0	2; 5812 Hollis-	Date Sampled:	07/08/09					
501 14Th Street, 3rd Floor	Alders Property		Date Received:	07/08/09					
Oakland CA 94612	Client Contact: Matt Hall		Date Reported:	07/13/09					
Oakland, OA 94012	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.





CHAIN OF CUSTODY RECORD

555 Montgomery Street, Suite 1300, San Francisco, CA 94111 Ph: 415.955.9040/Fax: 415.955.9041

S01 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:	5512	toluis -	ALTERS PROPER	TT.																			
Job Number:	4823	02											<u>a</u> 1	A	nah	ysi	s F	Requested					Turnaround
Project Manager\Co	ntact:	MATT	HALL							Γ	2	8	ЗI		R	ž	ŧ.						Time
Samplers:	THOM	is campi	TELLI			10000					ž	Ξ.	5		4	2				a,			<u>3 - DAY</u>
Recorder (Signature	Required):	Elianas	a Cimpott Ili_				No.	Con	itainers	i (ž	4	ŝ	H	A.					1-UE1			No
				M	<u>atrix</u>	9.34	<u>& P</u>	1054	invative	0	੍ਹ	3]	8	S	ĉ	5			al cle			
Field Sample Identification No.	Date	Time	Lab Sample No.	Soil	Water	Ĕ	H ₂ SQ	NNO	Other		16491	JE E	17.1	Shic	SHC	भू	TCLP			Silica ge	Hold		Remarks
TI 0-0.5	7/8/01	9:10		\times					X	1	X	x١	×										
TI 20-23	7/5/09	4:12		X					X	3	x			X	X	X	x						
TZ 0-0.5	7/8/04	9:01		X			ŀ		X)	×	\times	X										
TZ 20-25	7/8/09	9:08		X					<u>x </u>		X												
T3 0-05	7/8/09	8:52		X					X	2	<u>s</u>	׼	<u>×</u>										
T3 2.0-2.5	7/8/09	9:00		X		_		_	X	$ \rangle$	<↓			_	_								· · · · · · · · · · · · · · · · · · ·
TH 0-0.5	7/8/09	8:35		X					$\times \square$	2	×	\times	×Ц	_									,, _,
TH 20-25	7/8/09	8:53		X		_			<u>× </u>		X	_	_	_	<u>×</u>	_	X						
T5 0-0.5	7/8/09	8:25		X		1			\mathbf{X}^{+}	<u>}</u>	<u> </u>	X	×1	_		4							
T5 2,0-2.5	7/8/09	8:30		X		_	\square		×Ц		세		-		X	_	X					·····	
T6 0-0.5	7/8/09	9:15		X		-	\square		소	2	Хļ		_	×	×	Xļ	X						
TF 0-0.5	7/8/69	9:16		ĽЦ		_			저	2	׆	ļ		_	X	Xļ	X						
				Ц	Percent Province	Ļ					_	_	_			_	_					: 	
·																						<u> </u>	
Relingered by Signat	une)		Date 7/8/09			Tin	ne Į	2	10 <		tec:	aivac	i by	: (S	gnal	ture	}			Dat	2	18/09	Time 5/0
Relipquished by (Signat	ute}	\geq	Date 7876	9		Tin	ne Z	/(9	P	teði	TVO	i by	Й.	Ľ	បាទ	V	Tell		Del	6	116/09	Time 414ph
Reiinquished by: (Signat	U(B)		Date			Tin	në			F	leci	awec	ру İ by	Lat	o: (Si	ัฐกะ	ature	8)		Dat	e		Time
Sent to Laboratory (Name): hts/Notes:	MCI	CAMPBEL							N	/iet	hod	l of tanc	Sh d Ca	ipm mied	nen 1 [<u>t</u>	Lab cou Private Courier	iner (Co	. Na	(me)	Fød Ex	Airborne UPS
																	and a						
IDE 11 422 GOOD CONDITION) HEAD SPACE ABSEN DECHLORINATED IN VOA	ATPROP	White Copy WHATE JAINERS SERVED IN LA	- Onginal		Yellov	v Ca	эру -	Lat	oratory	ł				2	Pink	: Cr	бру	- Field		C	00	C Number: ()067 67
FALSERVATION																							

Page ____ of ____

.

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Pittsburg, CA 94565-1701 (925) 252-9262					WorkOr	der: 090719	A	ClientCode: TV	WRK	
	WaterT	rax	UriteOn []	EDF	Excel	Fax	🖌 Ema	ail 🗌 HardCo	opy 🔄 ThirdPa	rty 🔲 J-flag
Report to:					В	Bill to:			Requested TA	T: 3 days
Matt Hall Treadwell & Rollo 501 14Th Street, 3rd Floor	Email: cc: PO:	mbha tacar	all@treadwell npitelli@tread	rollo.com dwellrollo.com		Accounts Pa Treadwell & 501 14Th St	ayable Rollo treet, 3rd Fl	loor	Date Receive Date Add-On	<i>d</i> : 07/08/2009 : 07/17/2009
Oakland, CA 94612 (510) 874-4500 FAX (510) 874-4507	ProjectNo:	#482	3.02; 5812 H	ollis-Alders Pro	perty	Oakland, CA SEND HARI	A 94612 DCOPY		Date Printed	: 07/17/2009

				[Requested Tests (See legend below)											
Lab ID	Client ID	Matrix	Collection Date	Hold[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	<u></u>	A				1	T	1		<u> </u>
0907195-008	T4 2.0-2.5	Soil	7/8/2009 8:50		A	1	A							1		
0907195-010	T5 2.0-2.5	Soil	7/8/2009 8:30		А		A									
0907195-011	T6 0-0.5	Soil	7/8/2009 9:15			A		A				1		1		
0907195-012	T7 0-0.5	Soil	7/8/2009 9:16		А			Α								

Test Legend:

1	STLC_METALS_Soil
6	
11	

2	STLC_PBCR_Soil	
7		
12		

3	TCLP_	_METALS_Soil
8		

4	TCLP_PBCR_Soil
9	

5	
10	

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.

	cCampbell Analyti "When Quality Counts"	cal, Inc.		1534 Web: www Tel	Willow P .inccamp ephone: 8	'ass Road, Pittsburg, CA bell.com E-mail: main@ 177-252-9262 Fax: 925	94565-1701 @mccampbell -252-9269	com				
Treadwell & R	Rollo	Client Projec	rt ID: #	4823.02; 5812 H	ollis-	Date Sampled:	07/08/09					
501 14Th Stre	et 3rd Floor	Alders Prop	erty			Date Received:	07/08/09					
Joi i i i i i i i i i i i i i i i i i i		itt Hall		Date Extracted:	07/17/09	-07/19/09)					
Oakland, CA 9				Date Analyzed:	07/20/09							
Extraction method:	CA Title 22	IC Analyt	P Metals* ical methods: SW60	10C			Work Ord	er: 0907195				
Lab ID	Client ID	1	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;	w	TOTAL	NA	μg/L
ND means not detected at or	S	WET	0.05	mg/L
above the reporting minit	1	1	1	

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

	McCampbell Analyti	ical, In	<u>c.</u>	153 Web: ww	4 Willow F /w.mccamp elephone: 8	Pass Road, Pit bell.com E 377-252-9262	tsburg, CA 94565-1701 -mail: main@mccampbel Fax: 925-252-9269	l.com		·			
Tready	vell & Rollo	Client Pr	oject ID:	#4823.02; 5812	Hollis-	Date Sampled: 07/08/09							
501 14	Th Street, 3rd Floor	Alders P	roperty			Date Re	Date Received: 07/08/09						
0011		ontact: M	latt Hall		Date Ext	tracted: 07/17/09	9-07/19/0)9					
Oaklar	nd, CA 94612			Date An	alyzed: 07/20/09)							
		d & Chromium	*										
Extractio	on method: CA Title 22		Ana	lytical methods: SW	'6010C		· · · · · · · · · · · · · · · · · · ·	Work O	rder: 090	07195			
Lab ID	Client ID		Matrix	Extraction Type	Chro	omium	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;	w	TOTAL	NA	NA	NA
ND means not detected at or above the reporting limit	S	WET	0.05	0.2	mg/L

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

	cCampbell Analyti "When Quality Counts"	cal, Inc.	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 & R	tollo	Client Project ID:	#4823.02; 5812 H	Iollis-	Date Sampled:	07/08/09						
501 14Th Stre	et 3rd Floor	Alders Property			Date Received:	07/08/09						
501 1 111 540	0, 514 1 1001	Client Contact: N	latt Hall		07/17/09	07/17/09-07/18/09						
Oakland, CA 9	94612	Client P.O.:			Date Analyzed:	07/22/09						
Extraction method:	SW1311			Work Ord	er: 0907195							
Lab ID	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;	w	TOTAL	NA	μg/L
ND means not detected at or	S	TCLP	0.05	mg/I
above the reporting limit	Ĭ	1021	0.05	ing D

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

	McCampbell Analyti	<u>c.</u>	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										
Tready	vell & Rollo	Client Pr	oject ID:	#4823.02; 5812	Hollis-	Date Sar	npled: 07/08/09						
501 14	Th Street, 3rd Floor	Alders F	roperty	Date Received: 07/08/09									
		Client C	tt Contact: Matt Hall Date Extracted: 07/17/09-07/18/09										
Oaklar	nd, CA 94612	Client P.O.: Date Analyzed: 07/22/09											
			Ch	romium & Lead	*								
Extraction	on method: SW1311		Ana	alytical methods: SW	'6010C			Work O	rder: 09	07195			
Lab ID	Client ID		Matrix	Extraction Type	Chro	omium	Lead	DF	% SS	Comments			
002A	T1 2.0-2.5		S	TCLP	1	ND	ND	1	N/A				
011A	Тб 0-0.5		S	TCLP	ו	ND	0.44	1	N/A				
_012A	т7 0-0.5		S	TCLP	1	ND	12	I	N/A				
									1				
	· · · · · ·												
	· · · · · · · · · · · · · · · · · · ·									1			

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

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



 1534 Willow Pass Road, Pittsburg, CA 94565-1701

 Web: www.mccampbell.com
 E-mail: mam@mccampbell.com

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

QC SUMMARY REPORT FOR SW6010C

W.O. Sample Matrix: Soil		i	QC Matri	c: Soil			Batch	ID: 44593		WorkOrder: 0907195				
EPA Method SW6010C	Spiked Sample ID: N/A													
Analyte	Sample Spiked MS M		MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acc	eptance	ce 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	5 104 4.42 N/A N/A 80 - 120							
All target compounds in the Method NONE	Blank of this	extraction	batch we	re ND les	s than the	method R	thod RL with the following exceptions:							

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

A 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 Matri	x: Soil			Batch	ID: 44630		WorkOrder 0907195					
EPA Method SW6010C	Extra	ction SW	/1311			Spiked Sample ID: N/A									
Analyte	Sample	Sample Spiked MS M		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	80 - 120	20						
All target compounds in the Metho NONE	od Blank of this	extraction	batch we	re ND les	s than the	method R	ethod RL with the following exceptions								

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

A QA/QC Officer

McCampbell An "When Quality	nalytical, Inc. Counts"	1534 Willow Pass Road, Pittsburg, CA 94565-1701 Web: www.inccampbell.com E-mail: main@mccampbell.com Telephone: 877-252-9262 Fax: 925-252-9269								
Treadwell & Rollo	Client Project ID: #4823.0	2; 5812 Hollis-	Date Sampled:	07/07/09-07/08/09						
501 14Th Street, 3rd Floor	Alders Property		Date Received:	07/08/09						
Oakland, CA 94612	Client Contact: Matt Hall		Date Reported:	07/13/09						
	Client P.O.:		Date Completed:	07/13/09						

WorkOrder: 0907195

July 13, 2009

Dear Matt:

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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.

well&Rollo Tread Environmental and Geotechnical Consultant

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CHAIN OF CUSTODY RECORD

Page	of	

0907195

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 555 Montgomery Street, Suite 1300, San Francisco, CA 94111 Ph: 415.955.9040/Fax: 415.955.9041

 S01 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 1	toluis -	MUTERS PROPER	217																			
Job Number:	4823.	02								E			Q 1	Anai	lysis	Req	ues	ted					Turnaround
Project Manager\Co	ntact:	MATT	HALL	مەربىرىسىرىسىزىر							3	Ś	ş										Time
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TH 2.0-2.5	7/8/09	\$:50		X					×	ľ	\underline{X}												
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Tel	McCAMPBELL ANALYTICAL, INC. 1534 WILLOW PASS ROAD PITTSBURG, CA 94565-1701 Website: www.mccampbell.com Telephone: (877) 252-9262 Port To: Matthew Hall Bill To; Matthew Hall								ru Do	RN Ge	I A oT	R(C DU cke	H NI r I	Al D T ED	IN TIM F		F	CU PD		TC H		Y F R cel	RECORD 48 HR 72 HF Write Or			R n (1	D R 5 DAY h (DW)							
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Treadwell&Rollo
Environmental and Geolechnical Consultant

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CHAIN OF CUSTODY RECORD

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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 \mathbb{X}

Site Name:	ALDERS	<u>PROPER</u>	TY - 5812 HOL	؟ ايل	>																	······································
Job Number:	4623	02												A	nah	rsis i	Requeste	đ				Turnaround
Project Manager\Con	tact:	MATT H	tall			-						U	4	a		Maillanith						Time
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1534 Willow Pass Rd Pittsburg, CA 94565-1701 (925) 252-9262

CHAIN-OF-CUSTODY RECORD

Page 1 of 2

(925) 252-9262				WorkO	Order: 0907195	Clien	tCode: TWRK		
		WriteOn	EDF	Excel	Fax	🖌 Email	HardCopy	ThirdParty	🗍 J-flag
Report to:				E	Bill to:		Req	uested TAT:	3 days
Matt Hall	Email:	mbhall@treadwe	ellrollo.com		Accounts Pay	able			
Treadwell & Rollo	CC:	tacampitelli@tre	adwellrollo.com	า	Treadwell & F	Rollo			
501 14Th Street, 3rd Floor	PO:				501 14Th Stre	et, 3rd Floor	Dat	e Received:	07/08/2009
Oakland, CA 94612	ProjectNo:	#4823.02; 5812	Hollis-Alders Pi	roperty	Oakland, CA	94612	Dat	e Printed:	07/08/2009
(510) 874-4500 FAX (510) 874-4507					SEND HARD	COPY			

				Requested Tests (See legend below)												
Lab ID	Client ID	Matrix	Collection Date	Hold	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	T			A		A	ľ.	
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	1							
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				1	A						1		
0907195-007	T4 0-0.5	Soil	7/8/2009 8:35					Α				A		A		
0907195-008	T4 2.0-2.5	Soil	7/8/2009 8:50					А								
0907195-009	T5 0-0.5	Soil	7/8/2009 8:25					Α				Α		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					Α								
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						А							
0907195-014	TR-20E 2.5-3.0	Soil	7/7/2009 13:45						A		A		A			

<u>Test Legend</u>:

1 G-MBTEX_W	2 MBTEXOXY-8260B
6 PBMS_SOLID	7 STLC_PB_S
11 TDS_W	12 TPH(D)WSG_S

0B_S	3 MBTEXOXY-8260B_W	4 METALSMS_S	5 PBMS_S
3	8 STLC_PBCR_Soil	9 TCLP_PB_S	10 TCLP_PBCR_Soil

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.



Page 1 of 2

1534 Willow Pass Rd				UNAIN		JIUUII	ILVVIID	0	
Pittsburg, CA 94565-1701 (925) 252-9262				WorkO	rder: 0907195	5 Clien	tCode: TWRK		
		WriteOn		Excel	Fax	🖌 Email	HardCopy	ThirdParty	J-flag
Report to:				В	ill to:		Rec	uested TAT:	3 days
Matt Hall Treadwell & Rollo	Email: cc [.]	mbhall@treadwe tacampitelli@trea	ellrollo.com adwelirollo.cor	n	Accounts Pay Treadwell & I	yable Rollo	D		07/00/2000
501 14Th Street, 3rd Floor	PO:				501 14Th Str	eet, 3rd Floor	Dai	e Receivea:	07/08/2009
Oakland, CA 94612 (510) 874-4500 FAX (510) 874-4507	ProjectNo:	#4823.02; 5812 I	Hollis-Alders P	roperty	Oakland, CA SEND HARD	94612 COPY	Dat	te Printed:	07/08/2009

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				Requested Tests (See legend below)												
Lab ID	Client ID	Matrix	Collection Date	Hold	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	1		
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						А		A		A			
0907195-022	TR-21D 3.0-3.5	Soil	7/7/2009 15:45						А							
0907195-023	UST-1-Deep-20	Soil	7/7/2009 16:30			А										
0907195-024	UST-1-Deep 24-25	Soil	7/7/2009 16:40			Α										
0907195-025	MW-01	Water	7/7/2009 19:30		А		В								С	
0907195-026	TR-21E 2.5-3.0	Soil	7/7/2009 16:00						А		A		A			
0907195-027	TR-21E 3.0-3.5	Soil	7/7/2009 16:05						Α							
0907195-028	UST-03	Water	7/7/2009 10:05		А										В	

Test Legend:

1	G-MBTEX_W	2 MBTEXOXY-8260B_S
6	PBMS_SOLID	7 STLC_PB_S
11	TDS_W	12 TPH(D)WSG_S

3	MBTEXOXY-8260B_W	4	METALSMS_S	5	
8	STLC_PBCR_Soil	9	TCLP_PB_S	10	TCLF

5	PBMS_S
0	TCLP_PBCR_Soil

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

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

CHAIN-OF-CUSTODY RECORD

Page 1 of 2

(925) 252-9262				WorkO	order: 0907195	Clier	ntCode: TWRK		
		WriteOn	EDF	Excel	Fax	🔽 Email	HardCopy	ThirdParty	U-flag
Report to:				В	Bill to:		Req	uested TAT:	3 days
Matt Hall	Email:	mbhall@treadwe	ellrollo.com		Accounts Pay	able			
Treadwell & Rollo	CC:	tacampitelli@trea	adwellrollo.com		Treadwell & F	Rollo			
501 14Th Street, 3rd Floor	PO:				501 14Th Stre	et, 3rd Floor	Dai	e Received:	07/08/2009
Oakland, CA 94612 (510) 874-4500 FAX (510) 874-4507	ProjectNo:	#4823.02; 5812	Hollis-Alders Pro	perty	Oakland, CA 9 SEND HARD0	94612 COPY	Dat	e Printed:	07/08/2009

								Req	uested	Tests (See leg	gend be	elow)			
Lab ID	Client ID	Matrix	Collection Date	Hold	1	2	3	4	5	6	7	8	9	10	11	12
0907195-029	KB-44 8 5-9 0	Soil	7/8/2009 10:15				r	r	<u></u>	·						Δ
0907195-030	KB-4A 9.0-9.25	Soil	7/8/2009 10:20	181			<u> </u>									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													А
0907195-033	KB-4B 10.5-11	Soil	7/8/2009 13:05													А
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													Α
0907195-036	KB-4D 8.5-9.0	Soil	7/8/2009 11:24													А
0907195-037	KB-4D 9.5-10.0	Soil	7/8/2009 11:30													А
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.



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

CHAIN-OF-CUSTODY RECORD

Page 2 of 2

			Work(Order: 0907195	Clier	ntCode: TWRK		
	WriteOn		Excel	Fax	🖌 Email	HardCopy	ThirdParty	🗌 J-flag
			I	Bill to:		Req	uested TAT:	3 days
Email:	mbhall@treadwe	ellrollo.com		Accounts Pay	vable			
cc: PO:	tacampitelli@trea	adwellrollo.com		Treadwell & F 501 14Th Stre	Rollo eet, 3rd Floor	Dat	e Received:	07/08/2009
ProjectNo:	#4823.02; 5812	Hollis-Alders Pr	operty	Oakland, CA SEND HARD	94612 COPY	Dat	e Printed:	07/08/2009
	Email: cc: PO: ProjectNo:	WriteOn Email: mbhall@treadwe cc: tacampitelli@trea PO: ProjectNo: #4823.02; 5812	WriteOn EDF Email: mbhall@treadwellrollo.com cc: tacampitelli@treadwellrollo.com PO: ProjectNo: #4823.02; 5812 Hollis-Alders Pr	Work(WriteOn EDF Excel WriteOn EDF Excel Email: mbhall@treadwellrollo.com cc: tacampitelli@treadwellrollo.com PO: ProjectNo: #4823.02; 5812 Hollis-Alders Property	WriteOn EDF Excel Fax Bill to: Email: mbhall@treadwellrollo.com Accounts Pay CC: tacampitelli@treadwellrollo.com Treadwell & Foregative for the foregative for the foregative for the foregative for the foregative for the foregative foregative for the foregative foregative for the foregative foregative for the foregative foregative for the foregative fo	WriteOn EDF Excel Fax ✓ Email Bill to: State Treadwell Treadwell	WriteOn EDF Excel Fax Email HardCopy Bill to: Bill to: Req Email: mbhall@treadwellrollo.com Accounts Payable Req cc: tacampitelli@treadwellrollo.com Treadwell & Rollo Date PO: 501 14Th Street, 3rd Floor Date ProjectNo: #4823.02; 5812 Hollis-Alders Property Oakland, CA 94612 Date	WriteOn EDF Excel Fax Email HardCopy ThirdParty Image: Bill of the state of

				L				Req	uested	Tests (See leg	gend be	low)			
Lab ID	Client ID	Matrix	Collection Date	Hold	13	14	15	16	17	18	19	20	21	22	23	24
0907195-001	T1 0-0.5	Soil	7/8/2009 9:10		<u> </u>											
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
18	19
23	24

15	
20	

16		
21		

17	
22	

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

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.

CHAIN-OF-CUSTODY RECORD

McCampb 1534 Wi Pittsbur (925) 22	ell Analytical, Inc. illow Pass Rd g, CA 94565-1701 52-9262				C	HAI Work	N-O Order:	F-C	UST 195	[OD (Y R	ECO	RD wrk		Page	2 of	2
			WriteOn	EDF	[Excel	[Fax	E	🖌 Email		Harc	iCopy	🗌 Thi	rdParty	🗌 J-	-flag
Report to: Matt Hall Treadwell & 501 14Th St Oakland, CA (510) 874-450	Rollo treet, 3rd Floor A 94612 00 FAX (510) 874-4507	Email: cc: PO: ProjectNo:	mbhall@tread tacampitelli@ #4823.02; 58	dwellrollo.com treadwellrollo.cor 12 Hollis-Alders F	n Propei	ty	Bill to: Ac Tre 50 Oa SE	counts eadwell 1 14Th ikland, (ND HA	Payable & Rolle Street, CA 946 RDCOI	e o 3rd Flo i12 ⊇Y	oor		Requ Dati Dati	uested e Rece e Prin	TAT: ived: ted:	3 (07/08/ 07/08/	days /2009 /2009
			······	······································					Rea	uested	Tests	(See le	gend b	elow)			
Lab ID	Client ID		Matrix	Collection Date	Hold	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									1	1	1	1	1
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 24-2	5	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													<u> </u>
0907195-027	TR-21E 3.0-3.5		Soil	7/7/2009 16:05							Ì						

Test Legend:

0907195-028

13 TPH(DMO)WS	G_S	4
18		9
23		24

UST-03

15	
20	

7/7/2009 10:05

Water

16	
21	

17	
22	

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

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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Page 2 of 2

Pittsburg, CA 94565-1701 (925) 252-9262				WorkO	tCode: TWRK				
		WriteOn		Excel	Fax	🔽 Email	HardCopy	ThirdParty	🗍 J-flag
Report to:				В	ill to:		Req	uested TAT:	3 days
Matt Hall Email: mbhall@treadwellrollo.com					Accounts Pa	ayable			
Treadwell & Rollo 501 14Th Street, 3rd Floor	cc: PO:	tacampitelli@trea	adwellrollo.com Treadwell & Rollo 501 14Th Street, 3rd Floor				Dat	e Received:	07/08/2009
Oakland, CA 94612 (510) 874-4500 FAX (510) 874-4507	ProjectNo:	: #4823.02; 5812 I	Hollis-Alders P	roperty	Oakland, CA SEND HAR	A 94612 DCOPY	Dat	e Printed:	07/08/2009
		·							

.

					Requested Tests (See legend below)											
Lab ID	Client ID	Matrix	Collection Date	Hold	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			1										
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			1										

<u>Test Legend</u>:

13 TPH(DMO)WSG_S	14
18	19
23	24

15 20

16	
21	

17	
22	

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

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.

<u></u> <u>M</u>	Campbell Analytical, Inc	<u>.</u>		1534 Willow Pass Road, Pittsburg, CA 94565-1701 Web: www.mccampbell.com E-mail: main@mccampbell.com						
	which Odanity Counts	mnla	Dead	nt Cha	alt	4	923-232-9209	<u> </u>		
	Sa	mpie	Rece	pt Cne	CKIIS	t				
Client Name:	Treadwell & Rollo			0	ate and	d Time Received:	7/8/09 4:5	5:00 PM		
Project Name:	#4823.02; 5812 Hollis-Alders Prop	erty		C	hecklis	st completed and rev	viewed by:	Melissa Valles		
WorkOrder N°:	0907195 Matrix Soil/Water			C	arrier:	Rob Pringle (MA	l Courier)			
	<u>Chair</u>	of Cu	stody (COC) Inf	ormati	ion				
Chain of custody	present?	Yes	\checkmark	No						
Chain of custody	signed when relinquished and received?	Yes	V	No						
Chain of custody	agrees with sample labels?	Yes	✓	No						
Sample IDs noted	by Client on COC?	Yes	\checkmark	No						
Date and Time of	collection noted by Client on COC?	Yes		No						
Sampler's name n	noted on COC?	Yes	✓	No						
	<u>S</u>	ample	Receip	t Inform	<u>ation</u>					
Custody seals int	act on shipping container/cooler?	Yes		No		Ν	₩ 🗹			
Shipping containe	er/cooler in good condition?	Yes	\checkmark	No						
Samples in prope	er containers/bottles?	Yes		No						
Sample container	rs intact?	Yes	V	No						
Sufficient sample	volume for indicated test?	Yes	✓	No						
	Sample Prese	rvatio	<u>1 and H</u>	old Time	<u>(HT) I</u>	nformation				
All samples recei	ved within holding time?	Yes	✓	No						
Container/Temp E	Blank temperature	Coole	r Temp:	4.2°C		1	va 🗖			
Water - VOA vial	s have zero headspace / no bubbles?	Yes	✓	No		No VOA vials submitt	ed 🗔			
Sample labels ch	ecked for correct preservation?	Yes	✓	No						
TTLC Metal - pH a	acceptable upon receipt (pH<2)?	Yes		No		Ν	ia 🗹			
Samples Receive	d on Ice?	Yes	✓	No						
	(ісе Тур	e: WE	TICE)						
* NOTE: If the "N	lo" box is checked, see comments below.									
	=======================================	===	===			=====				
Client contacted:	Date contac	ted:				Contacted b	y:			

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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.

	IcCampbell Analyti "When Quality Counts"	cal, Inc.	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	Client Project ID:	#4823.02; 5812 Hollis-	ed: 07/07/09						
501 14Th Str	eet, 3rd Floor	Alders Toperty		Date Receiv	red: 07	7/08/09				
	,	Client Contact: N	fatt Hall	Date Extract	ted: 07	/08/09-0	7/09/09			
Oakland, CA	94612	Client P.O.:		Date Analyz	zed 07	7/09/09				
Foundation mother d	Gasoline Ra	ange (C6-C12) Vola	itile Hydrocarbons as G	asoline*		101	0007105			
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			
					ļ.					
					ļ					
										
	· · · · · · · · · · · · · · · · · · ·									
	<u> </u>				<u> </u>					
Re ND	porting Limit for DF =1; means not detected at or	W	50			μg/L				
a	bove the reporting limit		1.0			mg/K	5			

* 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

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell An "When Quality	nalyti / Counts"	cal, In	<u>c.</u>	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		Client Pr	oject ID:	#4823.0	2; 5812 Hollis-	07/07/09				
501 14Th Stugat 2nd Elagr		Alders P	roperty			Date Received:	eived: 07/08/09			
501 14111 Street, Std Floor	Client C	ontact: M	latt Hal	 [Date Extracted:	07/08/09				
Oakland, CA 94612				Date Analyzed:	07/09/09					
Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0907195										
Lab ID	09071	95-023A	0907195	-024A						
Client ID	ient ID UST-1-Deep-20 US			ep 24-			Reporting	Limit for		
Matrix	1	S	S					-1		
DF		1	1				s	w		
Compound		Concentration						ug/L		
tert-Amyl methyl ether (TAME)	1	ND	ND				0.005	NA		
Benzene]	ND	ND				0.005	NA		
t-Butyl alcohol (TBA)		ND	ND				0.05	NA		
Diisopropyl ether (DIPE)	1	ND	ND				0.005	NA		
Ethylbenzene	1	ŇD	ND				0.005	NA		
Ethyl tert-butyl ether (ETBE)	1	ND	ND				0.005	NA		
Methyl-t-butyl ether (MTBE)	1	ND	ND				0.005	NA		
Toluene	1	ND	ND				0.005	NA		
Xylenes	1	ND	ND				0.005	NA		
		Surr	ogate Rec	overies	s (%)					
%SS1:		83	83							
%SS2:		108	110)	l					
Comments * water and vanor samples are reported in		il/sludge/so	lid samples	in ma/k	r product/oil/non-s	queous liquid sampl	es and all TC			
extracts are reported in mg/L, wipe samp ND means not detected above the report # surrogate diluted out of range or coelui	les in μg/ ing lımit; es with a	wipe. N/A mean: nother peak	s analyte no	t applica	ble to this analysis	s. ference.				

McCampbell An "When Ouality	alyti _{Counts"}	cal, Inc	<u>.</u>	1534 Willow Pass Road, Pittsburg, CA 94565-1701 Web: www.inccampbell.com E-mail: main@mccampbell.com Telephone: 877-252-9262 Fax: 925-252-9269						
Treadwell & Rollo		Client Pro	ject ID:	#4823.02; 5812 Hollis- Date Sampled:			07/07/09			
501 14Th Street 3rd Floor		Alders Pro	operty			Date Received: 07/08/09				
501 14111 Succi, 510 11001		Client Contact: Matt Hall Date Extracted:								
Oakland, CA 94612		Client P.O	v.:			Date Analyzed:	07/09/09			
		Oxygena	tes and B	TEX b	y GC/MS*	I				
Extraction Method: SW5030B		Analy	tical Method	I: SW826	0B		Work Order:	0907195		
Lab ID	0907195-025B					1				
Client ID	M	MW-01					Reporting	Limit for		
Matrix		W					- DF	· =1		
DF		1					S	W		
Compound		Concentration						μg/L		
tert-Amyl methyl ether (TAME)		ND					NA	0.5		
Benzene	ND		• •				NA	0.5		
t-Butyl alcohol (TBA)	i	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	i	ŅD					NA	0.5		
		Surro	gate Rec	overies	s (%)					
%SS1:		85								
%S <u>S</u> 2:		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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	McCampbell Analyti	cal, Inc.		1534 Willow Pass Road, Pittsburg, CA 94565-1701 Web: www.inccampbell.com E-mail: main@inccampbell.com Telephone: 877-252-9262 Fax: 925-252-9269							
Tready	well & Rollo	Client Project	t ID:	#4823.02; 5812	Hollis-	Date Sampled: 07/08/09					
501 14	Th Street, 3rd Floor	Alders Prope	erty		ceived: 07/08/09						
		Client Contac	ct: M	latt Hall		tracted: 07/08/09					
Oaklaı	nd, CA 94612				Date An	alyzed: 07/09/09	-07/10/()9			
	· · · · · · · · · · · · · · · · · · ·	·		Metals*		· · · · · ·					
Extraction	on method: SW3050B		Ana	ulytical methods: 602	20A		,	Work O	rder: 090	07195	
Lab ID	Client ID	Ma	trix	Extraction Type	Chro	omium	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	ТЗ 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

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 & Ro	llo	Client Project ID	: #4	823.02; 5812 H	Iollis-	Date Sampled:	07/07/09	-07/08/09)		
501 14Th Street	t, 3rd Floor	Alders Property				Date Received:	07/08/09	07/08/09			
	,	Client Contact:	tact: Matt Hall Date Extracted:					07/08/09			
Oakland, CA 94612 Client P.O.: Date Analyzed:						07/09/09	-07/10/09)			
Extraction method: 5	SW3050B	Le At	ead b	by ICP-MS*	A			Work Ord	er: 0907195		
Lab ID	Client ID	Matri	x E	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	'5-016A TR-21A 3.0-3.5			TOTAL		5.1	1	108			
0907195-017A	TR-21B 2.5-3.0	S		TOTAL		5.0		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	ŀ	99			
	·										

Reporting Limit for DF =1;	W	TOTAL	NA	μg/L
above the reporting limit	S	TOTAL	0.5	mg/Kg

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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	Campbell Analyti	cal, Inc.	I 534 Willow Pass Road, Pittsburg, CA 94565-1701 Web: www.inccampbell.com E-mail: main@mccampbell.com Telephone: 877-252-9262 Fax: 925-252-9269						
Treadwell & Ro	ollo	Client Project ID:	#4823.02; 5812 H	Iollis-	Date Sampled:	07/08/09			
501 14Th Stree	et, 3rd Floor	Alders Property			Date Received:	07/08/09			
		Client Contact: M	att Hall		Date Extracted: 07/08/09				
Oakland, CA 94	4612	Client P.O.:			Date Analyzed:	07/10/09			
Extraction method:	SW3050B	d by ICP-MS* /tical methods: 6020/	4			Work Ord	ler: 0907195		
Lab ID	Client ID	Matrix	Extraction Type		Lead	DF	% SS	Comments	
0907195-012A	T7 0-0.5	S	TOTAL		3500	100	117		
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	<u> 2</u>								
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							-		
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Reporting Limit for DF =1;	W	TOTAL	NA	μg/L
above the reporting limit	S	TOTAL	0.5	mg/Kg

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.

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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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	cCampbell Analyti "When Ouality Counts"	cal, Inc.	1534 Web: ww Te	Willow F w.mccamp lephone: 8	Pass Road, Pittsburg, CA obell.com E-mail: main(377-252-9262 Fax: 925	94565-1701 @mccampbell -252-9269	.com		
Treadwell & F	Rollo	Client Project ID:	#4823.02; 5812 H	Hollis-	Date Sampled:	07/07/09			
501 14Th Stre	et, 3rd Floor	Alders Property			Date Received:	07/08/09			
	,	Client Contact: 1	Aatt Hall		07/08/09	-07/10/09)		
Oakland, CA S	94612			Date Analyzed:	07/13/09				
Extraction method:	CA Title 22	I	ead by ICP*	010C			Work Ord	er: 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		
					·			:	
	· · · · · · · · · · · · · · · · · · ·			:					
				1				-	

Reporting Limit for $DF = 1$;	W	TOTAL	NA	μg/L
above the reporting limit	S	WET	0.2	mg/L

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-1000 water.

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	McCampbell Analyti	ical, Inc.	153 Web: ww T	4 Willow P ww.mccamp elephone: 8	ass Road, Pi bell.com E 77-252-9262	ttsburg, CA 94565-1701 2-mail: main@mccampbell 2: Fax: 925-252-9269	.com		
Tread	well & Rollo	Client Project ID:	#4823.02; 5812	Hollis-	Date Sa	mpled: 07/08/09	I		
501 14	Th Street, 3rd Floor	Alders Property	Date Received: 07/08/09						
		Client Contact: M	fatt Hall		Date Ex	tracted: 07/08/09	-07/10/0)9	
Oakla	nd, CA 94612	Client P.O.:			Date An	alyzed: 07/13/09			
		Lea	d & Chromium	*					
Extraction method: CA Title 22 Analytical methods: SW6010C						·	Work O	rder: 09	07195
Lab ID	Client ID	Matrix	Extraction Type	mium	Lead	DF	% SS	Comments	
001A	T1 0-0.5	S	WET	0	.41	19	1	N/A	
003A	T2 0-0.5	S	WET	WET 0.		28	1	N/A	
005A	T3 0-0.5	S	WET	0	.41	44	L	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

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.

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

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Treadwell & Ro	ollo	Client Project ID:	#4823.02; 5812 H	Iollis-	Date Sampled:	07/07/09			
501 14Th Stree	et, 3rd Floor	Alders Property			Date Received:	07/08/09			
		Client Contact: N	Aatt Hall	att Hall Date Extracted: 07/08/09-07/09/09					
Oakland, CA 94	4612	Client P.O.:			Date Analyzed:	07/09/09			
		I	ead by ICP*						
Extraction method: SW1311 Analytical			lytical methods: SW60	010C -	T	DE	Work Ord	er: 0907195	
		Matrix	Extraction Type		Lead		% <u>.</u> 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;	W	TOTAL	NA	μg/L
above the reporting limit	S	TCLP	0.2	mg/L

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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	McCampbell Analyti	ical, In	<u>c.</u>	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							
Tread	well & Rollo	Client Pr	oject ID:	#4823.02; 5812	Hollis-	Date Sar	npled: 07/08/09				
501.14	4Th Street. 3rd Floor	Alders P	roperty	Date Received: 07/08/09							
		Client C	ontact: N	latt Hall		Date Ext	tracted: 07/08/09	-07/09/0)9		
Oakla	Oakland, CA 94612 Client P.O.:					Date An	alyzed: 07/09/09				
		Chi	romium & Lead	*	<u> </u>						
Extraction method: SW1311 Analytical methods: SW					6010C			Work Or	rder: 09	07195	
Lab ID	Client ID		Extraction Type	Chro	omium	Lead	DF	% SS	Comments		
001A	T1 0-0.5		S	TCLP N		ND	ND	1	N/A		
003A	T2 0-0.5	T2 0-0.5 S		TCLP	ND		ND	I	N/A		
005A	T3 0-0.5		S	TCLP	ND		1.6	1	N/A		
007A	T4 0-0.5		S	TCLP	ו	ND	ND	1	N/A		
009A	T5 0-0.5		S	TCLP	ND		ND	1	N/A		
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			······								

	W	TOTAL	NA	ΝΑ	ΝA
Reporting Limit for $DF = I$;	**	TOTAL	INA	INA	
ND means not detected at or above the reporting limit	S	TCLP	0.05	0.2	mg/L

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.

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WET = Waste Extraction Test (STLC).

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

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McC	Campbell Analyti	cal, Inc.	2	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	D	Client Proje	ect ID: #4	#4823.02; 5812 Hollis- Date Sampled:					
501 14Th Street, 3	3rd Floor	Alucis I lo	рену	Date Received: 07/08/09					
		Client Con	tact: Mat	t Hall	Date Extracted:	07/08/09			
Oakland, CA 946	12	Client P.O.	:		Date Analyzed	07/09/09			
Analytical Method: SN	M2540C	Tot	al Dissolv	ed Solids*		Work Order:	0907195		
Lab ID Client ID Matr			Matrix	Total Disso	lved Solids	DF	Comments		
0907195-025C	MW-01		W	13	10	1			
0907195-028B	UST-03		W	11	80	2	bl		
				·					
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Reporting Limit for DF = 1; ND means not detected at or	W	10 mg/L	
above the reporting limit	S	NA	

* water samples reported in mg/L.

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

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Treadwell & R	ollo	Client Project ID:	#4823.02; 5812 Hollis-	Date Sampled: 07/08/09				
501 14Th Stree	et. 3rd Floor	Alders Property	Date Rec	eived:	07/08/09	-		
••••	-,	Client Contact: M	Date Extr	acted:	07/08/09			
Oakland, CA 9	4612	Client P.O.:		Date Ana	lyzed	07/09/09-	07/10/09	
	Total Extractal	ole Petroleum Hydr	ocarbons with Silica Ge	l Clean-Up	k	•		
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	el		
0907195-030A	KB-4A 9.0-9.25	S	4900			103	el	
0907195-031A	KB-4B 6.5-7.0	S	570	1	114	el		
0907195-032A	KB-4B 8,5-9.0	S	1600	50	110	el		
0907195-033A	KB-4B 10.5-11	S	81		l	113	el	
0907195-034A	KB-4C 10.5-11	S	3.9		1	115	el	
0907195-035A	KB-4D 7.5-8.0	S	270		1	114	el	
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	el	
0907195-038A	KB-4E 10-10.5	S	13		1	116	el	
0907195-039A	KB-4 Drum	S	250		1	107	el	
	· · ·							
Repor	ting [imit for $DF = 1$		NIA			NIA		

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

el) unmodified or weakly modified diesel is significant

Angela Rydelius, Lab Manager

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Treadwell & R	ollo	Client Project ID:	#4823.02; 5812 Holl	is- Dat	e Sampled:	07/07/0)9				
501 14Th Stree	at 3rd Floor	Alders Property		Dat	e Received:	07/08/0	07/08/09				
501 141115000	5, 514 1 1001	Client Contact:	Matt Hall	Date	e Extracted:	07/08/0)9				
Oakland, CA 9	4612	Client P.O.:		Dat	e Analyzed:	07/10/0)9-07/13/	09			
Extraction method:	Total Ext SW3510C/3630C/SW3550C/36	ractable Petroleum Analytical me	Hydrocarbons with Sethods: SW8015B	Silica Geł	Clean-Up*	Wo	ork Order: (0907195			
Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	TPH-Diesel TPH-Motor Oil (C10-C23) (C18-C36)			% 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	7,000	10	104	el,bl			
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Reporting Limit for $DF = 1$;	W	50	250	μg/L
ND means not detected at or above the reporting limit	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 / 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 090				order 09071	95	
EPA Method SW8015Bm	Extra	ction SW	5030B					Spiked Sample ID: 0907165-001A					
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	eptance	Criteria (%)	•	
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD	
TPH(btex ^f	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

 \pounds TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water QC Matrix: Water						BatchID 44376 WorkOrder 0907195					95	
EPA Method SW8015Bm	Extra	ction SW	5030B				Spiked Sample ID: 0907195-025A					25A
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	eptance	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.




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)01A		
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	eptance	Criteria (%)	,
, iiu, io	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 we	re ND les	s than the	method R	L with th	e following	exceptions.			

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.

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QC SUMMARY REPORT FOR SW8260B

W.O Sample Matrix: Water			QC Matri	x: Water			Batch	ID [.] 44356		WorkC	Order 09071	95
EPA Method SW8260B	Extra	ction SW	5030B					9	Spiked San	nple ID	: 0907143-0)20B
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	eptance	Criteria (%))
, individ	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	M\$ / 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 E NONE	Blank of this	extraction	batch we	re ND les	s than the	method R	L with th	e following	exceptions:			

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	1 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.

A QA/QC Officer



McCampbell Analytical, Inc.

"When Quality Counts"

 1534 Willow Pass Road, Pittsburg, CA 94565-1701

 Web: www.mccampbell.com
 E-mail: mam@inccampbell.com

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

QC SUMMARY REPORT FOR 6020A

W.O. Sample Matrix: Soil/Solid

QC Matrix: Soil

WorkOrder: 0907195

EPA Method 6020A			Extrac	tion SW:	3050B	BatchID: 44351			Spiked Sample ID: 0907162-002A				2A
Analyte	Sample	Spiked	MS	MSD	MS-MSD	Spiked	LCS	LCSD	LCS-LCSD	Acc	eptanc	e Criteria (%	»)
, mary co	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 t NONE	he Method B	lank of th	is extract	ion batch	were ND le	ss than the	e method F	L with th	e following e	exceptions.			

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.

A QA/QC Officer



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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 6020A

W.O Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0907195

EPA Method 6020A		Extraction SW3050B						: 44351	Spiked Sample ID: 0907162-002A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	Spiked	LCS	LCSD	LCS-LCSD	Acce	eptanc	e Criteria (%)
, when y to	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 t NONE	he Method B	lank of th	is extract	ion batch	were ND les	ss than the	e method F	L with the	e following e	exceptions:			

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.

K___QA/QC Officer



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 6020A

W.O Sample Matrix: Soi	I	QC Matrix: Soil WorkOrder 0						rder 090719	95				
EPA Method 6020A			Extrac	tion SW	3050B		BatchID	: 44379	Spik	ed Sample	ID:	0907195-02	7A
Analyte	Sample	Spiked	MS	MSD	MS-MSD	Spiked	LCS	LCSD	LCS-LCSD	Acc	eptanc	e 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 th NONE	e Method B	lank of th	is extract	ion batch	were ND les	ss than the	e method F	RL with th	e following e	exceptions:			

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.

A QA/QC Officer



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	W.O. Sample Matrix: Soil QC Matrix: Soil						Batch	ID: 44332		WorkOrder: 0907195			
EPA Method SW6010C	thod SW6010C Extraction CA Title 22 Spiked Sample ID							: N/A					
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acc	eptance	e Criteria (%)		
Analyte	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 Metho NONE	d Blank of this	extraction	batch we	re ND les	s than the	method R	L with th	e following	exceptions.				

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.

A QA/QC Officer



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		1	QC Matri	k: Soil			Batch	ID: 44380		WorkC	order 09071	95
EPA Method SW6010C			5	Spiked San	nple ID	: N/A						
Analyte	LCS	LCSD	LCS-LCSD	Acce	eptance	Criteria (%)						
/ indiyio	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 I NONE	Blank of this	extraction	batch we	re ND les	s than the	method R	L with th	e following	exceptions:			

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.

R QA/QC Officer



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

QC SUMMARY REPORT FOR WET CHEMISTRY TESTS

Test Method:	Total Dissolved Solids		Matrix: W			WorkOrder: 0907195
Method Nam	ne: 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
		<u>B</u> /	ATCH 44355 SUMMARY			
Lab ID	Date Sampled Date Extr	acted Date A	Analyzed Lab ID	Date	Sampled Date	e Extracted Date Analyzed
0907195-025C	07/07/09 7:30 PM 07/0	3/09 07/09/09	9 1:55 PM 0907195-02)9 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.

____QA/QC Officer



QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Water		(QC Matrix	c Water			Batch	ID: 44354		WorkC	order: 09071	95
EPA Method SW8015B			S	opiked San	nple ID	: N/A						
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	eptance	Criteria (%)	
Analyte	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 NONE	Blank of this	extraction	batch we	re ND les	s than the	method R	L with th	e following	exceptions			

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.

A QA/QC Officer



QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Soil		(QC Matrix	k: Soil			Batch	ID: 44381		WorkC)rder: 09071	95
EPA Method SW8015B	Éxtra	ction SW	3550C/3	630C				ę	Spiked Sar	nple ID	: 0907195-0)39A
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acci	eptance	Criteria (%)	,
, waryte	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 Metho NONE	od Blank of this	extraction	batch we	re ND les	s than the	method R	L with th	e following	exceptions:			

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.

A QA/QC Officer

McCampbell A "When Quality	nalytical, Inc. ty Counts"	l 534 Will Web: www.mc Telepho	ow Pass Road, Pittsburg, campbell.com E-mail: m me: 877-252-9262 Fax:	CA 94565-1701 ain@mccampbell.com 925-252-9269
Treadwell & Rollo	Client Project ID: #4823.0	02; Alders	Date Sampled:	07/06/09-07/07/09
501 14Th Street, 3rd Floor	Property		Date Received:	07/07/09
Oakland CA 94612	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.

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McCampbell Analytical, Inc.



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UST-03 7.5-8

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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 94565-170 (925) 252-9262

CHAIN-OF-CUSTODY RECORD

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Page 1 of 1

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Pittsburg, CA 94565-1701 (925) 252-9262			WorkOr	der: 0907143	clien	tCode: TWRK		
	🗍 WriteOn	EDF	Excel	Fax	🖌 Email	HardCopy	ThirdParty	☐ J-flag
Report to:			Bil	l to:		Req	uested TAT:	3 days
Matthew Hall	Email:			Accounts Pay	/able			
Treadwell & Rollo	cc:			Treadwell & I	Rolio	_	~	
501 14Th Street, 3rd Floor	PO:			501 14Th Str	eet, 3rd Floor	Dat	e Received:	07/07/2009
Oakland, CA 94612	ProjectNo: #4823.02; Alders	Property		Oakland, CA	94612	Dat	e Printed:	07/07/2009
(510) 874-4500 FAX (510) 874-4507				SEND HARD	COPY			

		Requested Tests (See legend below)														
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GMBTEXOXYPB_W	

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3	TDS_W
8	

4	TPH(DMO)WSG_S
9	

5	TPH(DMO)WSG_W
10	

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.

When Quality Counts"	<u>'</u>		1534 Willow Pass Road, Pittsburg, CA 94565-1701 Web: www.inccampbell.com E-mail: main@mccampbell.com Telephone: 877-252-9262 Fax: 925-252-9269						
Sa	mple	Recei	pt Checklis	t					
Client Name: Treadwell & Rollo			Date and	I Time Received:	07/07/09 7	':47:34 PM			
Project Name: #4823.02; Alders Property			Checklis	st completed and r	eviewed by:	Samantha Arbuckle			
WorkOrder N°: 0907143 Matrix <u>Soil/Water</u>			Carrier [.]	Rob Pringle (N	1AI Courier)				
<u>Chair</u>	ı of Cu	stody ((COC) Informati	on					
Chain of custody present?	Yes	V	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	\checkmark	No 🗔						
Date and Time of collection noted by Client on COC?	Yes		No 🗆						
Sampler's name noted on COC?			No 🗆						
<u>s</u>	iample	Receip	t 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	V	No 🗆						
Sufficient sample volume for indicated test?	Yes	☑	No 🗌						
Sample Prese	rvatio	n and He	old Time (HT) I	nformation					
All samples received within holding time?	Yes		No 🗌						
Container/Temp Blank temperature	Coole	er Temp:	5.2°C						
Water - VOA vials have zero headspace / no bubbles?	Yes	☑	No 🗆 N	lo VOA vials subm	nitted 🗖				
Sample labels checked for correct preservation?	Yes		No 🗌						
TTLC Metal - pH acceptable upon receipt (pH<2)?	Yes		No 🗆		NA 🗹				
Samples Received on Ice?	Yes	\checkmark	No 🗆						
(Ісе Тур	be: WE	TICE)						
* NOTE: If the "No" box is checked, see comments below.									

Client contacted:

Date contacted:

Contacted by:

Comments:

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McCampbell An "When Quality	alyti _{Counts"}	cal, In	<u>c.</u>		1534 Willow Pa Web: www.mccampl Telephone: 8	ass Road, Pittsburg, CA pell.com E-mail: main 77-252-9262 Fax: 925	94565-1701 @mccampbell.c -252-9269	om		
Treadwell & Rollo		Client Pr	oject ID:	#4823.0	02; Alders	Date Sampled:	07/06/09			
		Property				Date Received: 07/07/09				
501 141n Street, 3rd Floor	:	Client C	ontact: N	latthew	Hall	Date Extracted:	07/07/09	·		
Oakland, CA 94612		Client P.	0.:			Date Analyzed:	07/08/09-0′	7/09/09		
	T	ן רפאנים א MBTEX by P&T and GC/MS *								
Extraction Method: SW5030B		Anal	lytical Method	1: SW826	0B		Work Order:	0907143		
Lab ID	09071	43-001A	0907143	-003A	0907143-004A	0907143-005A				
Client ID	Client ID UST-0			5-15.2	UST-01 19.5-20	UST-02 11.5-12	Reporting	Limit for		
Matrix		S S			S	S	DF	=1		
DF	1	1		1	1	S	W			
Compound				Conce	entration		mg/kg	ug/L		
TPH(g)		ND	ND)	ND	ND	0.25	NA		
tert-Amyl methyl ether (TAME)		ND	ND ND		ND	ND	0.005	NA		
Benzene		ND	ND)	ND	ND	0.005	NA		
t-Butyl alcohol (TBA)		ND	ND	1	ND	ND	0.05	NA		
1,2-Dibromoethane (EDB)		ND	ND	1	ND	ND	0.004	NA		
1,2-Dichloroethane (1,2-DCA)		ND	ND)	ND	ND	0.004	NA		
Diisopropyl ether (DIPE)		ND	ND	1	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	1	ND	ND	0.005	NA		
Toluene		ND	ND	1	ND	ND	0.005	NA		
Xylenes		ND	ND)	ND	ND	0.005	NA		
		Surr	ogate Rec	overies	s (%)					
%SS1:		83	82		86	84				
%\$\$2:		108	109)	108	110				
Comments										
* water and vapor samples are reported in extracts are reported in mg/L, wipe sampl ND means not detected above the reporti	μg/L, so es in μg/ ng limit:	il/sludge/so wipe. N/A mean	olid samples s analyte no	in mg/k	g, product/oil/non-a able to this analysis	queous liquid sample	s and all TC	LP & SPLP		

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

Angela Rydelius, Lab Manager

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"When Ouality	<u>c.</u>	1534 Willow Pass Road, Pittsburg, CA 94565-1701 Web: www.inccampbell.com E-mail: main@mccampbell.com Telephone: 877-252-9262 Fax: 925-252-9269								
Treadwell & Rollo		Client Pr	oject ID: #48	323.0	02; Alders	Date Sampled:	07/06/09			
501 14Th Street 2nd Eleca		Property				Date Received: 07/07/09				
501 141h Street, 3rd Floor	F	Client Co	ontact: Matth	new	Hall	Date Extracted:	07/07/09			
Oakland, CA 94612	-	Client P.0	D.:			Date Analyzed:	07/08/09-0	7/09/09		
	ידייייייייייייייייייייייייייייייייייי	TPH(g) & MBTEX by P&T and GC/MS *								
Extraction Method: SW5030B		Anal	ytical Method: SW	V8260)B		Work Order:	0907143		
Lab ID	090714	3-007A	0907143-008	3A	0907143-010A	0907143-011A				
Client ID	UST-02	UST-02 19.5-20 UST-02 2			UST-03 4.5-5	UST-03 7.5-8	Reporting	Lunit for		
Matrix		s s			S	S	DF	=1		
DF		1	1		1	1	S	w		
Compound			Co	once	ntration		mg/kg	ug/L		
TPH(g)	N	D	ND		ND	0.86	0.25	NA		
tert-Amyl methyl ether (TAME)	N	(D	ND		ND	ND	0.005	NA		
Benzene	N	ID	ND		ND	ND.	0.005	NA		
t-Butyl alcohol (TBA)	N	(D	ND		ND	ND	0.05	NA		
1,2-Dibromoethane (EDB)	N	ID	ND		ND	ND	0.004	NA		
1,2-Dichloroethane (1,2-DCA)	N	ID	ND		ND	ND	0.004	NA		
Diisopropyl ether (DIPE)	N	ID	ND		ND	ND	0.005	NA		
Ethylbenzene	N	ID	ND		ND	ND	0.005	NA		
Ethyl tert-butyl ether (ETBE)	N	ID	ND		ND	ND	0.005	NA		
Methyl-t-butyl ether (MTBE)	N	ID	ND		ND	ND	0.005	NA		
Toluene	N	ID	ND		ND	ND	0.005	NA		
Xylenes	N	ID	ND		ND	ND	0.005	NA		
		Surr	ogate Recove	eries	(%)					
%SS1:	8	32	84		85	87				
%SS2:	1	09	106		108	106	<u> </u>			
Comments										

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

Angela Rydelius, Lab Manager

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McCampbell An "When Quality	alyti _{Counts"}	cal, In	<u>c.</u>		1534 Willow P Web: www.mccamp Telephone: 8	ass Road, Pittsburg, CA bell.com E-mail: main 77-252-9262 Fax: 925	94565-1701 @mccampbell.c -252-9269	oin	
Treadwell & Rollo		Client Pr	oject ID:	#4823.0	02; Alders	Date Sampled:	07/06/09		
501 14Th Street 3rd Floor		Property				Date Received: 07/07/09			
501 14 m Succi, 514 moor		Client Co	ontact: M	latthew	Hall	Date Extracted:	07/07/09		
Oakland, CA 94612		Client P.C	D.:			Date Analyzed:	07/08/09-0′	7/09/09	
	т	'PH(g) & I	MBTEX b	y P&T	and GC/MS *			<u></u>	
Extraction Method: SW5030B		Anal	ytical Method	l: SW826	0B		Work Order:	0907143	
Lab ID	09071	43-013A	0907143	-016A	0907143-017A	0907143-018A			
Client ID	UST-0	3 13.5-14	UST-04	8.5-9	UST-04 10-10.5	UST-04 15-15.5	Reporting	Limit for	
Matrix		S S			S	S	Dr	-1	
DF	1		1	1	s	w			
Compound				Conce	entration		mg/kg	ug/L	
TPH(g)	0	.46	1.9		0.81	ND	0.25	NA	
tert-Amyl methyl ether (TAME)		ND N			ND	ND	0.005	NA	
Benzene		ND N			ND	ND	0.005	NA	
t-Butyl alcohol (TBA)		ND N		•	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	l	ND	ND	0.005	NA	
Ethylbenzene		ND	ND	I	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	1	ND	ND	0.005	NA	
		Surr	ogate Rec	overie	s (%)				
%SS1:		85		87	83				
%SS2:		110	100	5.	105	108	<u> </u>		
Comments									
water and vapor samples are reported in $\mu g/L$, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP ktracts are reported in mg/L, wipe samples in $\mu g/wipe$.									

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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McCampbell An "When Quality	alytical, In	<u>ıc.</u>	1534 Willow Pass Road, Pittsburg, CA 94565-1701 Web: www.inccampbell.com E-mail: main@mccampbell.com Telephone: 877-252-9262 Fax: 925-252-9269							
Treadwell & Rollo	Client I	roject ID: #4	823.0	2; Alders	Date Sampled:	07/07/09				
	Propert	у			Date Received: 07/07/09					
501 141h Street, 3rd Floor	Client (Contact: Mat	thew l	Hall	Date Extracted:	07/08/09-0	7/09/09			
Oakland, CA 94612	Client F	.0.:			Date Analyzed:	07/08/09-0	7/09/09			
<u> </u>	TPH(g)MBTE	X + Oxygenate	es + E	DB and 1,2-DC	۸*					
Extraction Method: SW5030B	An	alytical Method: S	W8260)B		Work Order:	0907143			
Lab ID	0907143-020B	0907143-02	21B	0907143-022A	0907143-023B					
Client ID	UST-01	UST-02	'	UST-03	UST-04	Reporting	Limit for			
Matrix	W	W		W	w	DF	=1			
DF	1	1		1	1	S	w			
Compound		· (Conce	ntration		ug/kg	μg/L			
TPH(g)	ND	390	0 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			
	Sur	rogate Recov	eries	(%)						
%SS1:	86	87		87	87					
%SS2:	106	106		106	107					
	ы b1	b1		6.61	61					

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

Angela Rydelius, Lab Manager

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McC	Campbell Analyti	cal, Inc.	1534 Willow Pass Road, Pittsburg, CA 94565-1701 Web: www.inccampbell.com E-inail: main@inccampbell.com Felephone: 877-252-9262 Fax: 925-252-9269						
Treadwell & Roll	lo	Client Project ID:	#4823.02; Alders Date Sampled: 07/07/09						
501 14Th Street,	3rd Floor	rioperty	Date Received: 07/07/09						
		Client Contact: M	atthew Hall	Date Extracted:	07/08/09-0	7/09/09			
Oakland, CA 946	12	Client P.O.:		Date Analyzed	07/09/09-0	7/10/09			
Analytical Method: S	M2540C	Total Disso	lved Solids*		Work Order:	0907143			
Lab ID	Client ID	Matrix	K Total Diss	olved Solids	DF	Comments			
0907143-020C	UST-01	W	6	18	1	bl			
0907143-021C	UST-02	W	11	20	2	bl			
0907143-023C	UST-04	w	6	59	1	bl			
						<u> </u>			
					_				
					<u> </u>				
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L	I				<u> </u>	1			

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

Angela Rydelius, Lab Manager

* water samples reported in mg/L.

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

	Campbell Analyt	ical, Inc.	1534 Willow Pass Road, Pittsburg, CA 94565-1701 Web: www.mccampbell.com E-mail: main@inccampbell.com Telephone: 877-252-9262 Fax: 925-252-9269						
Treadwell & Ro	ollo	Client Project ID	: #4823.02; Alders	Date Sampled:	07/06/	07/06/09-07/07/09			
	151	Property		Date Received:	07/07/	07/07/09 07/07/09			
501 14Th Stree	t, 3rd Floor	Client Contact:	Matthew Hall	Date Extracted:	07/07/				
Oakland, CA 94	4612	Client P.O.:		Date Analyzed:	07/08/	09-07/10/	09		
Entraction methods	W	ork Order	0907143						
Extraction method:	\$W3310C/3030C/3W3330C/30	Analytical in	TPU Discol	TPH Motor Oil	1		0,07145		
Lab ID	Client ID	Matrix	(C10-C23)	(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		
Rep	porting Limit for DF =1:	w	50	250		ارمال	,		
ND	means not detected at or	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

above the reporting limit

e2) diesel range compounds are significant; no recognizable pattern

e3) aged diesel is significant

e7) oil range compounds are significant

DHS ELAP Certification 1644



Angela Rydelius, Lab Manager



QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Soil		x: Soil			BatchID: 44322 WorkOrder 0907143					43		
EPA Method SW8260B	Extra	ction SW	5030B					5	Spiked Sar	nple ID	: 0907143-0)08A
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD Acceptance Criteri			Criteria (%))
Analyte	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
%\$\$3:	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.



QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Soil			QC Matrix	x: Soil			BatchID: 44352 WorkOrder 09071				43	
EPA Method SW8260B	Extra	ction SW	5030B					S	Spiked Sar	nple ID	: 0907192-0	01A
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acc	eptance	e Criteria (%)	r
, indijez	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)	NĎ	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	3.0	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



 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 SW8260B

W.O. Sample Matrix: Water			QC Matrix	x Water			BatchID: 44356 WorkOrder 090714				43	
EPA Method SW8260B	Extra	ction SW	5030B					S	piked San	nple ID	: 0907143-0	20B
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	Criteria (%)	1	
Analyte	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
Dissopropyl ether (DIPE)	ND	10	107	109	1.92	121	122	1.14	70 - 130	30	70 - 130	30
Ethyl tert-butyl ether (ETBE)	ŇD	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.

QA/QC Officer



 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 WET CHEMISTRY TESTS

Test Method:	Total Dissolved So	lids	Matrix: W			WorkOrder: 0907143
Method Name	e: SM2540C		Units mg/L			BatchID: 44355
Lab ID	Sam	ble DF	Dup / Ser. Dil.	DF	% RPD	Acceptance Criteria (%)
0907143-020C	618	3 1	650	2	5.05	<20
0907143-021C	112	0 2	1140	2	1.06	<20
0907143-023C	659) 1	650	2	1.37	<20
		Ē	ATCH 44355 SUMMAR	<u> </u>		
Lab ID	Date Sampled	Date Extracted Date	Analyzed Lab ID	Date	e Sampled Date	e Extracted Date Analyzed
0907143-020C	07/07/09 9:45 AM	07/08/09 07/09/0)9 1:15 PM 0907143	-021C 17/07/	09 10:30 AM	07/09/09 07/10/09 1:15 PM
0907143-023C	07/07/09 9:55 AM	<u> </u>)9 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.

AK____ QA/QC Officer



 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 SW8015B

W.O Sample Matrix: Soil		(QC Matrix	c Soil			Batch	ID: 44313		WorkC	order: 09071	43
EPA Method SW8015B	Extrac	ction _{SW}	3550C/3	630C				S	Spiked Sar	nple ID	: 0907117-0	03A
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acc	eptance	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 E NONE	lank of this	extraction	batch we	re ND les	s than the	method R	L with th	e following	exceptions:			

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.

A QA/QC Officer



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

QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 44354

WorkOrder: 0907143

EPA Method: SW8015B	Extra	ction: SV	/3510C/3	630C				:	Spiked Sam	ple ID:	N/A	
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acc	eptance	e Criteria (%)	I.
, and you	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 NONE	Blank of this exti	raction bate	h were NI) less than	the method	l RL with	the follow	ing exception	15:			

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.

QA/QC Officer

McCampbell A	nalytical, Inc.	1534 Wil Web: www.mc Telepha	low Pass Road, Pittsburg, campbell.com E-mail: m one: 877-252-9262 Fax:	CA 94565-1701 am@mccampbell.com 925-252-9269
Treadwell & Rollo	Client Project ID: #4823.0	02; Alders	Date Sampled:	07/06/09
501 14Th Street, 3rd Floor	Property		Date Received:	07/07/09
Oakland CA 94612	Client Contact: Matthew	Hall	Date Reported:	07/17/09
Vakialiu, CA 94012	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.

Tel	McCAMPI Website: <u>www.mcc</u> ephone: (877) 252-	BELL 1534 WIL PITTSBUI amphell.c -9262	ANAI LOW PAS RG, CA 94 <u>com</u> Ema	2YT 8 RO 565-17 il: ma	AD 91 in@n F	AL,	, IN mpbel (925)	C. 11.co 25:	om 2-92	69		-	i an	រូប ១ (RN Jec	AI 2 Tr	RO ack	CH UN (er	IA D 1 ED	IN FIM F	OF E	CI PD	US Q RUSI F	TO H :		R R rel	48 I Q	CO) IR WI	RD 72 ite (ur Ur Dn (1	5 DAY SW)
Report To: N	Matthew Hall	T	B	ill To	: Ma	tthe	w Ha	<u>n</u>							Ī		I		Ant	ulysis	s Rec	juest					1	0	ther	+c	omments
<u>company:</u>	al 14 th Street, 3 rd	, tite. Floor, O	akland.	CA 0	4612												1	100	1.51	1			ACCRETE ALL AND A							F	ilter
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Tele: (510) 874-4500		F	ax: (510)	874-	4507											a c	3				ALCONT.							10 a	or metais nalvsis:
Project #: 48	23.02		P	rojec	t Nar	ne: /	Alder	s P	ropa	erty					, is	â	- 4	۲Ţ	22				-		Ì					Ŷ	es / No
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	UST-01 15-15.2	7/6/09	11:50	1			x			x			;	\checkmark	47	14								1	i			х	x		
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McCampbell Analytical, Inc.

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Pittsburg, CA 94565-1701 (925) 252-9262				WorkOrd	er: 090714	A Cli	entCode: TWRk		
		🗌 WriteOn	EDF	Excel	Fax	🖌 Email	HardCopy	ThirdParty	🗍 J-flag
Report to:				Bi	il to:		Re	quested TAT:	3 days
Matthew Hall Treadwell & Rollo 501 14Th Street, 3rd Floor	Email: cc: PO:	mbhall@treadwell tacampitelli@tread	rollo.com dwellrollo.com		Accounts Pa Treadwell & 501 14Th St	ayable Rollo treet, 3rd Floor	Da Da	te Received: te Add-On:	07/07/2009 07/15/2009
Oakland, CA 94612 (510) 874-4500 FAX (510) 874-4507	ProjectNo:	#4823.02; Alders F	Property		Oakland, CA SEND HARI	A 94612 DCOPY	Da	te Printed:	07/15/2009

				ſ				Rec	uested	Tests (See leg	gend be	elow)			
Lab ID	Client ID	Matrix	Collection Date	Hold	1	2	3	4	5	6	7	8	9	10	11	12
1				-						I	1	r	r			
0907143-014	UST-03 15-15.5	Soil	7/6/2009 13:50		A	A										

Test Legend:

1	GAS8260_S
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11	

2	TPH(DMO)WSG_S
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10	

Prepared by: Samantha Arbuckle

TPH(d&mo) WSG and TPHg by 8260 added to UST 3 15-15.5, 72hr per Matt 07/15/09. **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 Analyti	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	#4823.02; Alders Date Sampled: 07/06/09					
501 14Th Street, 3rd Floor	rioperty		Date Receiv	ed: 07	/07/09	
	Client Contact: M	atthew Hall	Date Extract	ed: 07.	/15/09	
Oakland, CA 94612	Client P.O.:		Date Analyz	ed 07	/16/09	
Extraction method SW5030B	TPH(g) by Analytical n	y GC/MS* nethods SW8260B		Wo	rk Order:	0907143
Lab.ID Client ID	Matrix	TPH(g)		DF	% SS	Comments
014A UST-03 15-15.5	s	ND		1	113	
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Penorting Limit for DE-1		NT A	······································	<u> </u>	<u>ا</u> ۲.۰.۰	ļ
ND means not detected at or above the reporting limit	S S	0.25			mg/k	g

* water and vapor samples are reported in $\mu g/L$, 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 $\mu g/wipe$

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.

DHS ELAP Certification 1644

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Angela Rydelius, Lab Manager

	cCampbell Analyti "When Quality Counts"	<u>cal, Inc.</u>	1534 W Web: www.n Telep	villow P nccamp phone: 8	ass Road, Pittsburg, CA bell.com E-mail: main(77-252-9262 Fax: 925	94565-1701 @mccampbel -252-9269	l.com	
Treadwell & R	ollo	Client Project ID:	#4823.02; Alders		Date Sampled:	07/06/0)9	
501 14Th Stre	et 3rd Floor	Property			Date Received:	07/07/0)9	
	0, 010 1 1001	Client Contact:	Matthew Hall		Date Extracted:	07/15/0)9	
Oakland, CA 9	4612	Client P.O.:	·		Date Analyzed:	07/17/0)9	
Extraction method:	Total Extr SW3550C/3630C	ractable Petroleum Analytical me	Hydrocarbons with the thods. SW8015B	Silica	Gel Clean-Up*	Wo	ork Order: (0907143
Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	T	PH-Motor Oil (C18-C36)	DF	% SS	Comments
0907143-014A	UST-03 15-15.5	S	ND		ND	1	105	
			· · · · · ·					
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	I					1		
Rep	porting Limit for DF =1;	W	NA		NA		ug/L	

ND means not detected at or above the reporting limitS1.05.0mg/Kg	Reporting Limit for $DF = 1$;	W	NA	NA	ug/L
	ND means not detected at or above the reporting limit	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 / STLC / STLP / 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:

Angela Rydelius, Lab Manager



QC SUMMARY REPORT FOR SW8260B

W.O Sample Matrix: Soil	QC Matrix: Soil					BatchID [·] 44523 WorkOrder [·] 0907143				43		
EPA Method SW8260B	Extraction SW5030B Spiked Sample ID: 0907335-07)72A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acc	eptance	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	3.0
%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 B NONE	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	1 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.





 1534 Willow Pass Road, Puttsburg, CA 94565-1701

 Web: www.mccampbell.com
 E-mail: main@mccampbell.com

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

BatchID: 44440

QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Soil

QC Matrix: Soil

Soil

WorkOrder 0907143

EPA Method SW8015B	Extra	ction SW	/3550C/3	630C					Spiked San	nple ID	: 0907263-0	03A
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	eptance	e Criteria (%)	
	mg/Kg mg/Kg % Rec. % Rec. % F					% 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 Meth NONE	od Blank of this	extraction	batch we	re ND les	s than the	method R	L with th	e following	exceptions:			

BATCH	44440	SUMMARY
DATON	77770	OOM WINNING

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.

_____QA/QC Officer