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August 30, 2013

Mr. Mark Detterman
Hazardous Materials Specialist
Alameda County Environmental Health Services
Environmental Protection, Local Oversight Program
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Subject: Letter of Transmittal for Additional Site Characterization and Monitoring Well Installation Report, Former McGrath Steel, 6655 Hollis Street, Emeryville, California 94608, ACEH Fuel Leak Case No. RO0000063, GeoTracker Global ID No. T0600102099

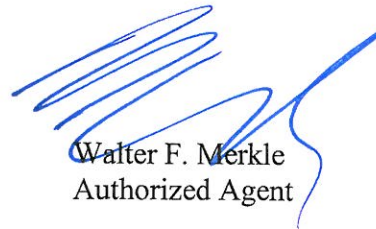
Dear Mr. Detterman:

As required in your letters of November 8, 2012, May 2, 2012, November 19, 2010 and April 7, 2006 for plume delineation and interim remediation at the above-referenced subject site, and proposed in the AllWest Environmental, Inc. *Additional Site Characterization Workplan Addendum* dated July 31, 2012 and *Subsurface Investigation* data transmittal letter report dated February 5, 2013, we submit this transmittal letter and accompanying *Additional Site Characterization and Monitoring Well Installation Report*.

I declare under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

Sincerely,

MCG Investments LLC,
A California limited liability
Company



Walter F. Merkle
Authorized Agent



AllWest Environmental, Inc.

Specialists in Physical Due
Diligence and Remedial Services

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**ADDITIONAL SITE CHARACTERIZATION
AND MONITORING WELL INSTALLATION REPORT**

*Former McGrath Steel
6655 Hollis Street and 1471 67th Street
Emeryville, California*

*Alameda County Fuel Leak Case # RO0000063
GeoTracker Facility Global ID # T0600102099*

PREPARED FOR:

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ALLWEST PROJECT 13019.23
August 30, 2013

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TABLE OF CONTENTS

I.	EXECUTIVE SUMMARY	Page 1
II.	PROJECT BACKGROUND	Page 4
A.	Site Location and Description.....	Page 4
B.	Site Geology and Hydrogeology.....	Page 5
C.	Site History and Previous Investigations	Page 6
III.	PURPOSE AND SCOPE OF WORK.....	Page 9
IV.	INVESTIGATIVE ACTIVITIES	Page 11
A.	Permitting and Offsite Property Access.....	Page 11
B.	Health and Safety and Traffic Control Plans	Page 12
C.	Underground Utility Locating.....	Page 12
D.	Geoprobe® DPT Boring Advancement and Soil Sampling	Page 12
E.	DPT Boring Groundwater Sampling	Page 13
F.	DPT Borehole Backfilling	Page 14
G.	Hollow Stem Auger Boring Advancement and Soil Sampling	Page 14
H.	Groundwater Monitoring Well Installation	Page 15
I.	Groundwater Monitoring Well Development and Sampling.....	Page 15
J.	Monitoring Well Head Survey.....	Page 17
K.	Investigative Derived Waste Containment and Disposal.....	Page 17
V.	QUALITY ASSURANCE / QUALITY CONTROL PROGRAM	Page 17
A.	Sample Preservation, Storage and Handling.....	Page 17
B.	Chain-of-Custody Program.....	Page 18
VI.	ANALYTICAL METHODS	Page 18
VII.	ASSESSMENT FINDINGS	Page 19
A.	Subsurface Conditions	Page 19
B.	Laboratory Analysis and Sampling Data	Page 19
C.	Laboratory QA/QC	Page 21
VIII.	DISCUSSION	Page 21
A.	Subsurface Conditions	Page 21
B.	Soil Screening Levels	Page 22
C.	Groundwater Screening Levels.....	Page 23
D.	Contaminant Distribution - Soil.....	Page 24
E.	Contaminant Distribution - Groundwater	Page 25

IX.	CONCLUSIONS AND RECOMMENDATIONS	Page 25
	A. Conclusions.....	Page 25
	B. Recommendations.....	Page 26
X.	LIMITATIONS.....	Page 26
XI.	REFERENCES	Page 27

TABLES

Table 1:	Summary of Well Construction Details
Table 2:	Summary of Groundwater Elevation Data
Table 3:	Summary of Soil Analytical Data, Total Petroleum Hydrocarbons and VOCs
Table 4:	Summary of Soil Analytical Data, PNAs/PAHs
Table 5:	Summary of Groundwater Analytical Data, Total Petroleum Hydrocarbons and VOCs
Table 6:	Summary of Groundwater, PNAs/PAHs

FIGURES

Figure 1:	Site Vicinity Map
Figure 2:	Site Plan with Historical Boring and Monitoring Well Locations
Figure 3:	Groundwater Elevation Contours, August 7, 2013
Figure 4:	Soil Analytical Results
Figure 5:	TPH-g Isoconcentration Contours in Groundwater
Figure 6:	TPH-d Isoconcentration Contours in Groundwater
Figure 7:	Benzene Isoconcentration Contours in Groundwater

APPENDICES

Appendix A:	Permits
Appendix B:	Standard Groundwater Monitoring Well Development and Sampling Procedures, Standard Geoprobe® DPT Sampling Procedures and Monitoring Well Installation Procedures
Appendix C:	Boring Logs
Appendix D:	Groundwater Development and Sampling Field Logs
Appendix E:	Laboratory Analytical Reports
Appendix F:	Monitoring Well Survey



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ADDITIONAL SITE CHARACTERIZATION

*Former McGrath Steel
6655 Hollis Street and 1471 67th Street
Emeryville, California*

*Alameda County Fuel Leak Case # RO0000063
GeoTracker Facility Global ID # T0600102099*

I. EXECUTIVE SUMMARY

AllWest Environmental, Inc. (AllWest) conducted a subsurface investigation to further characterize site conditions in the vicinity of former underground storage tanks (USTs) located at the subject site referenced above (Figures 1 and 2). The investigation was performed in response to a request by the Alameda County Health Care Services Agency, Environmental Health Department (ACEH) in their letters of April 17, 2006, November 19, 2010 (revised December 6, 2010) and May 2, 2012.

AllWest prepared and submitted an *Additional Site Characterization Workplan Addendum* dated July 31, 2012 to the Alameda County Health Care Services Agency, Environmental Health Department (ACEH) proposing the advancement of ten (10) direct push technology (DPT) soil borings and the installation of two (2) groundwater monitoring wells at the subject site. ACEH conditionally approved the *Workplan Addendum* in their letter of November 8, 2012; however, required advancement of one (1) additional soil boring and additional shallow soil sampling intervals. One (1) additional groundwater monitoring well installation was proposed by AllWest in our *Subsurface Investigation* data package cover letter dated February 4, 2013. ACEH approved the additional well installation in their e-mail of March 14, 2013.

This executive summary is provided solely for the purpose of overview. Any party who relies on this report must read the full report. The executive summary may omit details, any one of which could be crucial to the proper understanding and risk assessment of the subject matter.

AllWest conducted a subsurface assessment at the subject property in January 2013 and August 2013 consisting of the advancement of eleven (11) DPT soil borings (B15 through B25), three (3) groundwater monitoring well installations (AMW-1, AMW-2 and AMW-3), and the collection of soil and groundwater data. The DPT borings were advanced to depths of 9 to 30 feet below ground surface (bgs) on January 16, 17, and 18, 2013. Groundwater monitoring wells AMW-1, AMW-2 and AMW-3 were installed to depths of 23 to 24 feet bgs on August 1 and 2, 2013. The new wells were developed on August 5, 2011. Groundwater samples were collected from the three new wells and one previously existing well MW-3 on August 7, 2013. Static depth to groundwater was approximately 9 to 11 feet bgs (Table 2). Groundwater flow direction was to the southeast at a gradient of 0.0167 feet per foot (Figure 3).

Total petroleum hydrocarbons as gasoline (TPH-g) was detected in soil at a maximum concentration of 2,000 milligrams per kilogram (mg/kg) in boring B20, located down-gradient from the former McGrath USTs at a depth of 12 to 12.5 feet bgs. The maximum total petroleum hydrocarbons as mineral spirits (TPH-ms) concentration detected in soil samples collected during this investigation was 1,200 mg/kg in boring B20 at 12-12.5 feet bgs and in boring B21 (located adjacent to the former McGrath USTs) at 10-10.5 feet bgs. However, these concentrations probably represent TPH-g within the TPH-ms (C9-C12) range, since gasoline-range compounds were characterized as significant, and mineral spirits were not historically stored in the McGrath USTs. The maximum total petroleum hydrocarbons as diesel (TPH-d) concentration in soil was 1,900 mg/kg in boring AMW-1, located downgradient of the former Clearprint Paper Company USTs, at a depth of 18.5-19 feet bgs (Table 1). The elevated TPH-d concentrations in soil samples from AMW-1 probably originate from an offsite source.

Toluene, ethylbenzene, and total xylenes were detected at maximum respective concentrations of 92 mg/kg, 35 mg/kg, and 210 mg/kg in soil samples from boring B20 at a depth of 12-12.5 feet bgs. Benzene and methyl tertiary butyl ether (MTBE) were detected at respective maximum concentrations of 12 mg/kg and 7.6 mg/kg in soil samples from boring B21 at a depth of 10-10.5 feet bgs. Other VOCs were detected in soil samples collected during this investigation including naphthalene, n-butyl benzene, 1,2,4-trimethylbenzene, isopropylbenzene, n-propyl benzene, 1,3,5-trimethylbenzene, 4-isopropyl toluene, acetone, and 2-butanone at respective maximum concentrations of 14 mg/kg, 9.1 mg/kg, 89 mg/kg, 0.67 mg/kg, 13 mg/kg, 29 mg/kg, 0.13 mg/kg, 0.096 mg/kg and 0.029 mg/kg. Soil analytical results for total petroleum hydrocarbons and volatile organic compounds (VOCs) are summarized in Table 3 and Figure 4.

Polynuclear aromatic hydrocarbons (PNAs/PAHs) were detected in soil samples collected during this investigation including benzo(a) anthracene, chrysene, fluoranthene, 1-methylnaphthalene, 2-methylnaphthalene, naphthalene, phenanthrene and pyrene at maximum respective concentrations of 0.013 mg/kg, 0.013 mg/kg, 0.037 mg/kg, 2.5 mg/kg, 4.3 mg/kg, 5.0 mg/kg, 1.4 mg/kg, and 0.033 mg/kg. PAH/PNA soil analytical results are summarized in Table 4.

TPH-d, benzene, toluene, ethylbenzene, total xylenes, MTBE, 2-methylnaphthalene and naphthalene were detected in soil samples at concentrations exceeding their applicable commercial/industrial Environmental Screening Levels (ESLs) where groundwater is not a drinking water resource, as established by the San Francisco Bay Regional Water Quality Control Board (SFRWQCB, May 2013).

Approximately 0.4 feet of light non-aqueous phase liquid (LNAPL) hydrocarbons (free product) was measured in monitoring well MW-3 during the August 7, 2013 groundwater sampling event (Table 2).

TPH-g was detected in groundwater samples at a maximum concentration of 160,000 micrograms per liter ($\mu\text{g/L}$) in boring B20, located down-gradient from the former McGrath USTs. TPH-ms was detected at a maximum concentration of 54,000 $\mu\text{g/L}$ in groundwater samples from existing monitoring well MW-3. However, these concentrations probably represent TPH-g within the TPH-ms (C9-C12) range, since gasoline-range compounds were characterized as significant, and mineral spirits were not historically stored in the McGrath USTs. TPH-d with gasoline range compounds characterized as significant was detected at a maximum concentration of 95,000 $\mu\text{g/L}$ in groundwater samples from boring B20.

Benzene and toluene were detected at maximum respective concentrations of 21,000 $\mu\text{g/L}$ and 47,000 $\mu\text{g/L}$ in groundwater samples from boring B20. Ethylbenzene and total xylenes were detected in groundwater samples from monitoring well MW-3 at maximum concentrations of 4,200 $\mu\text{g/L}$ and 24,000 $\mu\text{g/L}$ on the August 7, 2013 sampling date. Methyl tertiary butyl ether (MTBE) was detected at a maximum concentration of 140,000 $\mu\text{g/L}$ in groundwater samples from boring B21.

Other VOCs detected in groundwater samples during this investigation included tert-butyl alcohol (TBA), naphthalene, 1,2,4-trimethylbenzene, n-propyl benzene, 1,3,5-trimethylbenzene, n-butyl benzene, sec-butyl benzene, isopropylbenzene, trichloroethene (TCE), 2-butanone, 1,2-dichloroethane (1,2-DCA), 1,1-dichloroethene, 1,1-dichloroethane, 1,1,1-trichloroethane and trans-1,3-dichloropropene at maximum respective concentrations of 520 $\mu\text{g/L}$, 1,100 $\mu\text{g/L}$, 5,200 $\mu\text{g/L}$, 620 $\mu\text{g/L}$, 1,500 $\mu\text{g/L}$, 27 $\mu\text{g/L}$, 7.3 $\mu\text{g/L}$, 15 $\mu\text{g/L}$, 53 $\mu\text{g/L}$, 2.4 $\mu\text{g/L}$, 0.55 $\mu\text{g/L}$, 140 $\mu\text{g/L}$, 5.2 $\mu\text{g/L}$ and 5.3 $\mu\text{g/L}$. Groundwater analytical results for total petroleum hydrocarbons and VOCs are summarized in Table 5 and Figures 5, 6 and 7.

PNAs/PAHs were detected in groundwater samples collected during this investigation including benzo(a) anthracene, fluoranthene, 1-methylnaphthalene, 2-methylnaphthalene, naphthalene, phenanthrene and pyrene at maximum respective concentrations of 0.56 $\mu\text{g/L}$, 0.94 $\mu\text{g/L}$, 460 $\mu\text{g/L}$, 750 $\mu\text{g/L}$, 1,700 $\mu\text{g/L}$, 0.88 $\mu\text{g/L}$ and 1.0 $\mu\text{g/L}$. PNA/PAH groundwater analytical results are summarized in Table 6.

TPH-g, TPH-ms, TPH-d, benzene, toluene, ethylbenzene, total xylenes, MTBE, 2-methylnaphthalene, naphthalene and benzo (a) anthracene were detected in groundwater

samples at concentrations exceeding their applicable commercial/industrial ESLs where groundwater is not a drinking water resource. Additionally, benzene, ethylbenzene, MTBE, and naphthalene were detected in groundwater samples at concentrations exceeding their applicable commercial/industrial vapor intrusion ESLs (SFRWQCB, May 2013).

AllWest concludes that soil and groundwater at the subject site vicinity is impacted by petroleum hydrocarbons and their constituents at concentrations exceeding applicable SFRWQCB commercial/industrial ESLs for sites where groundwater is not a potential drinking water resource. The downgradient extent of the adsorbed and dissolved phase petroleum hydrocarbon plume in soil and groundwater is largely defined and extends from the vicinity of the former McGrath Steel USTs to the west along 67th Street to the vicinity of monitoring well AMW-1 west of the former Clearprint Paper Company USTs. Elevated TPH-d concentrations detected in soil samples in downgradient boring AMW-1 probably originate from an offsite source. The cross-gradient extent of the adsorbed and dissolved phase hydrocarbon plume has not been fully defined. Free product is present in monitoring well MW-3 in the vicinity of the former McGrath USTs. Free product does not appear to be significant in lateral extent.

AllWest recommends conducting quarterly groundwater monitoring at the subject site in the new monitoring wells AMW-1, AMW-2 and AMW-3 and existing monitoring well MW-3. AllWest also recommends implementing interim remedial action of free product in the vicinity of the former USTs at the subject site by installing a passive skimming device in monitoring well MW-3.

II. PROJECT BACKGROUND

A. Site Location and Description

The subject property is located at the southwest corner of the intersection of Hollis and 67th Streets in a commercial and industrial district of the City of Emeryville, Alameda County, California. A site vicinity map is included as Figure 1.

The subject property consists of two parcels (Assessor's Parcel Numbers 049-1511-01 and 049-1511-014). Parcel 01, on the southwest corner of Hollis and 67th Streets at the 6655 Hollis Street address, is developed with an approximately 4,100 square foot two-story commercial office building constructed in 1947, and a smaller metal tool shed building. Parcel 14, to the west of Parcel 1 at the 1471 67th Street address, is developed with an approximately 15,246 square foot light industrial warehouse building constructed circa 1946 [Stellar Environmental Solutions, Inc., (Stellar) *Phase I Environmental Site Assessment, 6655 Hollis Street, Emeryville, California*, June 2011 (Stellar, 2011)].

The subject property was last occupied by CMC Rebar. The property currently appears to be vacant, although a neighboring painting contracting business, Giampolini & Co., appears to be using the Parcel 14 structure. Two USTs formerly present under the sidewalk in front of the warehouse at 1471 67th Street were removed in 1996. A site plan with former UST locations and historical and current boring and monitoring well locations is included as Figure 2.

B. Site Geology and Hydrogeology

The subject site is located on a generally level parcel at an elevation of approximately 20 feet above mean seal level (msl) with a slight slope to the west towards San Francisco Bay approximately ½ mile to the west. The subject site is located within the East Bay Plain Sub-Basin of the Santa Clara Valley Groundwater Basin, an alluvial plain located along the east shore of San Francisco Bay. Although groundwater in the subject site vicinity is not currently used for drinking water purposes, the East Bay Plain Sub-Basin, including the subject site vicinity, has been designated as a zone where groundwater is a potential drinking water resource by the SFRWQCB *Water Quality Control Plan (Basin Plan)* dated June 29, 2013 (SFRWQCB, June 2013).

According to an e-mail communication on February 6, 2013 with Maurice Kaufman, director of the City of Emeryville Public Works Department, use of groundwater for drinking water purposes within the City of Emeryville is prohibited by a City ordinance due to widespread regional contamination. No plans exist for future beneficial use of groundwater within the City of Emeryville. Therefore, AllWest does not regard groundwater in the subject site vicinity as a potential drinking water resource.

The site is underlain by interbedded silty clay and silty sand to sandy silt to a depth of approximately 24 feet below ground surface (bgs). Depth to groundwater was encountered in previous subsurface investigations at the subject site vicinity at depths of approximately 6.5 to 12 feet bgs. Direction of groundwater flow in the site vicinity is to the west toward San Francisco Bay (Stellar, 2011).

Depth to first encountered groundwater in soil borings during subsurface investigations in the vicinity of the subject site during 1998 and 2005 ranged from approximately 9 to 22.5 feet bgs (WA, 1998 and 2006). Historical depth to groundwater in the Clearprint Paper Company groundwater monitoring well MW-3, located in 67th Street adjacent to the former subject property USTs at 1471 67th Street, has ranged from approximately 7 to 11 feet bgs (WA, 2006 and ACEH *Fuel Leak Site Case Closure, Clearprint Paper Co.*, June 27, 2005).

During a site visit on September 14, 2011, AllWest measured depth to water in MW-3 at 11.05 feet below top-of-casing (TOC), with approximately 3 feet of floating free product on top. During groundwater monitoring events conducted by

AllWest in July 2012 to June 2013, depth to groundwater ranged from 8.57 to 11.52 feet below TOC, with free product thickness declining from 2.65 feet to none measured.

C. Site History and Previous Investigations

From the early 1900s until circa 1946, the subject property Parcel 01 was developed as a residence, and Parcel 14 was undeveloped. Between circa 1946 and 1950, the subject property was developed with the current office and light industrial warehouse buildings. The McGrath Steel Company operated a steel warehouse and/or the Pacific Rolling Door Company from circa 1950 until about 2007. The McGrath Steel business was sold and relocated in 2007. CMC Rebar subsequently leased the subject property, but although CMC Rebar still stores some equipment in the warehouse and shop, no fabrication is currently conducted. The current subject property owner is MCG Investments, Inc. Giampolini and Company, a painting contractor located across the street from the subject site, appears to be currently using the subject site warehouse at 1471 67th Street.

Two (2) 2,000-gallon single-wall steel USTs were formerly located beneath the 67th Street sidewalk in front of the warehouse building. The diesel and gasoline USTs were installed in 1979 and 1981, respectively. The USTs were removed in July 1996 by Subsurface Environmental Corp. (SEC). No holes were noted in the USTs, but obvious discoloration and petroleum hydrocarbon odor were noted in the surrounding soil. No information was included in the SEC report regarding any product piping removal. Elevated concentrations of petroleum hydrocarbons were detected in confirmatory soil samples following the UST removal. Additional soil was over-excavated to a depth of approximately 12 feet bgs for a total of approximately 70 cubic yards of soil removed. Confirmatory soil samples collected following over-excavation contained a maximum of 15 milligrams per kilogram (mg/kg) total petroleum hydrocarbons as gasoline (TPH-g) and 870 mg/kg total petroleum hydrocarbons as diesel (TPH-d) [SEC, *Tank Removal Closure Report*, September 16, 1996 (SEC, 1996)].

Weiss Associates (WA) conducted a subsurface investigation at the subject property in May 1998. Three (3) soil borings (B-1, B-2 and B-5) were advanced to depths ranging from 16.5 to 24 feet bgs in the vicinity of the former USTs along the north and south sides of 67th Street. Additional borings B-6 and B-7 were attempted but encountered refusal in gravel base rock material at approximately 2 feet bgs and were not sampled. Proposed borings B-3 and B-4 were not attempted.

Petroleum hydrocarbons were detected in soil samples collected only from boring B-5 at 12 feet bgs, at concentrations of 68 mg/kg TPH-g, 120 mg/kg TPH-d, 0.28 mg/L benzene, 0.6 mg/L toluene, 0.49 mg/L xylenes and 3.8 mg/L methyl tert-butyl ether (MTBE). Petroleum hydrocarbons were detected in grab groundwater

samples from all three borings, with elevated concentrations of 270,000 micrograms per liter ($\mu\text{g/L}$) TPH-g, 1,600 $\mu\text{g/L}$ TPH-d, 21,000 $\mu\text{g/L}$ benzene, 34,000 $\mu\text{g/L}$ toluene, 6,000 $\mu\text{g/L}$ ethylbenzene, 36,000 $\mu\text{g/L}$ total xylenes and 59,000 $\mu\text{g/L}$ MTBE detected in boring B-5 (WA, 1998).

WA conducted an additional subsurface investigation in December 2005. Six (6) soil borings (B-8 through B-14) were advanced to a maximum depth of approximately 22 feet bgs in the vicinity of the former USTs and downgradient to the west, along the north and south sides of 67th Street and within the sidewalk on the south side of 67th Street. Low to moderate concentrations of petroleum hydrocarbons were detected in soil samples from all six borings, with maximum concentrations of 500 mg/kg TPH-g, 1.7 mg/kg benzene, 19 mg/kg toluene, 12 mg/kg ethylbenzene and 73 mg/kg total xylenes detected at 15 feet bgs in boring B-13; and 11 mg/kg MTBE detected at 5 feet bgs in boring B-14. Maximum concentrations of 340 mg/kg TPH-d were detected in B-8 at 10 feet bgs, and 6.2 mg/kg total petroleum hydrocarbons as mineral spirits (TPH-ms) were detected at 6.2 mg/kg in B-12 at 5 feet bgs.

Elevated concentrations of dissolved phase petroleum hydrocarbons were detected in groundwater samples from all six (6) soil borings and monitoring well MW-3. Maximum concentrations of 290,000 $\mu\text{g/L}$ TPH-g and 37,000 $\mu\text{g/L}$ total xylenes were detected in boring B-13. Maximum concentrations of 180,000 $\mu\text{g/L}$ TPH-ms, 24,000 $\mu\text{g/L}$ benzene, 39,000 $\mu\text{g/L}$ toluene and 6,500 $\mu\text{g/L}$ ethylbenzene were detected in boring B-12. Maximum concentrations of 12,000 $\mu\text{g/L}$ MTBE were detected in boring B-14 and well MW-3. Maximum concentrations of 100,000 $\mu\text{g/L}$ TPH-d were detected in boring B-11.

Petroleum hydrocarbon concentrations in soil and groundwater exceeded corresponding SFRWQCB Environmental ESLs for commercial/industrial land use where groundwater is not a potential drinking water resource (SFRWQCB, *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*, Tables B and D, Interim Final November 2007, revised May 2008).

Groundwater sampling of monitoring well MW-3 was attempted by Stellar Environmental Solutions, Inc. in May 2011; however a sample was not collected due to the presence of free product in the bailer. During a site visit on September 14, 2011, AllWest measured a floating free product thickness of approximately 3 feet in MW-3, using a standard electric water level probe and observing product thickness on the tape. A precise product thickness measurement could not be made since an oil/water interface probe was not available. The free product was almost clear in appearance, emitted a gasoline-like odor, and rapidly volatilized from the probe.

Four USTs containing mineral spirits and other petroleum-based solvents (including 2,2,4-trimethylpentane) were removed in 1994 at the adjacent

Clearprint Paper Company (Clearprint) site at 1482 67th Street, located to the northwest across 67th Street from the subject site and in the downgradient direction. The USTs were located in the sidewalk along the north side of 67th Street (Figure 2). Remedial activities including soil excavation and groundwater removal were conducted.

A subsequent subsurface investigation conducted in 1995 consisted of three (3) soil borings (SB-1, SB-2 and SB-3) and the installation of three (3) groundwater monitoring wells (MW-1, MW-2 and MW-3). Although elevated concentrations of petroleum hydrocarbons including TPH-g, TPH-d, oil and grease, and benzene, toluene, ethylbenzene and xylenes (BTEX) were detected in confirmatory excavation soil samples and groundwater samples from the borings and wells, these constituents of concern (COCs) were considered by ACEH to have originated from the upgradient subject (McGrath Steel) site, since these COCs were never used in the Clearprint USTs. Petroleum hydrocarbon and BTEX concentrations in groundwater samples from monitoring wells MW-1 and MW-2 had declined to below detection limits by the final sampling events in 2004. The ACEH issued case closure for the Clearprint site in June 2005 (ACEH *Fuel Leak Site Case Closure, Clearprint Paper Co.*, June 27, 2005).

The Clearprint groundwater monitoring wells MW-1 and MW-2 were destroyed and properly abandoned by Environmental Strategies Consulting, Inc. (ESC) in June 2005 following case closure (ESC, June 23, 2005). Well MW-3 was left in place for monitoring of the subject (McGrath Steel) site.

The ACEH, in their letters of April 7, 2006 and November 19, 2010 (revised December 6, 2010), requested additional characterization of the downgradient extent and distribution of dissolved phase petroleum hydrocarbons and residual free product, and implementation of interim remedial action, at the subject site. AllWest submitted an *Additional Site Characterization and Interim Remedial Action Workplan* on September 27, 2011 (AllWest, September 2011) to the ACEH proposing advancement of five downgradient soil borings with collection of grab groundwater samples in addition to free product removal, redevelopment and sampling of existing groundwater monitoring well MW-3.

The ACEH responded to the AllWest *Additional Site Characterization and Interim Remedial Action Workplan* (AllWest, September 2011) in their letter of May 2, 2012, and requested relocation of some of the proposed downgradient borings along 67th Street to optimize the dissolved hydrocarbon plume characterization, additional UST source area characterization of LNAPL (free product) extent in soil and groundwater, characterization of the former fuel dispenser location, additional soil sample collection and analysis, and the installation of at least two additional groundwater monitoring wells to establish groundwater flow direction and monitor the down-gradient hydrocarbon plume extent. The ACEH requested a two phase approach to the work, with the soil

borings to be performed first with a brief data submittal to the ACEH proposing optimal monitoring well locations, followed by the installation of the groundwater monitoring wells after ACEH approval of proposed locations.

In response to the ACEH request, AllWest prepared and submitted an *Additional Site Characterization Workplan Addendum* on July 31, 2012, proposing advancement of ten (10) DPT borings and installation of two (2) groundwater monitoring wells. It was approved conditionally by the ACEH in a letter dated November 8, 2012, who required advancement of one (1) additional soil boring and additional shallow soil sampling intervals. One (1) additional groundwater monitoring well installation was proposed by AllWest in our *Subsurface Investigation* data package cover letter dated February 4, 2013. ACEH approved the additional well installation in their e-mail of March 14, 2013.

On July 30, 2012, Blaine Tech Services, Inc. (BTS), under the supervision of AllWest, redeveloped existing monitoring well MW-3. On August 2, 2012, AllWest collected groundwater samples from monitoring well MW-3 (AllWest, August 23, 2012). AllWest subsequently collected groundwater samples from well MW-3 on December 18, 2012 and March 27 and June 27, 2013 (AllWest, January 9, April 18 and July 11, 2013). The results of these quarterly groundwater monitoring events are summarized in Tables 2 and 5.

III. PURPOSE AND SCOPE OF WORK

The purpose of this investigation was to further evaluate the extent of LNAPL, adsorbed and dissolved-phase petroleum hydrocarbons in soil and groundwater in the vicinity of the former UST and dispenser source area at the subject property, and in the hydraulically downgradient and cross-gradient directions. This proposed work was performed in response to a request by ACEH in their letters of April 7, 2006, November 19, 2010 (revised December 6, 2010), May 2, 2012 and November 8, 2012. The scope of work, as proposed, consisted of the following tasks:

1. Prepared a written workplan for conducting a subsurface investigation at the site. Submitted the workplan to the ACEH for review and concurrence;
2. Prepared site specific health and safety plans and traffic control plans;
3. Obtained drilling permits from the Alameda County Public Works Agency (ACPWA), and street and sidewalk encroachment permits from the City of Emeryville Public Works Department (EPWD);
4. Engaged the service of Underground Service Alert (USA) and a private underground utility locator to locate and clear underground utilities within the proposed investigation area so that the potential of accidental damage to

underground utilities would be reduced during the subsurface investigation. Notified the ACEH, ACPWA and facility owners and tenants prior to the start of field work;

5. Retained the service of a C-57 licensed drilling contractor, Gregg Drilling and Testing, for the advancement of eleven (11) Direct Push Technology (DPT) borings (B15 through B25) in the vicinity of the former USTs and fuel dispensers, and along 67th Street down-gradient to cross-gradient of the former USTs;
6. Collected soil samples at continuous intervals from each of the eleven (11) DPT borings. Retained two (2) to three (3) soil samples from each boring for possible chemical analysis. Installed temporary PVC well casings and allowed water levels to recover before monitoring potential free product. Collected and retained one “grab” groundwater sample from each DPT boring for analytical testing;
7. Maintained samples of all media under chain-of-custody and transported them to a Department of Health Services (DHS) certified analytical laboratory for chemical analyses. Analyzed two (2) to three (3) soil samples from each source area boring B20 through B24, and one (1) composite soil drum sample, for TPH-d and TPH-ms per EPA Method 8015B with silica gel cleanup, TPH-g with full scan VOCs including fuel oxygenates and lead scavengers per EPA Method 8260B, and PNAs/PAHs by EPA Method 8270C-SIM. Analyze one (1) to three (3) soil samples from each downgradient boring B15 through B19 and B25 for TPH-d and TPH-ms per EPA Method 8015B with silica gel cleanup, and TPH-g, BTEX and MTBE per EPA Method 8015Bm/8021B (no other VOC analysis), and PNAs/PAHs by EPA Method 8270. Analyze one composite soil drum sample for disposal profiling for LUFT 5 metals (cadmium, chromium, nickel, lead and zinc) per EPA Method 6010. Archived additional soil samples for possible analysis based on headspace screening and previous analytical results;
8. Analyzed one groundwater sample from each boring for TPH-d and TPH-ms per EPA Method 8015B with silica gel cleanup, and TPH-g and VOCs (full scan including fuel oxygenates and lead scavengers) per EPA method 8260B, and PNAs/PAHs by EPA Method 8270C-SIM;
9. At the completion of drilling removed temporary casings and backfilled the DPT borings with a “neat” cement grout slurry, and restored concrete slabs with concrete slurry;
10. Prepared and submitted a brief written data submittal dated February 4, 2013, presenting a summary of the laboratory analytical data, soil boring logs, and site plan with boring and proposed monitoring well locations. Uploaded the data submittal to the ACEH FTP site and GeoTracker database for ACEH approval of proposed monitoring well locations;

11. After obtaining ACPWA drilling permits, EPWD encroachment permits, and clearing locations of utilities per Tasks 3 and 4 above, retained the service of a C-57 licensed drilling contractor, Woodward Drilling Company, Inc., for the advancement of three (3) nominal 8-inch diameter soil borings (AMW-1, AMW-2 and AMW-3) using a truck-mounted hollow stem auger (HSA) rig along 67th Street down-gradient to cross-gradient of the former USTs. Collected soil samples during drilling for lithologic characterization and laboratory chemical analysis;
12. After advancing to the designated depth, completed the borings as two-inch diameter PVC groundwater monitoring wells (AMW-1, AMW-2 and AMW-3);
13. Developed the new wells using surge block and submersible pump methods to remove fines and improve hydraulic conductivity with the surrounding formation;
14. Measured groundwater levels and potential free product thickness, purged a minimum of three casing volumes and collected groundwater samples from the three new wells AMW-1, AMW-2 and AMW-3, and existing well MW-3;
15. Analyzed one groundwater sample from each new monitoring well AMW-1, AMW-2 and AMW-3 and existing monitoring well MW-3 for TPH-g and TPH-ms by analytical method 8015/8021, for TPH-d by analytical method 8015 with silica gel cleanup, for VOCs by analytical method 8260 (full scan) and for PNAs/PAHs by analytical method 8270;
16. Surveyed the new and existing well head elevations and locations to NAD 1983 and NAVD 1988 datum in accordance with State Water Resources Control Board (SWRCB) GeoTracker protocol;
17. Arranged for profiling, transport and disposal of investigative-derived waste soil and groundwater at an appropriate disposal facility;
18. Prepared a written report for the monitoring well installation and previous subsurface investigation describing the field activities, summarizing the laboratory analytical data, presenting investigation findings, and providing conclusions and recommendations. Uploaded the report to the ACEH FTP site and GeoTracker database.

IV. INVESTIGATIVE ACTIVITIES

A. Permitting and Offsite Property Access

AllWest was unable to gain access to the offsite property occupied by the Giampolini and Co. parking lot located on the north side of 67th Street for the advancement of proposed boring B18 and monitoring well AMW-3 down-

gradient to cross-gradient from the subject property (Figure 3). Boring B18 and monitoring well AMW-3 were instead located in the sidewalk along the north side of 67th Street. Boring and well locations are shown on Figure 2.

AllWest prepared and submitted a drilling permit application to ACPWA for review and approval. AllWest prepared and submitted an encroachment permit application for street and sidewalk drilling along 67th Street to the EPWD for review and approval. Upon permit approval, AllWest notified the ACEH, ACPWA, EPWD, and the subject and adjacent property owners and tenants of the drilling schedule a minimum of 72 working hours in advance to allow scheduling of drilling and grouting inspection. Copies of the permits are included in Appendix A.

B. Health and Safety and Traffic Control Plans

AllWest updated the existing site specific health and safety plan prior to mobilizing to the site. A tailgate safety meeting was held prior to commencing work. All site personnel were required to review the health and safety plan. A traffic control and sidewalk closure plan was prepared to ensure the safety of workers, pedestrians and motorists along 67th Street.

C. Underground Utility Location

To avoid damage to underground utility installations during the course of the subsurface investigation, AllWest contacted Underground Service Alert (USA), an organization for public utility information, on the pending subsurface investigation. USA then notified public and private entities that maintain underground utilities within the site vicinity to locate and mark their installations for field identification. A private underground utility locator, Subtronic Corporation (Subtronic) of Concord, California, was also employed by AllWest to conduct magnetometer and ground penetrating radar sweep investigations to locate marked and unmarked underground utilities in the vicinity of the proposed boring locations.

D. Geoprobe[®] DPT Boring Advancement and Soil Sampling

On January 16, 17 and 18, 2013, AllWest conducted a subsurface investigation at the subject site (Figures 1 and 2), as proposed in our *Additional Site Characterization Workplan Addendum* (July 31, 2012). Eleven (11) soil borings (B15 through B25) were advanced by the direct push technology (DPT) continuous coring method to collect soil and groundwater samples to further delineate the extent of petroleum hydrocarbons and free product in the subsurface in the vicinity of the former USTs and fuel dispensers, and down-gradient to cross-gradient from the subject site. The borings were advanced to depths of 9 to

30 feet bgs to intersect the first encountered water-bearing zone. Boring locations are shown on Figure 2. Boring logs are included in Appendix C.

Gregg Drilling and Testing, Inc., a C-57 licensed drilling contractor located in Martinez, California, provided drilling services. Following coring of the concrete sidewalk slabs or asphalt pavement, all boring locations were hand-augered to 5 feet bgs to clear potential underground utilities; therefore, undisturbed soil samples could not be collected above that depth.

Soil sampling was accomplished using a nominal 5-foot long, 2-inch outside diameter (OD) stainless steel drive probe and extension rods. The drive probe is equipped with nominal 1-1/2 inch inside diameter (ID) clear plastic poly tubes that line the interior of the probe. The probe and insert tubes are together hydraulically driven using a percussion hammer in 5-foot intervals. After each drive interval the drive probe and rods are retrieved to the surface. The poly tube containing subsurface soil is then removed. The drive probe is then cleaned, equipped with a new poly tube and reinserted into the boring with extension rods as required. The apparatus is then driven following the above procedure until the desired depth is obtained. Standard DPT sampling procedures are included in Appendix B.

An AllWest environmental professional oversaw field work and drilling activities. Soil was logged in accordance with the Unified Soil Classification System (USCS). The poly tubes and soil are inspected after each drive interval with lithologic and relevant drilling observations recorded. Soil samples were screened for organic vapors using a photo-ionizer detector (PID) by taking readings of headspace vapor concentrations of the soil inside a zip-lock plastic bag. PID readings, soil staining and other relevant observations are recorded on the boring logs. Boring logs are included in Appendix C.

Selected soil sample intervals were cut from the 5-foot poly tube intervals for analytical testing. The ends of samples for possible analytical testing were sealed using Teflon™ lined plastic end caps. The samples were labeled, and stored in an iced cooler.

E. DPT Boring Groundwater Sampling

“Grab” groundwater samples were collected after the completion of soil sampling and when the borings had reached their designed depth. The steel probe and rods were removed from the boring and new, nominal 3/4-inch ID diameter PVC solid and perforated temporary casing were lowered into the borehole. Depth to water and potential floating free product thickness were then measured using an electronic oil/water interface probe. No free product was detected in any of the borings. Following groundwater and product level measurements, a 3/4-inch ID clear acrylic, polyethylene or Teflon™ bailer was lowered to the groundwater

surface, raised and inspected for potential product sheen or layer thickness. No sheen or free product were observed.

Groundwater samples were then collected by oscillating disposable polyethylene sample tubing fitted with a check valve. Upon retrieval of the sample, the retained water was transferred to appropriate sample bottles furnished by the analytical laboratory. Samples for TPH-g, BTEX and fuel oxygenate and additive analysis were collected in two 40-milliliter VOA vials preserved with HCl solution. Samples for TPH-d and TPH-mo analysis were collected in one 1-liter amber glass bottle preserved with HCl solution. Samples for PNAs/PAHs analysis were collected in one 1-liter unpreserved amber glass bottle. All sample bottles for volatile organic analysis had Teflon lined septum/cap and were filled such that no headspace was present. Sample bottles were labeled and immediately placed on ice to preserve the chemical characteristics of their contents.

F. DPT Borehole Backfilling

At the completion of drilling and sampling, the borings were backfilled with a “neat” Portland Type I or II cement grout slurry tremied into the borehole through a PVC pipe. Concrete sidewalk slabs were restored with concrete slurry poured flush to grade. Grouting was performed under the supervision of an ACPWA inspector.

G. Hollow Stem Auger Boring Advancement and Soil Sampling

On August 1 and 2, 2013, three (3) groundwater monitoring wells, (AMW-1, AMW-2 and AMW-3) were installed to respective depths of 24, 24, and 23 feet bgs along the north and south sides of 67th Street west-northwest to west-southwest and downgradient of the subject site. Monitoring well locations are shown on Figure 2.

Woodward Drilling Co., Inc., a C-57 licensed drilling contractor located in Rio Vista, California, provided drilling services. Following coring of the concrete sidewalk slabs or asphalt pavement, all boring locations were cleared to 5 feet bgs for potential underground utilities using an air knife and vacuum equipment and by hand-augering. Therefore, undisturbed soil samples could not be recovered above 5 feet bgs. The borings for monitoring wells AMW-1 and AMW-2 were advanced using a truck-mounted, hollow stem auger (HSA) drill rig equipped with nominal 3.75-inch ID and 8-inch outside diameter OD, hollow stem augers.

During the borehole advancement operations, an environmental professional from AllWest was present to collect representative soil samples, conduct field vapor screening and maintain a continuous log of drilling activities. Soil vapor headspace and ambient concentrations were monitored using a PID. Field activities were conducted under the direction of a California licensed Professional

Geologist. Standard hollow stem auger drilling procedures are included in Appendix B. Boring logs are included in Appendix C.

Soil samples were collected for lithologic characterization and potential chemical analysis with a two-inch diameter California Modified split-spoon sampler equipped with 2-inch diameter by 6-inch long brass or stainless steel liners. Three soil samples from each boring were selected for potential laboratory analysis. Sample tubes selected for chemical analysis were sealed with Teflon™ lined plastic end caps. Sample containers were labeled, placed in an iced cooler and transported under chain-of-custody control to the analytical laboratory.

H. Groundwater Monitoring Well Installation

Once the borings were advanced to their designated depths of 23 feet bgs (AMW-3) and 24 feet bgs (AMW-1 and AMW-2), well casings were installed through the center of the hollow stem augers. After the well casings were set, the augers were removed in sections while the sand filter pack was placed. Well casing was composed of nominal 2-inch ID schedule-40 PVC pipe. The casing screen section consisted of factory perforated 0.01-inch slots and extended for 15 foot interval above the bottom of the boring. Non-perforated (blank) well casing pipe was used to complete the well casing from the top of the screen section to the ground surface. The screened interval was selected to extend above the static water level to allow potential floating free product (LNAPL) to be monitored, while also allowing for seasonal groundwater level variations.

The filter pack around the well screen interval consisted of pre-washed #2/12 Monterey sand placed in the annular space from the well bottom up to one foot above the screen section. The wells were then surged with a surge block to settle the sand pack, which was then topped off to maintain the one foot level above the top of the screen. An approximate two-foot hydrated bentonite pellet or chip seal was then placed in the annular space above the filter pack to prevent surface water infiltration. The remaining annular space in the borehole was then backfilled with neat Portland cement grout up to approximately one foot bgs. Grouting was performed under the supervision of an ACPWA inspector. The well casings were protected by a flush-mounted traffic-rated vault box set in a concrete annular surface seal. A water-tight locking end-cap was placed on top of each well casing to prevent surface water intrusion and unauthorized access. Standard monitoring well installation procedures are included in Appendix B. Monitoring well construction details are summarized in Table 1. Monitoring well construction diagrams are included in Appendix C.

I. Groundwater Monitoring Well Development and Sampling

On August 5, 2013, the three new groundwater monitoring wells (AMW-1, AMW-2 and AMW-3) were developed by Woodward Drilling, Inc. under

supervision of AllWest, using a surge block and submersible electric pump to remove fine sediments from the well and borehole annulus and to enhance hydraulic conductivity with the surrounding formation. Approximately 25 to 35 well casing volumes of water were purged from each well. Development was performed at least 48 hours after completion to allow the grout seals to adequately cure. Standard monitoring well development procedures are included in Appendix B.

The new groundwater monitoring wells were allowed to stabilize for a minimum of 48 hours after development prior to purging and collection of groundwater samples. Since the previous sampling event for monitoring well MW-3 occurred in the previous quarter, a groundwater sample was also collected from existing monitoring well MW-3 during this event. One groundwater sample from each well (AMW-1, AMW-2, AMW-3 and MW-3) was collected on August 7, 2013 and submitted for laboratory analysis.

Prior to well purging, an electric oil/water interface sounding probe was lowered into the well casings to measure the depth to the water and thickness of any potential floating free product to the nearest 0.01 feet below TOC. Depth to groundwater ranged from 8.94 feet below TOC in AMW-3 to 9.96 feet below TOC in AMW-2. No product or sheen were detected or observed in any of the new monitoring wells AMW-1, AMW-2 or AMW-3. Approximately 0.4 foot of free product (LNAPL) was detected in monitoring well MW-3 by the electric oil/water interface probe. Depth to groundwater and free product thickness data are included in Table 2.

A new, disposable polyethylene bailer was lowered into the well casing and partially submerged. Upon bailer retrieval, the surface water was retained and examined for any floating product or product sheen. After all initial measurements were completed and recorded, a minimum of three well casing volumes of groundwater were purged with a new, disposable polyethylene bailer. Groundwater characteristics, temperature, pH and conductivity were monitored at each well volume interval. Purging was continued until groundwater parameters stabilized to within 10%.

Groundwater sampling was conducted after water levels recovered to at least 80% of initial level, recorded prior to purging. Groundwater samples were collected from each well with new, disposable polyethylene bailers. Upon bailer retrieval, the water was transferred to appropriate sample bottles furnished by the analytical laboratory. 40-milliliter (ml) volatile organic analysis (VOA) glass vials preserved with hydrochloric acid (HCl) were used for TPH-g, TPH-ms, and VOC analysis. Samples for TPH-d analysis were collected in one 1-liter amber glass bottle preserved with HCl solution. Samples for PNAs/PAHs analysis were collected in one 1-liter unpreserved amber glass bottle. All sample bottles for VOA had Teflon lined septum/caps and were filled so that no headspace was present. The

sample bottles were then labeled and placed in an iced cooler for transport under chain-of-custody control to the analytical laboratory.

To help prevent cross-contamination, all groundwater sampling equipment that came into contact with groundwater was decontaminated prior to sampling. To minimize the possibility of cross-contamination, a new disposable bailer was used to collect each groundwater sample. All investigative derived wastes, soil (drill cuttings) and water (decontamination, development and purge water) were temporarily stored at the property in 55-gallon drums, awaiting test results to determine the proper disposal method.

Standard groundwater sampling procedures are included in Appendix C. Groundwater purging and sampling field logs are included in Appendix D.

J. Monitoring Well Head Survey

On August 13, 2013, AllWest contracted with a licensed California surveyor, Morrow Surveying of West Sacramento, California, to establish horizontal and vertical control of the three new and one existing monitoring well heads (AMW-1, AMW-2, AMW-3 and MW-3) using NAD 1983 and NAVD 1988 datum in accordance with California State Water Resources Control Board (SWRCB) GeoTracker protocol. A notch was set in the top of each PVC casing during the installation process and subsequently used as the TOC elevation reference point to measure water depths. This notch, as well as the vault box top, were surveyed to an accuracy of 0.01 feet and referenced to mean sea level (MSL) using NAVD 1988 datum. This information along with depth to water measurements were used to calculate groundwater flow direction and gradients. Monitoring well survey data is included in Table 2 and Appendix F.

K. Investigation-Derived Waste Containment and Disposal

Investigation-derived waste including soil cores, soil cuttings, decontamination rinseate, purged groundwater and free product were contained onsite in 55-gallon drums pending analytical results, profiling and transport to an appropriate disposal facility. The drums were removed from the subject site by Woodward Drilling, Inc. on August 23, 2013 and transported as non-hazardous waste to Potrero Hills Landfill in Suisun, California.

V. QUALITY ASSURANCE/QUALITY CONTROL PROGRAM

A. Sample Preservation, Storage and Handling

To prevent the loss of constituents of interest, all soil and groundwater samples were preserved by storing in an ice chest cooled to 4°C with crushed ice

immediately after their collection and during transportation to the laboratory. Samples were stored within the cooler in separate zip-lock plastic bags to avoid cross-contamination.

B. Chain-Of-Custody Program

All samples collected for this project were transported under chain-of-custody protocol. The chain-of-custody program allows for the tracing of possession and handling of individual samples from the time of field collection through laboratory analysis. The document includes the signature of the collector, date and time of collection, sample number, number and type of sample containers including preservatives, parameters requested for analysis, signatures of persons and inclusive dates involved in the chain of possession. Upon delivery to the laboratory the document also includes the name of the person receiving the samples, and date and time samples were received.

VI. ANALYTICAL METHODS

All samples selected for analysis were analyzed by a State of California certified independent analytical laboratory, McCampbell Analytical, Inc., of Pittsburg, California.

All soil samples from source area borings B20 through B24 were analyzed for total petroleum hydrocarbons as diesel (TPH-d) by analytical method 8015B with silica gel cleanup, for total petroleum hydrocarbons as mineral spirits (TPH-ms) by analytical method 8015Bm, for total petroleum hydrocarbons as gasoline (TPH-g) and volatile organic compounds (VOCs) (full scan) by analytical method 8260B, and for polynuclear aromatic hydrocarbons (PNAs/PAHs) by analytical method 8270C-SIM. Soil samples from down-gradient borings B15 through B19 and B25 were analyzed for the same constituents except full-scan VOCs were not analyzed, and TPH-g, BTEX and MTBE were analyzed by analytical Method 8015Bm/8021B.

Soil samples from the hollow stem auger (HSA) borings were analyzed for TPH-g, TPH-ms, BTEX and MTBE by analytical method 8015Bm/SW8021B, for TPH-d by analytical method SW8015B with silica gel cleanup, and for PNAs/PAHs by analytical method SW8270C-SIM.

Groundwater samples from the DPT borings were analyzed for TPH-d by analytical method 8015B with silica gel cleanup, for TPH-ms by analytical method 8015Bm, and for TPH-g and full VOC scan including fuel oxygenates diisopropyl ether (DIPE), ethyl tertiary butyl ether (ETBE), methyl tertiary butyl ether (MTBE), tertiary amyl methyl ether (TAME) and tertiary butyl ether (TBA), and lead scavengers 1,2-dibromoethene (EDB) and 1,2-dichloroethane (EDC) by analytical method 8260B. All DPT groundwater samples were analyzed for PNAs/PAHs by Analytical method 8270C-SIM except for the

groundwater samples collected from borings B16 and B21; there was an insufficient quantity of groundwater in those borings to collect samples for PNA/PAH analysis.

Groundwater samples from the new monitoring wells AMW-1, AMW-2, AMW-3 and from the existing monitoring well MW-3 were analyzed for TPH-g and TPH-ms by analytical method SW8021B/8015Bm, for TPH-d by analytical method SW8015B with silica gel cleanup, for VOCs by analytical method 8260B, and for PNAs/PAHs by analytical method SW8270C-SIM.

One soil waste drum sample composited from corings from all DPT and HSA borings was analyzed for TPH-g and VOCs by analytical method SW8260B, and for LUFT 5 metals (cadmium, chromium, nickel, lead and zinc) by EPA Method 6010 for disposal profiling.

VII. ASSESSMENT FINDINGS

A. Subsurface Conditions

The lithology encountered in most borings during this investigation consisted of interbedded silts, clays, and sands. Occasional lenses of silty gravel and gravelly silt were encountered to depths of 12 feet bgs in borings B16, B17, B19 and B22. Gravelly clay was encountered between 13 and 18 feet bgs in B19. Silty sand was encountered between approximately 15 and 21 feet bgs in borings AMW-1, AMW-2 and AMW-3. Fine sand was encountered to a depth of approximately 9 feet bgs in boring B23. Groundwater was encountered between approximately 9 to 30 feet bgs, and rose to static levels of approximately 9 to 11 feet bgs. The direction of groundwater flow was to the southeast at a gradient of 0.0167 feet per foot (Figure 3). Boring logs are included in Appendix C. Groundwater elevation data are included in Table 2 and on Figure 3.

B. Laboratory Analysis and Sampling Data

Soil

TPH-g was detected in soil samples at a maximum concentration of 2,000 milligrams per kilogram (mg/kg) in boring B20, located down-gradient from the former McGrath USTs at a depth of 12 to 12.5 feet below ground surface (bgs). The maximum TPH-ms concentration detected in soil samples collected during this investigation was 1,200 mg/kg in boring B20 at 12-12.5 feet bgs and in boring B21 (located adjacent to the former McGrath USTs) at 10-10.5 feet bgs. However, these concentrations probably represent TPH-g within the TPH-ms (C9-C12) range, since gasoline-range compounds were characterized as significant, and mineral spirits were not historically stored in the McGrath USTs. The maximum TPH-d concentration detected in soil samples was 1,900 mg/kg in

boring AMW-1, located downgradient of the former Clearprint Paper Company USTs, at a depth of 18.5-19 feet bgs (Table 1).

Toluene, ethylbenzene, and total xylenes were detected in soil samples at maximum respective concentration of 92 mg/kg, 35 mg/kg, and 210 mg/kg in boring B20 at a depth of 12-12.5 feet bgs. Benzene and MTBE were detected at respective maximum concentrations of 12 mg/kg and 7.6 mg/kg in boring B21 at a depth of 10-10.5 feet bgs.

Other VOCs were detected in soil samples collected during this investigation including naphthalene, n-butyl benzene, 1,2,4-trimethylbenzene, isopropylbenzene, n-propyl benzene, 1,3,5-trimethylbenzene, 4-isopropyl toluene, acetone, and 2-butanone at respective maximum concentrations of 14 mg/kg, 9.1 mg/kg, 89 mg/kg, 0.67 mg/kg, 13 mg/kg, 29 mg/kg, 0.13 mg/kg, 0.096 mg/kg, and 0.029 mg/kg. Soil analytical results for total petroleum hydrocarbons and VOCs are summarized in Table 3 and Figure 4.

PNAs/PAHs were detected in soil samples collected during this investigation including benzo(a) anthracene, chrysene, fluoranthene, 1-methylnaphthalene, 2-methylnaphthalene, naphthalene, phenanthrene and pyrene at maximum respective concentrations of 0.013 mg/kg, 0.013 mg/kg, 0.037 mg/kg, 2.5 mg/kg, 4.3 mg/kg, 5.0 mg/kg, 1.4 mg/kg, and 0.033 mg/kg. PAH/PNA soil analytical results are summarized in Table 4. No other COCs were detected at or above laboratory reporting limits in any soil samples analyzed during this investigation. Laboratory analytical reports and chain of custody documents are included in Appendix E.

Groundwater

Approximately 0.4 feet of free product (LNAPL) was measured in monitoring well MW-3 on the August 7, 2013 groundwater sampling event. TPH-g was detected in groundwater samples at a maximum concentration of 160,000 micrograms per liter ($\mu\text{g/L}$) in boring B20, located down-gradient from the former McGrath USTs. TPH-ms was detected at a maximum concentration of 54,000 $\mu\text{g/L}$ in groundwater samples from existing monitoring well MW-3 (on the August 7, 2013 sampling date). However, these concentrations probably represent TPH-g within the TPH-ms (C9-C12) range, since gasoline-range compounds were characterized as significant, and mineral spirits were not historically stored in the McGrath USTs. TPH-d with gasoline range compounds characterized as significant was detected at a maximum concentration of 95,000 $\mu\text{g/L}$ in groundwater samples from boring B20. Benzene and toluene were detected at a maximum respective concentrations of 21,000 $\mu\text{g/L}$ and 47,000 $\mu\text{g/L}$ in groundwater samples from boring B20. Ethylbenzene and total xylenes were detected in groundwater samples from existing monitoring well MW-3 at maximum concentrations of 4,200 $\mu\text{g/L}$ and 24,000 $\mu\text{g/L}$ on the August 7, 2013

sampling date. MTBE was detected at a maximum concentration of 140,000 µg/L in groundwater samples from boring B21.

Other VOCs detected in groundwater samples during this investigation included tert-butyl alcohol (TBA), naphthalene, 1,2,4-trimethylbenzene, n-propyl benzene, 1,3,5-trimethylbenzene, n-butyl benzene, sec-butyl benzene, isopropylbenzene, trichloroethene (TCE), 2-butanone, 1,2-dichloroethane (1,2-DCA), 1,1-dichloroethene, 1,1-dichloroethane, 1,1,1-trichloroethane and trans-1,3-dichloropropene at maximum respective concentrations of 520 µg/L, 1,100 µg/L, 5,200 µg/L, 620 µg/L, 1,500 µg/L, 27 µg/L, 7.3 µg/L, 15 µg/L, 53 µg/L, 2.4 µg/L, 0.55 µg/L, 140 µg/L, 5.2 µg/L, 5.3 µg/L and 110 µg/L. Groundwater analytical results for total petroleum hydrocarbons and VOCs are summarized in Table 5 and Figures 5, 6 and 7.

PNAs/PAHs were detected in groundwater samples collected during this investigation including benzo(a) anthracene, fluoranthene, 1-methylnaphthalene, 2-methylnaphthalene, naphthalene, phenanthrene and pyrene at maximum respective concentrations of 0.56 µg/L, 0.94 µg/L, 460 µg/L, 750 µg/L, 1,700 µg/L, 0.88 µg/L and 1.0 µg/L. PNA/PAH groundwater analytical results are summarized in Table 6. No other COCs were detected at or above laboratory reporting limits in any groundwater samples analyzed during this investigation. Laboratory analytical reports and chain of custody documents are included in Appendix E.

C. Laboratory QA/QC

A review of laboratory internal quality assurance/quality control (QA/QC) report indicates the method blank and sample spike data for all analyses were within the laboratory recovery limits. The samples were also analyzed within the acceptable EPA holding times. The data from the McCampbell Analytical laboratory are considered to be of good quality. Laboratory QA/QC reports and chain-of-custody records are included in Appendix E.

VIII. DISCUSSION

A. Environmental Screening Levels

To assess if the identified constituents of concern (COCs) in soil and groundwater pose a risk to human health and the environment, concentrations were compared with ESLs for commercial/industrial land use where groundwater is not a potential drinking water resource compiled by the SFRWQCB in *Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater*, Interim Final, May 2013. Although the SFRWQCB *Basin Plan* has designated groundwater in the site vicinity as a potential drinking water resource

(SFRWQCB, June 2013), groundwater in the subject site vicinity is not currently used as a drinking water resource. According to the City of Emeryville Public Works Department, a City ordinance prohibits use of groundwater for drinking water purposes due to widespread regional contamination, and no plans exist for future beneficial use.

ESLs were developed by the SFRWQCB to address environmental protection goals. These goals include protection of human health, drinking water resources, aquatic and terrestrial biota and adverse nuisance conditions. Under most conditions, the presence of chemicals at concentrations below the corresponding ESLs can be assumed not to pose a significant threat to human health and the environment. Concentrations of chemicals above ESLs do not necessarily indicate that impacts to human health or the environment exist or that remedial measures are required, only that further evaluation is required. ESLs are not intended to be used as a “clean-up” standard.

B. Soil Screening Levels

AllWest compared soil sample analytical results to the SFRWQCB ESLs from *Tables B and B-2, Shallow Soils (≤ 3 m bgs), Groundwater is not a Current or Potential Source of Drinking Water, Commercial/Industrial Land Use*, and *Tables D and D-2 Deep Soils (> 3 m bgs), Groundwater is not a Current or Potential Source of Drinking Water, Commercial/Industrial Land Use* (RWQCB, Interim Final – May 2013).

TPH-g and TPH-ms were not detected at concentrations exceeding ESLs in any of the shallow (< 9.9 feet bgs) or deep (> 9.9 feet bgs) soil samples collected and analyzed during this investigation. TPH-d was not detected at concentrations exceeding ESLs in any shallow (< 9.9 feet bgs) soil samples analyzed during this investigation. TPH-d concentrations detected at 1,900 mg/kg in one (1) soil sample, AMW-1-18.5-19 (i.e. collected from 18.5 to 19 feet bgs in boring AMW-1), exceeded the deep soil (> 9.9 feet bgs) ESL of 1,100 mg/kg.

Benzene was detected at concentrations exceeding its shallow and deep ESL of 1.2 mg/kg in six (6) soil samples, and matching the ESL in two (2) samples, at a maximum concentration of 12 mg/kg in soil sample B21-10-10.5. Toluene was detected at concentrations exceeding its shallow and deep ESL of 9.3 mg/kg in five (5) soil samples at a maximum concentration of 92 mg/kg in soil sample B20-12-12.5. Ethylbenzene was detected at concentrations exceeding its shallow and deep ESL of 4.7 mg/kg in eight (8) soil samples, at a maximum concentration of 35 mg/kg in soil sample B20-12-12.5. Total xylenes were detected at concentrations exceeding its shallow and deep ESL of 11 mg/kg in thirteen (13) soil samples, and matching the ESL in one (1) sample, at a maximum concentration of 210 mg/kg in soil sample B20-12-12.5. MTBE was detected at

concentrations exceeding its shallow and deep ESL of 8.4 mg/kg in one (1) soil sample, at a maximum concentration of 12 mg/kg in soil sample B21-21.5-22.

For PNA/PAH analyses, 2-methylaphthalene was detected at concentrations exceeding its shallow and deep ESL of 0.25 mg/kg in fourteen (14) soil samples, at a maximum concentration of 4.3 mg/kg in soil sample B20-12-12.5.

Naphthalene was detected in two (2) soil samples at concentrations exceeding its shallow and deep soil ESL of 4.8 mg/kg, at a maximum concentration of 7.1 mg/kg in soil sample B20-12-12.5. None of the other COCs analyzed were detected above their non-drinking water ESLs in soil samples collected during this investigation. Soil analytical data and ESLs for sites where groundwater is and is not a drinking water resource are summarized in Tables 3 and 4. Distribution of petroleum hydrocarbons in soil is shown on Figure 4.

C. Groundwater Screening Levels

AllWest compared groundwater sample analytical results to the SFRWQCB ESLs from *Tables B and B-2, Shallow Soils (≤ 3 m bgs), Groundwater is not a Current or Potential Source of Drinking Water, Commercial/Industrial Land Use, Tables D and D-2 Deep Soils (> 3 m bgs), Groundwater is not a Current or Potential Source of Drinking Water, Commercial/Industrial Land Use, and Table E-1, Groundwater Screening Levels for Evaluation of Potential Vapor Intrusion, Commercial/Industrial Land Use (RWQCB, Interim Final – May 2013).*

TPH-g was detected in concentrations exceeding its non-drinking water ESL of 500 $\mu\text{g/L}$ in eleven (11) groundwater samples collected during this investigation at a maximum concentration of 160,000 $\mu\text{g/L}$ in boring B20. TPH-ms was detected in concentrations exceeding its non-drinking water ESL of 500 $\mu\text{g/L}$ in ten (10) groundwater samples collected during this investigation at a maximum concentration of 54,000 $\mu\text{g/L}$ in monitoring well MW-3; however, this probably represents TPH-g within the TPH-ms range. TPH-d was detected in concentrations exceeding its non-drinking water ESL of 640 $\mu\text{g/L}$ in nine (9) groundwater samples collected during this investigation at a maximum concentration of 95,000 $\mu\text{g/L}$ in boring B20. Groundwater vapor intrusion ESLs have not been established for TPH-g, TPH-ms or TPH-d.

Benzene was detected at concentrations exceeding its non-drinking water ESL of 27 $\mu\text{g/L}$ in six (6) groundwater samples, and exceeding its vapor intrusion ESL of 210 $\mu\text{g/L}$ in five (5) samples, at a maximum concentration of 21,000 $\mu\text{g/L}$ in boring B20. Toluene was detected at concentrations exceeding its non-drinking ESL of 130 $\mu\text{g/L}$ in six (6) groundwater samples, at a maximum concentration of 47,000 $\mu\text{g/L}$ in boring B20. The commercial/industrial vapor intrusion ESL has not been established for toluene; however, it was not detected at a concentration exceeding its residential vapor intrusion ESL of 95,000 $\mu\text{g/L}$. Ethylbenzene was detected at concentrations exceeding its non-drinking ESL of 43 $\mu\text{g/L}$ in nine

groundwater samples, and its vapor intrusion ESL of 3,100 µg/L in three (3) samples, at a maximum concentration of 4,200 µg/L in monitoring well MW-3. Total xylenes were detected at concentrations exceeding its non-drinking ESL of 100 µg/L in ten (10) groundwater samples, at a maximum concentration of 24,000 µg/L in monitoring well MW-3. The commercial/industrial vapor intrusion ESL has not been established for xylenes; however, it was not detected at a concentration exceeding its residential vapor intrusion ESL of 37,000 µg/L. MTBE was detected at concentrations exceeding its non-drinking ESL of 1,800 µg/L in five groundwater samples, and its vapor intrusion ESL of 100,000 µg/L in one (1) sample, at a maximum concentration of 140,000 µg/L in boring B21.

2-methylnaphthalene was detected at concentrations exceeding its non-drinking ESL of 2.1 µg/L in seven (7) groundwater samples, at a maximum concentration of 750 µg/L in boring B20. Vapor intrusion ESLs have not been established for 2-methylnaphthalene. Naphthalene was detected at concentrations exceeding its non-drinking ESL of 4.6 µg/L in eight (8) groundwater samples, and its vapor intrusion ESL of 1,600 µg/L in one (1) sample, at a maximum concentration of 1,700 µg/L in boring B20. Benzo (a) anthracene was detected in one (1) groundwater sample at concentrations exceeding its non-drinking water ESL of 0.027 µg/L. Vapor intrusion ESLs have not been established for benzo (a) anthracene. No other COCs were detected in groundwater samples analyzed in this investigation at concentrations exceeding established applicable ESLs. Groundwater analytical data and drinking water, non-drinking water and vapor intrusion ESLs are summarized in Tables 5 and 6.

D. Contaminant Distribution - Soil

The lateral extent of adsorbed-phase petroleum hydrocarbons and their constituents has been largely defined in the downgradient direction west of the former McGrath USTs at boring AMW-1, but has not been fully defined in the cross-gradient directions to the north and south of 67th Street. The highest TPH-g and TPH-d concentrations detected in soil samples during this investigation were from borings B20 and B21 located immediately downgradient from the former McGrath USTs. In the vertical distribution of TPH-g and TPH-d, the highest concentrations tend to occur at approximately 10 to 12.5 feet bgs, consistent with the capillary smear zone above first encountered groundwater. The anomalously high TPH-d concentration detected in the soil sample from 18.5 to 19 feet bgs in the downgradient boring AMW-1 appears to originate from an offsite source. The upgradient extent of petroleum hydrocarbons from the McGrath UST release appears to be defined by boring B-23. The slightly more elevated TPH-g and TPH-d concentrations in the farther upgradient boring B-24 likely originate from a separate release from the former fuel dispensers. Distribution of TPH-g, TPH-d and benzene in soil is shown on Figure 4.

E. Contaminant Distribution - Groundwater

The lateral extent of dissolved-phase petroleum hydrocarbons and their constituents has been largely defined in the downgradient direction west of the former McGrath USTs at monitoring well AMW-1, but has not been fully defined in the cross-gradient directions to the north and particularly to the south of 67th Street. The upgradient extent of dissolved-phase petroleum hydrocarbons from also not been fully defined; concentrations decline in boring B23 immediately upgradient of the former USTs, however there appears to be a separate release source in the vicinity of boring B24 and the former fuel dispensers farther upgradient. The highest dissolved-phase TPH-g, TPH-d and benzene concentrations detected in groundwater samples during this investigation were from boring B20 located immediately downgradient from the former McGrath USTs. TPH-g, TPH-d and benzene isoconcentration maps are shown as Figures 5, 6 and 7, respectively.

Approximately 0.4 feet of light non-aqueous phase liquid (LNAPL) hydrocarbons (free product) was measured in monitoring well MW-3 in the former UST vicinity during the August 7, 2013 groundwater sampling event. The lateral extent of free product appears to be limited to the Free product was not measured or observed in boring B20; however, the temporary well casing may have been installed for an insufficient time for free product to accumulate.

IX. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

AllWest conducted a subsurface assessment consisting of eleven (11) DPT borings (B15 through B25) and three (3) groundwater monitoring well installations (AMW-1, AMW-2 and AMW-3) at the subject site to further evaluate the extent of LNAPL, adsorbed and dissolved-phase petroleum hydrocarbons in soil and groundwater in the vicinity of the former UST and dispenser source area at the subject property, and in the hydraulically down-gradient and cross-gradient directions.

AllWest concludes that TPH-g, TPH-ms, TPH-d, BTEX, MTBE, 2-methylnaphthalene, naphthalene and benzo (a) anthracene were identified in shallow and deep soil samples and in groundwater samples at concentrations exceeding corresponding and applicable SFRWQCB commercial/industrial non-drinking water ESL values. Benzene, ethylbenzene, MTBE and naphthalene were detected in groundwater samples exceeding corresponding commercial/industrial vapor intrusion ESLs. Therefore, a potential soil vapor intrusion impact to indoor air quality may occur within the former McGrath Steel warehouse building at

1471 67th Street and the MetalCo building at 1475 67th Street, located adjacent to the areas of COC concentrations.

The downgradient extent of the adsorbed and dissolved phase petroleum hydrocarbon plume in soil and groundwater is largely defined and extends from the vicinity of the former McGrath Steel USTs to the west along 67th Street to the vicinity of monitoring well AMW-1 west of the former Clearprint Paper Company USTs. The highest COC concentrations (with the exception of TPH-d) occur in the vicinity of the former McGrath Steel USTs and immediately downgradient. Elevated TPH-d concentrations detected in soil samples in downgradient boring AMW-1 probably originate from an offsite source. The cross-gradient extent of the adsorbed and dissolved phase hydrocarbon plume has not been fully defined, particularly south of 67th Street. Additionally, 0.4 feet of LNAPL (free product) was discovered in monitoring well MW-3 during the August 7, 2013 groundwater sampling event.

B. Recommendations

AllWest recommends conducting quarterly groundwater monitoring at the subject site in the new monitoring wells AMW-1, AMW-2 and AMW-3 and existing monitoring well MW-3. AllWest also recommends implementing interim remedial action of free product in monitoring well MW-3 with the installation of a passive product skimming device, consisting of a “sock” containing petroleum hydrocarbon-absorbing material within a 2-inch diameter by 3-foot long perforated metal canister placed in the well. AllWest recommends initially checking the skimmer “sock” on a monthly basis, and replacing it if necessary.

X. LIMITATIONS

The work described in this report is performed in accordance with the Environmental Consulting Agreement between MCG Investments, LLC (Client) and AllWest Environmental, Inc, dated June 2013. AllWest has prepared this report for the exclusive use of the Client for this particular project and in accordance with generally accepted practices at the time of the work. No other warranties, certifications or representations, either expressed or implied are made as to the professional advice offered. The services provided for the Client were limited to their specific requirements; the limited scope allows for AllWest to form no more than an opinion of the actual site conditions. No matter how much research and sampling may be performed, the only way to know about the actual composition and condition of the subsurface of a site is through excavation.

The conclusions and recommendations contained in this report are made based on observed conditions existing at the site, laboratory test results of the submitted samples, and interpretation of a limited data set. It must be recognized that changes can occur in subsurface conditions due to site use or other reasons. Furthermore, the distribution of

chemical concentrations in the subsurface can vary spatially and over time. The results of chemical analysis are valid as of the date and at the sampling location only. AllWest is not responsible for the accuracy of the test data from an independent laboratory, or for any analyte quantities falling below the recognized standard detection limits or for the method utilized by the independent laboratories.

Background information that AllWest has used in preparing this report, including but not limited to previous field measurements, analytical results, site plans, and other data, has been furnished to AllWest by the Client, its previous consultants, and/or third parties. AllWest has relied on this information as furnished. AllWest is not responsible for nor has it confirmed the accuracy of this information.

XI. REFERENCES

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TABLES

TABLE 1
Summary of Well Construction Details
Former McGrath Steel
6655 Hollis Street
Emeryville, California
AllWest Project No. 13019.23

Well Number	Casing Diameter (inches)	Borehole Diameter (inches)	Total Depth of Well (feet bgs)	Top-Bottom of Screen (feet bgs)	Screen Length (feet)	Top-Bottom of Filter Pack (feet bgs)
MW-3	2	8	29	9-29	20	7-29.5
AMW-1	2	8	24	9-24	15	7-24
AMW-2	2	8	24	9-24	15	7-24
AMW-3	2	8	23	8-23	15	6-23

Notes:

bgs below ground surface

TABLE 2
Summary of Groundwater Elevation Data

Former McGrath Steel
6655 Hollis Street
Emeryville, California
AllWest Project No. 13019.23

Well Number	Date	TOC Elevation (feet msl)	Ground Surface Elevation (feet msl)	Depth to Groundwater (feet below TOC)	Product Thickness (feet)	Groundwater Surface Elevation (feet msl) ^a
MW-3	10/17/1995	22.73	23.17	9.42	0.00	13.31
MW-3	11/21/1995	22.73	23.17	9.85	0.00	12.88
MW-3	12/23/1995	22.73	23.17	8.52	0.00	14.21
MW-3	1/15/1996	22.73	23.17	8.72	0.00	14.01
MW-3	2/16/1996	22.73	23.17	7.08	0.04	15.68
MW-3	3/28/1996	22.73	23.17	6.78	0.03	15.97
MW-3	8/22/2005	22.73	23.17	12.36	0.00	10.37
MW-3	12/20/2005	22.73	23.17	10.82	0.00	11.91
MW-3	9/14/2011*	22.73	23.17	11.05	3	13.93
MW-3	7/30/2012	22.73	23.17	11.52	2.65	13.20
MW-3	8/2/2012	22.73	23.17	9.22	1.12	14.35
MW-3	12/18/2012	22.73	23.17	8.91	0.00	13.82
MW-3	3/27/2013	22.73	23.17	8.57	0.20	14.31
MW-3	6/27/2013	22.73	23.17	9.90	0.00	12.83
MW-3	8/7/2013	25.55	26.00	9.09	0.41	16.77
AMW-1	8/7/2013	22.09	22.54	9.54	0.00	12.55
AMW-2	8/7/2013	23.43	23.73	9.96	0.00	13.47
AMW-3	8/7/2013	25.16	25.50	8.94	0.00	16.22

Notes:

* Groundwater level measurement only, no sampling

TOC Top of Well Casing

Well MW-3 ground surface and TOC elevations surveyed to feet above mean sea level (msl) per City of Emeryville Datum, BM#5 by Triad/Holmes Associates October 17, 1995. All ground surface and TOC elevations re-surveyed to NAD 1983 and NAVD 1988 datum by Morrow Surveying, Inc., August 13, 2013.

a Groundwater elevation corrected for free product thickness, assuming density of 0.75 for gasoline.

NM Not Measured

TABLE 3
Summary of Soil Analytical Data
Total Petroleum Hydrocarbons and VOCs
Former McGrath Steel
6655 Hollis Street
Emeryville, California
AllWest Project No. 13019.23

Sample Name and Depth (feet bgs)	Date Sampled	TPH-g (mg/kg)	TPH-ms (mg/kg)	TPH-d (mg/kg)	TPH-mo* (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	Other VOCs (mg/kg)
B15-10-10.5	1/17/2013	ND <1.0	ND <1.0	ND <1.0	NA	ND <0.005	ND <0.005	ND <0.005	0.012	ND <0.05	NA
B15-19.5-20 qualifiers	1/17/2013	ND <1.0	ND <1.0	2.7 e2	NA	ND <0.005	ND <0.005	ND <0.005	0.007	ND <0.05	NA
B16-8.5-9 qualifiers	1/17/2013	110 d1	59 d1	3.8 e4	NA	0.84	4.8	2.8	13	ND <0.50	NA
B16-11.5-12 qualifiers	1/17/2013	260 d1	130 d1	9.6 e4	NA	2.9	16	5.7	24	ND <1.5	NA
B16-14.5-15 qualifiers	1/17/2013	140 d1	84 d1	3.7 e4	NA	2.6	10	2.6	16	ND <1.0	NA
B17-8.5-9	1/16/2013	ND <1.0	ND <1.0	ND <1.0	ND <5.0	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <1.0	NA
B18-10-10.5 qualifiers	1/16/2013	450 d2, d9	430 d2, d9	60 e4, e2	5.4 e4, e2	ND <0.50	ND <0.50	8.0	25	ND <5.0	NA
B18-15.5-16 qualifiers	1/16/2013	ND <1.0 d1	ND <1.0 d1	2.4 e2	ND <5.0 e2	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.05	NA
B19-10-10.5 qualifiers	1/16/2013	360 d1	350 d1	32 e4	ND <5.0 e4	0.31	0.23	8.8	26	ND <1.0	NA
B19-14.5-15 qualifiers	1/16/2013	240 d1	240 d1	11 e4	ND <5.0 e4	0.12	0.16	5.7	14	ND <1.0	NA
B20-10-10.5 qualifiers	1/17/2013	480	280 d1	90 e4	NA	2.2	17	7.1	42	ND <0.50	2.3 (n-butyl benzene), 3.3 (naphthalene), 19 (1,2,4-trimethylbenzene), 0.67 (isopropylbenzene), 2.9 (n-propyl benzene), 6.5 (1,3,5-trimethylbenzene), ND (others - varies)
B20-12-12.5 qualifiers	1/17/2013	2,000	1,200 d1	24 e4	NA	8.0	92	35	210	ND <5.0	9.1 (n-butyl benzene), 14 (naphthalene), 89 (1,2,4-trimethylbenzene), 13 (n-propyl benzene), 29 (1,3,5-trimethylbenzene), ND (others - varies)
B20-14.5-15 qualifiers	1/17/2013	27	15 d1	5.1 e4	NA	0.72	1.5	0.37	2.2	0.28	0.17 (naphthalene), 0.66 (1,2,4-trimethylbenzene), 0.21 (1,3,5-trimethylbenzene), ND (others - varies)
B21-4.5-5 qualifiers	1/18/2013	280	410 d1	40 e2, e4	NA	ND <0.50 a13	4.3 a13	3.2 a13	19 a13	0.98 a13	3.3 (naphthalene), 13 (1,2,4-trimethylbenzene), 1.8 (n-propyl benzene), 4.1 (1,3,5-trimethylbenzene), 1.8 (n-butyl benzene), ND (others - varies) a13
B21-10-10.5 qualifiers	1/18/2013	1,900	1,200 d1	180 e4	NA	12 a13	88 a13	31 a13	170 a13	7.6 a13	7.0 (n-butyl benzene), 9.6 (naphthalene), 68 (1,2,4-trimethylbenzene), 11 (n-propyl benzene), 23 (1,3,5-trimethylbenzene), ND (others - varies) a13

TABLE 3
Summary of Soil Analytical Data
Total Petroleum Hydrocarbons and VOCs
Former McGrath Steel
6655 Hollis Street
Emeryville, California
AllWest Project No. 13019.23

Sample Name and Depth (feet bgs)	Date Sampled	TPH-g (mg/kg)	TPH-ms (mg/kg)	TPH-d (mg/kg)	TPH-mo* (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	Other VOCs (mg/kg)
B21-21.5-22 qualifiers	1/18/2013	120	340	22	NA	1.2	4.9	1.8	11	12	0.50 (n-butyl benzene), 0.77 (naphthalene), 4.6 (1,2,4-trimethylbenzene), 0.67 (n-propyl benzene), 1.5 (1,3,5-trimethylbenzene), ND (others - varies) a13
B22-4.5-5 qualifiers	1/18/2013	92	120	9.1	NA	0.16	ND <0.12	1.5	6.3	0.45	0.54 (n-butyl benzene), 0.13 (4-isopropyl toluene), 0.74 (naphthalene), 4.2 (1,2,4-trimethylbenzene), 0.16 (isopropylbenzene), 0.74 (n-propyl benzene), 1.4 (1,3,5-trimethylbenzene), ND (others - varies) a13
B22-10-10.5 qualifiers	1/18/2013	68	280	17	NA	0.79	3.3	1.2	6.0	3.1	0.27 (n-butyl benzene), 0.47 (naphthalene), 2.6 (1,2,4-trimethylbenzene), 0.39 (n-propyl benzene), 0.85 (1,3,5-trimethylbenzene), ND (others - varies) a13
B22-14.5-15 qualifiers	1/18/2013	30	20	3.2	NA	1.2	1.7	0.46	2.1	1.2	0.11 (n-butyl benzene), 0.14 (naphthalene), 0.81 (1,2,4-trimethylbenzene), 0.14 (n-propyl benzene), 0.26 (1,3,5-trimethylbenzene), ND (others - varies) a13
B23-5-5.5	1/17/2013	ND <0.25	ND <1.0	ND <1.0	NA	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND (varies)
B23-8.5-9 qualifiers	1/17/2013	0.57	ND <1.0	15	NA	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND (varies)
B24-4.5-5 qualifiers	1/18/2013	0.45	ND <1.0	1.8	NA	ND <0.005	ND <0.005	ND <0.005	ND <0.005	0.12	0.096 (acetone), 0.029 (2-butanone), ND (others - varies)
B24-8.5-9 qualifiers	1/18/2013	250	230	44	NA	0.53	6.8	4.1	23	0.53	1.2 (n-butyl benzene), 1.6 (naphthalene), 10 (1,2,4-trimethylbenzene), 1.6 (n-propyl benzene), 3.5 (1,3,5-trimethylbenzene), ND (others - varies) a13
B24-21.5-22 qualifiers	1/18/2013	1.6	4.2	2.2	NA	0.022	0.11	0.032	0.19	0.24	0.065 (1,2,4-trimethylbenzene), 0.019 (1,3,5-trimethylbenzene), ND (others - varies) a13
B25-10-10.5 qualifiers	1/16/2013	16	6.8	3.4	ND <5.0	0.0088	0.034	0.30	0.015	ND <0.05	NA
B25-15-15.5	1/16/2013	ND <1.0	ND <1.0	ND <1.0	ND <5.0	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.05	NA
AMW-1-6.5-7 qualifiers	8/2/2013	ND <1.0	ND <1.0	13	NA	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.05	NA
AMW-1-12.5-13	8/2/2013	ND <1.0	ND <1.0	2.9	NA	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.05	NA

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Total Petroleum Hydrocarbons and VOCs
Former McGrath Steel
6655 Hollis Street
Emeryville, California
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Sample Name and Depth (feet bgs)	Date Sampled	TPH-g (mg/kg)	TPH-ms (mg/kg)	TPH-d (mg/kg)	TPH-mo* (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	Other VOCs (mg/kg)
qualifiers				e7, e1							
AMW-1-18.5-19	8/2/2013	3.8	7.5	1,900	NA	ND <0.005	0.0053	0.0059	0.028	ND <0.05	NA
qualifiers		d7	d7	e7, e1							
AMW-2-6.5-7	8/1/2013	ND <1.0	ND <1.0	ND <1.0	NA	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.05	NA
AMW-2-15.5-16	8/1/2013	430	440	83	NA	1.3	8.3	10	45	ND <2.0	NA
qualifiers		d1	d1	e4, e2							
AMW-2-23-23.5	8/1/2013	ND <1.0	ND <1.0	ND <1.0	NA	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.05	NA
AMW-3-6.5-7	8/2/2013	ND <1.0	ND <1.0	1.0	NA	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.05	NA
qualifiers				e7, e2							
AMW-3-9-9.5	8/2/2013	240	260	82	NA	0.26	1.3	5.1	18	0.90	NA
qualifiers		d1	d1	e4, e7, e2							
AMW-3-12-12.5	8/2/2013	41	44	28	NA	0.078	0.28	0.96	4.6	ND <0.25	NA
qualifiers		d1	d1	e4, e2							
RWQCB Commercial/Industrial ESLs, ≤3 m (9.9 feet) bgs, drinking water		500	500	500	2,500	0.044	2.9	3.3	2.3	0.023	0.5 (acetone) 0.059 (1,3-dichloropropene) 1.2 (naphthalene) NE or varies (others)
RWQCB Commercial/Industrial ESLs, >3 m (9.9 feet) bgs, drinking water		580	580	530	5,000	0.044	2.9	3.3	2.3	0.023	0.5 (acetone) 0.059 (1,3-dichloropropene) 1.2 (naphthalene) NE or varies (others)
RWQCB Commercial/Industrial ESLs, ≤3 m (9.9 feet) bgs, non- drinking water		500	500	500	2,500	1.2	9.3	4.7	11	8.4	0.5 (acetone) 1.3 (1,3-dichloropropene) 4.8 (naphthalene) NE or varies (others)
RWQCB Commercial/Industrial ESLs, >3 m (9.9 feet) bgs, non- drinking water		2,400	2,400	1,100	5,000	1.2	9.3	4.7	11	8.4	0.5 (acetone) 1.3 (1,3-dichloropropene) 4.8 (naphthalene) NE or varies (others)

Notes:

All samples analyzed by McCampbell Analytical, Inc., Pittsburg, California
All results are reported in milligrams per kilogram (mg/kg)

- TPH-g Total petroleum hydrocarbons gasoline range (C6-C12), Analytical Method SW8021B/8015Bm for soil samples collected from borings B15, B16, B17, B18, B19, B25, AMW-1, AMW-2 and AMW-3; Analytical Method SW8260B for soil samples collected from borings B20, B21, B22, B23, and B24
- TPH-ms Total petroleum hydrocarbons mineral spirits range (C9-C12), Analytical Method SW8021/8015Bm
- TPH-d Total petroleum hydrocarbons as diesel (C10-C23), Analytical Method SW8015B with silica gel cleanup
- TPH-mo Total petroleum hydrocarbons as motor oil (C18-C36), Analytical Method SW8015B with silica gel cleanup
- MTBE Methyl tertiary butyl ether, Analytical Method SW8021B/8015Bm for soil samples collected from borings B15, B16, B17, B18, B19, B25, AMW-1, AMW-2, and AMW-3; Analytical Method SW8260B for soil samples collected from borings B20, B21, B22, B23 and B24
- BTEX Benzene, Toluene, Ethylbenze and Total Xylenes by Analytical Method SW8021B/8015Bm for soil samples collected from borings B15, B16, B17, B18, B19, B25, AMW-1, AMW-2 and AMW-3; Analytical Method SW8260B for soil samples collected from borings B20, B21, B22, B23 and B24
- VOCs Volatile organic compounds, Analytical Method SW8260B for soil samples collected from borings B20, B21, B22, B23 and B24 only.
- ND <1.0 Not detected at or above listed reporting limit
- NE Not established

TABLE 3
Summary of Soil Analytical Data
Total Petroleum Hydrocarbons and VOCs
Former McGrath Steel
6655 Hollis Street
Emeryville, California
AllWest Project No. 13019.23

Sample Name and Depth (feet bgs)	Date Sampled	TPH-g (mg/kg)	TPH-ms (mg/kg)	TPH-d (mg/kg)	TPH-mo* (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	Other VOCs (mg/kg)
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San Francisco Bay Regional Water Quality Control Board (SFRWQCB) Environmental Screening Levels (ESLs) for commercial/industrial land use where groundwater is a potential drinking water resource from Tables A and A2 and Tables C and C-2, *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*. RWQCB, Interim Final - May 2013.

San Francisco Bay Regional Water Quality Control Board (SFRWQCB) Environmental Screening Levels (ESLs) for commercial/industrial land use where groundwater is not a potential drinking water resource from Tables B and B-2 and Tables D and D-2, *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*. RWQCB, Interim Final - May 2013.

* Analysis not requested by AllWest but performed anyway where listed

Laboratory Qualifiers:

- L - lighter hydrocarbons contributed to the quantitation
- Y - sample exhibits chromatographic pattern which does not resemble standard
- a13 - reporting limit raised due to low density sample
- d1 - weakly modified or unmodified gasoline is significant
- e1 - unmodified or weakly modified diesel is significant
- e2 - diesel range compounds are significant; no recognizable pattern
- e4 - gasoline-range compounds are significant
- e7 - oil-range compounds are significant

TABLE 4
Summary of Soil Analytical Data
PNAs/PAHs
Former McGrath Steel
6655 Hollis Street
Emeryville, California
AllWest Project No. 13019.23

Sample Name and Depth (feet bgs)	Date Sampled	Benzo (a) anthracene (mg/kg)	Chrysene (mg/kg)	Fluoranthene (mg/kg)	1-Methylnaphthalene (mg/kg)	2-Methylnaphthalene (mg/kg)	Naphthalene (mg/kg)	Phenanthrene (mg/kg)	Pyrene (mg/kg)	Other PNAs/PAHs (mg/kg)
B15-10-10.5	1/17/2013	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01
B15-19.5-20	1/17/2013	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01
B16-8.5-9	1/17/2013	ND <0.01	ND <0.01	ND <0.01	0.097	0.19	0.23	ND <0.01	ND <0.01	ND <0.01
B16-11.5-12	1/17/2013	ND <0.01	ND <0.01	ND <0.01	0.082	0.15	0.15	ND <0.01	ND <0.01	ND <0.01
B16-14.5-15	1/17/2013	ND <0.01	ND <0.01	ND <0.01	0.039	0.069	0.075	ND <0.01	ND <0.01	ND <0.01
B17-8.5-9	1/16/2013	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01
B18-10-10.5	1/16/2013	ND <0.10	ND <0.10	ND <0.10	0.69	1.1	0.47	ND <0.10	ND <0.10	ND <0.10
B18-15.5-16	1/16/2013	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01
B19-10-10.5	1/16/2013	ND <0.10	ND <0.10	ND <0.10	0.48	0.76	0.72	ND <0.10	ND <0.10	ND <0.10
B19-14.5-15	1/16/2013	ND <0.01	ND <0.01	ND <0.01	0.26	0.50	0.50	0.014	ND <0.01	ND <0.01
B20-10-10.5	1/17/2013	ND <0.20	ND <0.20	ND <0.20	1.7	2.9	4.5	ND <0.20	ND <0.20	ND <0.20
B20-12-12.5	1/17/2013	ND <0.20	ND <0.20	ND <0.20	2.5	4.3	7.1	ND <0.20	ND <0.20	ND <0.20
B20-14-14.5	1/17/2013	ND <0.01	ND <0.01	ND <0.01	0.085	0.16	0.22	ND <0.01	ND <0.01	ND <0.01
B21-4.5-5	1/18/2013	ND <0.10	ND <0.10	ND <0.10	0.87	1.4	1.6	ND <0.10	ND <0.10	ND <0.10
B21-10-10.5	1/18/2013	ND <0.20	ND <0.20	ND <0.20	2.1	3.7	5.0	ND <0.20	ND <0.20	ND <0.20
B21-21.5-22	1/18/2013	ND <0.01	ND <0.01	ND <0.01	0.27	0.50	0.43	ND <0.01	ND <0.01	ND <0.01
B22-4.5-5	1/18/2013	ND <0.01	ND <0.01	ND <0.01	0.13	0.24	0.15	ND <0.01	ND <0.01	ND <0.01
B22-10-10.5	1/18/2013	ND <0.050	ND <0.050	ND <0.050	0.26	0.41	0.67	ND <0.050	ND <0.050	ND <0.050
B22-14.5-15	1/18/2013	ND <0.01	ND <0.01	ND <0.01	0.024	0.044	0.058	ND <0.01	ND <0.01	ND <0.01
B23-5-5.5	1/17/2013	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01
B23-8.5-9	1/17/2013	ND <0.01	ND <0.015	0.016	ND <0.01	ND <0.01	ND <0.01	ND <0.01	0.018	ND <0.01
B24-4.5-5	1/18/2013	ND <0.01	ND <0.01	ND <0.01	0.013	0.025	0.029	ND <0.01	ND <0.01	ND <0.01
B24-8.5-9	1/18/2013	ND <0.10	ND <0.10	ND <0.10	0.59	0.95	0.85	ND <0.10	ND <0.10	ND <0.10
B24-21.5-22	1/18/2013	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	0.014	ND <0.01	ND <0.01	ND <0.01
B25-10-10.5	1/16/2013	0.013	0.013	0.037	0.014	0.028	0.012	0.043	0.033	ND <0.01
B25-15-15.5	1/16/2013	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01

TABLE 4
Summary of Soil Analytical Data
PNAs/PAHs
Former McGrath Steel
6655 Hollis Street
Emeryville, California
AllWest Project No. 13019.23

Sample Name and Depth (feet bgs)	Date Sampled	Benzo (a) anthracene (mg/kg)	Chrysene (mg/kg)	Fluoranthene (mg/kg)	1-Methylnaphthalene (mg/kg)	2-Methylnaphthalene (mg/kg)	Naphthalene (mg/kg)	Phenanthrene (mg/kg)	Pyrene (mg/kg)	Other PNAs/PAHs (mg/kg)
AMW-1-6.5-7	8/2/2013	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01
AMW-1-12.5-13	8/2/2013	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01
AMW-1-18.5-19	8/2/2013	ND <1.0	ND <1.0	ND <1.0	1.2	1.5	ND <1.0	1.4	ND <1.0	ND <1.0
AMW-2-6.5-7	8/1/2013	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01
AMW-2-15.5-16	8/1/2013	ND <0.20	ND <0.20	ND <0.20	1.4	2.4	2.5	ND <0.20	ND <0.20	ND <0.20
AMW-2-23-23.5	8/1/2013	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01
AMW-3-6.5-7	8/2/2013	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01
AMW-3-9-9.5	8/2/2013	ND <0.10	ND <0.10	ND <0.10	0.93	1.6	1.2	ND <0.10	ND <0.10	ND <0.10
AMW-3-12-12.5	8/2/2013	ND <0.050	ND <0.050	ND <0.050	0.30	0.51	0.37	ND <0.050	ND <0.050	ND <0.050
RWQCB Commercial/Industrial ESLs, ≤3 m (9.9 feet) bgs, drinking water		0.45	4.5	40	NE	0.25	1.2	11	85	Vary
RWQCB Commercial/Industrial ESLs, >3 m (9.9 feet) bgs, drinking water		0.45	4.5	60	NE	0.25	1.2	11	85	Vary
RWQCB Commercial/Industrial ESLs, ≤3 m (9.9 feet) bgs, non- drinking water		0.45	4.5	40	NE	0.25	4.8	11	85	Vary

TABLE 4
Summary of Soil Analytical Data
PNAs/PAHs
Former McGrath Steel
6655 Hollis Street
Emeryville, California
AllWest Project No. 13019.23

Sample Name and Depth (feet bgs)	Date Sampled	Benzo (a) anthracene (mg/kg)	Chrysene (mg/kg)	Fluoranthene (mg/kg)	1-Methylnaphthalene (mg/kg)	2-Methylnaphthalene (mg/kg)	Naphthalene (mg/kg)	Phenanthrene (mg/kg)	Pyrene (mg/kg)	Other PNAs/PAHs (mg/kg)
RWQCB Commercial/Industrial ESLs, >3 m (9.9 feet) bgs, non- drinking water		0.45	4.5	60	NE	0.25	4.8	11	85	Vary

Notes:

All samples analyzed by McCampbell Analytical, Inc., Pittsburg, California
All results are reported in milligrams per kilogram (mg/kg)

PNAs/PAHs Polynuclear Aromatic Hydrocarbons/Polycyclic Aromatic Hydrocarbons, Analytical Method SW8270C-SIM
ND <0.01 Not detected at or above listed reporting limit
NE Not established

San Francisco Bay Regional Water Quality Control Board (SFRWQCB) Environmental Screening Levels (ESLs) for commercial/industrial land use where groundwater is a potential drinking water resource from Tables A and A-2, and Tables C and C-2, *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater* . RWQCB, Interim Final - May 2013.

San Francisco Bay Regional Water Quality Control Board (SFRWQCB) Environmental Screening Levels (ESLs) for commercial/industrial land use where groundwater is not a potential drinking water resource from Tables B and B-2, and Tables D and D-2, *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater* . RWQCB, Interim Final - May 2013.

TABLE 5
Summary of Groundwater Analytical Data
Total Petroleum Hydrocarbons and VOCs

Former McGrath Steel
6655 Hollis Street
Emeryville, California
AllWest Project No. 13019.23

Sample / Field Point Name	Date Sampled	TPH-g (µg/L)	TPH-ms (µg/L)	TPH-d (µg/L)	TPH-mo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other VOCs (µg/L)
MW-3	10/17/1995	8,600	ND <100	220	NA	730	2,100	270	1,400	NA	NA
MW-3 qualifiers	8/22/2005	39,000	NA	2,500 L,Y	NA	3,100	3,800	1,100	4,700	7,200	Oxygenates - ND (varies)
MW-3 qualifiers	12/20/2005	54,000	NA	2,600 L,Y	NA	6,000	10,000	1,700	9,600	12,000	Oxygenates - ND (varies)
MW-3 qualifiers	8/2/2012	27,000	14,000 d1	33,000 e4, e2	680 e4, e2	1,300	3,800	400	4,500	630	400 (TBA), 110 (trans-1,3-dichloropropene), 250 (naphthalene), 1,100 (1,2,4-trimethylbenzene), 280 (1,3,5-trimethylbenzene), ND (others - varies)
MW-3 qualifiers	12/18/2012	21,000	12,000 d1	2,600 e4	ND <250 e4	830	1,400	450	2,600	840	140 (naphthalene), 630 (1,2,4-trimethylbenzene), 78 (n-propyl benzene), 190 (1,3,5-trimethylbenzene), ND (others - varies)
MW-3 qualifiers	6/27/2013	18,000	NA	2,300 e4	NA	1,900	2,000	540	2,700	1,900	520 (TBA), 170 (naphthalene), 650 (1,2,4-trimethylbenzene), 84 (n-propyl benzene), 200 (1,3,5-trimethylbenzene), ND, reporting limits vary (others)
MW-3 qualifiers	8/7/2013	130,000 d1, b6	54,000 d1, b6	24,000 e4, b6	NA	9,800 b6, c8	16,000 b6, c8	4,200 b6, c8	24,000 b6, c8	6,300 b6, c8	1,100 (naphthalene), 5,200 (1,2,4-trimethylbenzene), 620 (n-propyl benzene), 1,500 (1,3,5-trimethylbenzene), others ND, reporting limits vary b6, c8
B15 qualifiers	1/17/2013	1,900 b1	1,300 d1, b1	740 e4, b1	NA	3.1 b1	32 b1	24 b1	160 b1	ND <1.2 b1	9.8 (n-butyl benzene), 27 (naphthalene), 100 (1,2,4-trimethylbenzene), 1.8 (sec-butyl benzene), 2.6 (isopropylbenzene), 12 (n-propyl benzene), 53 (TCE), 33 (1,3,5-trimethylbenzene), ND (others - varies) b1
B16 qualifiers	1/17/2013	47,000 b1	ND <5,000 d1, b1	6,300 e4, b1	NA	2,200 b1	5,700 b1	1,100 b1	5,800 b1	900 b1	190 (naphthalene), 1,600 (1,2,4-trimethylbenzene), 180 (n-propyl benzene), 460 (1,3,5-trimethylbenzene), ND (others - varies) b1
B17 qualifiers	1/16/2013	190 b1	ND <50 b1	320 e7, e2, b1	NA	ND <0.5 b1	ND <0.5 b1	ND <0.5 b1	ND <0.5 b1	ND <0.5 b1	ND - varies b1
B18 qualifiers	1/16/2013	8,300 b1	4,800 d2, b1	1,500 e4, b1	NA	17 b1	ND <12 b1	290 b1	1,100 b1	ND <12 b1	64 (naphthalene), 380 (1,2,4-trimethylbenzene), 15 (isopropylbenzene), 57 (n-propyl benzene), 100 (1,3,5-trimethylbenzene), ND (others - varies) b1

TABLE 5
Summary of Groundwater Analytical Data
Total Petroleum Hydrocarbons and VOCs

Former McGrath Steel
6655 Hollis Street
Emeryville, California
AllWest Project No. 13019.23

Sample / Field Point Name	Date Sampled	TPH-g (µg/L)	TPH-ms (µg/L)	TPH-d (µg/L)	TPH-mo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other VOCs (µg/L)
B19 qualifiers	1/16/2013	5,000 b1	3,000 d2, b1	1,300 e4, b1	NA	6.5 b1	ND <5.0 b1	150 b1	350 b1	ND <5.0 b1	27 (n-butyl benzene), 44 (naphthalene), 290 (1,2,4-trimethylbenzene), 7.3 (sec-butyl benzene), 14 (isopropylbenzene), 57 (n-propyl benzene), 89 (1,3,5-trimethylbenzene), ND (others - varies) b1
B20 qualifiers	1/17/2013	160,000 b1, b6	22,000 b1, b6, d1	95,000 b1, b6, e4	NA	21,000 b1, b6	47,000 b1, b6	3,700 b1, b6	21,000 b1, b6	2,300 b1, b6	1,800 (1,2,4-trimethylbenzene), ND (others - varies) b1, b6
B21 qualifiers	1/18/2013	41,000	16,000 d1	3,900 e4	NA	ND <2,500	6,100	ND <2,500	6,200	140,000	ND (varies)
B22 qualifiers	1/18/2013	110,000	17,000 d1	8,800 e4	NA	7,700	26,000	3,500	21,000	8,100	910 (naphthalene), 2,300 (1,2,4-trimethylbenzene), 590 (1,3,5-trimethylbenzene), ND (others varies), ND (others - varies)
B23 qualifiers	1/17/2013	170 b1	160 b1, d1	140 b1, e2, e4	NA	ND <0.5 b1	1.3 b1	1.3 b1	5.0 b1	1.8 b1	0.96 (n-butyl benzene), 2.1 (naphthalene), 3.0 (1,2,4-trimethylbenzene), 1.3 (sec-butyl benzene), 3.8 (isopropylbenzene), 9.3 (n-propyl benzene), 0.76 (1,3,5-trimethylbenzene), ND (others - varies) b1
B24 qualifiers	1/18/2013	17,000	7,600 d1	8,800 e4	NA	340	2,100	520	2,800	2,500	130 (naphthalene), 710 (1,2,4-trimethylbenzene), 87 (n-propyl benzene), 220 (1,3,5-trimethylbenzene), ND (others varies)
B25 qualifiers	1/16/2013	270 b1	87 d2, b1	340 e7, e4, e2, b1	NA	ND <0.5 c8, b1	ND <0.5 c8, b1	4.3 c8, b1	1.4 c8, b1	23 c8, b1	2.4 (2-butanone), 0.55 (1,2-DCA), 3.0 (naphthalene), 4.8 (1,2,4-trimethylbenzene), 1.5 (1,1-dichloroethene), 1.5 (n-propyl benzene), 0.83 (TCE), 1.0 (1,3,5-trimethylbenzene), ND (others - varies) c8, b1
AMW-1 qualifiers	8/7/2013	ND <50 b1	ND <50 b1	110 e7, e1, b1	NA	ND <1.2 b1	ND <1.2 b1	ND <1.2 b1	ND <1.2 b1	2.5 b1	2.0 (1,1-dichloroethane), 39 (1,1-dichloroethene), 7.3 (TCE), ND (others, reporting limits vary) b1
AMW-2 qualifiers	8/7/2013	1,300 d1, b1	550 d1, b1	210 e4, e2, b1	NA	66 b1	74 b1	48 b1	280 b1	350 b1	22 (naphthalene), 46 (1,2,4-trimethylbenzene), 6.4 (n-propyl benzene), 29 (1,3,5-trimethylbenzene), ND (others, reporting limits vary) b1

TABLE 5
Summary of Groundwater Analytical Data
Total Petroleum Hydrocarbons and VOCs

Former McGrath Steel
6655 Hollis Street
Emeryville, California
AllWest Project No. 13019.23

Sample / Field Point Name	Date Sampled	TPH-g (µg/L)	TPH-ms (µg/L)	TPH-d (µg/L)	TPH-mo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other VOCs (µg/L)
AMW-3	8/7/2013	2,000	1,000	340	NA	17	72	83	360	ND <5.0	7.4 (n-butyl benzene), 18 (naphthalene), 76 (1,2,4-trimethylbenzene), 5.2 (1,1-dichloroethane), 140 (1,1-dichloroethene), 18 (n-propyl benzene), 5.3 (1,1,1-trichloroethane), 20 (TCE), 39 (1,3,5-trimethylbenzene), ND (others, reporting limits vary)
qualifiers		d1, b1	d1, b1	e4, e2, b1							
RWQCB Commercial/Industrial ESLs, drinking water*		100	100	100	100	1.0	40	30	20	5.0	0.5 (1,2-DCA), 12 (TBA), 5.0 (TCE), 0.5 (1,3-dichloropropene) 6.2 (naphthalene) NE or varies (others)
RWQCB Commercial/Industrial ESLs, non-drinking water*		500	500	640	640	27	130	43	100	1,800	100 (1,2-DCA), 18,000 (TBA), 130 (TCE), 24 (1,3-dichloropropene) 24 (naphthalene) NE or vary (others)
RWQCB Commercial/Industrial ESLs, vapor intrusion		NE	NE	NE	NE	270	NE (95,000**)	3,100	NE (37,000**)	100,000	1,000 (1,2-DCA), 1,300 (TCE), 260 (1,3-dichloropropene) 1,600 (naphthalene) NE or vary (others)

Notes:

All results are reported in micrograms per liter (µg/L) [equivalent to parts per billion (ppb)], except where noted.

- 1,2-DCA 1,2-dichloroethane, Analytical Method SW8260B
- TCE trichloroethene, Analytical Method SW8260B
- TPH-g Total petroleum hydrocarbons as gasoline, Analytical Method SW8260B, except samples collected on 10/17/95, 8/22/05 and 12/20/05 Analytical Method SW8015Bm
- TPH-ms Total petroleum hydrocarbons Mineral Spirits Range (C9-C12), Analytical Method SW8015Bm
- TPH-d Total petroleum hydrocarbons as diesel, C10-C23, Analytical Method SW8015B with silica gel cleanup
- TPH-mo Total petroleum hydrocarbons as motor oil, C18-C36, Analytical Method SW8015B with silica gel cleanup
- MTBE Methyl tertiary butyl ether, Analytical Method SW8260B
- TBA Tertiary butyl alcohol, Analytical Method SW8260B
- BTEX Benzene, Toluene, Ethylbenzene, Xylenes, Analytical Method SW8021B on 10/17/95 only; Analytical Method SW8260B on all other dates
- VOCs Volatile organic compounds, Analytical Method SW8260B
- ND <100 Not detected at or above listed reporting limit
- NE Not established
- NA Not analyzed

San Francisco Bay Regional Water Quality Control Board (SFRWQCB) Environmental Screening Levels (ESLs) for commercial/industrial land use where groundwater is a potential drinking water resource from Tables A and F-1a, *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*. RWQCB, Interim Final - May 2013.

San Francisco Bay Regional Water Quality Control Board (SFRWQCB) Environmental Screening Levels (ESLs) for commercial/industrial land use where groundwater is not a potential drinking water resource from Tables B and F-1b, *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*. RWQCB, Interim Final - May 2013.

San Francisco Bay Regional Water Quality Control Board (SFRWQCB) Groundwater Screening Levels for Evaluation of Potential Vapor Intrusion (Volatile Chemicals Only) for commercial/industrial land use from Table E-1, *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*. RWQCB, Interim Final - May 2013.

* The subject site lies within the City of Emeryville, where groundwater use as a drinking water resource is currently prohibited by City ordinance due to widespread

TABLE 5
Summary of Groundwater Analytical Data
Total Petroleum Hydrocarbons and VOCs

Former McGrath Steel
6655 Hollis Street
Emeryville, California
AllWest Project No. 13019.23

Sample / Field Point Name	Date Sampled	TPH-g (µg/L)	TPH-ms (µg/L)	TPH-d (µg/L)	TPH-mo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other VOCs (µg/L)
---------------------------------	-----------------	-----------------	------------------	-----------------	------------------	-------------------	-------------------	-----------------------------	----------------------------	----------------	----------------------

regional contamination, and no plans exist for future beneficial groundwater use.

** Residential vapor intrusion ESL - commercial ESL for vapor intrusion not established, soil gas sampling recommended.

Laboratory Qualifiers:

- L - lighter hydrocarbons contributed to the quantitation
- Y - sample exhibits chromatographic pattern which does not resemble standard
- b1 - aqueous sample that contains greater than ~1 vol. % sediment
- b6 - lighter than water immiscible sheen/product is present
- c8 - sample pH is greater than 2
- d1 - weakly modified or unmodified gasoline is significant
- d2 - heavier gasoline range compounds are significant (aged gasoline?)
- e2 - diesel range compounds are significant; no recognizable pattern
- e4 - gasoline-range compounds are significant
- e7 - oil range compounds are significant

TABLE 6
Summary of Groundwater Analytical Data
PNAs/PAHs

Former McGrath Steel
6655 Hollis Street
Emeryville, California
AllWest Project No. 13019.23

Sample / Field Point Name	Date Sampled	Benzo (a) anthracene (µg/L)	Fluoranthene (µg/L)	1-Methylnaphthalene (µg/L)	2-Methylnaphthalene (µg/L)	Naphthalene (µg/L)	Phenanthrene (µg/L)	Pyrene (µg/L)	Other PNAs/PAHs (µg/L)
B15 (qualifiers)	1/17/2013 b1	ND <0.5	ND <0.5	ND <0.5	ND <0.5	ND <0.5	ND <0.5	ND <0.5	ND <0.5
B16	1/17/2013	NA	NA	NA	NA	NA	NA	NA	NA
B17 (qualifiers)	1/16/2013 b1	ND <0.5	ND <0.5	ND <0.5	ND <0.5	ND <0.5	ND <0.5	ND <0.5	ND <0.5
B18 (qualifiers)	1/16/2013 b1	ND <5.0	ND <5.0	22	36	67	ND <5.0	ND <5.0	ND <5.0
B19 (qualifiers)	1/16/2013 b1	ND <0.5	ND <0.5	15	27	0.67	ND <0.5	ND <0.5	ND <0.5
B20 (qualifiers)	1/17/2013 b1	ND <50	ND <50	460	750	1,700	ND <50	ND <50	ND <50
B21	1/18/2013	NA	NA	NA	NA	NA	NA	NA	NA
B22	1/18/2013	ND <50	ND <50	280	420	1,300	ND <50	ND <50	ND <50
B23 (qualifiers)	1/17/2013 b1	0.56	0.94	ND <0.5	ND <0.5	ND <0.55	0.75	1.0	ND <0.5
B24	1/18/2013	ND <5.0	ND <5.0	20	30	80	ND <5.0	ND <5.0	ND <5.0
B25 (qualifiers)	1/16/2013 b1	ND <0.5	ND <0.5	4.4	6.8	12	0.88	ND <0.5	ND <0.5
MW-3 qualifiers	8/7/2013 b6	ND <50	ND <50	390	710	890	ND <50	ND <50	ND <50
AMW-1 qualifiers	8/7/2013 b1	ND <0.5	ND <0.5	ND <0.5	ND <0.5	ND <0.5	ND <0.5	ND <0.5	ND <0.5
AMW-2 qualifiers	8/7/2013 b1	ND <0.5	ND <0.5	1.5	1.6	7.7	ND <0.5	ND <0.5	ND <0.5
AMW-3 qualifiers	8/7/2013 b1	ND <0.5	ND <0.5	3.2	ND <0.5	ND <0.5	ND <0.5	ND <0.5	ND <0.5
RWQCB Commercial/Industrial ESLs, drinking water*		0.027	8.0	NE	2.1	6.2	4.6	2.0	Vary
RWQCB Commercial/Industrial ESLs, non-drinking water*		0.027	8.0	NE	2.1	24	4.6	2.0	Vary

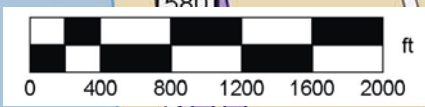
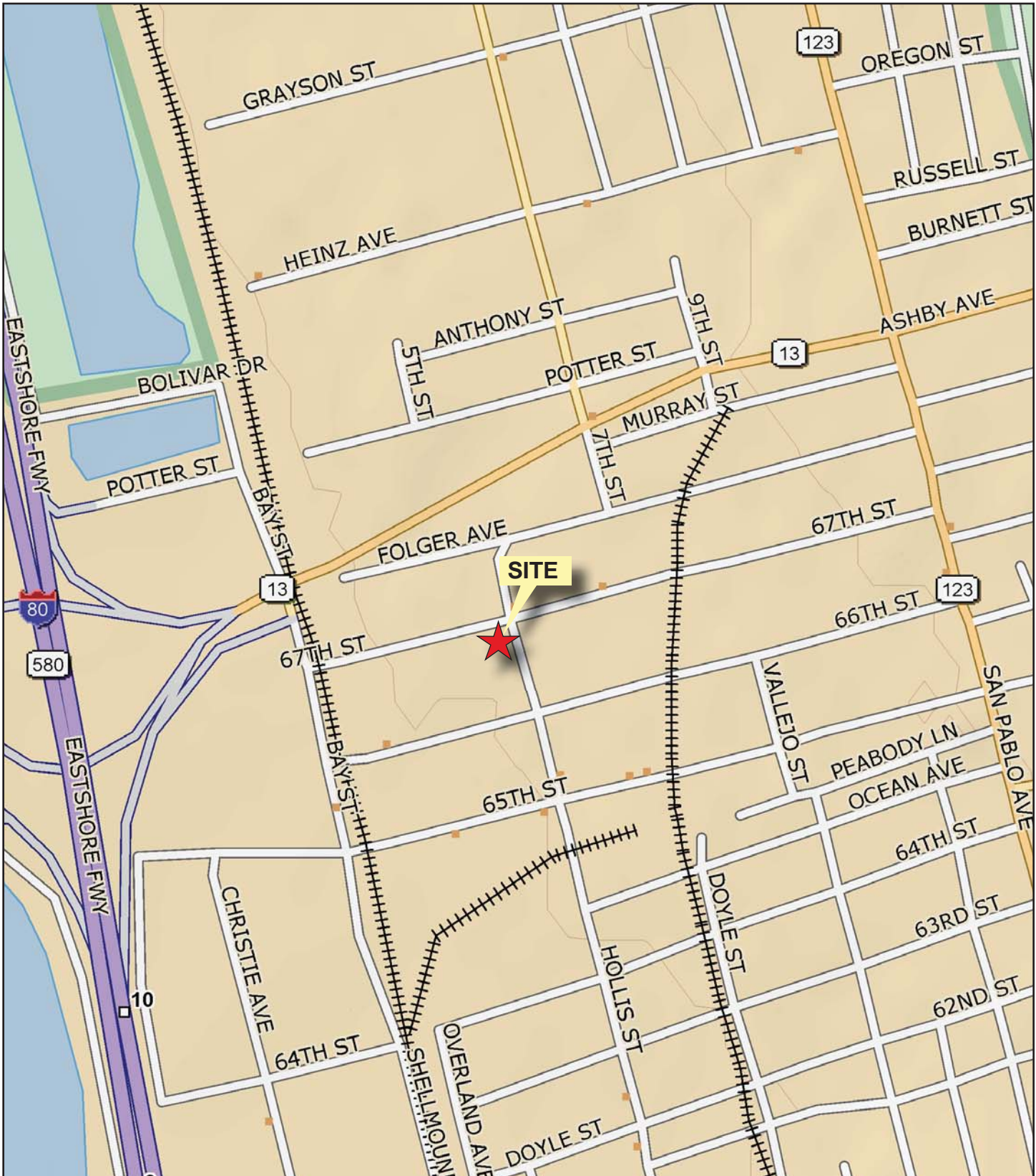
Notes: All results are reported in micrograms per liter (µg/L) [equivalent to parts per billion (ppb)], except where noted.
All samples analyzed by McCampbell Analytical, Inc., Pittsburg, California
PNAs/PAHs = Polynuclear Aromatic Hydrocarbons/Polycyclic Aromatic Hydrocarbons by analytical method SW8270C-SIM
ND (<0.5) - Not detected at or above listed reporting limit
NE - Not established

San Francisco Bay Regional Water Quality Control Board (SFRWQCB) Environmental Screening Levels (ESLs) for commercial/industrial land use where groundwater is a potential drinking water resource from Tables A and F-1a, *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*.
San Francisco Bay Regional Water Quality Control Board (SFRWQCB) Environmental Screening Levels (ESLs) for commercial/industrial land use where groundwater is not a potential drinking water resource from Tables B and F-1b, *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*. RWQCB, Interim Final - May 2013.

Laboratory Qualifiers:

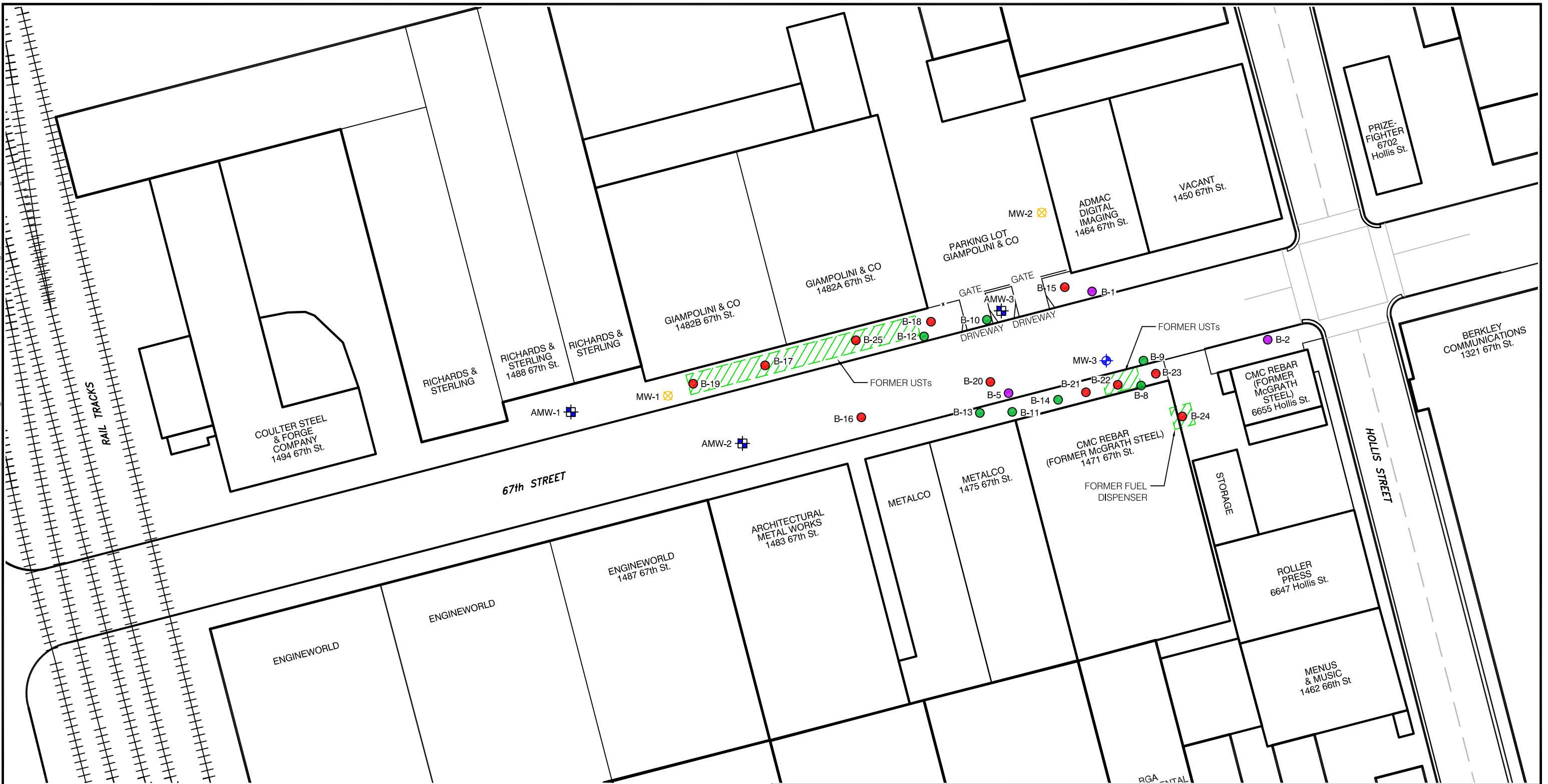
b1 - Aqueous sample that contains greater than ~1 vol. % sediment
b6 - Lighter than water immiscible sheen/product is present.

FIGURES



 MN (12.5° E)		VICINITY MAP
		FIGURE 1
		6655 HOLLIS STREET
		EMERYVILLE, CALIFORNIA 94608
		SOURCE: DELORME TOPO
		PREPARED BY: D. CAMACHO
		DATE: 8/21/13
	PROJECT NO. 13019.23	

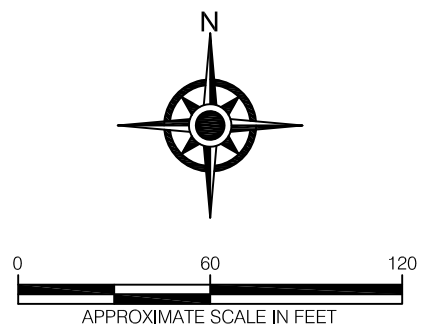
C:\Drawing Files\AllWest Environmental\13019.23\Fig 2_Site Plan W-Boring & MW Locations 01-2013 & 08-2013 - 08/27/2013



LEGEND

- MW-2 ☒ MONITORING WELL (CLEARPRINT/ESC - DESTROYED, 2005)
- MW-3 ⊕ MONITORING WELL (ESC, 1995)
- AMW-3 ⊕ MONITORING WELL (ALLWEST, 2013)
- B-5 ● SOIL BORING (WEISS ASSOCIATES, 1998)
- B-14 ● SOIL BORING (WEISS ASSOCIATES, 2005)
- B-25 ● SOIL BORING (JANUARY 16, 17, & 18, 2013)

- ▨ FORMER USTs, FUEL DISPENSERS (REMOVED 1994 & 1996)
- x — FENCE



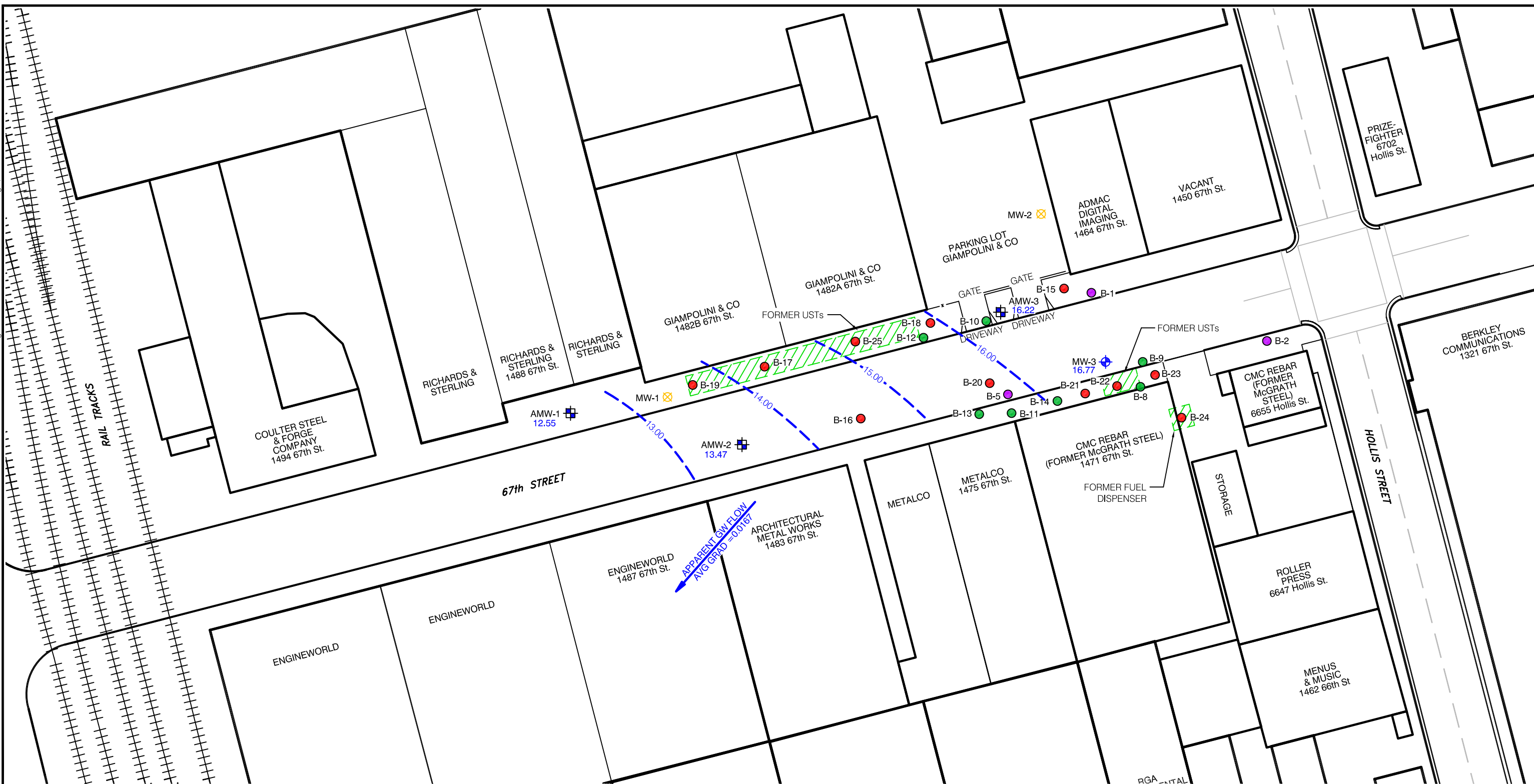
PROJECT NO.
13019.23

**FIGURE 2
SITE PLAN WITH BORING AND MONITORING
WELL LOCATIONS
JANUARY 2013 AND AUGUST 2013**

Former McGrath Steel
6655 Hollis Street, Emeryville, California

SOURCE: Morrow Surveying and Google Earth

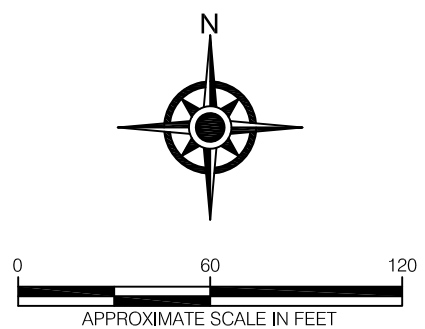
DRAWN BY: CM (08/27/2013)



LEGEND

- MW-2 ☒ MONITORING WELL (CLEARPRINT/ESC - DESTROYED, 2005)
- MW-3 ⊕ MONITORING WELL (ESC, 1995)
- AMW-3 ⊕ 16.22 MONITORING WELL (ALLWEST, 2013) AND GROUNDWATER ELEVATION (ft.) NAVD 88 DATUM
- B-5 ● SOIL BORING (WEISS ASSOCIATES, 1998)
- B-14 ● SOIL BORING (WEISS ASSOCIATES, 2005)
- B-25 ● SOIL BORING (JANUARY 16, 17, & 18, 2013)

- ← GROUNDWATER FLOW DIRECTION IN FEET PER FOOT
- ▨ FORMER USTs, FUEL DISPENSERS (REMOVED 1994 & 1996)
- x - FENCE




AllWest

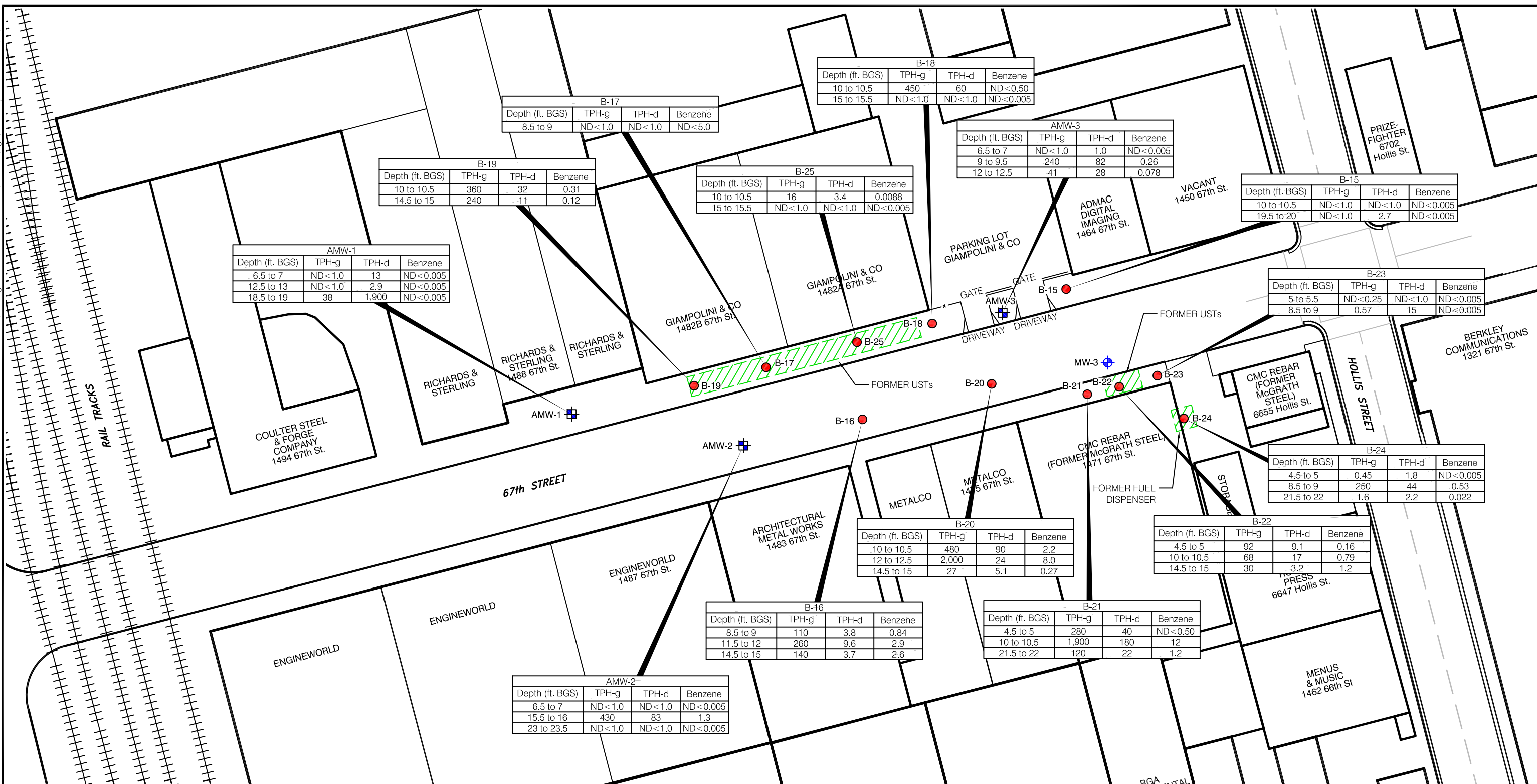
PROJECT NO.
13019.23

FIGURE 3
GROUNDWATER ELEVATION CONTOURS
AUGUST 7, 2013

Former McGrath Steel
6655 Hollis Street, Emeryville, California

SOURCE: Morrow Surveying and Google Earth

DRAWN BY: CM (08/27/2013)



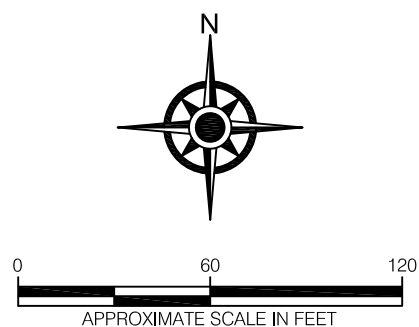
LEGEND

- MW-3 MONITORING WELL (ESC, 1995)
- AMW-3 MONITORING WELL (ALLWEST, 2013)
- B-25 SOIL BORING (JANUARY 16, 17, & 18, 2013)
- FORMER USTs, FUEL DISPENSERS (REMOVED 1994 & 1996)
- FENCE

NOTE:

- TPH-g - Total Petroleum Hydrocarbons as Gasoline
- TPH-d - Total Petroleum Hydrocarbons as Diesel
- ft. BGS - Feet Below Ground Surface

All Analytical results in milligrams per kilogram (mg/kg)



AllWest

PROJECT NO.
13019.23

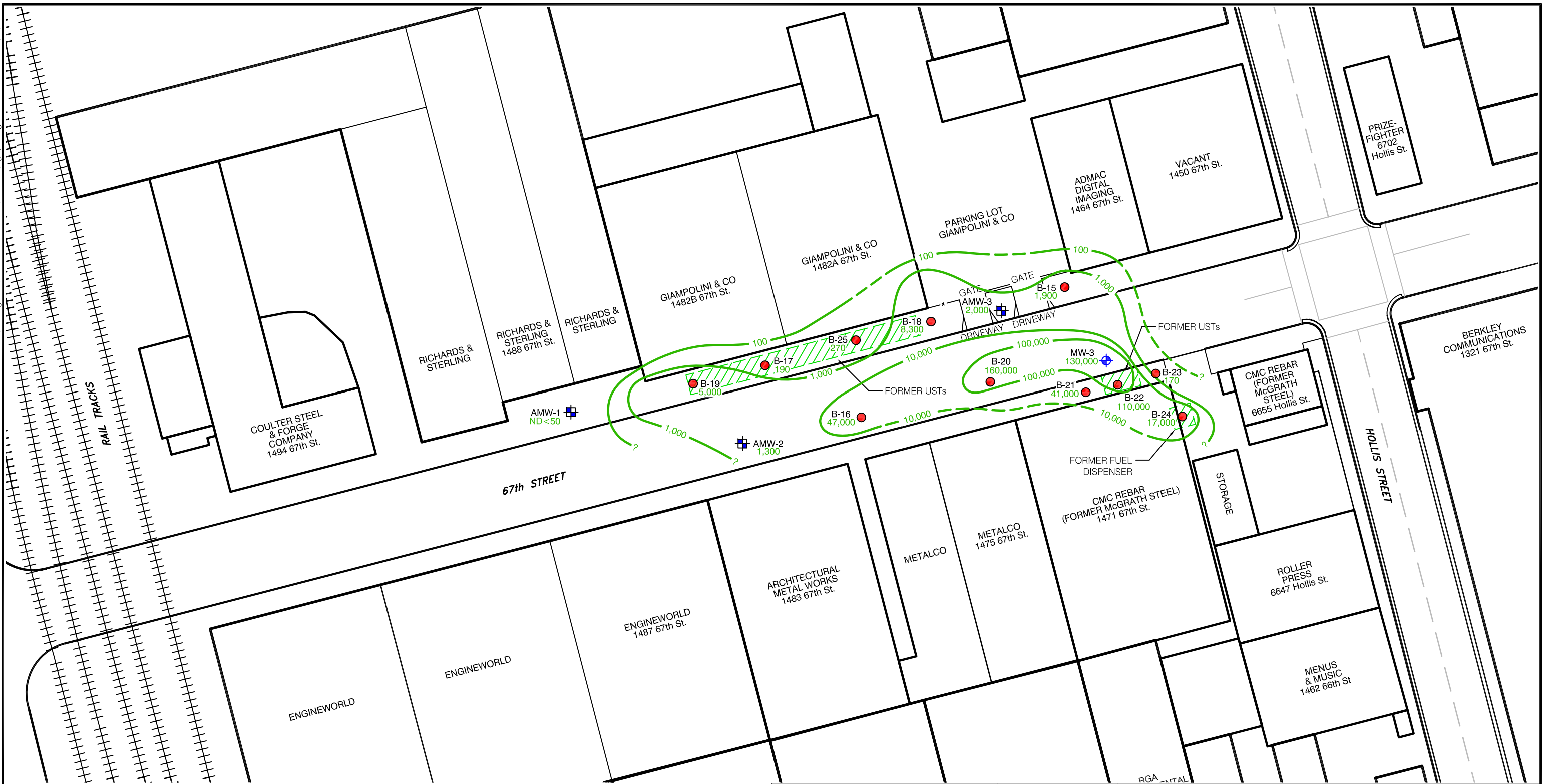
FIGURE 4

SOIL ANALYTICAL RESULTS




Former McGrath Steel
6655 Hollis Street, Emeryville, California

SOURCE: Morrow Surveying and Google Earth
DRAWN BY: CM (08/28/2013)

C:\Drawing Files\AllWest Environmental\13019.23\Fig 5, TPH-g Iso-Contours In GW - 09/10/2013

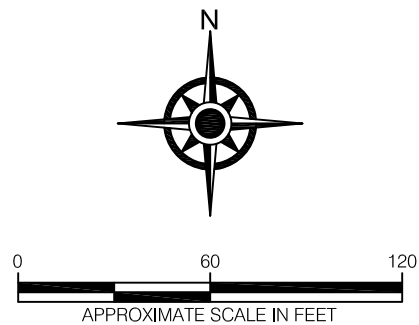


LEGEND

- MW-3  MONITORING WELL (ESC, 1995) WITH TPH-g CONCENTRATION IN MICROGRAMS PER LITER (µg/L) - DASHED WHERE INFERRED
- AMW-3  MONITORING WELL (ALLWEST, 2013) WITH TPH-g CONCENTRATION IN MICROGRAMS PER LITER (µg/L) - DASHED WHERE INFERRED
- B-25  SOIL BORING (JANUARY 16, 17, & 18, 2013) WITH TPH-g CONCENTRATION IN MICROGRAMS PER LITER (µg/L) - DASHED WHERE INFERRED

-  FORMER USTs, FUEL DISPENSERS (REMOVED 1994 & 1996)
-  FENCE

NOTE:
TPH-g - Total Petroleum Hydrocarbons as Gasoline



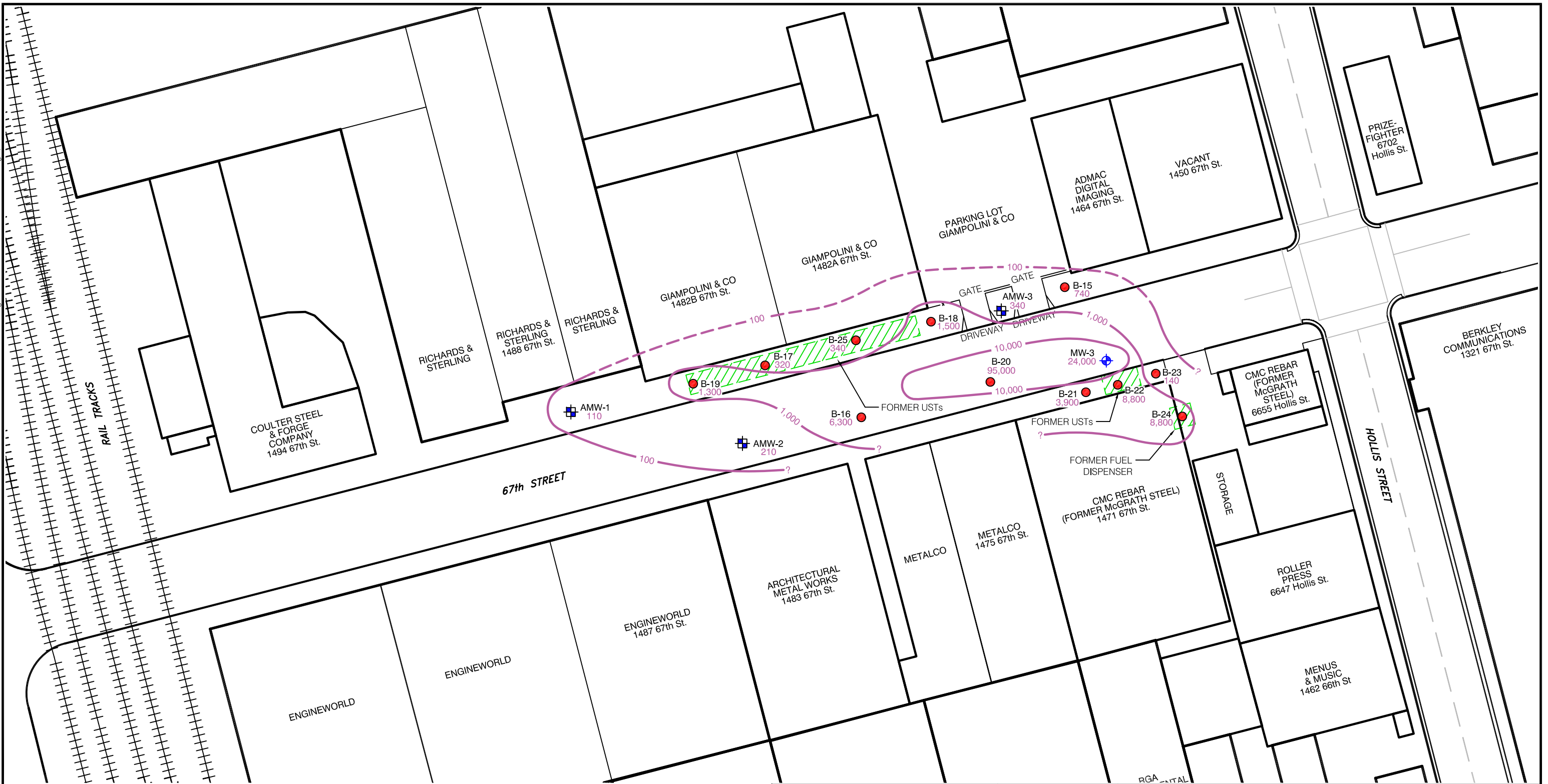

AllWest

PROJECT NO.
13019.23




FIGURE 5
TPH-g ISOCONCENTRATION CONTOURS IN GROUNDWATER

Former McGrath Steel
6655 Hollis Street, Emeryville, California

SOURCE: Morrow Surveying and Google Earth
DRAWN BY: CM (08/27/2013)

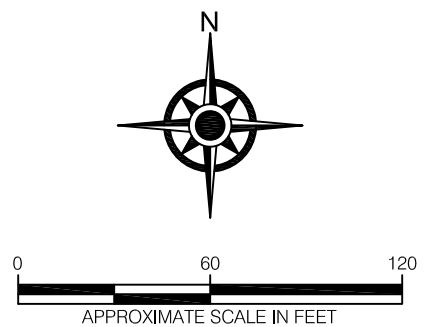


LEGEND

- MW-3  MONITORING WELL (ESC, 1995) WITH TPH-d CONCENTRATION IN MICROGRAMS PER LITER (µg/L) - DASHED WHERE INFERRED
24,000
- AMW-3  MONITORING WELL (ALLWEST, 2013) WITH TPH-d CONCENTRATION IN MICROGRAMS PER LITER (µg/L) - DASHED WHERE INFERRED
340
- B-25  SOIL BORING (JANUARY 16, 17, & 18, 2013) WITH TPH-d CONCENTRATION IN MICROGRAMS PER LITER (µg/L) - DASHED WHERE INFERRED
340

-  FORMER USTs, FUEL DISPENSERS (REMOVED 1994 & 1996)
-  FENCE

NOTE:
TPH-d - Total Petroleum Hydrocarbons as Diesel




AllWest

PROJECT NO.
13019.23

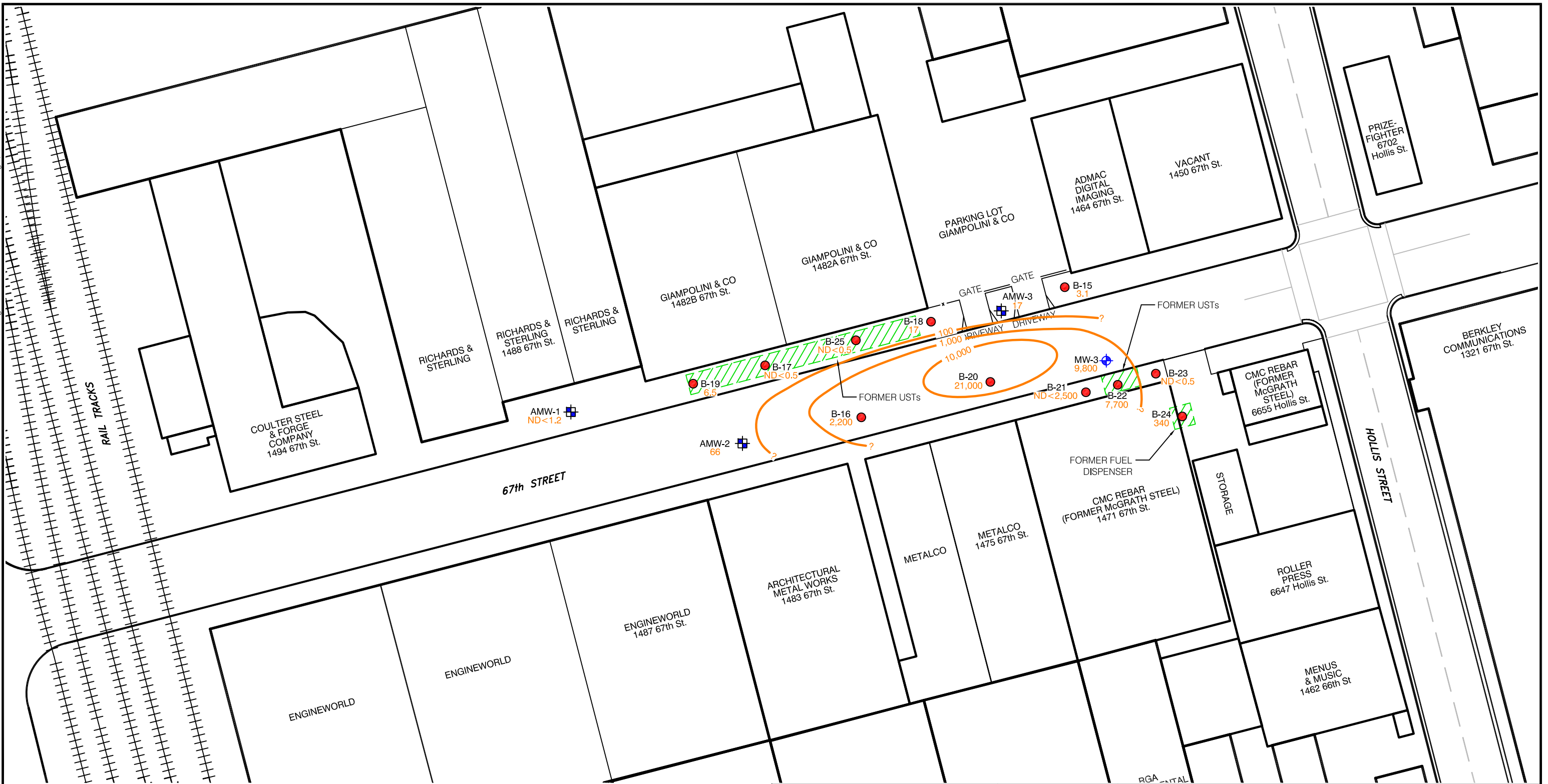
FIGURE 6

TPH-d ISOCONCENTRATION CONTOURS IN GROUNDWATER




Former McGrath Steel
6655 Hollis Street, Emeryville, California

SOURCE: Morrow Surveying and Google Earth

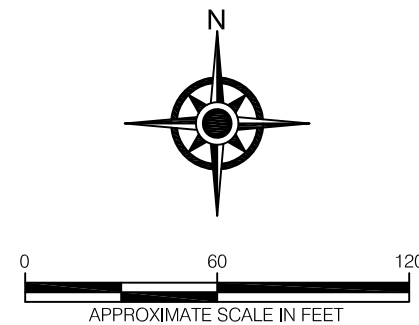
DRAWN BY: CM (08/27/2013)



LEGEND

- MW-3  MONITORING WELL (ESC, 1995) WITH BENZENE CONCENTRATION IN MICROGRAMS PER LITER (µg/L) - DASHED WHERE INFERRED
9,800
- AMW-3  MONITORING WELL (ALLWEST, 2013) WITH BENZENE CONCENTRATION IN MICROGRAMS PER LITER (µg/L) - DASHED WHERE INFERRED
17
- B-25  SOIL BORING (JANUARY 16, 17, & 18, 2013) WITH BENZENE CONCENTRATION IN MICROGRAMS PER LITER (µg/L) - DASHED WHERE INFERRED
ND<0.5

-  FORMER USTs, FUEL DISPENSERS (REMOVED 1994 & 1996)
-  FENCE



PROJECT NO.
13019.23

FIGURE 7
BENZENE ISOCONCENTRATION CONTOURS
IN GROUNDWATER

Former McGrath Steel
6655 Hollis Street, Emeryville, California

SOURCE: Morrow Surveying and Google Earth

DRAWN BY: CM (08/27/2013)

APPENDIX A

Alameda County Public Works Agency - Water Resources Well Permit



399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 11/30/2012 By jamesy

Permit Numbers: W2012-0833
Permits Valid from 12/19/2012 to 12/21/2012

Application Id: 1354308570816
Site Location: 6655 Hollis Street
Project Start Date: 12/19/2012
Assigned Inspector: Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org

City of Project Site: Emeryville

Completion Date: 12/21/2012

Applicant: AllWest Environmental, Inc. - Christopher Houlihan
530 Howard Street #300, San Francisco, CA 94105
Phone: 415-391-2510

Property Owner: Walter Merkle
MCG Investments, Kay & Merkle, 100 The Embarcadero, San Francisco, CA 94105
Phone: 415-357-1200

Client: ** same as Property Owner **

Receipt Number: WR2012-0388 Total Due: \$265.00
Payer Name : Marc Cunningham Total Amount Paid: \$265.00
Paid By: MC PAID IN FULL

Works Requesting Permits:

Borehole(s) for Geo Probes-Sampling 24 to 72 hours only - 11 Boreholes
Driller: Gregg Drilling & Testing, Inc. - Lic #: 485165 - Method: DP

Work Total: \$265.00

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2012-0833	11/30/2012	03/19/2013	11	2.50 in.	25.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.
2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.
3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.
4. Applicant shall contact Steve Miller for an inspection time at (510) 670-5517 or email to stevem@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
5. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no

Alameda County Public Works Agency - Water Resources Well Permit

case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

6. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.

7. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

8. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

Alameda County Public Works Agency - Water Resources Well Permit



399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 07/12/2013 By priest

Permit Numbers: W2013-0502 to W2013-0504
Permits Valid from 07/30/2013 to 07/31/2013

Application Id: 1373326704868
Site Location: 6655 Hollis Street/Former McGrath Steel
Project Start Date: 07/30/2013
Assigned Inspector: Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org

City of Project Site: Emeryville

Completion Date: 07/31/2013

Applicant: AllWest Environmental, Inc. - Christopher Houlihan
530 Howard Street, Suite 300, San Francisco, CA 94105

Phone: 415-391-2510

Property Owner: Walter Merkle
MCG Investments, Kay & Merkle, 100 The Embarcadero, San Francisco, CA 94105

Phone: 415-357-1200

Client: ** same as Property Owner **
Contact: Christopher Houlihan

Phone: 415-391-2510
Cell: 415-847-1761

	Total Due:	\$1191.00
Receipt Number: WR2013-0239	Total Amount Paid:	\$1191.00
Payer Name : Marc Cunningham	Paid By: MC	PAID IN FULL

Works Requesting Permits:

Well Construction-Monitoring-Monitoring - 3 Wells
Driller: Woodward Drilling - Lic #: 710079 - Method: hstem

Work Total: \$1191.00

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2013-0502	07/12/2013	10/28/2013	AMW-1	8.00 in.	2.00 in.	7.00 ft	30.00 ft
W2013-0503	07/12/2013	10/28/2013	AMW-2	8.00 in.	2.00 in.	7.00 ft	30.00 ft
W2013-0504	07/12/2013	10/28/2013	AMW-3	8.00 in.	2.00 in.	7.00 ft	30.00 ft

Specific Work Permit Conditions

1. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

2. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

3. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the

Alameda County Public Works Agency - Water Resources Well Permit

permits and requirements have been approved or obtained.

4. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Include permit number and site map.
 5. Applicant shall submit the copies of the approved encroachment permit to this office within 60 days.
 6. Applicant shall contact Steve Miller for an inspection time at (510) 670-5517 or email to stevem@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
 7. Wells shall have a Christy box or similar structure with a locking cap or cover. Well(s) shall be kept locked at all times. Well(s) that become damaged by traffic or construction shall be repaired in a timely manner or destroyed immediately (through permit process). No well(s) shall be left in a manner to act as a conduit at any time.
 8. Minimum surface seal thickness is two inches of cement grout placed by tremie.
 9. Minimum seal (Neat Cement seal) depth for monitoring wells is 5 feet below ground surface(BGS) or the maximum depth practicable or 20 feet.
 10. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.
-



City of Emeryville • Department of Public Works

Encroachment Permit

APPLICANT AllWest Environmental
CONTACT PERSON Chris Houlihan
ADDRESS 530 Howard St., SF CA 94105
PHONE 415-391-2510
FAX 415-391-2008

OWNER/DEVELOPER OF FACILITIES
Walter Merkle % Kay & Merkle
ADDRESS 100 The Embarcadero
SF CA 94105
415-357-1200

CONTRACTOR PERFORMING WORK
Gregg Drilling
CONTACT PERSON Paul Rogers
ADDRESS 950 Howe Rd, Martinez CA
PHONE 925-335-0480 FAX 925-313-0302
LICENSE NO. 485165 CLASS C-57

Yes No CURRENT CITY BUSINESS LICENSE ON FILE

Yes No PROVIDE PROOF OF INSURANCE

EST. START DATE 1/16/13 EST. COMPLETION DATE 1/18/13 EST. COST IN CITY R/W

LOCATION OF WORK 6655 Hollis St., and 67th St., Emeryville, CA

CHECK ALL THAT APPLY

- Traffic Control Survey Sidewalk Detour Dumpster Temporary No Parking
Private Facilities on Public Right of Way Construction Sidewalk Driveway Approach Curb & Gutter Pedestrian Ramp Water Service Gas Service Electric Service Roof Drain Utility Maintenance Fence Excavation Obstruction Access Road Monitoring Well Sewer Lateral Storm Drain Crane Block Party

FULLY DESCRIBE PROPOSED WORK WITHIN CITY RIGHT-OF-WAY (additional space on reverse if needed):
Attach 3 complete sets of plans 8 1/2 X 11, if applicable.

Five (5) soil borings in sidewalk along north side of 67th Street. Three (3) soil borings in sidewalk, two (2) borings in street along south side of 67th St. 2.5-inch diameter boreholes. Temporary No Parking signs on both sides of street - Sidewalk parking is common on this street. Boreholes will be patched in sidewalks. Street boreholes will be repaired with concrete and darkened with lampblack to match surrounding asphalt.

I hereby agree to protect and indemnify the City of Emeryville and hold it harmless in every way from all claim or suits for injury or damage to persons or property as set forth in the Standard Provisions. I agree not to begin construction until all materials to be used are on hand; to perform all work in accordance with the plans submitted (if any), the Standard Provisions to Encroachment Permit, and all applicable Special Conditions of Approval, and to pay all inspection and engineering costs in addition to those paid at the time of issuance of this permit. I further agree to complete the work to the satisfaction of the City Engineer and if for any reason the City of Emeryville is required to complete this work, I will pay all costs for such work.

Applicant Signature [Signature] Date 1/4/13

After final inspection is approved, please contact the Public Works Department at 510-596-4330 to determine final cost, and for final payment or reimbursement of deposit.

Permit No. 21301147 Date 1-10-12
Application Fee \$167
Long Term Permit Fee, Beyond 30 days \$
'No Parking Signs' Qty Total \$
Permit Inspection Deposit (2 hr. min.) \$202
Cost Recovery Estimate \$
Arborist Recovery Estimate \$
Required Security Deposit:
\$1,000 cash \$1000
\$10,000 Bond, Bond #
100% Perf. Bond,
Bond Value: Bond #
Total Payment Required \$1369
Received: \$1369 Date 1/10/13
Receipt #
Failure to obtain approval of a Final Inspection of the work covered by this Encroachment Permit within one (1) year of the estimated completion date shall result in the loss of the security deposit which shall be retained by the City of Emeryville.

FOR CITY USE ONLY

o Temporary Permit # _____ days

o Long Term Permit

The following documents are attached and incorporated into this permit and have been given to the applicant:

- Standard Provisions to Encroachment Permit
- Special Conditions of Approval
- City Standard Details (List Details)
- Handout, Urban Runoff BMP's

Other _____

Remarks _____

- 48 HOUR NOTICE PRIOR TO START OF WORK,
- PROVIDE CONSTRUCTION SCHEDULE 5 DAYS PRIOR TO START OF WORK
- AS-BUILT PLANS REQUIRED

PLEASE CALL FOR INSPECTION AT 510-596-4333 Dennis 455-22 7286

PLEASE NOTIFY POLICE (510-596-3700) AND FIRE (510-596-3750) 24 HOURS IN ADVANCE.

This permit is void unless the work is completed before _____, 20____

This permit is to be strictly construed and no other work than is specifically mentioned is hereby authorized.

APPROVED [Signature] TITLE St. Civil Eng DATE 1/10/13

FINAL INSPECTION APPROVED _____ TITLE _____ DATE _____



**CITY OF EMERYVILLE • DEPARTMENT OF PUBLIC WORKS
ENCROACHMENT PERMIT**

415-391-2008

APPLICANT AllWest Environmental
 CONTACT PERSON Christopher Houlahan
 ADDRESS 530 Howard St. #300
San Francisco, CA 94105
 PHONE 415-391-2510 EMAIL choulahan@allwest1.com
 OWNER/DEVELOPER Walter Merkle
 ADDRESS 1/2 Kay's Merkle, 100 The Embarcadero, San Francisco, CA 94105
 PHONE 415-357-1200 EMAIL wmerkle@kmlaw100.com
 CONTRACTOR DOING WORK Woodward Drilling
 CONTACT PERSON Regan Woodward
 ADDRESS 550 River Road
Rio Vista, CA 94571
 PHONE 707-374-4300 EMAIL ryan@woodwarddrilling.com
 LICENSE NO. 710079 CLASS C-57

Yes No CURRENT CITY BUSINESS LICENSE ON FILE
 Yes No PROVIDE PROOF OF INSURANCE

EST. START DATE 7/30/13 EST. COMPLETION DATE 7/31/13 EST. COST IN CITY RW _____

LOCATION OF WORK 67th Street, Emeryville

CHECK ALL CONDITIONS THAT APPLY:

- Traffic Control Survey Sidewalk Detour Dumpster Temporary No Parking Construction Sidewalk Obstruction
- Private Facilities on Public Right of Way Driveway Approach Curb & Gutter Pedestrian Ramp Water Service Fence
- Excavation Electric Service Roof Drain Utility Maintenance Access Road Monitoring Well Sewer Lateral Crane
- Storm Drain Block Party Gas Service

FULLY DESCRIBE PROPOSED WORK WITHIN CITY RIGHT-OF-WAY (additional space on reverse if needed): Attach 3 complete sets of plans 8 1/2 X 11, if applicable.

Three (3) groundwater monitoring wells with 9-inch manholes (traffic-rated, flush). Wells will be up to 30 feet deep. Two (2) wells in sidewalk along north side of 67th Street. One (1) well in street or sidewalk (utilities permitting) south side of 67th Street. Temporary No Parking signs in all work zones. Wells to be designated AMW-1, AMW-2 and AMW-3.

I hereby agree to protect and indemnify the City of Emeryville and hold it harmless in every way from all claim or suits for injury or damage to persons or property as set forth in the Standard Provisions. I agree not to begin construction until all materials to be used are on hand, to perform all work in accordance with the plans submitted (if any), the Standard Provisions to Encroachment Permit, and all applicable Special Conditions of Approval, and to pay all inspection and engineering costs in addition to those paid at the time of issuance of this permit. I further agree to complete the work to the satisfaction of the City Engineer and if for any reason the City of Emeryville is required to complete this work, I will pay all costs for such work.

Applicant Signature [Signature]

Date 7/9/13

FOR CITY USE ONLY

Permit No. 21307129 Date 7-29-13

Temporary Permit # _____ days Long Term Permit

Permit Administrative Fee.....\$ 171

"No Parking" Signs..... x \$ _____ \$

Permit Inspection Deposit (2 hr. min.).....\$ 202

Cost Recovery Estimate.....\$ _____

Arborist Recovery Estimate.....\$ _____

Long Term Permit Fee (____ mos. x _____)\$ _____

Tree Removal Fee.....\$ _____

Tree Protection Deposit (value x 3 + \$10,000) \$ _____

Required Security Deposit:

\$1,000 cash.....\$ 1000

\$10,000 Bond..... Bond # _____

100% Performance Bond, Bond # _____

Bond Value \$ _____

Total Payment Required.....\$ 1,373

Receipt # 02-19815 Date 7/20/13 Amt. Received: \$ 1373

Business License Certificate of Insurance

FOR CITY USE ONLY

The following documents are attached and incorporated into this permit and have been given to the applicant:

- Standard Provisions to Encroachment Permit
- Special Conditions of Approval
- City Standard Details (List Details)
- Handout, Urban Runoff BMP's
- Other _____

Remarks Pothole underground utilities prior to
drilling. (CF well is adjacent to utility)

- 48 HOUR NOTICE PRIOR TO START OF WORK
- PROVIDE CONSTRUCTION SCHEDULE 5 DAYS PRIOR TO START OF WORK
- AS-BUILT PLANS REQUIRED
- PLEASE CALL FOR INSPECTION AT 510-596-4333
- PLEASE NOTIFY POLICE (510-596-3700) AND FIRE (510-596-3750) 24 HOURS IN ADVANCE.

This permit is void unless the work is completed before 30 Aug 2013

This permit is to be strictly construed and no other work than is specifically mentioned is hereby authorized.

After final inspection is approved, please contact the Public Works Department at 510-596-4330 to determine final cost, and for final payment or reimbursement of deposit. Failure to obtain approval of a Final Inspection of the work covered by this Encroachment Permit within one (1) year of the estimated completion date shall result in the loss of the security deposit which shall be retained by the City of Emeryville.

APPROVED [Signature] TITLE PWD DATE 29 July 13

FINAL INSPECTION APPROVED _____ TITLE _____ DATE _____

APPENDIX B



STANDARD GEOPROBE™ DPT SAMPLING PROCEDURES

Soil Sampling

Direct push technology (DPT) soil core sampling using Geoprobe™ or similar methods is accomplished using a nominal 4-foot long, 2-inch diameter stainless steel drive probe and extension rods. The drive probe is equipped with nominal 1-1/2 inch diameter clear plastic poly tubes that line the interior of the probe. The probe and insert tubes are together pneumatically driven using a percussion hammer in 4-foot intervals. After each drive interval the drive probe and rods are retrieved to the surface. The poly tube containing subsurface soil is then removed. The drive probe is then cleaned, equipped with a new poly tube and reinserted into the boring with extension rods as required. The apparatus is then driven following the above procedure until the desired depth is obtained. The poly tubes and soil are inspected after each drive interval with lithologic and relevant drilling observations recorded. Soil samples are screened for organic vapors using an organic vapor meter (OVM), photo-ionization detector (PID) or other appropriate device. OVM/PID readings, soil staining and other relevant observations are recorded. Selected soil sample intervals can be cut from the 4-foot intervals for possible analytical or geotechnical testing or other purposes.

The soils contained in the sample liners are then classified according to the Uniform Soil Classification System and recorded on the soil boring logs.

Sample liners selected for laboratory analyses are sealed with Teflon sheets, plastic end caps, and silicon tape. The sealed sample liner is then labeled, sealed in a plastic bag, and placed in an ice chest cooled to 4°C with crushed ice for temporary field storage and transportation. The standard chain-of-custody protocol is maintained for all soil samples from the time of collection to arrival at the laboratory.

Groundwater Sampling

Groundwater sampling is performed after the completion of soil sampling and when the boring has reached its desired depth. The steel probe and rods are then removed from the boring and new, nominal 1-inch diameter PVC solid and perforated temporary casing is lowered into the borehole. Alternatively, a retractable screen sampling device such as a Hydropunch™ can be driven to the desired depth and pulled back to expose the screened interval. Depth to water is then measured using an electronic groundwater probe. Groundwater samples are collected using a stainless steel bailer, disposable Teflon™ bailer, or check valve or peristaltic pump with disposable Teflon™ or polyethylene sample tubing.

After the retrieval of the bailer, groundwater contained in the bailer (or discharged from sample tubing) is decanted into laboratory provided containers. The containers are then sealed with Teflon coated caps with no headspace, labeled, and placed in an ice chest for field storage and transportation to a state certified analytical laboratory. The standard chain-of-custody protocols are followed from sample collection to delivery to the laboratory. A new bailer (or sample tubing) is used for each groundwater sampling location to avoid cross contamination.



Soil Sampling with Hollow-Stem Auger

A soil boring is advanced with a truck-mounted drill rig using 8-inch outside diameter (O.D.), 3.75-inch inside diameter (I.D.), and 5-foot long hollow stem augers. The augers are advanced with a center plug at the lead auger section and drilling rods inside the hollow stem to create an open borehole with the augers as the boring casing. After the augers are advanced to the desired sampling depth, the center plug is removed and a soil sampler is attached to the drilling rod. The soil sampler contains three 2-inch diameter and 6-inch long brass tubes is driven 18 inches beyond the auger depth. The brass tube acts as the sample container to contain the soil core generated during the sampler drive. After the retrieval of the soil sampler, the brass tube containing the soil core is removed and sealed with Teflon tape and plastic end caps. The soil sample is then placed in an ice chest for field storage and transport to the laboratory. New sample tubes are use during each soil sampling drive to prevent cross-contamination.



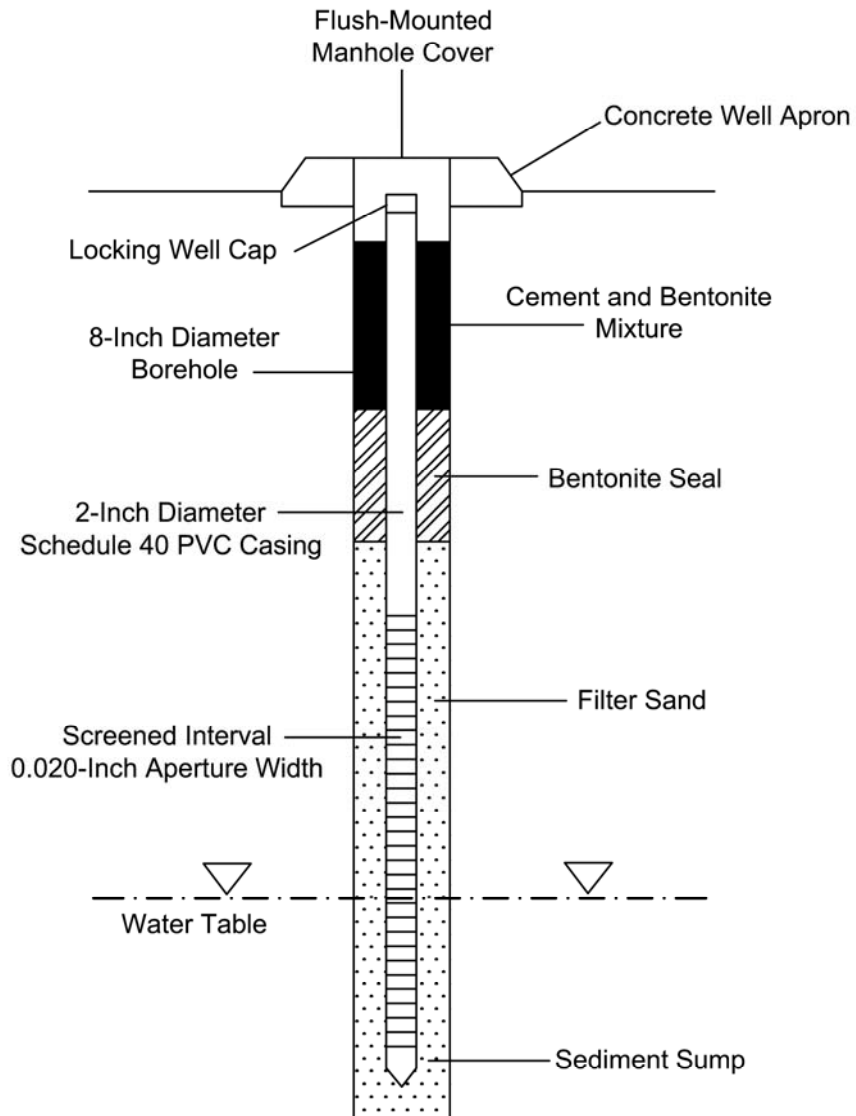
Groundwater Monitoring Well Installation

A groundwater monitoring well will be installed in each of the boreholes after the designated boring termination depth is reached. The well will be installed through the center of the hollow stem augers. After the well casing has been set, the augers will be removed in sections while the sand filter pack is being placed. Well casing composed of 2-inch diameter schedule-40 PVC pipes will be employed. The screen section of the casing will have factory perforated 0.02-inch slots and extend 10 feet below and 5 feet above the groundwater table. The blank section (non-perforated well casing pipe) will complete the well casing up to the ground surface. The length of screen and blank section of well casing will be adjusted in the field in accordance with groundwater and soil conditions encountered.

The filter pack around the well screen will be pre-washed #3 Monterey sand placed from the bottom of the well up to one foot above the screen section. A 1-foot bentonite seal will then be placed above the filter pack to prevent surface water infiltration. The remaining length of the annular space in the borehole will be backfilled with neat cement grout up to 2 feet below the ground surface. The uppermost two feet of the well casing will be protected by a traffic-rated Christy box set in concrete. A water-tight locking end-cap will be placed on top of the well casing to prevent surface water intrusion and unauthorized access. A diagram of typical groundwater monitoring well construction is included in Appendix A.



Groundwater Monitoring Well Diagram (Generalized)





Groundwater Monitoring Well Development

Groundwater monitoring wells will be developed with the combination of surging and pumping actions. The wells will be alternately surged with a surging block for five minutes and pumped with a submersible pump for two minutes. The physical characteristics of the groundwater, such as water color and clarity, pH, temperature, and conductivity, will be monitored during well development. Well development will be considered complete when the groundwater is relatively sediment-free and groundwater characteristic indicators are stabilized (consecutive readings within 10% of each other).

Groundwater will be sampled from the developed wells no sooner than 48 hours after well development to allow stabilization of groundwater conditions. Prior to groundwater sampling, a proper purging process will be performed at each well. The purpose of well purging is to remove fine grained materials from the well casing and to allow fresh and more representative water to recharge the well. Prior to well purging, an electric water depth sounder will be lowered into the well casing to measure the depth to the water to the nearest 0.01 feet. A clear poly bailer will then be lowered into the well casing and partially submerged. Upon retrieval of the clear bailer, the surface of the water column retained in the bailer will be carefully examined for any floating product or product sheen.

After all initial measurements are completed and recorded, the well will be purged by an electrical submersible pump or a bailer. A minimum of 3 well volumes of groundwater will be purged and groundwater characteristics (temperature, pH, and conductivity) monitored at each well volume interval. Purging is considered complete when indicators are stabilized (consecutive readings within 10% of each other) and the purged water is relatively free of sediments.

Groundwater sampling will be conducted after the water level has recovered to at least 80% of the initial level, recorded prior to purging. The groundwater sample will be collected by a disposable bailer. Upon retrieval of the bailer, the retained water will be carefully transferred to appropriate sample bottle furnished by the analytical laboratory. All sample bottles will have a Teflon lined septum/cap and be filled such that no headspace is present. Then the sample bottles will be labeled and immediately placed on ice to preserve the chemical characteristics of its content.

To prevent cross contamination, all groundwater sampling equipment that comes in contact with the groundwater will be thoroughly decontaminated prior to sampling. A disposable bailer will be used to collect the groundwater samples. Sample handling, storage, and transport procedures described in the following sections will be employed. All well development and purging water will be temporarily stored on-site in 55-gallon drums awaiting test results to determine the proper disposal method.

APPENDIX C



AllWest

AllWest Environmental
530 Howard Street #300
San Francisco, CA 94105
Telephone: 415-391-2510
Fax: 415-391-2008

BORING NUMBER B15

CLIENT MCG Investments LLC

PROJECT NUMBER 12071.23

DATE STARTED 1/17/13 **COMPLETED** 1/17/13

DRILLING CONTRACTOR Gregg Drilling and Testing

DRILLING METHOD Geoprobe

LOGGED BY C. Houlihan **CHECKED BY** Leonard Niles

NOTES Borehole grouted with neat cement

PROJECT NAME Hollis

PROJECT LOCATION 6655 Hollis Street, Emeryville CA

GROUND ELEVATION _____ **HOLE SIZE** 2.5 inches

GROUND WATER LEVELS:

▽ **AT TIME OF DRILLING** 29.00 ft

▼ **AT END OF DRILLING** 29.00 ft

AFTER DRILLING ---

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 2/1/13 09:36 - Z:\GINT\12071.23 HOLLIS GEOPROBE BORINGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA
0						
0.5			CL		Concrete/no recovery	
3.0	AU		CL		(CL) Clay (>95% fines, <5% medium-grained sand), black (2.5Y 2.5/1), soft to stiff, high plasticity, slightly moist.	
5.0			CL		(CL) Sandy clay (70% fines, 30% fine to medium-grained sand), olive gray (5Y 4/2), soft to stiff, low plasticity, slightly moist.	
9.0	UD	100	CL			
10.0			ML		(ML) Sandy silt with gravel, 60% fines, 20% sand, 20% gravel, olive brown (2.5Y 4/4), gravel clasts up to 1 inch, nonplastic, dry.	PID = 0.4
11.0	B15-10-10.5	100	ML		(ML) Silt, olive brown (2.5Y 4/4), soft, nonplastic, moist.	
12.0			ML		(ML) Sandy silt (75% fines, 20% sand, 5% gravel), olive brown (2.5Y 4/4), soft, nonplastic, moist.	
15.0	UD	100	ML			
15.0			CL		(CL) Clay (less than 5% sand) olive brown (2.5Y 4/4), stiff to hard, medium plasticity, dry to slightly moist.	
20.0	B15-19.5-20	100	CL			PID = 0.3
25.0	UD	100	CL			
29.0			CL			
30.0			CL		(CL) Same as above but moist to wet.	

Bottom of borehole at 30.0 feet.



AllWest

AllWest Environmental
530 Howard Street #300
San Francisco, CA 94105
Telephone: 415-391-2510
Fax: 415-391-2008

BORING NUMBER B16

PAGE 1 OF 1

CLIENT MCG Investments LLC

PROJECT NAME Hollis

PROJECT NUMBER 12071.23

PROJECT LOCATION 6655 Hollis Street, Emeryville CA

DATE STARTED 1/17/13 COMPLETED 1/17/13

GROUND ELEVATION _____ HOLE SIZE 2.5 inches

DRILLING CONTRACTOR Gregg Drilling and Testing

GROUND WATER LEVELS:

DRILLING METHOD Geoprobe

▽ AT TIME OF DRILLING 30.00 ft

LOGGED BY C. Houlihan CHECKED BY Leonard Niles

AT END OF DRILLING ---

NOTES Borehole grouted with neat cement

▽ 1hrs AFTER DRILLING 28.50 ft

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 2/1/13 09:37 - Z:\GINT\12071.23 HOLLIS GEOPROBE BORINGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA
0						
0.5					Asphalt/no recovery	
1.0					Road base	
	AU		CL		(CL) Clay, 100% fines, trace sands, dark brown (10YR 3/6), soft to stiff, high plasticity, slightly moist.	
4.0						
5	UD	100	ML		(ML) Gravelly silt (80% fines, 20% gravel with some coarse sand), dark greenish gray (GLE Y 1, 4/10Y), stiff, low plasticity, slightly moist.	
8.0						
	B16-8.5-9	100			(CL) Clay (less than 5% gravel and coarse sand), olive brown (2.5Y 4/3), stiff, medium plasticity, slightly moist.	PID = 4.9
10	UD	100				
	B16-11.5-12	100				PID = 91.6
	UD	100				
15	B16-14.5-15	100				PID = 64.8
	UD	100				
20						
25						
27.0						
					(ML) Silt, olive brown (2.5Y 4/3), soft, nonplastic, moist to wet.	
			ML			
30.0						

Bottom of borehole at 30.0 feet.



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530 Howard Street #300
San Francisco, CA 94105
Telephone: 415-391-2510
Fax: 415-391-2008

BORING NUMBER B17

PAGE 1 OF 1

CLIENT MCG Investments LLC

PROJECT NAME Hollis

PROJECT NUMBER 12071.23

PROJECT LOCATION 6655 Hollis Street, Emeryville CA

DATE STARTED 1/16/13 COMPLETED 1/16/13

GROUND ELEVATION _____ HOLE SIZE 2.5 inches

DRILLING CONTRACTOR Gregg Drilling and Testing

GROUND WATER LEVELS:

DRILLING METHOD Geoprobe

▽ AT TIME OF DRILLING 9.00 ft

LOGGED BY C. Houlihan CHECKED BY Leonard Niles

▼ AT END OF DRILLING 9.00 ft

NOTES Borehole grouted with neat cement

AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA
0						
0.5					Concrete	
5.0	AU		GM		(GM) Silty gravel (possibly fill), 60% gravel and coarse sands, 40% fines, dark greenish gray (GLEY 1 4/10GY), soft, nonplastic, moist to wet.	
5.0					No recovery	
7.0	NR	0				
7.0	UD	100	GM		(GM) Silty gravel, 60% gravel and coarse sands, 40% fines, dark greenish gray (GLEY 1 4/10GY), soft, nonplastic, wet.	
9.0	B17-8.5-9	100			▼	PID = 0.4

Bottom of borehole at 9.0 feet.

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 2/1/13 09:37 - Z:\GINT\12071.23 HOLLIS GEOPROBE BORINGS.GPJ



AllWest

AllWest Environmental
530 Howard Street #300
San Francisco, CA 94105
Telephone: 415-391-2510
Fax: 415-391-2008

BORING NUMBER B18

PAGE 1 OF 1

CLIENT MCG Investments LLC

PROJECT NUMBER 12071.23

DATE STARTED 1/16/13 COMPLETED 1/16/13

DRILLING CONTRACTOR Gregg Drilling and Testing

DRILLING METHOD Geoprobe

LOGGED BY C. Houlihan CHECKED BY Leonard Niles

NOTES Borehole grouted with neat cement

PROJECT NAME Hollis

PROJECT LOCATION 6655 Hollis Street, Emeryville CA

GROUND ELEVATION _____ HOLE SIZE 2.5 inches

GROUND WATER LEVELS:

∇ AT TIME OF DRILLING 16.00 ft

AT END OF DRILLING ---

∇ AFTER DRILLING 12.10 ft

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 2/1/13 09:37 - Z:\GINT\12071.23 HOLLIS GEOPROBE BORINGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA
0		0			0.5 Concrete	
					1.0 Topsoil	
	AU		CH		(CH) Clay with sand, 90% fines, 10% fine sand, light olive brown (2.5Y 5/4), soft, high plasticity, moist.	
5					6.0	
	UD	100	CH		(CH) Clay with less than 5% fine sand, olive (5Y 5/2), stiff, high plasticity, dry to slightly moist.	
10					11.0	PID = 60.6
	B18-10-10.5	100	CH		(CH) Same as above but with gravel clasts up to 1/2 inch.	
					13.0	
	UD	100	CL		(CL) Sandy clay, 80% fines, 20% sand, very dark grayish-brown (2.5Y 3/2), soft to stiff, low to medium plasticity, moist to wet.	
15					16.0 ∇	PID = 1.2
	B18-15.5-16	100			Bottom of borehole at 16.0 feet.	



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AllWest Environmental
530 Howard Street #300
San Francisco, CA 94105
Telephone: 415-391-2510
Fax: 415-391-2008

BORING NUMBER B19

PAGE 1 OF 1

CLIENT MCG Investments LLC

PROJECT NAME Hollis

PROJECT NUMBER 12071.23

PROJECT LOCATION 6655 Hollis Street, Emeryville CA

DATE STARTED 1/16/13 COMPLETED 1/16/13

GROUND ELEVATION _____ HOLE SIZE 2.5 inches

DRILLING CONTRACTOR Gregg Drilling and Testing

GROUND WATER LEVELS:

DRILLING METHOD Geoprobe

▽ AT TIME OF DRILLING 15.00 ft

LOGGED BY C. Houlihan CHECKED BY Leonard Niles

▼ AT END OF DRILLING 8.04 ft

NOTES Borehole grouted with neat cement

AFTER DRILLING ---

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 2/1/13 09:37 - Z:\GINT\12071.23 HOLLIS GEOPROBE BORINGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA
0						
0.5					Concrete/no recovery	
5	AU	100	CH		(CH) Clay, black (2.5Y 2.5/1), soft to stiff, high plasticity, slightly moist.	
6.0					No recovery	
8.0	UD	100	ML		(ML) Gravelly silt, 60% fines, 30% gravel, 10% coarse sand, dark olive brown (2.5Y 3/3), soft to stiff, medium plasticity, dry to slightly moist.	
8.0					▼ (CH) Clay, dark yellowish brown (10YR 3/4), soft, high plasticity, moist.	
10	B19-10-10.5	100	CH			PID = 32
10	UD	100				
13.0					(CL) Gravelly clay, 80% fines, 20% gravel with trace coarse sand, dark yellowish brown (10YR 3/6), soft to stiff, low to medium plasticity, moist to wet.	
15	B19-14.5-15	100	CL			PID = 9.4
15	UD	100				
18.0						

Bottom of borehole at 18.0 feet.



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AllWest Environmental
530 Howard Street #300
San Francisco, CA 94105
Telephone: 415-391-2510
Fax: 415-391-2008

BORING NUMBER B20

PAGE 1 OF 1

CLIENT MCG Investments LLC

PROJECT NAME Hollis

PROJECT NUMBER 12071.23

PROJECT LOCATION 6655 Hollis Street, Emeryville CA

DATE STARTED 1/17/13 COMPLETED 1/17/13

GROUND ELEVATION _____ HOLE SIZE 2.5 inches

DRILLING CONTRACTOR Gregg Drilling and Testing

GROUND WATER LEVELS:

DRILLING METHOD Geoprobe

▽ AT TIME OF DRILLING 9.00 ft

LOGGED BY C. Houlihan CHECKED BY Leonard Niles

▼ AT END OF DRILLING 9.00 ft

NOTES Borehole grouted with neat cement

AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA
0						
0.5					Asphalt/no recovery	
5.0	AU		CL		(CL) Clay, >95% fines, <5% fine-grained sand, black (2.5Y 2.5/1), soft to stiff, high plasticity, slightly moist.	
9.0	UD	100	ML		(ML) Sandy silt, 70% fines, 30% fine to medium grained sand, olive gray (5Y 4/2), soft to stiff, medium plasticity, slightly moist.	
10.0					(CH) Clay, less than 5% fine sand, dark yellowish brown (10YR 4/4), stiff, high plasticity, moist to wet, hydrocarbon odor.	PID = 102
10.5	B20-10-10.5 UD	100	CH			PID = 163
12.5	B20-12-12.5 UD	100				
14.5	B20-14.5-15 UD	100				PID = 50
15.0					Bottom of borehole at 15.0 feet.	

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 2/1/13 09:37 - Z:\GINT\12071.23 HOLLIS GEOPROBE BORINGS.GPJ



AllWest

AllWest Environmental
530 Howard Street #300
San Francisco, CA 94105
Telephone: 415-391-2510
Fax: 415-391-2008

BORING NUMBER B21

PAGE 1 OF 1

CLIENT MCG Investments LLC

PROJECT NUMBER 12071.23

DATE STARTED 1/18/13 **COMPLETED** 1/18/13

DRILLING CONTRACTOR Gregg Drilling and Testing

DRILLING METHOD Geoprobe

LOGGED BY C. Houlihan **CHECKED BY** Leonard Niles

NOTES Borehole grouted with neat cement

PROJECT NAME Hollis

PROJECT LOCATION 6655 Hollis Street, Emeryville CA

GROUND ELEVATION _____ **HOLE SIZE** 2.5 inches

GROUND WATER LEVELS:

▽ **AT TIME OF DRILLING** 24.00 ft

▼ **AT END OF DRILLING** 24.00 ft

AFTER DRILLING ---

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 2/1/13 09:37 - Z:\GINT\12071.23 HOLLIS GEOPROBE BORINGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA
0						
0.5			CL		Concrete/no recovery (CL) Clay, less than 5% fine sands, black (5Y 2.5/2), stiff, medium to high plasticity, slightly moist.	
3.5	AU		CL-ML		(CL-ML) Clayey silt, olive brown (2.5Y 4/6), soft, nonplastic, slightly moist.	
5.0	AU B21-4.5-5	100	CL-ML		(CL-ML) Clayey silt with 5% trace coarse sands, olive brown (2.5Y 4/6) with orange mottling, soft, medium plasticity, moist.	PID = 0.5
8.0	UD	100	CL-ML		(CL-ML) Clayey silt with gravel, 10% gravel and coarse sand, olive brown (2.5Y 4/4), stiff, high plasticity, slightly moist.	
10.5	B21-10-10.5	100	CL-ML			PID = 413
18.0	UD	100			No recovery	
20.0	NR	0				
20.0	UD	100	CL-ML		(CL-ML) Clayey silt with gravel, 10% gravel and coarse sand, olive brown (2.5Y 4/4), stiff, high plasticity, slightly moist.	PID = 177
21.5	B21-21.5-22	100	CL-ML			
22.0	UD	100	CL-ML			
23.0			CL-ML			
24.0			CL-ML		(CL-ML) Same as above but moist to wet.	

Bottom of borehole at 24.0 feet.



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BORING NUMBER B22

CLIENT MCG Investments LLC

PROJECT NUMBER 12071.23

DATE STARTED 1/18/13 COMPLETED 1/18/13

DRILLING CONTRACTOR Gregg Drilling and Testing

DRILLING METHOD Geoprobe

LOGGED BY C. Houlihan CHECKED BY Leonard Niles

NOTES Borehole grouted with neat cement

PROJECT NAME Hollis

PROJECT LOCATION 6655 Hollis Street, Emeryville CA

GROUND ELEVATION _____ HOLE SIZE 2.5 inches

GROUND WATER LEVELS:

▽ AT TIME OF DRILLING 13.66 ft

▼ AT END OF DRILLING 13.66 ft

AFTER DRILLING ---

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 2/1/13 09:37 - Z:\GINT\12071.23 HOLLIS GEOPROBE BORINGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA
0						
0.5					Concrete/no recovery	
0.5 - 5.0	AU		CL		(CL) Clay, greenish gray (GLEY 1 5/5GY), stiff, medium plasticity, moist.	
5.0 - 6.0	AU B22-4.5-5		ML		(ML) Sandy silt, 60% fines, 30% sand, 10% gravel, dark olive gray (5Y 3/2), soft, nonplastic, wet, hydrocarbon odor.	PID = 221
6.0 - 8.0	UD	100	ML		(ML) Gravelly silt, 80% fines, 20% gravel with trace coarse sand, brown (10YR 5/3), stiff, medium plasticity, slightly moist.	
8.0 - 12.0					(ML) Same as above but dry.	
10.0 - 12.0	B22-10-10.5	100	ML			PID = 84.5
12.0 - 14.0	UD	100	ML		(ML) Sandy silt, 80% fines, 20% fine sand, 10YR 5/3, soft, nonplastic, wet.	
14.0 - 15.0	B22-14.5-15	100	CL		(CL) Clay, dark yellowish brown (10YR 4/6), hard, medium plasticity, dry.	PID = 45.7
15.0					Bottom of borehole at 15.0 feet.	



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BORING NUMBER B23

CLIENT MCG Investments LLC

PROJECT NAME Hollis

PROJECT NUMBER 12071.23

PROJECT LOCATION 6655 Hollis Street, Emeryville CA

DATE STARTED 1/17/13 COMPLETED 1/17/13

GROUND ELEVATION _____ HOLE SIZE 2.5 inches

DRILLING CONTRACTOR Gregg Drilling and Testing

GROUND WATER LEVELS:

DRILLING METHOD Geoprobe

▽ AT TIME OF DRILLING 3.00 ft

LOGGED BY C. Houlihan CHECKED BY Leonard Niles

▼ AT END OF DRILLING 3.00 ft

NOTES Borehole grouted with neat cement

AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA
0						
0.5					Concrete/no recovery	
5	AU				(SP) Sand, fine-grained, black (2.5Y 2.5/1), weak cementation, rounded, nonplastic, wet.	
	B23-5-5.5	100	SP			PID = 0.3
	UD	100				
	B23-8.5-9	100				PID = 0.5
					Bottom of borehole at 9.0 feet.	



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BORING NUMBER B24

CLIENT MCG Investments LLC

PROJECT NUMBER 12071.23

DATE STARTED 1/18/13 COMPLETED 1/18/13

DRILLING CONTRACTOR Gregg Drilling and Testing

DRILLING METHOD Geoprobe

LOGGED BY C. Houlihan CHECKED BY Leonard Niles

NOTES Borehole grouted with neat cement

PROJECT NAME Hollis

PROJECT LOCATION 6655 Hollis Street, Emeryville CA

GROUND ELEVATION _____ HOLE SIZE 2.5 inches

GROUND WATER LEVELS:
 AT TIME OF DRILLING ---
 ▼ AT END OF DRILLING 9.45 ft
 AFTER DRILLING ---

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 2/1/13 09:37 - Z:\GINT\12071.23 HOLLIS GEOPROBE BORINGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA
0					Concrete	
1.0	AU		CL-ML		(CL-ML) Silty clay with some shells, light olive brown (2.5Y 5/4), stiff, high plasticity, slightly moist.	
5	AU B24-4.5-5		CL-ML			PID = 6.3
6.0	UD	100	CL-ML		(CL-ML) Silty clay, light brownish gray (2.5Y 6/2), stiff, low plasticity, slightly moist.	
9.0	B24-8.5-9	100	CL		▼ (CL) Clay with gravel, 90% fines, 10% gravel with clasts up to 1/2 inch, light olive brown (2.5Y 5/4), stiff, low plasticity, dry to slightly moist.	PID = 169
12.0			CL		(CL) Clay with sand, 90% fines, 10% fine grained sand, yellowish-brown (10YR 5/4), stiff, medium plasticity, slightly moist.	
14.0	UD	100	CL		(CL) Clay with gravel, 90% fines, 10% gravel clasts up to 1/2 inch, yellowish brown (10YR 5/4) with some orange mottling, stiff, medium plasticity, slightly moist.	
21.5	B24-21.5-22	100	CL			PID = 14.8
22	UD	100	CL		(CL) Same as above but wet.	
24.0					Bottom of borehole at 24.0 feet.	



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BORING NUMBER B25

PAGE 1 OF 1

CLIENT MCG Investments LLC

PROJECT NAME Hollis

PROJECT NUMBER 12071.23

PROJECT LOCATION 6655 Hollis Street, Emeryville CA

DATE STARTED 1/16/13 COMPLETED 1/16/13

GROUND ELEVATION _____ HOLE SIZE 2.5 inches

DRILLING CONTRACTOR Gregg Drilling and Testing

GROUND WATER LEVELS:

DRILLING METHOD Geoprobe

AT TIME OF DRILLING ---

LOGGED BY C. Houlihan CHECKED BY Leonard Niles

AT END OF DRILLING ---

NOTES Borehole grouted with neat cement

2hrs AFTER DRILLING 29.80 ft

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 2/1/13 09:37 - Z:\GINT\12071.23 HOLLIS GEOPROBE BORINGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA
0						
0.5					Concrete/no recovery	
0.5 - 4.0	AU		CH		(CH) Clay, black (5Y 2.5/2), stiff, high plasticity, slightly moist.	
4.0 - 9.0	UD	100	CH		(CH) Clay with sand, 10% fine to coarse sand, minor pebbles, dark greenish-gray (GLEYS 1, 4/1) mottled with orange, stiff, high plasticity, slightly moist.	
9.0 - 10.5	B25-10-10.5	100				PID = 4.5
10.5 - 15.5	UD	100				
15.5 - 21.0	B25-15-15.5	100	CH		(CH) Clay, trace sands, olive brown (2.5Y 4/6), stiff, high plasticity, slightly moist.	PID = 0.6
21.0 - 22.0			CL-ML		(CL-ML) Silty clay, dark gray (5Y 4/1), soft, low to medium plasticity, wet.	
22.0 - 30.0	UD	100	CL		(CL) Clay with gravel, 90% clay, 10% gravel, trace coarse sands, brown (10YR 4/3), hard to stiff, low plasticity, dry.	
30.0					Bottom of borehole at 30.0 feet.	



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WELL NUMBER AMW-1

CLIENT Walter Merkle **PROJECT NAME** Hollis - Emeryville
PROJECT NUMBER 13019.23 **PROJECT LOCATION** 6655 Hollis Avenue, Emeryville, CA
DATE STARTED 8/2/13 **COMPLETED** 8/2/13 **GROUND ELEVATION** 22.54 ft **HOLE SIZE** 8 inches
DRILLING CONTRACTOR Woodward Drilling **GROUND WATER LEVELS:**
DRILLING METHOD Hollow Stem Auger **▽ AT TIME OF DRILLING** 16.00 ft / Elev 6.54 ft
LOGGED BY C. Houlihan **CHECKED BY** Leonard Niles **▼ AT END OF DRILLING** 12.00 ft / Elev 10.54 ft
NOTES _____ **AFTER DRILLING** ---

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 9/4/13 08:35 - Z:\GINT\13019.23 HOLLIS MWL REVISED.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
0					Concrete		8-inch vault box. Capped riser. TOC elev. 22.09' msl Concrete
0.5					Air knife and hand auger - no recovery		
5	AU	0					Bentonite Chips
5.0			ML		(ML) Sandy silt with gravel (60% fines, 30% sand, 10% gravel), dark olive brown (2.5Y 3/3), stiff, medium plasticity, dry to slightly moist.	PID = 0.1	
9.0	SS AMW-1-6.5-7	100	ML		(ML) Same as above but dark gray (2.5Y 3/20 and gravel clasts up to 1 inch).		2" ID Sch. 40 PVC Casing
10			CH		(CH) Clay, dark yellowish brown (10YR 3/4), soft, high plasticity, moist.	PID = 0.2	
15	SS AMW-1-12.5-13	100	CH				2" ID Sch. 40 PVC 0.010" slotted screen
15.0			SM		(SM) Silty sand (80% sand, 20% fines), very dark grayish-brown (2.5Y 3/2), weak cementation, subangular to subrounded, nonplastic, moist to wet.	PID = 0.1	#2/12 sand pack
20	SS AMW-1-18.5-19	100	SM				
21.0			CH		(CH) Clay with sand (90% fines, 10% sand), light olive brown (2.5Y 5/4), stiff, high plasticity, moist.		
24.0			CH				PVC bottom cap
Bottom of borehole at 24.0 feet.							



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WELL NUMBER AMW-2

CLIENT Walter Merkle
PROJECT NUMBER 13019.23
DATE STARTED 8/1/13 **COMPLETED** 8/1/13
DRILLING CONTRACTOR Woodward Drilling
DRILLING METHOD Hollow Stem Auger
LOGGED BY C. Houlihan **CHECKED BY** Leonard Niles
NOTES _____

PROJECT NAME Hollis - Emeryville
PROJECT LOCATION 6655 Hollis Avenue, Emeryville, CA
GROUND ELEVATION 23.73 ft **HOLE SIZE** 8 inches
GROUND WATER LEVELS:
 ▽ **AT TIME OF DRILLING** 16.00 ft / Elev 7.73 ft
 ▼ **AT END OF DRILLING** 10.00 ft / Elev 13.73 ft
AFTER DRILLING ---

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 9/4/13 08:52 - Z:\GINT\13019.23 HOLLIS MWL REVISED.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
0					Asphalt		
1.0					Air knife and hand auger - no recovery		
5	AU	0					8-inch vault box. Capped riser. TOC elev. 23.43' msl. Concrete
5.0			CH		(CH) Clay, black (2.5Y 2.5/1), soft to stiff, high plasticity, slightly moist.		2" ID Sch. 40 PVC Casing
6.0			ML		(ML) Gravelly silt (80% fines, 20% gravel with some coarse sand), greenish-gray (GLE Y 1, 5/10Y), stiff, low plasticity, slightly moist.	PID = 0.2	Bentonite Chips
8.0	SS AMW-2-6.5-7	100			(CH) Clay, dark yellowish-brown (10YR 3/4), soft, high plasticity, moist.		
10			CH				2" ID Sch. 40 PVC 0.010" slotted screen
15	SS AMW-2-15.5-16	100	SW-SM		(SW-SM) Sand with silt (90% sand, 10% fines), olive brown (2.5Y 4/3), weak cementation, subangular to subrounded, nonplastic, moist to wet.	PID = 438	#2/12 sand pack
20			ML		(ML) Silt with 10% fine sand, olive brown (2.5Y 4/3), soft, nonplastic, wet.		
24.0	SS AMW-2-23-23.5	100			Bottom of borehole at 24.0 feet.	PID = 1.5	PVC bottom cap



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BORING NUMBER AMW-3

PAGE 1 OF 1

CLIENT Walter Merkle

PROJECT NUMBER 13019.23

DATE STARTED 8/2/13 COMPLETED 8/2/13

DRILLING CONTRACTOR Woodward Drilling

DRILLING METHOD Hollow Stem Auger

LOGGED BY C. Houlihan CHECKED BY Leonard Niles

NOTES _____

PROJECT NAME Hollis - Emeryville

PROJECT LOCATION 6655 Hollis Avenue, Emeryville, CA

GROUND ELEVATION 25.5 ft HOLE SIZE 8 inches

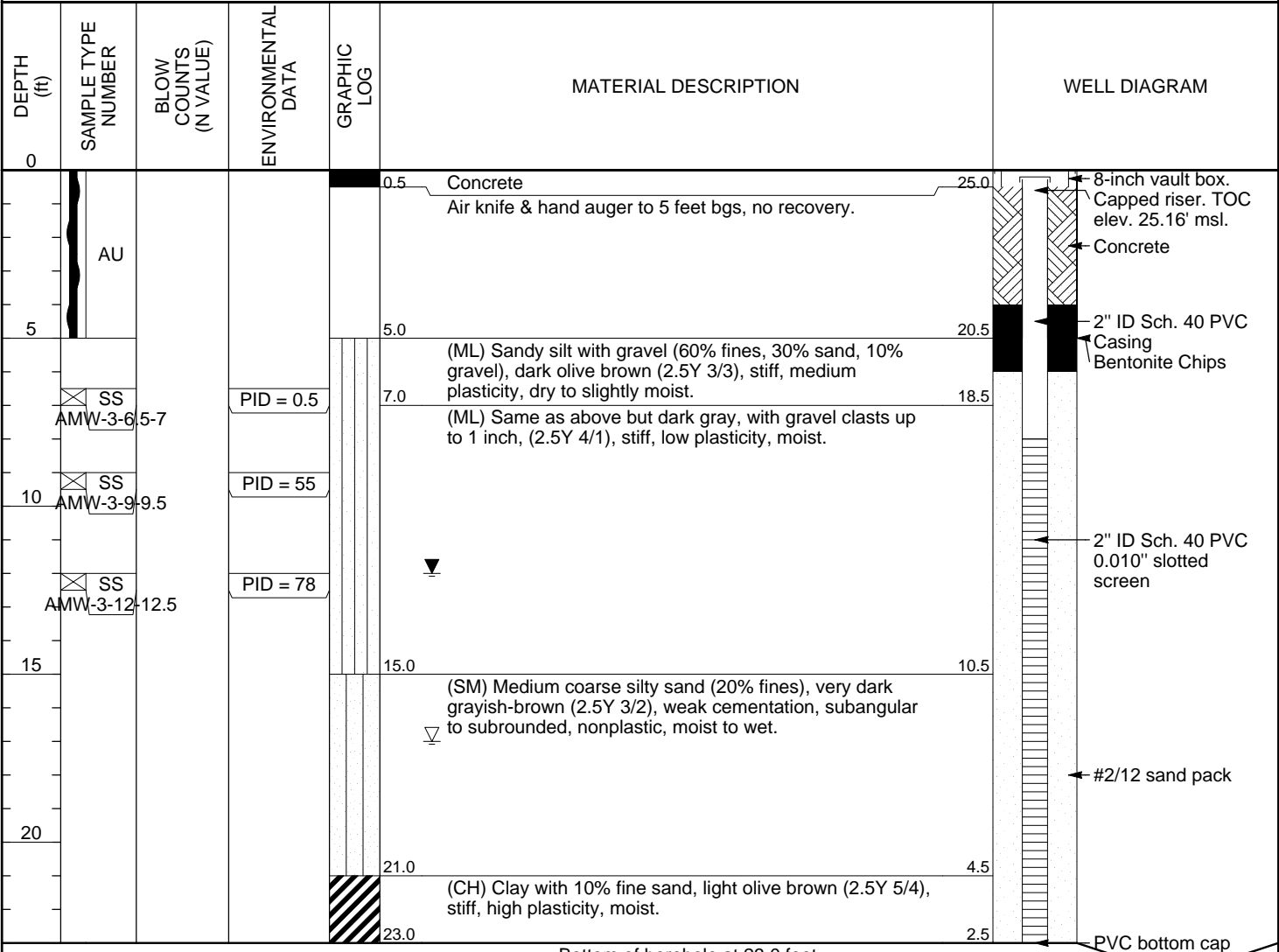
GROUND WATER LEVELS:

▽ AT TIME OF DRILLING 17.00 ft / Elev 8.50 ft

▽ AT END OF DRILLING 12.00 ft / Elev 13.50 ft

AFTER DRILLING ---

ENVIRONMENTAL.BH - GINT STD US LAB.GDT - 9/4/13 09:03 - Z:\GINT\13019.23 HOLLIS MWI_REVISD.GPJ



APPENDIX D



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DEVELOPMENT TABLE

PROJECT NO: 13019.23
Page 1 of 1

SITE NAME: Hollis
 WELL I.D.: AMW-1
 DEVELOPED BY: Woodward CMA
 LOCK NUMBER:
 INITIAL DEPTH TO BOTTOM (feet): 23.42
 FINAL DEPTH TO BOTTOM (feet): 23.69
 CASING VOLUME (gallons): 2.17

LOCATION: Emeryville CA
 DATE DEVELOPED: 8/5/13
 DATE COMPLETED: 8/5/13
 INITIAL DEPTH TO WATER (feet): 9.83
 FINAL DEPTH TO WATER (feet): 9.89
 CALCULATED PURGE (gallons): 21.74
 ACTUAL PURGE (gallons): 25

DEVELOPMENT QUARTERLY BIANNUAL OTHER

SAMPLE TYPE: Groundwater Surface Water Other

CASING DIAMETER: 2" 3" 4"
 Casing Volume (0.16) (0.38) (0.66)
 (gallons per foot):
 $0.16 (13.59) = 2.17$

FIELD MEASUREMENTS

VOLUME (gal)	TIME	TEMP (degrees C)	PH (units)	CONDUCTIVITY (mS/cm)	DTW (feet)	TURBIDITY (NTU)
5	1355	22.9	6.74	1538		Silty/cloudy
10	1400	22.7	6.57	1521		silty
15	1405	22.6	6.48	1501		clear
20	1410	22.6	6.40	1492		clear
25	1415	22.6	6.44	1485		clear

OTHER INFORMATION

ODOR: None FINAL TURBIDITY: Clear

PURGING EQUIPMENT

Centrifugal Pump
 Submersible Pump (disposable)
 Peristaltic Pump
 Purge Pump
 Other: _____

Bailer (Teflon)
 Bailer (PVC or
 Bailer (Stainless Steel)

SAMPLING EQUIPMENT

Centrifugal Pump
 Submersible Pump
 Peristaltic Pump
 Purge Pump
 Other: _____

Bailer (Teflon)
 Bailer (PVC or disposable)
 Bailer (Stainless Steel)

Comments: _____



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DEVELOPMENT TABLE

PROJECT NO: 13019.23
Page 1 of 1

SITE NAME: Hollis	LOCATION: Emeryville, CA
WELL I.D.: AMW-2	DATE DEVELOPED: 8/5/13
DEVELOPED BY: Woodward/CMA	DATE COMPLETED: 8/5/13
LOCK NUMBER:	INITIAL DEPTH TO WATER (feet): 9.67
INITIAL DEPTH TO BOTTOM (feet): 23.58	FINAL DEPTH TO WATER (feet): 9.80
FINAL DEPTH TO BOTTOM (feet): 23.80	CALCULATED PURGE (gallons): 22.3
CASING VOLUME (gallons): 2.23	ACTUAL PURGE (gallons): 25

DEVELOPMENT QUARTERLY BIANNUAL OTHER

SAMPLE TYPE: Groundwater Surface Water Other

CASING DIAMETER: 2" 3" 4"
Casing Volume (0.16) (0.38) (0.66)

(gallons per foot):
 $0.16(13.91) = 2.23$

FIELD MEASUREMENTS

VOLUME (gal)	TIME	TEMP (degrees C)	PH (units)	CONDUCTIVITY (mS/cm)	DTW (feet)	TURBIDITY (NTU)
5	1300	20.9	6.56	2221		Silty
10	1310	20.5	6.38	2115		Silty
15	1315	20.5	6.33	2065		Silty
20	1320	20.4	6.30	2009		Slightly silty
25	1325	20.4	6.29	1952		Clear

OTHER INFORMATION

ODOR: None FINAL TURBIDITY: Clear

PURGING EQUIPMENT

- Centrifugal Pump
- Submersible Pump (disposable)
- Peristaltic Pump
- Purge Pump
- Bailer (Teflon)
- Bailer (PVC or Stainless Steel)

Other: _____

SAMPLING EQUIPMENT

- Centrifugal Pump
- Submersible Pump
- Peristaltic Pump
- Purge Pump
- Bailer (Teflon)
- Bailer (PVC or disposable)
- Bailer (Stainless Steel)

Other: _____

Comments: _____



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DEVELOPMENT TABLE

PROJECT NO: 13019.23
Page 1 of 1

SITE NAME: Hollis	LOCATION: Emeryville, CA
WELL I.D.: AMW-3	DATE DEVELOPED: 8/5/13
DEVELOPED BY: Woodward/CRA	DATE COMPLETED: 8/5/13
LOCK NUMBER:	INITIAL DEPTH TO WATER (feet): 8.76
INITIAL DEPTH TO BOTTOM (feet): 22.41	FINAL DEPTH TO WATER (feet): 8.98
FINAL DEPTH TO BOTTOM (feet): 23.00	CALCULATED PURGE (gallons): 21.8
CASING VOLUME (gallons): 2.18	ACTUAL PURGE (gallons): 35

DEVELOPMENT QUARTERLY BIANNUAL OTHER

SAMPLE TYPE: Groundwater Surface Water Other

CASING DIAMETER: 2" 3" 4"
Casing Volume (0.16) (0.38) (0.66)

(gallons per foot):
 $0.16(13.65) = 2.18$

FIELD MEASUREMENTS

VOLUME (gal)	TIME	TEMP (degrees C)	PH (units)	CONDUCTIVITY (mS/cm)	DTW (feet)	TURBIDITY (NTU)
5	0940	20.0	6.50	1950		Silty
10	0947	20.0	6.42	1925		Silty
15	0952	20.5	6.30	1887		Silty
20	0959	20.4	6.33	1812		Silty
25	1002	20.4	6.30	1632		slightly silty
35	1012	20.3	6.29	1592		slightly silty

OTHER INFORMATION

ODOR: _____

FINAL TURBIDITY: Slightly silty

PURGING EQUIPMENT

- Centrifugal Pump
- Submersible Pump (disposable)
- Peristaltic Pump
- Purge Pump
- Other: _____

SAMPLING EQUIPMENT

- Centrifugal Pump
- Submersible Pump
- Peristaltic Pump
- Purge Pump
- Other: _____

Comments: _____



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PURGE TABLE

WELL ID: AMW-1
Page 1 of 1

SITE NAME: <u>Hollis - Emeryville</u>	LOCATION: <u>Emeryville CA</u>
PROJECT NO: <u>13019 23</u>	DATE PURGED: <u>8/7/13</u>
PURGED/SAMPLED BY: <u>C. Houlihan</u>	DATE SAMPLED: <u>8/7/13</u>
TIME SAMPLED: <u>1400</u>	DEPTH TO BOTTOM (feet): <u>23.69</u>
DEPTH TO WATER (feet): <u>9.54</u>	WATER COLUMN HEIGHT (feet): <u>14.15</u>
CALCULATED PURGE (gallons): <u>6.972</u>	CASING VOLUME (gallons): <u>2.264</u>
ACTUAL PURGE (gallons) <u>7</u>	

DEVELOPMENT _____ QUARTERLY BIANNUAL _____ OTHER _____

SAMPLE TYPE: Groundwater Surface Water _____ Other _____

CASING DIAMETER: 2" 3" _____ 4" _____
 Casing Volume (0.16) (0.38) (0.66)
 (gallons per foot): $0.16(14.15) = 2.264 \quad \times 3 = 6.792$

FIELD MEASUREMENTS

VOLUME (gal)	TIME	TEMP (degrees C)	pH	CONDUCTIVITY (µS)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTU)
2	1309	22.0	6.58	1491		clear
4	1330	21.9	6.42	1539		Silty
6	1348	21.9	6.42	1467		Silty

SAMPLE INFORMATION TPH-g, ms by 8015, 10th-d

SAMPLE DEPTH TO WATER (feet): 9.60 Analyses: 8015 w/s-g; VOCs 8260, PATTs 8270
 80% RECHARGE: Y/N SAMPLE TURBIDITY: Silty
 ODOR: none SAMPLE BOTTLE/PRESERVATIVE: 4VOCs/HCL, 2LA/HCL, 2LA/none

PURGING EQUIPMENT

Centrifugal Pump Bailer (Teflon)
 Submersible Pump Bailer (PVC or disposable)
 Peristaltic Pump Bailer (Stainless Steel)
 Purge Pump
 Other: _____

SAMPLING EQUIPMENT

Centrifugal Pump Bailer (Teflon)
 Submersible Pump Bailer (PVC or disposable)
 Peristaltic Pump Bailer (Stainless Steel)
 Purge Pump
 Other: _____

Comments: _____



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PURGE TABLE

WELL ID: Amw-2
Page 1 of 1

SITE NAME: <u>Hollis - Emeryville</u>	LOCATION: <u>Emeryville, CA</u>
PROJECT NO: <u>13019.23</u>	DATE PURGED: <u>8/7/13</u>
PURGED/SAMPLED BY: <u>C. Haulihan</u>	DATE SAMPLED: <u>8/7/13</u>
TIME SAMPLED: <u>1048</u>	DEPTH TO BOTTOM (feet): <u>24.00</u>
DEPTH TO WATER (feet): <u>9.96</u>	WATER COLUMN HEIGHT (feet): <u>14.04</u>
CALCULATED PURGE (gallons): <u>6.74</u>	CASING VOLUME (gallons): <u>2.25</u>
ACTUAL PURGE (gallons) <u>7</u>	

DEVELOPMENT _____ QUARTERLY BIANNUAL _____ OTHER _____

SAMPLE TYPE: Groundwater Surface Water _____ Other _____

CASING DIAMETER: 2" 3" _____ 4" _____

Casing Volume (0.16) (0.38) (0.66)

(gallons per foot):

$0.16(14.04) = 2.25$ $\times 3 = 6.74$

FIELD MEASUREMENTS

VOLUME (gal)	TIME	TEMP (degrees C)	pH	CONDUCTIVITY (µS)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTU)
2	1018	20.3	6.51	2337		clear
4	1029	20.6	6.44	2123		cloudy
6	1038	20.6	6.35	2113		cloudy

SAMPLE INFORMATION / PH-g, ms by 8015, TPH-d

SAMPLE DEPTH TO WATER (feet): 10.32 Analyses: 8015 w/s.g., VOCs by 8260, PAHs 8270

80% RECHARGE: N SAMPLE TURBIDITY: cloudy

ODOR: none SAMPLE BOTTLE/PRESERVATIVE: 4 VOA/HCl, 1 LA/HCl, 1 LA/none

PURGING EQUIPMENT

- Centrifugal Pump
- Submersible Pump
- Peristaltic Pump
- Purge Pump
- Other: _____
- Bailer (Teflon)
- Bailer (PVC or disposable)
- Bailer (Stainless Steel)

SAMPLING EQUIPMENT

- Centrifugal Pump
- Submersible Pump
- Peristaltic Pump
- Purge Pump
- Other: _____
- Bailer (Teflon)
- Bailer (PVC or disposable)
- Bailer (Stainless Steel)

Comments: _____



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PURGE TABLE

WELL ID: AMW-3
Page 1 of 1

SITE NAME: <u>Hollis - Emeryville</u>	LOCATION: <u>Emeryville, CA</u>
PROJECT NO: <u>13019.23</u>	DATE PURGED: <u>8/7/13</u>
PURGED/SAMPLED BY: <u>C. Houlihan</u>	DATE SAMPLED: <u>8/7/13</u>
TIME SAMPLED: <u>0951</u>	DEPTH TO BOTTOM (feet): <u>22.39</u>
DEPTH TO WATER (feet): <u>8.94</u>	WATER COLUMN HEIGHT (feet): <u>12.45</u>
CALCULATED PURGE (gallons): <u>5.976</u>	CASING VOLUME (gallons): <u>1.992</u>
ACTUAL PURGE (gallons) <u>6</u>	

DEVELOPMENT _____ QUARTERLY BIANNUAL _____ OTHER _____

SAMPLE TYPE: Groundwater Surface Water _____ Other _____

CASING DIAMETER: 2" 3" _____ 4" _____
Casing Volume (0.16) (0.38) (0.66)

(gallons per foot): $0.16(12.45) = 1.992$ $\times 3 = 5.976$

FIELD MEASUREMENTS

VOLUME (gal)	TIME	TEMP (degrees C)	pH	CONDUCTIVITY (µS)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTU)
2	0915	19.7	6.46	1980		Silty
4	0924	19.7	6.44	1856		Silty
6	0940	19.6	6.41	1472		Silty

SAMPLE DEPTH TO WATER (feet): 9.12 Analyses: TPH-g, ms by 8015, TPH-d
 80% RECHARGE: Y N SAMPLE TURBIDITY: Silty
 ODOR: none SAMPLE BOTTLE/PRESERVATIVE: 4 VOAs/HCl, 2 ILA/HCl, 1 no HCl

PURGING EQUIPMENT

Centrifugal Pump
 Submersible Pump
 Peristaltic Pump
 Purge Pump
 Other: _____
 Bailer (Teflon)
 Bailer (PVC or disposable)
 Bailer (Stainless Steel)

SAMPLING EQUIPMENT

Centrifugal Pump
 Submersible Pump
 Peristaltic Pump
 Purge Pump
 Other: _____
 Bailer (Teflon)
 Bailer (PVC or disposable)
 Bailer (Stainless Steel)

Comments: _____



AllWest

PURGE TABLE

WELL ID: MW-3
Page 1 of 1

SITE NAME: Hollis - Emeryville	LOCATION: Emeryville, CA
PROJECT NO: 3019.23	DATE PURGED: 8/7/13
PURGED/SAMPLED BY: C. Haulihan	DATE SAMPLED: 8/7/13
TIME SAMPLED: 1239	DEPTH TO BOTTOM (feet): 29.22
DEPTH TO WATER (feet): 9.09	WATER COLUMN HEIGHT (feet): 20.13
CALCULATED PURGE (gallons): 9.66	CASING VOLUME (gallons): 3.22
ACTUAL PURGE (gallons): 10	

DEVELOPMENT _____ QUARTERLY BIANNUAL _____ OTHER _____

SAMPLE TYPE: Groundwater Surface Water _____ Other _____

CASING DIAMETER: 2" 3" _____ 4" _____
 Casing Volume (0.16) (0.38) (0.66)
 (gallons per foot): $0.16(20.13) = 3.22 \quad \times 3 = 9.66$

FIELD MEASUREMENTS

VOLUME (gal)	TIME	TEMP (degrees C)	pH	CONDUCTIVITY (µS)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTU)
3	1120	19.1	6.61	2113		Silty
6	1148	19.4	6.15	1916		Silty
9	1215	19.4	6.10	1852		Silty

SAMPLE INFORMATION TPH-g.ms 8015

SAMPLE DEPTH TO WATER (feet): 9.11 Analyses: TPH-d 8015 w/s.g., VOCs 8260, PAHs 8270
 80% RECHARGE Y/N SAMPLE TURBIDITY: Silty
 ODOR: Strong HC SAMPLE BOTTLE/PRESERVATIVE: 4 VOCs/HCl, 1 LA/HCl, 1 LA/none

PURGING EQUIPMENT

Centrifugal Pump Bailer (Teflon)
 Submersible Pump Bailer (PVC or disposable)
 Peristaltic Pump Bailer (Stainless Steel)
 Purge Pump
 Other: _____

SAMPLING EQUIPMENT

Centrifugal Pump Bailer (Teflon)
 Submersible Pump Bailer (PVC or disposable)
 Peristaltic Pump Bailer (Stainless Steel)
 Purge Pump
 Other: _____

Comments: DTP 8.68 0.41 feet of product. Skimmed, bailed
 DTW 9.09 product (LNAPL) before sampling.

APPENDIX E



Analytical Report

All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/17/13
		Date Received: 01/18/13
	Client Contact: Leonard Niles	Date Reported: 01/28/13
	Client P.O.:	Date Completed: 01/25/13

WorkOrder: 1301437

January 29, 2013

Dear Leonard:

Enclosed within are:

- 1) The results of the **10** analyzed samples from your project: **#12071.23; Hollis,**
- 2) QC data for the above samples, and
- 3) A copy of the chain of custody.

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

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

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
 Laboratory Manager
 McC Campbell Analytical, Inc.

The analytical results relate only to the items tested.



McC Campbell Analytical, Inc.

1534 Willow Pass Rd. / Pittsburg, Ca. 94565-1701
 www.mccampbell.com / main@mccampbell.com
 Telephone: (877) 252-9262 / Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

TURN AROUND TIME: RUSH 24 HR 48 HR 72 HR 5 DAY 10 DAY

GeoTracker EDF PDF EDD Write On (DW) EQuIS

Effluent Sample Requiring "J" flag UST Clean Up Fund Project ; Claim # _____

1301437

Report To: Leonard Niles **Bill To:** Carol Kamelb
Company: Allwest **Carol Kamelb**
 530 Howard St. #300 **Carol@allwest1.com**
 SF CA 94105 **choulihan@allwest1.com**
Tele: (415) 391-2510 **E-Mail:** leonard@allwest1.com
Project #: 12071.23 **Fax:** (415) 391-2008
Project Location: Emeryville, CA **Project Name:** Hollis
Sampler Signature: *Choulihan* **Purchase Order#** _____

Analysis Request

SAMPLE ID	Location/ Field Point Name	SAMPLING		# Containers	MATRIX							METHOD PRESERVED																																				
		Date	Time		Ground Water	Waste Water	Drinking Water	Sea \ Water	Soil	Air	Sludge	Other	HCL	HNO ₃	Other	BTEX & TPH as Gas (8021/8015 or 8260) / MTBE	TPH as Diesel (8015) <i>and TPH-mts with silica gel</i>	Total Petroleum Oil & Grease (1664 / 5520 E/R&F)	Total Petroleum Hydrocarbons (418.1)	MTBE / BTEX ONLY (EPA 8260/8021)	EPA 505/608 / 8081 (CI Pesticides)	EPA 608 / 8082 PCB's ; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic CI Herbicides)	EPA 524.2 / 624 / 8260 (VOCs) <i>and TPH-g</i>	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	Metals (200.7 / 200.8 / 6010 / 6020)	Filter sample for DISSOLVED metals analysis																	
<i>B15-10-10.5 -></i>		<i>1/17/13</i>	<i>0830</i>	<i>1</i>										<i>X</i>	<i>X</i>																																	
<i>B15-14.5-20 -></i>		<i>1</i>	<i>0850</i>	<i>1</i>										<i>X</i>	<i>X</i>																																	
<i>B16-8.5-9 -></i>		<i>1</i>	<i>1022</i>	<i>1</i>										<i>X</i>	<i>X</i>																																	
<i>B16-11.5-12 -></i>		<i>1</i>	<i>1041</i>	<i>1</i>										<i>X</i>	<i>X</i>																																	
<i>B16-14.5-15 -></i>		<i>1</i>	<i>1054</i>	<i>1</i>										<i>X</i>	<i>X</i>																																	
<i>B20-10-10.5 -></i>		<i>1</i>	<i>1325</i>	<i>1</i>										<i>X</i>	<i>X</i>											<i>X</i>																						
<i>B20-12-12.5 -></i>		<i>1</i>	<i>1336</i>	<i>1</i>										<i>X</i>	<i>X</i>											<i>X</i>																						
<i>B20-14.5-15 -></i>		<i>1</i>	<i>1341</i>	<i>1</i>										<i>X</i>	<i>X</i>											<i>X</i>																						
<i>B23-5-5.5 -></i>		<i>1</i>	<i>1455</i>	<i>1</i>										<i>X</i>	<i>X</i>											<i>X</i>																						
<i>B23-8.5-9 -></i>		<i>1</i>	<i>1507</i>	<i>1</i>										<i>X</i>	<i>X</i>											<i>X</i>																						

****MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate \$250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.**

Relinquished By:	Date:	Time:	Received By:	ICE #	COMMENTS:
<i>[Signature]</i>	<i>1/17/13</i>	<i>1950</i>	<i>[Signature]</i>	<i>3.0</i>	GOOD CONDITION HEAD SPACE ABSENT DECHLORINATED IN LAB APPROPRIATE CONTAINERS PRESERVED IN LAB
<i>[Signature]</i>	<i>1/18/13</i>	<i>1720</i>	<i>[Signature]</i>		
Relinquished By:	Date:	Time:	Received By:	VOAS O&G METALS OTHER HAZARDOUS:	
				PRESERVATION pH<2	



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1301437

ClientCode: AWE

WaterTrax
 WriteOn
 EDF
 Excel
 EQuIS
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:

Leonard Niles
All West Environmental, Inc
530 Howard Street, Ste.300
San Francisco, CA 94105
(415) 391-2510 FAX: (415) 391-2008

Email: Leonard@allwest1.com
cc:
PO:
ProjectNo: #12071.23; Hollis

Bill to:

Darlene Torio
All West Environmental, Inc
530 Howard Street, Ste.300
San Francisco, CA 94105
darlene@allwest1.com

Requested TAT:

5 days

Date Received: 01/18/2013

Date Printed: 01/18/2013

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1301437-001	B15-10-10.5	Soil	1/17/2013 8:30	<input type="checkbox"/>	A		A	A	A							
1301437-002	B15-19.5-20	Soil	1/17/2013 8:50	<input type="checkbox"/>	A		A		A							
1301437-003	B16-8.5-9	Soil	1/17/2013 10:22	<input type="checkbox"/>	A		A		A							
1301437-004	B16-11.5-12	Soil	1/17/2013 10:41	<input type="checkbox"/>	A		A		A							
1301437-005	B16-14.5-15	Soil	1/17/2013 10:54	<input type="checkbox"/>	A		A		A							
1301437-006	B20-10-10.5	Soil	1/17/2013 13:25	<input type="checkbox"/>	A	A			A							
1301437-007	B20-12-12.5	Soil	1/17/2013 13:36	<input type="checkbox"/>	A	A			A							
1301437-008	B20-14.5-15	Soil	1/17/2013 13:41	<input type="checkbox"/>	A	A			A							
1301437-009	B23-5-5.5	Soil	1/17/2013 14:55	<input type="checkbox"/>	A	A			A							
1301437-010	B23-8.5-9	Soil	1/17/2013 15:07	<input type="checkbox"/>	A	A			A							

Test Legend:

1	8270D-PNA_S	2	GAS8260_S	3	G-MBTEX_S	4	PREFDF REPORT	5	TPH(D)WSG_S
6		7		8		9		10	
11		12							

The following SampIDs: 006A, 007A, 008A, 009A, 010A contain testgroup.

Prepared by: Zoraida Cortez

Comments:

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



Sample Receipt Checklist

Client Name: **All West Environmental, Inc**

Date and Time Received: **1/18/2013 5:36:24 PM**

Project Name: **#12071.23; Hollis**

LogIn Reviewed by: **Zoraida Cortez**

WorkOrder N°: **1301437** Matrix: Soil

Carrier: Rob Pringle (MAI Courier)

Chain of Custody (COC) Information

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

Sample Receipt Information

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

Sample Preservation and Hold Time (HT) Information

- All samples received within holding time? Yes No
- Container/Temp Blank temperature Cooler Temp: 3°C NA
- Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
- Sample labels checked for correct preservation? Yes No
- Metal - pH acceptable upon receipt (pH<2)? Yes No NA
- Samples Received on Ice? Yes No

(Ice Type: WET ICE)

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

 Comments:



All West Environmental, Inc
530 Howard Street, Ste.300
San Francisco, CA 94105

Client Project ID: #12071.23; Hollis
Client Contact: Leonard Niles
Client P.O.:

Date Sampled: 01/17/13
Date Received: 01/18/13
Date Extracted: 01/18/13
Date Analyzed: 01/23/13

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1301437

Table with 2 columns: Lab ID, Client ID, Matrix and their corresponding values: 1301437-006A, B20-10-10.5, Soil

Main data table with 8 columns: Compound, Concentration *, DF, Reporting Limit, Compound, Concentration *, DF, Reporting Limit. Lists various organic compounds and their detection results.

Surrogate Recoveries (%)

Table showing surrogate recoveries: %SS1: 117, %SS2: 107, %SS3: 90

Comments:

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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



Table with client information: All West Environmental, Inc, Client Project ID: #12071.23; Hollis, Date Sampled: 01/17/13, Date Received: 01/18/13, Client Contact: Leonard Niles, Date Extracted: 01/18/13, San Francisco, CA 94105, Client P.O., Date Analyzed: 01/23/13

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1301437

Summary table with Lab ID: 1301437-007A, Client ID: B20-12-12.5, Matrix: Soil

Main data table with columns: Compound, Concentration *, DF, Reporting Limit, Compound, Concentration *, DF, Reporting Limit. Lists various organic compounds and their detection results.

Surrogate Recoveries (%)

Table showing surrogate recoveries: %SS1: 122, %SS2: 104, %SS3: 96

Comments:

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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



Table with client information: All West Environmental, Inc, Client Project ID: #12071.23; Hollis, Date Sampled: 01/17/13, Date Received: 01/18/13, Client Contact: Leonard Niles, Date Extracted: 01/18/13, San Francisco, CA 94105, Client P.O., Date Analyzed: 01/25/13

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1301437

Summary table with Lab ID: 1301437-008A, Client ID: B20-14.5-15, Matrix: Soil

Main data table with columns: Compound, Concentration *, DF, Reporting Limit, Compound, Concentration *, DF, Reporting Limit. Lists various organic compounds and their detection results.

Surrogate Recoveries (%)

Table showing surrogate recoveries: %SS1: 119, %SS2: 105, %SS3: 94

Comments:

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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



Table with client information: All West Environmental, Inc, Client Project ID: #12071.23; Hollis, Date Sampled: 01/17/13, Date Received: 01/18/13, Client Contact: Leonard Niles, Date Extracted: 01/18/13, San Francisco, CA 94105, Client P.O., Date Analyzed: 01/22/13

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1301437

Summary table with columns: Lab ID (1301437-009A), Client ID (B23-5-5.5), Matrix (Soil)

Main data table with columns: Compound, Concentration *, DF, Reporting Limit, Compound, Concentration *, DF, Reporting Limit. Lists various organic compounds and their detection results.

Surrogate Recoveries (%)

Table showing surrogate recoveries: %SS1: 113, %SS2: 114, %SS3: 98

Comments:

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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



Table with client information: All West Environmental, Inc, Client Project ID: #12071.23; Hollis, Date Sampled: 01/17/13, Date Received: 01/18/13, Client Contact: Leonard Niles, Date Extracted: 01/18/13, San Francisco, CA 94105, Client P.O., Date Analyzed: 01/22/13

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1301437

Summary table with Lab ID 1301437-010A, Client ID B23-8.5-9, Matrix Soil

Main data table with columns: Compound, Concentration *, DF, Reporting Limit, Compound, Concentration *, DF, Reporting Limit. Lists various organic compounds and their detection results.

Surrogate Recoveries (%)

Table showing surrogate recoveries: %SS1: 113, %SS2: 117, %SS3: 101

Comments:

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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



McC Campbell Analytical, Inc.

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Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

All West Environmental, Inc

530 Howard Street, Ste.300

San Francisco, CA 94105

Client Project ID: #12071.23; Hollis

Client Contact: Leonard Niles

Client P.O.:

Date Sampled: 01/17/13

Date Received: 01/18/13

Date Extracted: 01/22/13

Date Analyzed: 01/23/13-01/25/13

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Extraction Method: SW3550B

Analytical Method: SW8270C-SIM

Work Order: 1301437

Lab ID	1301437-001A	1301437-002A	1301437-003A	1301437-004A	Reporting Limit for DF = 1	
Client ID	B15-10-10.5	B15-19.5-20	B16-8.5-9	B16-11.5-12		
Matrix	S	S	S	S		
DF	1	1	1	1		

Compound	Concentration				mg/kg	ug/L
	Acenaphthene	ND	ND	ND	ND	0.01
Acenaphthylene	ND	ND	ND	ND	0.01	NA
Anthracene	ND	ND	ND	ND	0.01	NA
Benzo (a) anthracene	ND	ND	ND	ND	0.01	NA
Benzo (b) fluoranthene	ND	ND	ND	ND	0.01	NA
Benzo (k) fluoranthene	ND	ND	ND	ND	0.01	NA
Benzo (g,h,i) perylene	ND	ND	ND	ND	0.01	NA
Benzo (a) pyrene	ND	ND	ND	ND	0.01	NA
Chrysene	ND	ND	ND	ND	0.01	NA
Dibenzo (a,h) anthracene	ND	ND	ND	ND	0.01	NA
Fluoranthene	ND	ND	ND	ND	0.01	NA
Fluorene	ND	ND	ND	ND	0.01	NA
Indeno (1,2,3-cd) pyrene	ND	ND	ND	ND	0.01	NA
1-Methylnaphthalene	ND	ND	0.097	0.082	0.01	NA
2-Methylnaphthalene	ND	ND	0.19	0.15	0.01	NA
Naphthalene	ND	ND	0.23	0.15	0.01	NA
Phenanthrene	ND	ND	ND	ND	0.01	NA
Pyrene	ND	ND	ND	ND	0.01	NA

Surrogate Recoveries (%)

%SS1	81	81	77	84
%SS2	81	80	78	85

Comments

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this ND means not detected at or above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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



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http://www.mccampbell.com / E-mail: main@mccampbell.com

All West Environmental, Inc
530 Howard Street, Ste.300
San Francisco, CA 94105

Client Project ID: #12071.23; Hollis
Client Contact: Leonard Niles
Client P.O.:

Date Sampled: 01/17/13
Date Received: 01/18/13
Date Extracted: 01/22/13
Date Analyzed: 01/23/13-01/25/13

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Extraction Method: SW3550B

Analytical Method: SW8270C-SIM

Work Order: 1301437

Lab ID	1301437-005A	1301437-006A	1301437-007A	1301437-008A	Reporting Limit for DF =1	
Client ID	B16-14.5-15	B20-10-10.5	B20-12-12.5	B20-14.5-15		
Matrix	S	S	S	S		
DF	1	20	20	1		

Compound	Concentration				mg/kg	ug/L
Acenaphthene	ND	ND<0.20	ND<0.20	ND	0.01	NA
Acenaphthylene	ND	ND<0.20	ND<0.20	ND	0.01	NA
Anthracene	ND	ND<0.20	ND<0.20	ND	0.01	NA
Benzo (a) anthracene	ND	ND<0.20	ND<0.20	ND	0.01	NA
Benzo (b) fluoranthene	ND	ND<0.20	ND<0.20	ND	0.01	NA
Benzo (k) fluoranthene	ND	ND<0.20	ND<0.20	ND	0.01	NA
Benzo (g,h,i) perylene	ND	ND<0.20	ND<0.20	ND	0.01	NA
Benzo (a) pyrene	ND	ND<0.20	ND<0.20	ND	0.01	NA
Chrysene	ND	ND<0.20	ND<0.20	ND	0.01	NA
Dibenzo (a,h) anthracene	ND	ND<0.20	ND<0.20	ND	0.01	NA
Fluoranthene	ND	ND<0.20	ND<0.20	ND	0.01	NA
Fluorene	ND	ND<0.20	ND<0.20	ND	0.01	NA
Indeno (1,2,3-cd) pyrene	ND	ND<0.20	ND<0.20	ND	0.01	NA
1-Methylnaphthalene	0.039	1.7	2.5	0.085	0.01	NA
2-Methylnaphthalene	0.069	2.9	4.3	0.16	0.01	NA
Naphthalene	0.075	4.5	7.1	0.22	0.01	NA
Phenanthrene	ND	ND<0.20	ND<0.20	ND	0.01	NA
Pyrene	ND	ND<0.20	ND<0.20	ND	0.01	NA

Surrogate Recoveries (%)

%SS1	83	97	101	86
%SS2	84	87	79	85

Comments

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this ND means not detected at or above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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



McC Campbell Analytical, Inc.

"When Quality Counts"

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http://www.mcccampbell.com / E-mail: main@mcccampbell.com

All West Environmental, Inc

530 Howard Street, Ste.300

San Francisco, CA 94105

Client Project ID: #12071.23; Hollis

Client Contact: Leonard Niles

Client P.O.:

Date Sampled: 01/17/13

Date Received: 01/18/13

Date Extracted: 01/22/13

Date Analyzed: 01/23/13-01/25/13

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Extraction Method: SW3550B

Analytical Method: SW8270C-SIM

Work Order: 1301437

Lab ID	1301437-009A	1301437-010A			Reporting Limit for DF =1	
Client ID	B23-5-5.5	B23-8.5-9				
Matrix	S	S				
DF	1	1				

Compound	Concentration			mg/kg	ug/L
	Acenaphthene	ND	ND		0.01
Acenaphthylene	ND	ND		0.01	NA
Anthracene	ND	ND		0.01	NA
Benzo (a) anthracene	ND	ND		0.01	NA
Benzo (b) fluoranthene	ND	ND		0.01	NA
Benzo (k) fluoranthene	ND	ND		0.01	NA
Benzo (g,h,i) perylene	ND	ND		0.01	NA
Benzo (a) pyrene	ND	ND		0.01	NA
Chrysene	ND	ND<0.015		0.01	NA
Dibenzo (a,h) anthracene	ND	ND		0.01	NA
Fluoranthene	ND	0.016		0.01	NA
Fluorene	ND	ND		0.01	NA
Indeno (1,2,3-cd) pyrene	ND	ND		0.01	NA
1-Methylnaphthalene	ND	ND		0.01	NA
2-Methylnaphthalene	ND	ND		0.01	NA
Naphthalene	ND	ND		0.01	NA
Phenanthrene	ND	ND		0.01	NA
Pyrene	ND	0.018		0.01	NA

Surrogate Recoveries (%)

%SS1	81	72		
%SS2	82	66		

Comments

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this ND means not detected at or above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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



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All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/17/13
		Date Received: 01/18/13
	Client Contact: Leonard Niles	Date Extracted 01/18/13
	Client P.O.:	Date Analyzed 01/22/13-01/23/13

TPH(g) by Purge & Trap and GC/MS*

Extraction method: SW5030B

Analytical methods: SW8260B

Work Order: 1301437

Lab ID	Client ID	Matrix	TPH(g)	DF	% SS	Comments
006A	B20-10-10.5	S	480	100	94	
007A	B20-12-12.5	S	2000	1000	92	
008A	B20-14.5-15	S	27	20	93	
009A	B23-5-5.5	S	ND	1	100	
010A	B23-8.5-9	S	0.57	1	103	

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

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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



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All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/17/13
		Date Received: 01/18/13
	Client Contact: Leonard Niles	Date Extracted: 01/18/13
	Client P.O.:	Date Analyzed: 01/19/13-01/23/13

Gasoline Range (C6-C12) Mineral Spirits Range (C9-C12) Volatile Hydrocarbons with BTEX & MTBE*

Extraction Method: SW5030B

Analytical Method: SW8021B/8015Bm

Work Order: 1301437

Lab ID	1301437-001A	1301437-002A	1301437-003A	1301437-004A	Reporting Limit for DF = 1	
Client ID	B15-10-10.5	B15-19.5-20	B16-8.5-9	B16-11.5-12		
Matrix	S	S	S	S		
DF	1	1	10	10		

Compound	Concentration				mg/Kg	ug/L
	TPH(g)	ND	ND	110	260	1.0
TPH(mineral spirits)	ND	ND	59	130	1.0	NA
MTBE	ND	ND	ND<0.50	ND<1.5	0.05	NA
Benzene	ND	ND	0.84	2.9	0.005	NA
Toluene	ND	ND	4.8	16	0.005	NA
Ethylbenzene	ND	ND	2.8	5.7	0.005	NA
Xylenes	0.012	0.007	13	24	0.005	NA

Surrogate Recoveries (%)

%SS:	93	103	---#	---#	
------	----	-----	------	------	--

Comments			d1	d1	
-----------------	--	--	----	----	--

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

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

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation: d1) weakly modified or unmodified gasoline is significant



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All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/17/13
	Client Contact: Leonard Niles	Date Received: 01/18/13
	Client P.O.:	Date Extracted: 01/18/13
		Date Analyzed: 01/19/13-01/23/13

Gasoline Range (C6-C12) Mineral Spirits Range (C9-C12) Volatile Hydrocarbons with BTEX & MTBE*

Extraction Method: SW5030B

Analytical Method: SW8021B/8015Bm

Work Order: 1301437

Lab ID	1301437-005A				Reporting Limit for DF =1
Client ID	B16-14.5-15				
Matrix	S				
DF	20				

Compound	Concentration				mg/Kg	ug/L
	TPH(g)	140				1.0
TPH(mineral spirits)	84				1.0	NA
MTBE	ND<1.0				0.05	NA
Benzene	2.6				0.005	NA
Toluene	10				0.005	NA
Ethylbenzene	2.6				0.005	NA
Xylenes	16				0.005	NA

Surrogate Recoveries (%)

%SS:	---#			
Comments	d1			

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

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

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:
d1) weakly modified or unmodified gasoline is significant



All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/17/13
		Date Received: 01/18/13
	Client Contact: Leonard Niles	Date Extracted 01/18/13
	Client P.O.:	Date Analyzed 01/19/13-01/23/13

Mineral Spirits Range (C9-C12) Volatile Hydrocarbons as Mineral Spirits*

Extraction method: SW5030B

Analytical methods: SW8015Bm

Work Order: 1301437

Lab ID	Client ID	Matrix	TPH(mineral spirits)	DF	% SS	Comments
006A	B20-10-10.5	S	280	20	---#	d1
007A	B20-12-12.5	S	1200	100	---#	d1
008A	B20-14.5-15	S	15	10	109	d1
009A	B23-5-5.5	S	ND	1	97	
010A	B23-8.5-9	S	ND	1	101	

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

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

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

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:
 d1) weakly modified or unmodified gasoline is significant



All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/17/13
		Date Received: 01/18/13
	Client Contact: Leonard Niles	Date Extracted 01/18/13
	Client P.O.:	Date Analyzed 01/19/13-01/25/13

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up*

Extraction method: SW3550B/3630C

Analytical methods: SW8015B

Work Order: 1301437

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	DF	% SS	Comments
1301437-001A	B15-10-10.5	S	ND	1	101	
1301437-002A	B15-19.5-20	S	2.7	1	113	e2
1301437-003A	B16-8.5-9	S	3.8	1	105	e4
1301437-004A	B16-11.5-12	S	9.6	1	102	e4
1301437-005A	B16-14.5-15	S	3.7	1	104	e4
1301437-006A	B20-10-10.5	S	90	1	102	e4
1301437-007A	B20-12-12.5	S	24	1	97	e4
1301437-008A	B20-14.5-15	S	5.1	1	103	e4
1301437-009A	B23-5-5.5	S	ND	1	102	
1301437-010A	B23-8.5-9	S	15	2	95	e7,e2

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

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

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

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

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

- e2) diesel range compounds are significant; no recognizable pattern
- e4) gasoline range compounds are significant.
- e7) oil range compounds are significant



QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 74102

WorkOrder: 1301437

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
tert-Amyl methyl ether (TAME)	ND	0.050	74.9	78.5	4.73	82.8	56 - 94	30	70 - 130
Benzene	ND	0.050	82.6	87.1	5.25	102	60 - 106	30	70 - 130
t-Butyl alcohol (TBA)	ND	0.20	75.1	76	1.19	78.3	56 - 140	30	70 - 130
Chlorobenzene	ND	0.050	81.4	85	4.35	98.6	61 - 108	30	70 - 130
1,2-Dibromoethane (EDB)	ND	0.050	76.4	84.6	10.2	91.2	54 - 119	30	70 - 130
1,2-Dichloroethane (1,2-DCA)	ND	0.050	89.1	97	8.51	107	48 - 115	30	70 - 130
1,1-Dichloroethene	ND	0.050	84.7	88.7	4.56	106	46 - 111	30	70 - 130
Diisopropyl ether (DIPE)	ND	0.050	85.7	88.8	3.63	98.3	53 - 111	30	70 - 130
Ethyl tert-butyl ether (ETBE)	ND	0.050	81.6	85.4	4.56	95.1	61 - 104	30	70 - 130
Methyl-t-butyl ether (MTBE)	ND	0.050	81.6	85	4.16	92.7	58 - 107	30	70 - 130
Toluene	ND	0.050	82.9	88.4	6.48	102	64 - 114	30	70 - 130
Trichloroethene	ND	0.050	91.4	93.5	2.34	108	60 - 116	30	70 - 130
%SS1:	116	0.12	114	114	0	117	70 - 130	30	70 - 130
%SS2:	113	0.12	115	115	0	117	70 - 130	30	70 - 130
%SS3:	93	0.012	93	102	9.39	102	70 - 130	30	70 - 130

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

BATCH 74102 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1301437-006A	01/17/13 1:25 PM	01/18/13	01/23/13 5:25 AM	1301437-007A	01/17/13 1:36 PM	01/18/13	01/23/13 6:06 AM
1301437-008A	01/17/13 1:41 PM	01/18/13	01/25/13 2:01 AM	1301437-009A	01/17/13 2:55 PM	01/18/13	01/22/13 2:46 PM
1301437-010A	01/17/13 3:07 PM	01/18/13	01/22/13 3:30 PM				

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



QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 74051

WorkOrder: 1301437

EPA Method: SW8015B		Extraction: SW3550B/3630C					Spiked Sample ID: 1301371-057A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH-Diesel (C10-C23)	ND	40	99.5	99.8	0.318	110	70 - 130	30	70 - 130	
%SS:	96	25	92	92	0	103	70 - 130	30	70 - 130	

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

BATCH 74051 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1301437-001A	01/17/13 8:30 AM	01/18/13	01/19/13 3:52 PM	1301437-002A	01/17/13 8:50 AM	01/18/13	01/23/13 12:35 AM
1301437-003A	01/17/13 10:22 AM	01/18/13	01/22/13 5:02 PM	1301437-004A	01/17/13 10:41 AM	01/18/13	01/22/13 8:37 PM
1301437-005A	01/17/13 10:54 AM	01/18/13	01/23/13 12:11 AM	1301437-006A	01/17/13 1:25 PM	01/18/13	01/25/13 4:15 PM
1301437-007A	01/17/13 1:36 PM	01/18/13	01/23/13 1:22 AM	1301437-008A	01/17/13 1:41 PM	01/18/13	01/22/13 6:13 PM

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

DHS ELAP Certification 1644

 QA/QC Officer



QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 74119

WorkOrder: 1301437

EPA Method: SW8015B		Extraction: SW3550B/3630C					Spiked Sample ID: 1301437-009A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH-Diesel (C10-C23)	ND	40	114	112	1.01	103	70 - 130	30	70 - 130	
%SS:	102	25	104	103	0.776	92	70 - 130	30	70 - 130	

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

BATCH 74119 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1301437-009A	01/17/13 2:55 PM	01/18/13	01/20/13 2:58 AM	1301437-010A	01/17/13 3:07 PM	01/18/13	01/20/13 10:43 AM

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



QC SUMMARY REPORT FOR SW8270C

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 74149

WorkOrder: 1301437

EPA Method: SW8270C-SIM		Extraction: SW3550B					Spiked Sample ID: 1301437-001A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	mg/kg	mg/kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
Benzo (a) pyrene	ND	0.20	79.1	82.6	4.25	64.6	30 - 130	30	30 - 130	
Chrysene	ND	0.20	94.5	97.6	3.21	83	30 - 130	30	30 - 130	
1-Methylnaphthalene	ND	0.20	99.5	104	4.49	84.4	30 - 130	30	30 - 130	
2-Methylnaphthalene	ND	0.20	83.2	86.3	3.73	70.4	30 - 130	30	30 - 130	
Phenanthrene	ND	0.20	93.5	103	9.31	87.5	30 - 130	30	30 - 130	
Pyrene	ND	0.20	84.8	88.1	3.79	74.2	30 - 130	30	30 - 130	
%SS1:	81	0.50	79	81	2.40	71	30 - 130	30	30 - 130	
%SS2:	81	0.50	80	84	4.06	72	30 - 130	30	30 - 130	

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

BATCH 74149 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1301437-001A	01/17/13 8:30 AM	01/22/13	01/23/13 12:16 AM	1301437-002A	01/17/13 8:50 AM	01/22/13	01/23/13 12:44 AM
1301437-003A	01/17/13 10:22 AM	01/22/13	01/23/13 1:11 AM	1301437-004A	01/17/13 10:41 AM	01/22/13	01/23/13 3:29 PM
1301437-005A	01/17/13 10:54 AM	01/22/13	01/23/13 3:57 PM	1301437-006A	01/17/13 1:25 PM	01/22/13	01/24/13 12:37 PM
1301437-007A	01/17/13 1:36 PM	01/22/13	01/24/13 1:05 PM	1301437-008A	01/17/13 1:41 PM	01/22/13	01/23/13 4:24 PM
1301437-009A	01/17/13 2:55 PM	01/22/13	01/23/13 3:55 AM	1301437-010A	01/17/13 3:07 PM	01/22/13	01/25/13 1:25 PM

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



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 74100

WorkOrder: 1301437

EPA Method: SW8021B/8015Bm		Extraction: SW5030B					Spiked Sample ID: 1301422-002A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH(btex) £	ND	0.60	103	105	2.11	109	70 - 130	20	70 - 130	
MTBE	ND	0.10	75	93.9	19.8	113	70 - 130	20	70 - 130	
Benzene	ND	0.10	104	101	2.79	106	70 - 130	20	70 - 130	
Toluene	ND	0.10	101	99.4	1.18	105	70 - 130	20	70 - 130	
Ethylbenzene	ND	0.10	102	98	4.36	101	70 - 130	20	70 - 130	
Xylenes	ND	0.30	102	102	0	105	70 - 130	20	70 - 130	
%SS:	110	0.10	107	100	6.11	102	70 - 130	20	70 - 130	

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

BATCH 74100 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1301437-001A	01/17/13 8:30 AM	01/18/13	01/23/13 7:26 PM	1301437-002A	01/17/13 8:50 AM	01/18/13	01/23/13 8:55 PM
1301437-003A	01/17/13 10:22 AM	01/18/13	01/19/13 10:05 PM	1301437-004A	01/17/13 10:41 AM	01/18/13	01/19/13 9:35 PM
1301437-005A	01/17/13 10:54 AM	01/18/13	01/19/13 11:04 PM	1301437-006A	01/17/13 1:25 PM	01/18/13	01/19/13 11:34 PM
1301437-007A	01/17/13 1:36 PM	01/18/13	01/19/13 3:09 PM	1301437-008A	01/17/13 1:41 PM	01/18/13	01/19/13 4:09 PM
1301437-009A	01/17/13 2:55 PM	01/18/13	01/23/13 9:25 PM	1301437-010A	01/17/13 3:07 PM	01/18/13	01/23/13 10:24 PM

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



Analytical Report

All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/18/13
		Date Received: 01/18/13
	Client Contact: Leonard Niles	Date Reported: 01/28/13
	Client P.O.:	Date Completed: 01/28/13

WorkOrder: 1301438

January 28, 2013

Dear Leonard:

Enclosed within are:

- 1) The results of the **10** analyzed samples from your project: **#12071.23; Hollis**,
- 2) QC data for the above samples, and
- 3) A copy of the chain of custody.

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

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

Best regards,

Angela Rydelius
Laboratory Manager
McC Campbell Analytical, Inc.

The analytical results relate only to the items tested.



McC Campbell Analytical, Inc.

1534 Willow Pass Rd. / Pittsburg, Ca. 94565-1701
www.mcccampbell.com / main@mcccampbell.com
Telephone: (877) 252-9262 / Fax: (925) 252-9269

1301438

CHAIN OF CUSTODY RECORD

TURN AROUND TIME: RUSH 24 HR 48 HR 72 HR 5 DAY 10 DAY

GeoTracker EDF PDF EDD Write On (DW) EQuIS

Effluent Sample Requiring "J" flag UST Clean Up Fund Project ; Claim # _____

Report To: Leonard Niles	Bill To: Carol Ramelb
Company: Allwest	carol@allwest1.com
530 Howard St. # 300	choulihan@allwest1.com
SF, CA 94105	E-Mail: leonard@allwest1.com
Telex: (415) 391-2510	Fax: (415) 391-2008
Project #: 1207L.23	Project Name: Hollis
Project Location: Emeryville, CA	Purchase Order#

Sampler Signature: *[Signature]*

Analysis Request

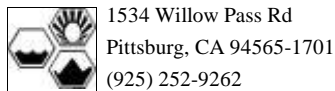
SAMPLE ID	Location/ Field Point Name	SAMPLING		# Containers	MATRIX								METHOD PRESERVED																						
		Date	Time		Ground Water	Waste Water	Drinking Water	Sea / Water	Soil	Air	Sludge	Other	HCL	HNO ₃	Other	BTEX & TPH as Gas (8021/8015 or 8260) / MTBE	TPH as Diesel (8015) and TPH -ms w/ silica gel cleanup	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	MTBE / BTEX ONLY (EPA 8260/ 8021)	EPA 505/ 608 / 8081 (CI Pesticides)	EPA 608 / 8082 PCB's ; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic CI Herbicides)	EPA 524.2 / 624 / 8260 (VOCs) and TPH-g	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	LAUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	Metals (200.7 / 200.8 / 6010 / 6020)	Filter sample for DISSOLVED metals analysis				
B21-4.5-5 →		1/18/13	0830	1					X						X									X											
B21-10-10.5 →			0856	1					X						X									X											
B21-21.5-22 →			0935	1					X						X									X											
B22-4.5-5 →			1005	1					X						X									X											
B22-10-10.5 →			1027	1					X						X									X											
B22-14.5-15 →			1034	1					X						X									X											
B24-9.5-5 →			1148	1					X						X									X											
B24-9.5-9 →			1210	1					X						X									X											
B24-21.5-22 →			1244	1					X						X									X											
Disp. Comp. →			1400	1					X						X									X											

**MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate \$250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

Relinquished By: <i>[Signature]</i>	Date: 1/18/13	Time: 1450	Received By: <i>[Signature]</i>
Relinquished By: <i>[Signature]</i>	Date: 1/18/13	Time: 1730	Received By: <i>[Signature]</i>
Relinquished By:	Date:	Time:	Received By:

ICE/t° 3.0
GOOD CONDITION _____
HEAD SPACE ABSENT _____
DECHLORINATED IN LAB _____
APPROPRIATE CONTAINERS _____
PRESERVED IN LAB _____

VOAS _____ O&G _____ METALS _____ OTHER _____ HAZARDOUS: _____
PRESERVATION pH-2 _____



CHAIN-OF-CUSTODY RECORD

WorkOrder: 1301438

ClientCode: AWE

WaterTrax
 WriteOn
 EDF
 Excel
 EQUIS
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:
 Leonard Niles
 All West Environmental, Inc
 530 Howard Street, Ste.300
 San Francisco, CA 94105
 (415) 391-2510 FAX: (415) 391-2008

Email: Leonard@allwest1.com
 cc:
 PO:
 ProjectNo: #12071.23; Hollis

Bill to:
 Darlene Torio
 All West Environmental, Inc
 530 Howard Street, Ste.300
 San Francisco, CA 94105
 darlene@allwest1.com

Requested TAT: 5 days

Date Received: 01/18/2013

Date Printed: 01/18/2013

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1301438-001	B21-4.5-5	Soil	1/18/2013 8:30	<input type="checkbox"/>	A	A		A	A								
1301438-002	B21-10-10.5	Soil	1/18/2013 8:56	<input type="checkbox"/>	A	A			A								
1301438-003	B21-21.5-22	Soil	1/18/2013 9:35	<input type="checkbox"/>	A	A			A								
1301438-004	B22-4.5-5	Soil	1/18/2013 10:05	<input type="checkbox"/>	A	A			A								
1301438-005	B22-10-10.5	Soil	1/18/2013 10:27	<input type="checkbox"/>	A	A			A								
1301438-006	B22-14.5-15	Soil	1/18/2013 10:34	<input type="checkbox"/>	A	A			A								
1301438-007	B24-4.5-5	Soil	1/18/2013 11:48	<input type="checkbox"/>	A	A			A								
1301438-008	B24-8.5-9	Soil	1/18/2013 12:10	<input type="checkbox"/>	A	A			A								
1301438-009	B24-21.5-22	Soil	1/18/2013 12:44	<input type="checkbox"/>	A	A			A								
1301438-010	Disp. Comp.	Soil	1/18/2013 14:00	<input type="checkbox"/>	A	A	A		A								

Test Legend:

1	8270D-PNA_S	2	GAS8260_S	3	LUFTMS_S	4	PREFD REPORT	5	TPH(D)WSG_S
6		7		8		9		10	
11		12							

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

Prepared by: Zoraida Cortez

Comments:

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



Sample Receipt Checklist

Client Name: **All West Environmental, Inc**

Date and Time Received: **1/18/2013 5:58:38 PM**

Project Name: **#12071.23; Hollis**

LogIn Reviewed by: **Zoraida Cortez**

WorkOrder N°: **1301438** Matrix: Soil

Carrier: Rob Pringle (MAI Courier)

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature	Cooler Temp: 3°C		NA <input type="checkbox"/>
Water - VOA vials have zero headspace / no bubbles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Metal - pH acceptable upon receipt (pH<2)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

(Ice Type: WET ICE)

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

 Comments:



Table with client information: All West Environmental, Inc, Client Project ID: #12071.23; Hollis, Date Sampled: 01/18/13, Date Received: 01/18/13, Client Contact: Leonard Niles, Date Extracted: 01/18/13, San Francisco, CA 94105, Client P.O., Date Analyzed: 01/22/13

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1301438

Summary table with Lab ID 1301438-001A, Client ID B21-4.5-5, Matrix Soil

Main data table with columns: Compound, Concentration *, DF, Reporting Limit, Compound, Concentration *, DF, Reporting Limit. Lists various organic compounds and their detection results.

Surrogate Recoveries (%)

Table showing surrogate recoveries: %SS1: 119, %SS2: 104, %SS3: 95

Comments:

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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

a13) reporting limit raised due to low density sample



Table with client information: All West Environmental, Inc, Client Project ID: #12071.23; Hollis, Date Sampled: 01/18/13, Date Received: 01/18/13, Client Contact: Leonard Niles, Date Extracted: 01/18/13, San Francisco, CA 94105, Client P.O., Date Analyzed: 01/24/13

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1301438

Table with Lab ID: 1301438-002A, Client ID: B21-10-10.5, Matrix: Soil

Main data table with columns: Compound, Concentration *, DF, Reporting Limit, Compound, Concentration *, DF, Reporting Limit. Lists various organic compounds and their detection results.

Surrogate Recoveries (%)

Table showing surrogate recoveries: %SS1: 117, %SS2: 106, %SS3: 91

Comments:

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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

a13) reporting limit raised due to low density sample



All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/18/13
		Date Received: 01/18/13
	Client Contact: Leonard Niles	Date Extracted: 01/18/13
	Client P.O.:	Date Analyzed: 01/24/13

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1301438

Lab ID	1301438-003A
Client ID	B21-21.5-22
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<3.3	67	0.05	tert-Amyl methyl ether (TAME)	ND<0.33	67	0.005
Benzene	1.2	67	0.005	Bromobenzene	ND<0.33	67	0.005
Bromochloromethane	ND<0.33	67	0.005	Bromodichloromethane	ND<0.33	67	0.005
Bromoform	ND<0.33	67	0.005	Bromomethane	ND<0.33	67	0.005
2-Butanone (MEK)	ND<1.3	67	0.02	t-Butyl alcohol (TBA)	ND<3.3	67	0.05
n-Butyl benzene	0.50	67	0.005	sec-Butyl benzene	ND<0.33	67	0.005
tert-Butyl benzene	ND<0.33	67	0.005	Carbon Disulfide	ND<0.33	67	0.005
Carbon Tetrachloride	ND<0.33	67	0.005	Chlorobenzene	ND<0.33	67	0.005
Chloroethane	ND<0.33	67	0.005	Chloroform	ND<0.33	67	0.005
Chloromethane	ND<0.33	67	0.005	2-Chlorotoluene	ND<0.33	67	0.005
4-Chlorotoluene	ND<0.33	67	0.005	Dibromochloromethane	ND<0.33	67	0.005
1,2-Dibromo-3-chloropropane	ND<0.27	67	0.004	1,2-Dibromoethane (EDB)	ND<0.27	67	0.004
Dibromomethane	ND<0.33	67	0.005	1,2-Dichlorobenzene	ND<0.33	67	0.005
1,3-Dichlorobenzene	ND<0.33	67	0.005	1,4-Dichlorobenzene	ND<0.33	67	0.005
Dichlorodifluoromethane	ND<0.33	67	0.005	1,1-Dichloroethane	ND<0.33	67	0.005
1,2-Dichloroethane (1,2-DCA)	ND<0.27	67	0.004	1,1-Dichloroethene	ND<0.33	67	0.005
cis-1,2-Dichloroethene	ND<0.33	67	0.005	trans-1,2-Dichloroethene	ND<0.33	67	0.005
1,2-Dichloropropane	ND<0.33	67	0.005	1,3-Dichloropropane	ND<0.33	67	0.005
2,2-Dichloropropane	ND<0.33	67	0.005	1,1-Dichloropropene	ND<0.33	67	0.005
cis-1,3-Dichloropropene	ND<0.33	67	0.005	trans-1,3-Dichloropropene	ND<0.33	67	0.005
Diisopropyl ether (DIPE)	ND<0.33	67	0.005	Ethylbenzene	1.8	67	0.005
Ethyl tert-butyl ether (ETBE)	ND<0.33	67	0.005	Freon 113	ND<6.7	67	0.1
Hexachlorobutadiene	ND<0.33	67	0.005	Hexachloroethane	ND<0.33	67	0.005
2-Hexanone	ND<0.33	67	0.005	Isopropylbenzene	ND<0.33	67	0.005
4-Isopropyl toluene	ND<0.33	67	0.005	Methyl-t-butyl ether (MTBE)	12	67	0.005
Methylene chloride	ND<0.33	67	0.005	4-Methyl-2-pentanone (MIBK)	ND<0.33	67	0.005
Naphthalene	0.77	67	0.005	n-Propyl benzene	0.67	67	0.005
Styrene	ND<0.33	67	0.005	1,1,1,2-Tetrachloroethane	ND<0.33	67	0.005
1,1,2,2-Tetrachloroethane	ND<0.33	67	0.005	Tetrachloroethene	ND<0.33	67	0.005
Toluene	4.9	67	0.005	1,2,3-Trichlorobenzene	ND<0.33	67	0.005
1,2,4-Trichlorobenzene	ND<0.33	67	0.005	1,1,1-Trichloroethane	ND<0.33	67	0.005
1,1,2-Trichloroethane	ND<0.33	67	0.005	Trichloroethene	ND<0.33	67	0.005
Trichlorofluoromethane	ND<0.33	67	0.005	1,2,3-Trichloropropane	ND<0.33	67	0.005
1,2,4-Trimethylbenzene	4.6	67	0.005	1,3,5-Trimethylbenzene	1.5	67	0.005
Vinyl Chloride	ND<0.33	67	0.005	Xylenes, Total	11	67	0.005

Surrogate Recoveries (%)

%SS1:	122	%SS2:	108
%SS3:	88		

Comments:

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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

a13) reporting limit raised due to low density sample



All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/18/13
		Date Received: 01/18/13
	Client Contact: Leonard Niles	Date Extracted: 01/18/13
	Client P.O.:	Date Analyzed: 01/24/13

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1301438

Lab ID	1301438-004A
Client ID	B22-4.5-5
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<1.2	25	0.05	tert-Amyl methyl ether (TAME)	ND<0.12	25	0.005
Benzene	0.16	25	0.005	Bromobenzene	ND<0.12	25	0.005
Bromochloromethane	ND<0.12	25	0.005	Bromodichloromethane	ND<0.12	25	0.005
Bromoform	ND<0.12	25	0.005	Bromomethane	ND<0.12	25	0.005
2-Butanone (MEK)	ND<0.50	25	0.02	t-Butyl alcohol (TBA)	ND<1.2	25	0.05
n-Butyl benzene	0.54	25	0.005	sec-Butyl benzene	ND<0.12	25	0.005
tert-Butyl benzene	ND<0.12	25	0.005	Carbon Disulfide	ND<0.12	25	0.005
Carbon Tetrachloride	ND<0.12	25	0.005	Chlorobenzene	ND<0.12	25	0.005
Chloroethane	ND<0.12	25	0.005	Chloroform	ND<0.12	25	0.005
Chloromethane	ND<0.12	25	0.005	2-Chlorotoluene	ND<0.12	25	0.005
4-Chlorotoluene	ND<0.12	25	0.005	Dibromochloromethane	ND<0.12	25	0.005
1,2-Dibromo-3-chloropropane	ND<0.10	25	0.004	1,2-Dibromoethane (EDB)	ND<0.10	25	0.004
Dibromomethane	ND<0.12	25	0.005	1,2-Dichlorobenzene	ND<0.12	25	0.005
1,3-Dichlorobenzene	ND<0.12	25	0.005	1,4-Dichlorobenzene	ND<0.12	25	0.005
Dichlorodifluoromethane	ND<0.12	25	0.005	1,1-Dichloroethane	ND<0.12	25	0.005
1,2-Dichloroethane (1,2-DCA)	ND<0.10	25	0.004	1,1-Dichloroethene	ND<0.12	25	0.005
cis-1,2-Dichloroethene	ND<0.12	25	0.005	trans-1,2-Dichloroethene	ND<0.12	25	0.005
1,2-Dichloropropane	ND<0.12	25	0.005	1,3-Dichloropropane	ND<0.12	25	0.005
2,2-Dichloropropane	ND<0.12	25	0.005	1,1-Dichloropropene	ND<0.12	25	0.005
cis-1,3-Dichloropropene	ND<0.12	25	0.005	trans-1,3-Dichloropropene	ND<0.12	25	0.005
Diisopropyl ether (DIPE)	ND<0.12	25	0.005	Ethylbenzene	1.5	25	0.005
Ethyl tert-butyl ether (ETBE)	ND<0.12	25	0.005	Freon 113	ND<2.5	25	0.1
Hexachlorobutadiene	ND<0.12	25	0.005	Hexachloroethane	ND<0.12	25	0.005
2-Hexanone	ND<0.12	25	0.005	Isopropylbenzene	0.16	25	0.005
4-Isopropyl toluene	0.13	25	0.005	Methyl-t-butyl ether (MTBE)	0.45	25	0.005
Methylene chloride	ND<0.12	25	0.005	4-Methyl-2-pentanone (MIBK)	ND<0.12	25	0.005
Naphthalene	0.74	25	0.005	n-Propyl benzene	0.74	25	0.005
Styrene	ND<0.12	25	0.005	1,1,1,2-Tetrachloroethane	ND<0.12	25	0.005
1,1,2,2-Tetrachloroethane	ND<0.12	25	0.005	Tetrachloroethene	ND<0.12	25	0.005
Toluene	ND<0.12	25	0.005	1,2,3-Trichlorobenzene	ND<0.12	25	0.005
1,2,4-Trichlorobenzene	ND<0.12	25	0.005	1,1,1-Trichloroethane	ND<0.12	25	0.005
1,1,2-Trichloroethane	ND<0.12	25	0.005	Trichloroethene	ND<0.12	25	0.005
Trichlorofluoromethane	ND<0.12	25	0.005	1,2,3-Trichloropropane	ND<0.12	25	0.005
1,2,4-Trimethylbenzene	4.2	25	0.005	1,3,5-Trimethylbenzene	1.4	25	0.005
Vinyl Chloride	ND<0.12	25	0.005	Xylenes, Total	6.3	25	0.005

Surrogate Recoveries (%)

%SS1:	115	%SS2:	107
%SS3:	92		

Comments:

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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

a13) reporting limit raised due to low density sample



Table with client information: All West Environmental, Inc, Client Project ID: #12071.23; Hollis, Date Sampled: 01/18/13, Date Received: 01/18/13, Client Contact: Leonard Niles, Date Extracted: 01/18/13, San Francisco, CA 94105, Client P.O., Date Analyzed: 01/25/13

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1301438

Table with Lab ID: 1301438-005A, Client ID: B22-10-10.5, Matrix: Soil

Main data table with columns: Compound, Concentration *, DF, Reporting Limit, Compound, Concentration *, DF, Reporting Limit. Lists various organic compounds and their detection levels.

Surrogate Recoveries (%)

Table showing surrogate recoveries: %SS1: 116, %SS2: 107, %SS3: 95

Comments:

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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

a13) reporting limit raised due to low density sample



Table with client information: All West Environmental, Inc, Client Project ID: #12071.23; Hollis, Date Sampled: 01/18/13, Date Received: 01/18/13, Client Contact: Leonard Niles, Date Extracted: 01/18/13, San Francisco, CA 94105, Client P.O., Date Analyzed: 01/25/13

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1301438

Summary table with Lab ID 1301438-006A, Client ID B22-14.5-15, Matrix Soil

Main data table with columns: Compound, Concentration *, DF, Reporting Limit, Compound, Concentration *, DF, Reporting Limit. Lists various organic compounds and their detection levels.

Surrogate Recoveries (%)

Table showing surrogate recoveries: %SS1: 111, %SS2: 108, %SS3: 91

Comments:

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.
ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor
surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.
a13) reporting limit raised due to low density sample



All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/18/13
		Date Received: 01/18/13
	Client Contact: Leonard Niles	Date Extracted: 01/18/13
	Client P.O.:	Date Analyzed: 01/25/13

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1301438

Lab ID	1301438-007A
Client ID	B24-4.5-5
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	0.096	1.0	0.05	tert-Amyl methyl ether (TAME)	ND	1.0	0.005
Benzene	ND	1.0	0.005	Bromobenzene	ND	1.0	0.005
Bromochloromethane	ND	1.0	0.005	Bromodichloromethane	ND	1.0	0.005
Bromoform	ND	1.0	0.005	Bromomethane	ND	1.0	0.005
2-Butanone (MEK)	0.029	1.0	0.02	t-Butyl alcohol (TBA)	ND	1.0	0.05
n-Butyl benzene	ND	1.0	0.005	sec-Butyl benzene	ND	1.0	0.005
tert-Butyl benzene	ND	1.0	0.005	Carbon Disulfide	ND	1.0	0.005
Carbon Tetrachloride	ND	1.0	0.005	Chlorobenzene	ND	1.0	0.005
Chloroethane	ND	1.0	0.005	Chloroform	ND	1.0	0.005
Chloromethane	ND	1.0	0.005	2-Chlorotoluene	ND	1.0	0.005
4-Chlorotoluene	ND	1.0	0.005	Dibromochloromethane	ND	1.0	0.005
1,2-Dibromo-3-chloropropane	ND	1.0	0.004	1,2-Dibromoethane (EDB)	ND	1.0	0.004
Dibromomethane	ND	1.0	0.005	1,2-Dichlorobenzene	ND	1.0	0.005
1,3-Dichlorobenzene	ND	1.0	0.005	1,4-Dichlorobenzene	ND	1.0	0.005
Dichlorodifluoromethane	ND	1.0	0.005	1,1-Dichloroethane	ND	1.0	0.005
1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.004	1,1-Dichloroethene	ND	1.0	0.005
cis-1,2-Dichloroethene	ND	1.0	0.005	trans-1,2-Dichloroethene	ND	1.0	0.005
1,2-Dichloropropane	ND	1.0	0.005	1,3-Dichloropropane	ND	1.0	0.005
2,2-Dichloropropane	ND	1.0	0.005	1,1-Dichloropropene	ND	1.0	0.005
cis-1,3-Dichloropropene	ND	1.0	0.005	trans-1,3-Dichloropropene	ND	1.0	0.005
Diisopropyl ether (DIPE)	ND	1.0	0.005	Ethylbenzene	ND	1.0	0.005
Ethyl tert-butyl ether (ETBE)	ND	1.0	0.005	Freon 113	ND	1.0	0.1
Hexachlorobutadiene	ND	1.0	0.005	Hexachloroethane	ND	1.0	0.005
2-Hexanone	ND	1.0	0.005	Isopropylbenzene	ND	1.0	0.005
4-Isopropyl toluene	ND	1.0	0.005	Methyl-t-butyl ether (MTBE)	0.12	1.0	0.005
Methylene chloride	ND	1.0	0.005	4-Methyl-2-pentanone (MIBK)	ND	1.0	0.005
Naphthalene	ND	1.0	0.005	n-Propyl benzene	ND	1.0	0.005
Styrene	ND	1.0	0.005	1,1,1,2-Tetrachloroethane	ND	1.0	0.005
1,1,2,2-Tetrachloroethane	ND	1.0	0.005	Tetrachloroethene	ND	1.0	0.005
Toluene	ND	1.0	0.005	1,2,3-Trichlorobenzene	ND	1.0	0.005
1,2,4-Trichlorobenzene	ND	1.0	0.005	1,1,1-Trichloroethane	ND	1.0	0.005
1,1,2-Trichloroethane	ND	1.0	0.005	Trichloroethene	ND	1.0	0.005
Trichlorofluoromethane	ND	1.0	0.005	1,2,3-Trichloropropane	ND	1.0	0.005
1,2,4-Trimethylbenzene	ND	1.0	0.005	1,3,5-Trimethylbenzene	ND	1.0	0.005
Vinyl Chloride	ND	1.0	0.005	Xylenes, Total	ND	1.0	0.005

Surrogate Recoveries (%)

%SS1:	126	%SS2:	111
%SS3:	93		

Comments: a13

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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

a13) reporting limit raised due to low density sample



Table with client information: All West Environmental, Inc, Client Project ID: #12071.23; Hollis, Date Sampled: 01/18/13, Date Received: 01/18/13, Client Contact: Leonard Niles, Date Extracted: 01/18/13, San Francisco, CA 94105, Client P.O., Date Analyzed: 01/24/13

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1301438

Summary table with Lab ID 1301438-008A, Client ID B24-8.5-9, Matrix Soil

Main data table with columns: Compound, Concentration *, DF, Reporting Limit, Compound, Concentration *, DF, Reporting Limit. Lists various organic compounds and their detection levels.

Surrogate Recoveries (%)

Table showing surrogate recoveries: %SS1: 122, %SS2: 106, %SS3: 93

Comments:

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.
ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor
surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.
a13) reporting limit raised due to low density sample



Table with client information: All West Environmental, Inc, Client Project ID: #12071.23; Hollis, Date Sampled: 01/18/13, Date Received: 01/18/13, Client Contact: Leonard Niles, Date Extracted: 01/18/13, San Francisco, CA 94105, Client P.O., Date Analyzed: 01/25/13

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1301438

Table with Lab ID: 1301438-009A, Client ID: B24-21.5-22, Matrix: Soil

Main data table with columns: Compound, Concentration *, DF, Reporting Limit, Compound, Concentration *, DF, Reporting Limit. Lists various organic compounds and their detection results.

Surrogate Recoveries (%)

Table showing surrogate recoveries: %SS1: 116, %SS2: 109, %SS3: 92

Comments:

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.
ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor
surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.
a13) reporting limit raised due to low density sample



All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/18/13
		Date Received: 01/18/13
	Client Contact: Leonard Niles	Date Extracted: 01/18/13
	Client P.O.:	Date Analyzed: 01/25/13

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1301438

Lab ID	1301438-010A
Client ID	Disp. Comp.
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<1.0	20	0.05	tert-Amyl methyl ether (TAME)	ND<0.10	20	0.005
Benzene	0.38	20	0.005	Bromobenzene	ND<0.10	20	0.005
Bromochloromethane	ND<0.10	20	0.005	Bromodichloromethane	ND<0.10	20	0.005
Bromoform	ND<0.10	20	0.005	Bromomethane	ND<0.10	20	0.005
2-Butanone (MEK)	ND<0.40	20	0.02	t-Butyl alcohol (TBA)	ND<1.0	20	0.05
n-Butyl benzene	ND<0.10	20	0.005	sec-Butyl benzene	ND<0.10	20	0.005
tert-Butyl benzene	ND<0.10	20	0.005	Carbon Disulfide	ND<0.10	20	0.005
Carbon Tetrachloride	ND<0.10	20	0.005	Chlorobenzene	ND<0.10	20	0.005
Chloroethane	ND<0.10	20	0.005	Chloroform	ND<0.10	20	0.005
Chloromethane	ND<0.10	20	0.005	2-Chlorotoluene	ND<0.10	20	0.005
4-Chlorotoluene	ND<0.10	20	0.005	Dibromochloromethane	ND<0.10	20	0.005
1,2-Dibromo-3-chloropropane	ND<0.080	20	0.004	1,2-Dibromoethane (EDB)	ND<0.080	20	0.004
Dibromomethane	ND<0.10	20	0.005	1,2-Dichlorobenzene	ND<0.10	20	0.005
1,3-Dichlorobenzene	ND<0.10	20	0.005	1,4-Dichlorobenzene	ND<0.10	20	0.005
Dichlorodifluoromethane	ND<0.10	20	0.005	1,1-Dichloroethane	ND<0.10	20	0.005
1,2-Dichloroethane (1,2-DCA)	ND<0.080	20	0.004	1,1-Dichloroethene	ND<0.10	20	0.005
cis-1,2-Dichloroethene	ND<0.10	20	0.005	trans-1,2-Dichloroethene	ND<0.10	20	0.005
1,2-Dichloropropane	ND<0.10	20	0.005	1,3-Dichloropropane	ND<0.10	20	0.005
2,2-Dichloropropane	ND<0.10	20	0.005	1,1-Dichloropropene	ND<0.10	20	0.005
cis-1,3-Dichloropropene	ND<0.10	20	0.005	trans-1,3-Dichloropropene	ND<0.10	20	0.005
Diisopropyl ether (DIPE)	ND<0.10	20	0.005	Ethylbenzene	0.22	20	0.005
Ethyl tert-butyl ether (ETBE)	ND<0.10	20	0.005	Freon 113	ND<2.0	20	0.1
Hexachlorobutadiene	ND<0.10	20	0.005	Hexachloroethane	ND<0.10	20	0.005
2-Hexanone	ND<0.10	20	0.005	Isopropylbenzene	ND<0.10	20	0.005
4-Isopropyl toluene	ND<0.10	20	0.005	Methyl-t-butyl ether (MTBE)	2.6	20	0.005
Methylene chloride	ND<0.10	20	0.005	4-Methyl-2-pentanone (MIBK)	ND<0.10	20	0.005
Naphthalene	ND<0.10	20	0.005	n-Propyl benzene	ND<0.10	20	0.005
Styrene	ND<0.10	20	0.005	1,1,1,2-Tetrachloroethane	ND<0.10	20	0.005
1,1,2,2-Tetrachloroethane	ND<0.10	20	0.005	Tetrachloroethene	ND<0.10	20	0.005
Toluene	1.0	20	0.005	1,2,3-Trichlorobenzene	ND<0.10	20	0.005
1,2,4-Trichlorobenzene	ND<0.10	20	0.005	1,1,1-Trichloroethane	ND<0.10	20	0.005
1,1,2-Trichloroethane	ND<0.10	20	0.005	Trichloroethene	ND<0.10	20	0.005
Trichlorofluoromethane	ND<0.10	20	0.005	1,2,3-Trichloropropane	ND<0.10	20	0.005
1,2,4-Trimethylbenzene	0.42	20	0.005	1,3,5-Trimethylbenzene	0.13	20	0.005
Vinyl Chloride	ND<0.10	20	0.005	Xylenes, Total	1.4	20	0.005

Surrogate Recoveries (%)

%SS1:	116	%SS2:	105
%SS3:	88		

Comments:

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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

a13) reporting limit raised due to low density sample



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Table with client information: All West Environmental, Inc, Client Project ID: #12071.23; Hollis, Date Sampled: 01/18/13, Date Received: 01/18/13, Client Contact: Leonard Niles, Date Extracted: 01/22/13, San Francisco, CA 94105, Client P.O., Date Analyzed: 01/23/13-01/24/13

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Extraction Method: SW3550B

Analytical Method: SW8270C-SIM

Work Order: 1301438

Table with columns: Lab ID, Client ID, Matrix, DF, and Reporting Limit for DF=1 (S, W). Rows include Lab IDs 1301438-001A through 004A.

Main data table with columns: Compound, Concentration (mg/kg, ug/L). Lists various PAHs like Acenaphthene, Anthracene, Benzo(a)anthracene, etc., with their respective concentrations.

Surrogate Recoveries (%)

Table showing surrogate recoveries for %SS1 and %SS2 across different samples.

Comments

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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



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All West Environmental, Inc
530 Howard Street, Ste.300
San Francisco, CA 94105

Client Project ID: #12071.23; Hollis

Date Sampled: 01/18/13

Date Received: 01/18/13

Client Contact: Leonard Niles

Date Extracted: 01/22/13

Client P.O.:

Date Analyzed: 01/23/13-01/24/13

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Extraction Method: SW3550B

Analytical Method: SW8270C-SIM

Work Order: 1301438

Lab ID	1301438-005A	1301438-006A	1301438-007A	1301438-008A	Reporting Limit for DF = 1	
Client ID	B22-10-10.5	B22-14.5-15	B24-4.5-5	B24-8.5-9		
Matrix	S	S	S	S		
DF	5	1	1	10		

Compound	Concentration				mg/kg	ug/L
	Acenaphthene	ND<0.050	ND	ND	ND<0.10	0.01
Acenaphthylene	ND<0.050	ND	ND	ND<0.10	0.01	NA
Anthracene	ND<0.050	ND	ND	ND<0.10	0.01	NA
Benzo (a) anthracene	ND<0.050	ND	ND	ND<0.10	0.01	NA
Benzo (b) fluoranthene	ND<0.050	ND	ND	ND<0.10	0.01	NA
Benzo (k) fluoranthene	ND<0.050	ND	ND	ND<0.10	0.01	NA
Benzo (g,h,i) perylene	ND<0.050	ND	ND	ND<0.10	0.01	NA
Benzo (a) pyrene	ND<0.050	ND	ND	ND<0.10	0.01	NA
Chrysene	ND<0.050	ND	ND	ND<0.10	0.01	NA
Dibenzo (a,h) anthracene	ND<0.050	ND	ND	ND<0.10	0.01	NA
Fluoranthene	ND<0.050	ND	ND	ND<0.10	0.01	NA
Fluorene	ND<0.050	ND	ND	ND<0.10	0.01	NA
Indeno (1,2,3-cd) pyrene	ND<0.050	ND	ND	ND<0.10	0.01	NA
1-Methylnaphthalene	0.26	0.024	0.013	0.59	0.01	NA
2-Methylnaphthalene	0.41	0.044	0.025	0.95	0.01	NA
Naphthalene	0.67	0.058	0.029	0.85	0.01	NA
Phenanthrene	ND<0.050	ND	ND	ND<0.10	0.01	NA
Pyrene	ND<0.050	ND	ND	ND<0.10	0.01	NA

Surrogate Recoveries (%)

%SS1	86	83	84	81
%SS2	74	83	84	77

Comments

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this ND means not detected at or above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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



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All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/18/13
		Date Received: 01/18/13
	Client Contact: Leonard Niles	Date Extracted: 01/22/13
	Client P.O.:	Date Analyzed: 01/23/13-01/24/13

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Extraction Method: SW3550B

Analytical Method: SW8270C-SIM

Work Order: 1301438

Lab ID	1301438-009A	1301438-010A			Reporting Limit for DF =1	
Client ID	B24-21.5-22	Disp. Comp.				
Matrix	S	S				
DF	1	1				

Compound	Concentration			mg/kg	ug/L
Acenaphthene	ND	ND		0.01	NA
Acenaphthylene	ND	ND		0.01	NA
Anthracene	ND	ND		0.01	NA
Benzo (a) anthracene	ND	ND		0.01	NA
Benzo (b) fluoranthene	ND	ND		0.01	NA
Benzo (k) fluoranthene	ND	ND		0.01	NA
Benzo (g,h,i) perylene	ND	ND		0.01	NA
Benzo (a) pyrene	ND	ND		0.01	NA
Chrysene	ND	ND		0.01	NA
Dibenzo (a,h) anthracene	ND	ND		0.01	NA
Fluoranthene	ND	ND		0.01	NA
Fluorene	ND	ND		0.01	NA
Indeno (1,2,3-cd) pyrene	ND	ND		0.01	NA
1-Methylnaphthalene	ND	0.072		0.01	NA
2-Methylnaphthalene	ND	0.13		0.01	NA
Naphthalene	0.014	0.11		0.01	NA
Phenanthrene	ND	ND		0.01	NA
Pyrene	ND	ND		0.01	NA

Surrogate Recoveries (%)

%SS1	81	84		
%SS2	81	85		

Comments

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this ND means not detected at or above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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



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All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/18/13
		Date Received: 01/18/13
	Client Contact: Leonard Niles	Date Extracted 01/18/13
	Client P.O.:	Date Analyzed 01/22/13-01/25/13

TPH(g) by Purge & Trap and GC/MS*

Extraction method: SW5030B

Analytical methods: SW8260B

Work Order: 1301438

Lab ID	Client ID	Matrix	TPH(g)	DF	% SS	Comments
001A	B21-4.5-5	S	280	100	92	
002A	B21-10-10.5	S	1900	1000	93	
003A	B21-21.5-22	S	120	67	96	
004A	B22-4.5-5	S	92	25	94	
005A	B22-10-10.5	S	68	100	93	
006A	B22-14.5-15	S	30	10	95	
007A	B24-4.5-5	S	0.45	1	98	
008A	B24-8.5-9	S	250	100	93	
009A	B24-21.5-22	S	1.6	1	99	
010A	Disp. Comp.	S	14	20	93	

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

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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



McC Campbell Analytical, Inc.

"When Quality Counts"

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

All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/18/13
		Date Received: 01/18/13
	Client Contact: Leonard Niles	Date Extracted 01/18/13
	Client P.O.:	Date Analyzed 01/19/13-01/28/13

Mineral Spirits Range (C9-C12) Volatile Hydrocarbons as Mineral Spirits*

Extraction method: SW5030B

Analytical methods: SW8015Bm

Work Order: 1301438

Lab ID	Client ID	Matrix	TPH(g)	DF	% SS	Comments
001A	B21-4.5-5	S	410	33	---#	d1
002A	B21-10-10.5	S	1200	200	118	d1
003A	B21-21.5-22	S	340	200	---#	d1
004A	B22-4.5-5	S	120	10	119	d1
005A	B22-10-10.5	S	280	20	---#	d1
006A	B22-14.5-15	S	20	1	96	d1
007A	B24-4.5-5	S	ND	1	119	
008A	B24-8.5-9	S	230	20	94	d1
009A	B24-21.5-22	S	4.2	1	106	d1
010A	Disp. Comp.	S	24	10	108	d1

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

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

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

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:
d1) weakly modified or unmodified gasoline is significant



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All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/18/13
		Date Received: 01/18/13
	Client Contact: Leonard Niles	Date Extracted: 01/18/13
	Client P.O.:	Date Analyzed: 01/24/13

LUFT 5 Metals*

Extraction method: SW3050B

Analytical methods: SW6020

Work Order: 1301438

Lab ID	Client ID	Matrix	Extraction Type	Cadmium	Chromium	Lead	Nickel	Zinc	DF	% SS	Comments
010A	Disp. Comp.	S	TOTAL	ND	53	6.4	40	42	1	91	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	TOTAL	NA	NA	NA	NA	NA	NA	NA
	S	TOTAL	0.25	0.5	0.5	0.5	5.0	mg/Kg	

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

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

TOTAL = Hot acid digestion of a representative sample aliquot.

TRM = Total recoverable metals is the "direct analysis" of a sample aliquot taken from its acid-preserved container.

DISS = Dissolved metals by direct analysis of 0.45 µm filtered and acidified sample.

%SS = Percent Recovery of Surrogate Standard

DF = Dilution Factor



All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/18/13
		Date Received: 01/18/13
	Client Contact: Leonard Niles	Date Extracted 01/18/13
	Client P.O.:	Date Analyzed 01/20/13-01/23/13

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up*

Extraction method: SW3550B/3630C

Analytical methods: SW8015B

Work Order: 1301438

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	DF	% SS	Comments
1301438-001A	B21-4.5-5	S	40	1	100	e4,e2
1301438-002A	B21-10-10.5	S	180	1	112	e4
1301438-003A	B21-21.5-22	S	22	1	97	e4
1301438-004A	B22-4.5-5	S	9.1	1	104	e4
1301438-005A	B22-10-10.5	S	17	1	94	e4
1301438-006A	B22-14.5-15	S	3.2	1	102	e4
1301438-007A	B24-4.5-5	S	1.8	1	95	e2
1301438-008A	B24-8.5-9	S	44	1	96	e4
1301438-009A	B24-21.5-22	S	2.2	1	104	e2
1301438-010A	Disp. Comp.	S	4.1	1	96	e4,e2

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

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

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

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

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

e2) diesel range compounds are significant; no recognizable pattern

e4) gasoline range compounds are significant.



QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 74102

WorkOrder: 1301438

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
tert-Amyl methyl ether (TAME)	ND	0.050	74.9	78.5	4.73	82.8	56 - 94	30	70 - 130
Benzene	ND	0.050	82.6	87.1	5.25	102	60 - 106	30	70 - 130
t-Butyl alcohol (TBA)	ND	0.20	75.1	76	1.19	78.3	56 - 140	30	70 - 130
Chlorobenzene	ND	0.050	81.4	85	4.35	98.6	61 - 108	30	70 - 130
1,2-Dibromoethane (EDB)	ND	0.050	76.4	84.6	10.2	91.2	54 - 119	30	70 - 130
1,2-Dichloroethane (1,2-DCA)	ND	0.050	89.1	97	8.51	107	48 - 115	30	70 - 130
1,1-Dichloroethene	ND	0.050	84.7	88.7	4.56	106	46 - 111	30	70 - 130
Diisopropyl ether (DIPE)	ND	0.050	85.7	88.8	3.63	98.3	53 - 111	30	70 - 130
Ethyl tert-butyl ether (ETBE)	ND	0.050	81.6	85.4	4.56	95.1	61 - 104	30	70 - 130
Methyl-t-butyl ether (MTBE)	ND	0.050	81.6	85	4.16	92.7	58 - 107	30	70 - 130
Toluene	ND	0.050	82.9	88.4	6.48	102	64 - 114	30	70 - 130
Trichloroethene	ND	0.050	91.4	93.5	2.34	108	60 - 116	30	70 - 130
%SS1:	116	0.12	114	114	0	117	70 - 130	30	70 - 130
%SS2:	113	0.12	115	115	0	117	70 - 130	30	70 - 130
%SS3:	93	0.012	93	102	9.39	102	70 - 130	30	70 - 130

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

BATCH 74102 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1301438-001A	01/18/13 8:30 AM	01/18/13	01/22/13 4:13 PM	1301438-002A	01/18/13 8:56 AM	01/18/13	01/24/13 10:36 PM
1301438-003A	01/18/13 9:35 AM	01/18/13	01/24/13 11:17 PM	1301438-004A	01/18/13 10:05 AM	01/18/13	01/24/13 11:58 PM
1301438-005A	01/18/13 10:27 AM	01/18/13	01/25/13 12:39 AM	1301438-006A	01/18/13 10:34 AM	01/18/13	01/25/13 1:20 AM
1301438-007A	01/18/13 11:48 AM	01/18/13	01/25/13 4:08 PM	1301438-008A	01/18/13 12:10 PM	01/18/13	01/24/13 9:13 PM
1301438-009A	01/18/13 12:44 PM	01/18/13	01/25/13 4:49 PM	1301438-010A	01/18/13 2:00 PM	01/18/13	01/25/13 5:30 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 $\% \text{ Recovery} = 100 * (\text{MS-Sample}) / (\text{Amount Spiked})$; $\text{RPD} = 100 * (\text{MS} - \text{MSD}) / ((\text{MS} + \text{MSD}) / 2)$.
 MS / 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 SW8270C

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 74149

WorkOrder: 1301438

EPA Method: SW8270C-SIM		Extraction: SW3550B					Spiked Sample ID: 1301437-001A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	mg/kg	mg/kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
Benzo (a) pyrene	ND	0.20	79.1	82.6	4.25	64.6	30 - 130	30	30 - 130	
Chrysene	ND	0.20	94.5	97.6	3.21	83	30 - 130	30	30 - 130	
1-Methylnaphthalene	ND	0.20	99.5	104	4.49	84.4	30 - 130	30	30 - 130	
2-Methylnaphthalene	ND	0.20	83.2	86.3	3.73	70.4	30 - 130	30	30 - 130	
Phenanthrene	ND	0.20	93.5	103	9.31	87.5	30 - 130	30	30 - 130	
Pyrene	ND	0.20	84.8	88.1	3.79	74.2	30 - 130	30	30 - 130	
%SS1:	81	0.50	79	81	2.40	71	30 - 130	30	30 - 130	
%SS2:	81	0.50	80	84	4.06	72	30 - 130	30	30 - 130	

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

BATCH 74149 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1301438-001A	01/18/13 8:30 AM	01/22/13	01/24/13 1:32 PM	1301438-002A	01/18/13 8:56 AM	01/22/13	01/24/13 2:00 PM
1301438-003A	01/18/13 9:35 AM	01/22/13	01/23/13 5:17 AM	1301438-004A	01/18/13 10:05 AM	01/22/13	01/24/13 8:01 PM
1301438-005A	01/18/13 10:27 AM	01/22/13	01/24/13 8:29 PM	1301438-006A	01/18/13 10:34 AM	01/22/13	01/23/13 4:52 PM
1301438-007A	01/18/13 11:48 AM	01/22/13	01/23/13 5:20 PM	1301438-008A	01/18/13 12:10 PM	01/22/13	01/24/13 8:56 PM
1301438-009A	01/18/13 12:44 PM	01/22/13	01/24/13 11:15 AM	1301438-010A	01/18/13 2:00 PM	01/22/13	01/23/13 5:51 PM

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



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 74100

WorkOrder: 1301438

EPA Method: SW8015Bm		Extraction: SW5030B					Spiked Sample ID: 1301422-002A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH(btex) [£]	ND	0.60	103	105	2.11	109	70 - 130	20	70 - 130	
MTBE	ND	0.10	75	93.9	19.8	113	70 - 130	20	70 - 130	
Benzene	ND	0.10	104	101	2.79	106	70 - 130	20	70 - 130	
Toluene	ND	0.10	101	99.4	1.18	105	70 - 130	20	70 - 130	
Ethylbenzene	ND	0.10	102	98	4.36	101	70 - 130	20	70 - 130	
Xylenes	ND	0.30	102	102	0	105	70 - 130	20	70 - 130	
%SS:	110	0.10	107	100	6.11	102	70 - 130	20	70 - 130	

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

BATCH 74100 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1301438-001A	01/18/13 8:30 AM	01/18/13	01/24/13 7:06 PM	1301438-002A	01/18/13 8:56 AM	01/18/13	01/20/13 3:31 AM
1301438-003A	01/18/13 9:35 AM	01/18/13	01/20/13 12:33 AM	1301438-004A	01/18/13 10:05 AM	01/18/13	01/24/13 9:13 PM
1301438-005A	01/18/13 10:27 AM	01/18/13	01/24/13 4:35 PM	1301438-006A	01/18/13 10:34 AM	01/18/13	01/19/13 7:07 PM
1301438-007A	01/18/13 11:48 AM	01/18/13	01/28/13 12:52 PM	1301438-008A	01/18/13 12:10 PM	01/18/13	01/24/13 2:40 PM

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



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 74120

WorkOrder: 1301438

EPA Method: SW8015Bm		Extraction: SW5030B					Spiked Sample ID: 1301498-001A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH(btex) [£]	ND	0.60	104	106	2.39	111	70 - 130	20	70 - 130	
MTBE	ND	0.10	111	114	2.92	117	70 - 130	20	70 - 130	
Benzene	ND	0.10	105	105	0	108	70 - 130	20	70 - 130	
Toluene	ND	0.10	102	102	0	106	70 - 130	20	70 - 130	
Ethylbenzene	ND	0.10	102	101	0.171	104	70 - 130	20	70 - 130	
Xylenes	ND	0.30	106	106	0	107	70 - 130	20	70 - 130	
%SS:	110	0.10	98	99	1.34	94	70 - 130	20	70 - 130	

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

BATCH 74120 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1301438-009A	01/18/13 12:44 PM	01/18/13	01/28/13 1:22 PM	1301438-010A	01/18/13 2:00 PM	01/18/13	01/19/13 10:35 PM

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



QC SUMMARY REPORT FOR SW6020

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 74063

WorkOrder: 1301438

EPA Method: SW6020		Extraction: SW3050B					Spiked Sample ID: 1301398-001A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
Cadmium	ND	50	108	112	3.92	91.3	75 - 125	20	75 - 125	
Chromium	43	50	104	97.1	3.69	94	75 - 125	20	75 - 125	
Lead	8.0	50	111	122	8.21	93.1	75 - 125	20	75 - 125	
Nickel	44	50	116	109	3.57	95.5	75 - 125	20	75 - 125	
Zinc	43	500	112	116	3.55	94.4	75 - 125	20	75 - 125	
%SS:	90	500	114	119	4.19	97	70 - 130	20	70 - 130	

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

BATCH 74063 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1301438-010A	01/18/13 2:00 PM	01/18/13	01/24/13 3:52 AM				

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



QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 74119

WorkOrder: 1301438

EPA Method: SW8015B		Extraction: SW3550B/3630C					Spiked Sample ID: 1301437-009A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH-Diesel (C10-C23)	ND	40	114	112	1.01	103	70 - 130	30	70 - 130	
%SS:	102	25	104	103	0.776	92	70 - 130	30	70 - 130	

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

BATCH 74119 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1301438-001A	01/18/13 8:30 AM	01/18/13	01/22/13 7:25 PM	1301438-002A	01/18/13 8:56 AM	01/18/13	01/22/13 5:02 PM
1301438-003A	01/18/13 9:35 AM	01/18/13	01/23/13 2:33 AM	1301438-004A	01/18/13 10:05 AM	01/18/13	01/22/13 6:13 PM
1301438-005A	01/18/13 10:27 AM	01/18/13	01/23/13 6:07 AM	1301438-006A	01/18/13 10:34 AM	01/18/13	01/20/13 2:58 AM
1301438-007A	01/18/13 11:48 AM	01/18/13	01/23/13 10:44 PM	1301438-008A	01/18/13 12:10 PM	01/18/13	01/23/13 3:44 AM
1301438-009A	01/18/13 12:44 PM	01/18/13	01/23/13 4:56 AM	1301438-010A	01/18/13 2:00 PM	01/18/13	01/22/13 9:48 PM

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

DHS ELAP Certification 1644

 QA/QC Officer



Analytical Report

All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/17/13
		Date Received: 01/18/13
	Client Contact: Leonard Niles	Date Reported: 01/28/13
	Client P.O.:	Date Completed: 01/25/13

WorkOrder: 1301439

January 28, 2013

Dear Leonard:

Enclosed within are:

- 1) The results of the **4** analyzed samples from your project: **#12071.23; Hollis,**
- 2) QC data for the above samples, and
- 3) A copy of the chain of custody.

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

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

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
 Laboratory Manager
 McC Campbell Analytical, Inc.

The analytical results relate only to the items tested.



McC Campbell Analytical, Inc.

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1301439

CHAIN OF CUSTODY RECORD

TURN AROUND TIME: RUSH 24 HR 48 HR 72 HR 5 DAY 10 DAY
GeoTracker EDF PDF EDD Write On (DW) EQUIS
Effluent Sample Requiring "J" flag UST Clean Up Fund Project ; Claim # _____

Report To: Leonard Niles Bill To: Carol Kamelb
Company: AllWest Carol@allwest1.com
530 Howard St #300 choulhan@allwest1.com
SF, CA 94105 E-Mail: leonard@allwest1.com
Tele: (415) 391-2510 Fax: (415) 391-2008
Project #: 12071.23 Project Name: Hollis
Project Location: Emeryville, CA Purchase Order#
Sampler Signature: [Signature]

Analysis Request

SAMPLE ID	Location/ Field Point Name	SAMPLING		# Containers	MATRIX							METHOD PRESERVED																								
		Date	Time		Ground Water	Waste Water	Drinking Water	Sea \ Water	Soil	Air	Sludge	Other	HCL	HNO ₃	Other	BTEX & TPH as Gas (8021/8015 or 8260) / MTBE	TPH as Diesel (8015) and TPH -ms with silica gel	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	MTBE / BTEX ONLY (EPA 8260/ 8021)	EPA 505/ 608 / 8081 (CI Pesticides)	EPA 608 / 8082 PCB's ; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic CI Herbicides)	EPA 524.2 / 624 / 8260 (VOCs) and TPH-a	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	Metals (200.7 / 200.8 / 6010 / 6020)	Filter sample for DISSOLVED metals analysis					
B15	B15	11/7/13	0930	3	X								X													X										
B15	B15		0930	1	X								X														X									
B15	B15		0930	1	X								X														X									
B16	B16		1149	3	X								X													X										
B16	B16		1149	1	X								X													X										
B20	B20		1411	3	X								X													X										
B20	B20		1411	1	X								X													X										
B20	B20		1411	1	X								X													X										
B23	B23		1525	3	X								X													X										
B23	B23		1525	1	X								X													X										
B23	B23		1525	1	X								X													X										

**MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate \$250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

Relinquished By: [Signature] Date: 11/8/13 Time: 1150 Received By: [Signature]

Relinquished By: [Signature] Date: 11/8/13 Time: 1720 Received By: [Signature]

Relinquished By: Date: Time: Received By:

ICE/t 30
GOOD CONDITION
HEAD SPACE ABSENT
DECHLORINATED IN LAB
APPROPRIATE CONTAINERS
PRESERVED IN LAB

VOAS O&G METALS OTHER HAZARDOUS:
PRESERVATION _____ pH <2 _____



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1301439

ClientCode: AWE

WaterTrax
 WriteOn
 EDF
 Excel
 EQUIS
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:
 Leonard Niles
 All West Environmental, Inc
 530 Howard Street, Ste.300
 San Francisco, CA 94105
 (415) 391-2510 FAX: (415) 391-2008

Email: Leonard@allwest1.com
 cc:
 PO:
 ProjectNo: #12071.23; Hollis

Bill to:
 Darlene Torio
 All West Environmental, Inc
 530 Howard Street, Ste.300
 San Francisco, CA 94105
 darlene@allwest1.com

Requested TAT: 5 days

Date Received: 01/18/2013

Date Printed: 01/18/2013

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1301439-001	B15	Water	1/17/2013 9:30	<input type="checkbox"/>	C	A	B	A	B								
1301439-002	B16	Water	1/17/2013 11:49	<input type="checkbox"/>		A	B		B								
1301439-003	B20	Water	1/17/2013 14:11	<input type="checkbox"/>	C	A	B		B								
1301439-004	B23	Water	1/17/2013 15:25	<input type="checkbox"/>	C	A	B		B								

Test Legend:

1	8270D-PNA_W	2	GAS8260_W	3	G-MBTX_W	4	PREFD REPORT	5	TPH(D)WSG_W
6		7		8		9		10	
11		12							

The following SampIDs: 001A, 001B, 002A, 002B, 003A, 003B, 004A, 004B contain testgroup.

Prepared by: Zoraida Cortez

Comments:

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



Sample Receipt Checklist

Client Name: **All West Environmental, Inc**

Date and Time Received: **1/18/2013 8:50:51 PM**

Project Name: **#12071.23; Hollis**

LogIn Reviewed by: **Zoraida Cortez**

WorkOrder N°: **1301439** Matrix: Water

Carrier: Rob Pringle (MAI Courier)

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature	Cooler Temp: 3°C		NA <input type="checkbox"/>
Water - VOA vials have zero headspace / no bubbles?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Metal - pH acceptable upon receipt (pH<2)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

(Ice Type: WET ICE)

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

 Comments: Sample 003 had headspace.



All West Environmental, Inc
530 Howard Street, Ste.300
San Francisco, CA 94105

Client Project ID: #12071.23; Hollis
Client Contact: Leonard Niles
Client P.O.:

Date Sampled: 01/17/13
Date Received: 01/18/13
Date Extracted: 01/23/13
Date Analyzed: 01/23/13

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1301439

Table with 2 columns: Lab ID, Client ID, Matrix and 1 column: 1301439-001A, B15, Water

Main table with 8 columns: Compound, Concentration *, DF, Reporting Limit, Compound, Concentration *, DF, Reporting Limit. Lists various organic compounds and their detection results.

Surrogate Recoveries (%)

Table with 2 columns: %SS1, %SS2 and 2 rows of values: 120, 105, 90

Comments: b1

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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



Table with client information: All West Environmental, Inc, Client Project ID: #12071.23; Hollis, Date Sampled: 01/17/13, Date Received: 01/18/13, Client Contact: Leonard Niles, Date Extracted: 01/23/13, San Francisco, CA 94105, Client P.O., Date Analyzed: 01/23/13

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1301439

Table with Lab ID: 1301439-002A, Client ID: B16, Matrix: Water

Main table with 8 columns: Compound, Concentration *, DF, Reporting Limit, Compound, Concentration *, DF, Reporting Limit. Lists various organic compounds and their detection results.

Surrogate Recoveries (%)

Table showing surrogate recoveries: %SS1: 119, %SS2: 106, %SS3: 97

Comments: b1

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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



Table with 4 columns: Client Project ID, Date Sampled, Date Received, Client Contact, Date Extracted, Client P.O., Date Analyzed. Includes address: All West Environmental, Inc, 530 Howard Street, Ste.300, San Francisco, CA 94105.

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1301439

Table with 2 columns: Lab ID (1301439-003A), Client ID (B20), Matrix (Water).

Main data table with 8 columns: Compound, Concentration *, DF, Reporting Limit, Compound, Concentration *, DF, Reporting Limit. Lists various organic compounds and their detection results.

Surrogate Recoveries (%)

Table with 2 columns: %SS1 (120), %SS2 (118), %SS3 (107).

Comments: b6,b1

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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



Table with client information: All West Environmental, Inc, Client Project ID: #12071.23; Hollis, Date Sampled: 01/17/13, Date Received: 01/18/13, Client Contact: Leonard Niles, Date Extracted: 01/24/13, San Francisco, CA 94105, Client P.O., Date Analyzed: 01/24/13

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1301439

Table with Lab ID (1301439-004A), Client ID (B23), Matrix (Water)

Main data table with columns: Compound, Concentration *, DF, Reporting Limit, Compound, Concentration *, DF, Reporting Limit. Lists various organic compounds and their detection results.

Surrogate Recoveries (%)

Table showing surrogate recoveries: %SS1: 121, %SS2: 119, %SS3: 102

Comments: b1

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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



McC Campbell Analytical, Inc.

"When Quality Counts"

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

All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/17/13
		Date Received: 01/18/13
	Client Contact: Leonard Niles	Date Extracted: 01/23/13
	Client P.O.:	Date Analyzed: 01/24/13-01/25/13

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Extraction Method: SW3510C

Analytical Method: SW8270C-SIM

Work Order: 1301439

Lab ID	1301439-001C	1301439-003C	1301439-004C	Reporting Limit for DF = 1
Client ID	B15	B20	B23	
Matrix	W	W	W	
DF	1	100	1	

Compound	Concentration			ug/kg	µg/L
Acenaphthene	ND	ND<50	ND	NA	0.5
Acenaphthylene	ND	ND<50	ND	NA	0.5
Anthracene	ND	ND<50	ND	NA	0.5
Benzo (a) anthracene	ND	ND<50	0.56	NA	0.5
Benzo (b) fluoranthene	ND	ND<50	ND	NA	0.5
Benzo (k) fluoranthene	ND	ND<50	ND	NA	0.5
Benzo (g,h,i) perylene	ND	ND<50	ND	NA	0.5
Benzo (a) pyrene	ND	ND<50	ND	NA	0.5
Chrysene	ND	ND<50	ND	NA	0.5
Dibenzo (a,h) anthracene	ND	ND<50	ND	NA	0.5
Fluoranthene	ND	ND<50	0.94	NA	0.5
Fluorene	ND	ND<50	ND	NA	0.5
Indeno (1,2,3-cd) pyrene	ND	ND<50	ND	NA	0.5
1-Methylnaphthalene	ND	460	ND	NA	0.5
2-Methylnaphthalene	ND	750	ND	NA	0.5
Naphthalene	ND	1700	ND<0.55	NA	0.5
Phenanthrene	ND	ND<50	0.75	NA	0.5
Pyrene	ND	ND<50	1.0	NA	0.5

Surrogate Recoveries (%)

%SS1	68	---#	66
%SS2	64	---#	51
Comments	b1	b1	b1

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

ND means not detected at or above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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

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



All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/17/13
		Date Received: 01/18/13
	Client Contact: Leonard Niles	Date Extracted 01/22/13-01/24/13
	Client P.O.:	Date Analyzed 01/22/13-01/24/13

TPH(g) by Purge & Trap and GC/MS*

Extraction method: SW5030B

Analytical methods: SW8260B

Work Order: 1301439

Lab ID	Client ID	Matrix	TPH(g)	DF	% SS	Comments
001A	B15	W	1900	2.5	92	b1
002A	B16	W	47,000	200	93	b1
003A	B20	W	160,000	100	100	b6,b1
004A	B23	W	170	1	101	b1

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

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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



All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/17/13
		Date Received: 01/18/13
	Client Contact: Leonard Niles	Date Extracted 01/23/13
	Client P.O.:	Date Analyzed 01/23/13

Mineral Spirits Range (C9-C12) Volatile Hydrocarbons as Mineral Spirits*

Extraction method: SW5030B

Analytical methods: SW8015Bm

Work Order: 1301439

Lab ID	Client ID	Matrix	TPH(mineral spirits)	DF	% SS	Comments
001B	B15	W	1300	1	---#	d1,b1
002B	B16	W	ND<5000	100	101	d1,b1
003B	B20	W	22,000	200	108	d1,b6,b1
004B	B23	W	160	1	116	d1,b1

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

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

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

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:
 b1) aqueous sample that contains greater than ~1 vol. % sediment
 b6) lighter than water immiscible sheen/product is present
 d1) weakly modified or unmodified gasoline is significant



All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/17/13
		Date Received: 01/18/13
	Client Contact: Leonard Niles	Date Extracted 01/18/13
	Client P.O.:	Date Analyzed 01/23/13

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up*

Extraction method: SW3510C/3630C

Analytical methods: SW8015B

Work Order: 1301439

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	DF	% SS	Comments
1301439-001B	B15	W	740	1	104	e4,b1
1301439-002B	B16	W	6300	1	99	e4,b1
1301439-003B	B20	W	95,000	10	106	e4,b6,b1
1301439-004B	B23	W	140	1	81	e4,e2,b1

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

* 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/matrix interference.

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

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:
 b1) aqueous sample that contains greater than ~1 vol. % sediment
 b6) lighter than water immiscible sheen/product is present
 e2) diesel range compounds are significant; no recognizable pattern
 e4) gasoline range compounds are significant.



QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 74174

WorkOrder: 1301439

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
tert-Amyl methyl ether (TAME)	ND	10	116	118	2.02	117	70 - 130	20	70 - 130
Benzene	1.9	10	89.6	90.8	1.14	102	70 - 130	20	70 - 130
t-Butyl alcohol (TBA)	4.7	40	121	124	1.99	117	70 - 130	20	70 - 130
Chlorobenzene	ND	10	97.6	97.2	0.444	99.4	70 - 130	20	70 - 130
1,2-Dibromoethane (EDB)	ND	10	111	112	1.57	111	70 - 130	20	70 - 130
1,2-Dichloroethane (1,2-DCA)	ND	10	92.2	98.5	6.67	105	70 - 130	20	70 - 130
1,1-Dichloroethene	ND	10	101	102	0.505	110	70 - 130	20	70 - 130
Diisopropyl ether (DIPE)	ND	10	89.6	93.1	3.81	121	70 - 130	20	70 - 130
Ethyl tert-butyl ether (ETBE)	ND	10	99.6	103	3.38	114	70 - 130	20	70 - 130
Methyl-t-butyl ether (MTBE)	ND	10	111	114	3.12	116	70 - 130	20	70 - 130
Toluene	0.73	10	101	96.9	3.88	99.8	70 - 130	20	70 - 130
Trichloroethene	ND	10	98.7	100	1.63	99.7	70 - 130	20	70 - 130
%SS1:	100	25	97	101	3.61	101	70 - 130	20	70 - 130
%SS2:	99	25	96	97	0.815	99	70 - 130	20	70 - 130
%SS3:	107	2.5	109	106	2.59	98	70 - 130	20	70 - 130

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

BATCH 74174 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1301439-001A	01/17/13 9:30 AM	01/23/13	01/23/13 3:21 AM	1301439-002A	01/17/13 11:49 AM	01/23/13	01/23/13 4:03 AM
1301439-003A	01/17/13 2:11 PM	01/24/13	01/24/13 11:18 PM	1301439-004A	01/17/13 3:25 PM	01/24/13	01/24/13 3:29 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.
 # surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.
 Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.



QC SUMMARY REPORT FOR SW8270C

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 74187

WorkOrder: 1301439

EPA Method: SW8270C-SIM		Extraction: SW3510C					Spiked Sample ID: N/A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
Benzo (a) pyrene	N/A	10	N/A	N/A	N/A	59.8	N/A	N/A	30 - 130	
Chrysene	N/A	10	N/A	N/A	N/A	90.7	N/A	N/A	30 - 130	
1-Methylnaphthalene	N/A	10	N/A	N/A	N/A	92.9	N/A	N/A	30 - 130	
2-Methylnaphthalene	N/A	10	N/A	N/A	N/A	76	N/A	N/A	30 - 130	
Phenanthrene	N/A	10	N/A	N/A	N/A	90.8	N/A	N/A	30 - 130	
Pyrene	N/A	10	N/A	N/A	N/A	78.1	N/A	N/A	30 - 130	
%SS1:	N/A	25	N/A	N/A	N/A	76	N/A	N/A	30 - 130	
%SS2:	N/A	25	N/A	N/A	N/A	79	N/A	N/A	30 - 130	

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

BATCH 74187 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1301439-001C	01/17/13 9:30 AM	01/23/13	01/24/13 10:19 PM	1301439-003C	01/17/13 2:11 PM	01/23/13	01/25/13 12:29 PM
1301439-004C	01/17/13 3:25 PM	01/23/13	01/25/13 12:57 PM				

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



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 74182

WorkOrder: 1301439

EPA Method: SW8021B/8015Bm		Extraction: SW5030B					Spiked Sample ID: 1301440-002B			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH(btex) [£]	6400	60	NR	NR	NR	102	N/A	N/A	70 - 130	
MTBE	2000	10	NR	NR	NR	90.3	N/A	N/A	70 - 130	
Benzene	350	10	NR	NR	NR	96	N/A	N/A	70 - 130	
Toluene	2000	10	NR	NR	NR	95.5	N/A	N/A	70 - 130	
Ethylbenzene	500	10	NR	NR	NR	94.4	N/A	N/A	70 - 130	
Xylenes	2700	30	NR	NR	NR	94.1	N/A	N/A	70 - 130	
%SS:	103	10	NR	NR	NR	99	N/A	N/A	70 - 130	

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

BATCH 74182 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1301439-001B	01/17/13 9:30 AM	01/23/13	01/23/13 3:45 AM	1301439-002B	01/17/13 11:49 AM	01/23/13	01/23/13 11:11 PM
1301439-003B	01/17/13 2:11 PM	01/23/13	01/23/13 6:12 AM	1301439-004B	01/17/13 3:25 PM	01/23/13	01/23/13 4:14 AM

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



QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 74125

WorkOrder: 1301439

EPA Method: SW8015B		Extraction: SW3510C/3630C					Spiked Sample ID: N/A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH-Diesel (C10-C23)	N/A	1000	N/A	N/A	N/A	110	N/A	N/A	70 - 130	
%SS:	N/A	625	N/A	N/A	N/A	102	N/A	N/A	70 - 130	

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

BATCH 74125 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1301439-001B	01/17/13 9:30 AM	01/18/13	01/23/13 1:44 AM	1301439-002B	01/17/13 11:49 AM	01/18/13	01/23/13 3:47 PM
1301439-003B	01/17/13 2:11 PM	01/18/13	01/23/13 8:21 PM	1301439-004B	01/17/13 3:25 PM	01/18/13	01/23/13 5:09 AM

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



Analytical Report

All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/18/13
		Date Received: 01/18/13
	Client Contact: Leonard Niles	Date Reported: 01/28/13
	Client P.O.:	Date Completed: 01/25/13

WorkOrder: 1301440

January 28, 2013

Dear Leonard:

Enclosed within are:

- 1) The results of the **3** analyzed samples from your project: **#12071.23; Hollis**,
- 2) QC data for the above samples, and
- 3) A copy of the chain of custody.

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

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

Best regards,

Angela Rydelius
Laboratory Manager
McC Campbell Analytical, Inc.

The analytical results relate only to the items tested.



McC Campbell Analytical, Inc.

1534 Willow Pass Rd. / Pittsburg, Ca. 94565-1701
 www.mccampbell.com / main@mccampbell.com
 Telephone: (877) 252-9262 / Fax: (925) 252-9269

1301440

CHAIN OF CUSTODY RECORD

TURN AROUND TIME: RUSH 24 HR 48 HR 72 HR 5 DAY 10 DAY

GeoTracker EDF PDF EDD Write On (DW) EQuIS

Effluent Sample Requiring "J" flag UST Clean Up Fund Project ; Claim # _____

Report To: Leonard Niles Bill To: Carol Ramello
 Company: AllWest Carol@allwest1.com
 530 Howard St. #300 choulihan@allwest1.com
 San Francisco, CA 94105 E-Mail: leonard@allwest1.com
 Tele: (415) 391-2510 Fax: (415) 391-2008
 Project #: 12071.23 Project Name: Hollis
 Project Location: Emeryville, CA Purchase Order#
 Sampler Signature: [Signature]

Analysis Request

SAMPLE ID	Location/ Field Point Name	SAMPLING		# Containers	MATRIX							METHOD PRESERVED		
		Date	Time		Ground Water	Waste Water	Drinking Water	Sea / Water	Soil	Air	Sludge	Other	HCL	HNO ₃
B22	B22	1/18/13	1100	3	X							X		
B22	B22		1100	1	X							X		
B22	B22		1100	1	X							X		
B24	B24		1320	3	X							X		
B24	B24		1320	1	X							X		
B24	B24		1320	1	X							X		
B21	B21		1347	3	X							X		
B21	B21		1347	1	X							X		

BTEX & TPH as Gas (8021/ 8015 or 8260) / MTBE	TPH as Diesel (8015) and TPH -ms w/silica gel	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	MTBE / BTEX ONLY (EPA 8260/ 8021)	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic Cl Herbicides)	EPA 524.2 / 624 (8260) (VOCs) and TPH-g	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	Metals (200.7 / 200.8 / 6010 / 6020)	Filter sample for DISSOLVED metals analysis
									X						
	X														
											X				
									X						
	X										X				
	X										X				

**MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate \$250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

Relinquished By: [Signature] Date: 1/18/13 Time: 1450 Received By: [Signature]
 Relinquished By: [Signature] Date: 1/18/13 Time: 1730 Received By: [Signature]
 Relinquished By: _____ Date: _____ Time: _____ Received By: _____

ICE # 30
 GOOD CONDITION _____
 HEAD SPACE ABSENT _____
 DECHLORINATED IN LAB _____
 APPROPRIATE CONTAINERS _____
 PRESERVED IN LAB _____
 VOAS O&G METALS OTHER HAZARDOUS:
 PRESERVATION _____ pH < 2 _____



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1301440

ClientCode: AWE

WaterTrax
 WriteOn
 EDF
 Excel
 EQuIS
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:
 Leonard Niles
 All West Environmental, Inc
 530 Howard Street, Ste.300
 San Francisco, CA 94105
 (415) 391-2510 FAX: (415) 391-2008

Email: Leonard@allwest1.com
 cc:
 PO:
 ProjectNo: #12071.23; Hollis

Bill to:
 Darlene Torio
 All West Environmental, Inc
 530 Howard Street, Ste.300
 San Francisco, CA 94105
 darlene@allwest1.com

Requested TAT: 5 days

Date Received: 01/18/2013

Date Printed: 01/18/2013

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1301440-001	B22	Water	1/18/2013 11:00	<input type="checkbox"/>	C	A	B										
1301440-002	B24	Water	1/18/2013 13:20	<input type="checkbox"/>	C	A	B										
1301440-003	B21	Water	1/18/2013 13:47	<input type="checkbox"/>		A	B										

Test Legend:

1	8270D-PNA_W	2	GAS8260_W	3	G-MBTEX_W	4		5	
6		7		8		9		10	
11		12							

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

Prepared by: Zoraida Cortez

Comments:

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



Sample Receipt Checklist

Client Name: **All West Environmental, Inc**

Date and Time Received: **1/18/2013 9:12:28 PM**

Project Name: **#12071.23; Hollis**

LogIn Reviewed by: **Zoraida Cortez**

WorkOrder N°: **1301440** Matrix: Water

Carrier: Rob Pringle (MAI Courier)

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature	Cooler Temp: 3°C		NA <input type="checkbox"/>
Water - VOA vials have zero headspace / no bubbles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Metal - pH acceptable upon receipt (pH<2)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

(Ice Type: WET ICE)

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

 Comments:



All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/18/13
		Date Received: 01/18/13
	Client Contact: Leonard Niles	Date Extracted: 01/25/13
	Client P.O.:	Date Analyzed: 01/25/13

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1301440

Lab ID	1301440-001A
Client ID	B22
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<10,000	1000	10	tert-Amyl methyl ether (TAME)	ND<500	1000	0.5
Benzene	7700	1000	0.5	Bromobenzene	ND<500	1000	0.5
Bromochloromethane	ND<500	1000	0.5	Bromodichloromethane	ND<500	1000	0.5
Bromoform	ND<500	1000	0.5	Bromomethane	ND<500	1000	0.5
2-Butanone (MEK)	ND<2000	1000	2.0	t-Butyl alcohol (TBA)	ND<2000	1000	2.0
n-Butyl benzene	ND<500	1000	0.5	sec-Butyl benzene	ND<500	1000	0.5
tert-Butyl benzene	ND<500	1000	0.5	Carbon Disulfide	ND<500	1000	0.5
Carbon Tetrachloride	ND<500	1000	0.5	Chlorobenzene	ND<500	1000	0.5
Chloroethane	ND<500	1000	0.5	Chloroform	ND<500	1000	0.5
Chloromethane	ND<500	1000	0.5	2-Chlorotoluene	ND<500	1000	0.5
4-Chlorotoluene	ND<500	1000	0.5	Dibromochloromethane	ND<500	1000	0.5
1,2-Dibromo-3-chloropropane	ND<200	1000	0.2	1,2-Dibromoethane (EDB)	ND<500	1000	0.5
Dibromomethane	ND<500	1000	0.5	1,2-Dichlorobenzene	ND<500	1000	0.5
1,3-Dichlorobenzene	ND<500	1000	0.5	1,4-Dichlorobenzene	ND<500	1000	0.5
Dichlorodifluoromethane	ND<500	1000	0.5	1,1-Dichloroethane	ND<500	1000	0.5
1,2-Dichloroethane (1,2-DCA)	ND<500	1000	0.5	1,1-Dichloroethene	ND<500	1000	0.5
cis-1,2-Dichloroethene	ND<500	1000	0.5	trans-1,2-Dichloroethene	ND<500	1000	0.5
1,2-Dichloropropane	ND<500	1000	0.5	1,3-Dichloropropane	ND<500	1000	0.5
2,2-Dichloropropane	ND<500	1000	0.5	1,1-Dichloropropene	ND<500	1000	0.5
cis-1,3-Dichloropropene	ND<500	1000	0.5	trans-1,3-Dichloropropene	ND<500	1000	0.5
Diisopropyl ether (DIPE)	ND<500	1000	0.5	Ethylbenzene	3500	1000	0.5
Ethyl tert-butyl ether (ETBE)	ND<500	1000	0.5	Freon 113	ND<10,000	1000	10
Hexachlorobutadiene	ND<500	1000	0.5	Hexachloroethane	ND<500	1000	0.5
2-Hexanone	ND<500	1000	0.5	Isopropylbenzene	ND<500	1000	0.5
4-Isopropyl toluene	ND<500	1000	0.5	Methyl-t-butyl ether (MTBE)	8100	1000	0.5
Methylene chloride	ND<500	1000	0.5	4-Methyl-2-pentanone (MIBK)	ND<500	1000	0.5
Naphthalene	910	1000	0.5	n-Propyl benzene	ND<500	1000	0.5
Styrene	ND<500	1000	0.5	1,1,1,2-Tetrachloroethane	ND<500	1000	0.5
1,1,2,2-Tetrachloroethane	ND<500	1000	0.5	Tetrachloroethene	ND<500	1000	0.5
Toluene	26,000	1000	0.5	1,2,3-Trichlorobenzene	ND<500	1000	0.5
1,2,4-Trichlorobenzene	ND<500	1000	0.5	1,1,1-Trichloroethane	ND<500	1000	0.5
1,1,2-Trichloroethane	ND<500	1000	0.5	Trichloroethene	ND<500	1000	0.5
Trichlorofluoromethane	ND<500	1000	0.5	1,2,3-Trichloropropane	ND<500	1000	0.5
1,2,4-Trimethylbenzene	2300	1000	0.5	1,3,5-Trimethylbenzene	590	1000	0.5
Vinyl Chloride	ND<500	1000	0.5	Xylenes, Total	21,000	1000	0.5

Surrogate Recoveries (%)

%SS1:	119	%SS2:	121
%SS3:	104		

Comments:

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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



Table with client information: All West Environmental, Inc, Client Project ID: #12071.23; Hollis, Date Sampled: 01/18/13, Date Received: 01/18/13, Client Contact: Leonard Niles, Date Extracted: 01/24/13, San Francisco, CA 94105, Client P.O., Date Analyzed: 01/24/13

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1301440

Table with Lab ID: 1301440-002A, Client ID: B24, Matrix: Water

Main data table with columns: Compound, Concentration *, DF, Reporting Limit, Compound, Concentration *, DF, Reporting Limit. Lists various organic compounds and their detection results.

Surrogate Recoveries (%)

Table showing surrogate recoveries: %SS1: 120, %SS2: 120, %SS3: 104

Comments:

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.
ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor
surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.



All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/18/13
		Date Received: 01/18/13
	Client Contact: Leonard Niles	Date Extracted: 01/25/13
	Client P.O.:	Date Analyzed: 01/25/13

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1301440

Lab ID	1301440-003A
Client ID	B21
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<50,000	5000	10	tert-Amyl methyl ether (TAME)	ND<2500	5000	0.5
Benzene	ND<2500	5000	0.5	Bromobenzene	ND<2500	5000	0.5
Bromochloromethane	ND<2500	5000	0.5	Bromodichloromethane	ND<2500	5000	0.5
Bromoform	ND<2500	5000	0.5	Bromomethane	ND<2500	5000	0.5
2-Butanone (MEK)	ND<10,000	5000	2.0	t-Butyl alcohol (TBA)	ND<10,000	5000	2.0
n-Butyl benzene	ND<2500	5000	0.5	sec-Butyl benzene	ND<2500	5000	0.5
tert-Butyl benzene	ND<2500	5000	0.5	Carbon Disulfide	ND<2500	5000	0.5
Carbon Tetrachloride	ND<2500	5000	0.5	Chlorobenzene	ND<2500	5000	0.5
Chloroethane	ND<2500	5000	0.5	Chloroform	ND<2500	5000	0.5
Chloromethane	ND<2500	5000	0.5	2-Chlorotoluene	ND<2500	5000	0.5
4-Chlorotoluene	ND<2500	5000	0.5	Dibromochloromethane	ND<2500	5000	0.5
1,2-Dibromo-3-chloropropane	ND<1000	5000	0.2	1,2-Dibromoethane (EDB)	ND<2500	5000	0.5
Dibromomethane	ND<2500	5000	0.5	1,2-Dichlorobenzene	ND<2500	5000	0.5
1,3-Dichlorobenzene	ND<2500	5000	0.5	1,4-Dichlorobenzene	ND<2500	5000	0.5
Dichlorodifluoromethane	ND<2500	5000	0.5	1,1-Dichloroethane	ND<2500	5000	0.5
1,2-Dichloroethane (1,2-DCA)	ND<2500	5000	0.5	1,1-Dichloroethene	ND<2500	5000	0.5
cis-1,2-Dichloroethene	ND<2500	5000	0.5	trans-1,2-Dichloroethene	ND<2500	5000	0.5
1,2-Dichloropropane	ND<2500	5000	0.5	1,3-Dichloropropane	ND<2500	5000	0.5
2,2-Dichloropropane	ND<2500	5000	0.5	1,1-Dichloropropene	ND<2500	5000	0.5
cis-1,3-Dichloropropene	ND<2500	5000	0.5	trans-1,3-Dichloropropene	ND<2500	5000	0.5
Diisopropyl ether (DIPE)	ND<2500	5000	0.5	Ethylbenzene	ND<2500	5000	0.5
Ethyl tert-butyl ether (ETBE)	ND<2500	5000	0.5	Freon 113	ND<50,000	5000	10
Hexachlorobutadiene	ND<2500	5000	0.5	Hexachloroethane	ND<2500	5000	0.5
2-Hexanone	ND<2500	5000	0.5	Isopropylbenzene	ND<2500	5000	0.5
4-Isopropyl toluene	ND<2500	5000	0.5	Methyl-t-butyl ether (MTBE)	140,000	5000	0.5
Methylene chloride	ND<2500	5000	0.5	4-Methyl-2-pentanone (MIBK)	ND<2500	5000	0.5
Naphthalene	ND<2500	5000	0.5	n-Propyl benzene	ND<2500	5000	0.5
Styrene	ND<2500	5000	0.5	1,1,1,2-Tetrachloroethane	ND<2500	5000	0.5
1,1,2,2-Tetrachloroethane	ND<2500	5000	0.5	Tetrachloroethene	ND<2500	5000	0.5
Toluene	6100	5000	0.5	1,2,3-Trichlorobenzene	ND<2500	5000	0.5
1,2,4-Trichlorobenzene	ND<2500	5000	0.5	1,1,1-Trichloroethane	ND<2500	5000	0.5
1,1,2-Trichloroethane	ND<2500	5000	0.5	Trichloroethene	ND<2500	5000	0.5
Trichlorofluoromethane	ND<2500	5000	0.5	1,2,3-Trichloropropane	ND<2500	5000	0.5
1,2,4-Trimethylbenzene	ND<2500	5000	0.5	1,3,5-Trimethylbenzene	ND<2500	5000	0.5
Vinyl Chloride	ND<2500	5000	0.5	Xylenes, Total	6200	5000	0.5

Surrogate Recoveries (%)

%SS1:	121	%SS2:	118
%SS3:	106		

Comments:

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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



McC Campbell Analytical, Inc.

"When Quality Counts"

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

All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/18/13
		Date Received: 01/18/13
	Client Contact: Leonard Niles	Date Extracted: 01/23/13
	Client P.O.:	Date Analyzed: 01/25/13

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Extraction Method: SW3510C

Analytical Method: SW8270C-SIM

Work Order: 1301440

Lab ID	1301440-001C	1301440-002C			Reporting Limit for DF =1	
Client ID	B22	B24				
Matrix	W	W				
DF	100	10				

Compound	Concentration			ug/kg	µg/L
					S
Acenaphthene	ND<50	ND<5.0		NA	0.5
Acenaphthylene	ND<50	ND<5.0		NA	0.5
Anthracene	ND<50	ND<5.0		NA	0.5
Benzo (a) anthracene	ND<50	ND<5.0		NA	0.5
Benzo (b) fluoranthene	ND<50	ND<5.0		NA	0.5
Benzo (k) fluoranthene	ND<50	ND<5.0		NA	0.5
Benzo (g,h,i) perylene	ND<50	ND<5.0		NA	0.5
Benzo (a) pyrene	ND<50	ND<5.0		NA	0.5
Chrysene	ND<50	ND<5.0		NA	0.5
Dibenzo (a,h) anthracene	ND<50	ND<5.0		NA	0.5
Fluoranthene	ND<50	ND<5.0		NA	0.5
Fluorene	ND<50	ND<5.0		NA	0.5
Indeno (1,2,3-cd) pyrene	ND<50	ND<5.0		NA	0.5
1-Methylnaphthalene	280	20		NA	0.5
2-Methylnaphthalene	420	30		NA	0.5
Naphthalene	1300	80		NA	0.5
Phenanthrene	ND<50	ND<5.0		NA	0.5
Pyrene	ND<50	ND<5.0		NA	0.5

Surrogate Recoveries (%)

%SS1	---#	61		
%SS2	---#	---		

Comments

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

ND means not detected at or above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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



All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/18/13
		Date Received: 01/18/13
	Client Contact: Leonard Niles	Date Extracted 01/24/13-01/25/13
	Client P.O.:	Date Analyzed 01/24/13-01/25/13

TPH(g) by Purge & Trap and GC/MS*

Extraction method: SW5030B

Analytical methods: SW8260B

Work Order: 1301440

Lab ID	Client ID	Matrix	TPH(g)	DF	% SS	Comments
001A	B22	W	110,000	100	98	
002A	B24	W	17,000	100	102	
003A	B21	W	41,000	200	100	

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

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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



McC Campbell Analytical, Inc.

"When Quality Counts"

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

All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/18/13
		Date Received: 01/18/13
	Client Contact: Leonard Niles	Date Extracted 01/23/13
	Client P.O.:	Date Analyzed 01/23/13

Mineral Spirits Range (C9-C12) Volatile Hydrocarbons as Mineral Spirits*

Extraction method: SW5030B

Analytical methods: SW8015Bm

Work Order: 1301440

Lab ID	Client ID	Matrix	TPH(mineral spirits)	DF	% SS	Comments
001B	B22	W	17,000	200	101	d1
002B	B24	W	7600	100	103	d1
003B	B21	W	16,000	100	111	d1

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

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

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

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:
 d1) weakly modified or unmodified gasoline is significant



All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/18/13
		Date Received: 01/18/13
	Client Contact: Leonard Niles	Date Extracted 01/18/13
	Client P.O.:	Date Analyzed 01/23/13

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up*

Extraction method: SW3510C/3630C

Analytical methods: SW8015B

Work Order: 1301440

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	DF	% SS	Comments
1301440-001B	B22	W	8800	1	103	e4
1301440-002B	B24	W	2700	1	101	e4
1301440-003B	B21	W	3900	1	100	e4

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

* 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/matrix interference.

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

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:
 e4) gasoline range compounds are significant.



QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 74125

WorkOrder: 1301440

EPA Method: SW8015B		Extraction: SW3510C/3630C					Spiked Sample ID: N/A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH-Diesel (C10-C23)	N/A	1000	N/A	N/A	N/A	110	N/A	N/A	70 - 130	
%SS:	N/A	625	N/A	N/A	N/A	102	N/A	N/A	70 - 130	

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

BATCH 74125 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1301440-001B	01/18/13 11:00 AM	01/18/13	01/23/13 3:03 AM	1301440-002B	01/18/13 1:20 PM	01/18/13	01/23/13 4:01 AM
1301440-003B	01/18/13 1:47 PM	01/18/13	01/23/13 2:52 AM				

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



QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 74174

WorkOrder: 1301440

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
tert-Amyl methyl ether (TAME)	ND	10	116	118	2.02	117	70 - 130	20	70 - 130
Benzene	1.9	10	89.6	90.8	1.14	102	70 - 130	20	70 - 130
t-Butyl alcohol (TBA)	4.7	40	121	124	1.99	117	70 - 130	20	70 - 130
Chlorobenzene	ND	10	97.6	97.2	0.444	99.4	70 - 130	20	70 - 130
1,2-Dibromoethane (EDB)	ND	10	111	112	1.57	111	70 - 130	20	70 - 130
1,2-Dichloroethane (1,2-DCA)	ND	10	92.2	98.5	6.67	105	70 - 130	20	70 - 130
1,1-Dichloroethene	ND	10	101	102	0.505	110	70 - 130	20	70 - 130
Diisopropyl ether (DIPE)	ND	10	89.6	93.1	3.81	121	70 - 130	20	70 - 130
Ethyl tert-butyl ether (ETBE)	ND	10	99.6	103	3.38	114	70 - 130	20	70 - 130
Methyl-t-butyl ether (MTBE)	ND	10	111	114	3.12	116	70 - 130	20	70 - 130
Toluene	0.73	10	101	96.9	3.88	99.8	70 - 130	20	70 - 130
Trichloroethene	ND	10	98.7	100	1.63	99.7	70 - 130	20	70 - 130
%SS1:	100	25	97	101	3.61	101	70 - 130	20	70 - 130
%SS2:	99	25	96	97	0.815	99	70 - 130	20	70 - 130
%SS3:	107	2.5	109	106	2.59	98	70 - 130	20	70 - 130

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

BATCH 74174 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1301440-001A	01/18/13 11:00 AM	01/25/13	01/25/13 12:36 AM	1301440-002A	01/18/13 1:20 PM	01/24/13	01/24/13 4:48 PM
1301440-003A	01/18/13 1:47 PM	01/25/13	01/25/13 1:15 AM				

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



QC SUMMARY REPORT FOR SW8270C

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 74187

WorkOrder: 1301440

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
Benzo (a) pyrene	N/A	10	N/A	N/A	N/A	59.8	N/A	N/A	30 - 130
Chrysene	N/A	10	N/A	N/A	N/A	90.7	N/A	N/A	30 - 130
1-Methylnaphthalene	N/A	10	N/A	N/A	N/A	92.9	N/A	N/A	30 - 130
2-Methylnaphthalene	N/A	10	N/A	N/A	N/A	76	N/A	N/A	30 - 130
Phenanthrene	N/A	10	N/A	N/A	N/A	90.8	N/A	N/A	30 - 130
Pyrene	N/A	10	N/A	N/A	N/A	78.1	N/A	N/A	30 - 130
%SS1:	N/A	25	N/A	N/A	N/A	76	N/A	N/A	30 - 130
%SS2:	N/A	25	N/A	N/A	N/A	79	N/A	N/A	30 - 130

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

BATCH 74187 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1301440-001C	01/18/13 11:00 AM	01/23/13	01/25/13 11:34 AM	1301440-002C	01/18/13 1:20 PM	01/23/13	01/25/13 12:01 PM

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



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 74182

WorkOrder: 1301440

EPA Method: SW8021B/8015Bm		Extraction: SW5030B					Spiked Sample ID: 1301440-002B			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH(btex) £	6400	60	NR	NR	NR	102	N/A	N/A	70 - 130	
MTBE	2000	10	NR	NR	NR	90.3	N/A	N/A	70 - 130	
Benzene	350	10	NR	NR	NR	96	N/A	N/A	70 - 130	
Toluene	2000	10	NR	NR	NR	95.5	N/A	N/A	70 - 130	
Ethylbenzene	500	10	NR	NR	NR	94.4	N/A	N/A	70 - 130	
Xylenes	2700	30	NR	NR	NR	94.1	N/A	N/A	70 - 130	
%SS:	103	10	NR	NR	NR	99	N/A	N/A	70 - 130	

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

BATCH 74182 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1301440-001B	01/18/13 11:00 AM	01/23/13	01/23/13 6:42 AM	1301440-002B	01/18/13 1:20 PM	01/23/13	01/23/13 8:10 AM
1301440-003B	01/18/13 1:47 PM	01/23/13	01/23/13 8:40 AM	1301440-003B	01/18/13 1:47 PM	01/23/13	01/23/13 11:41 PM

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



Analytical Report

All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/16/13
		Date Received: 01/17/13
	Client Contact: Leonard Niles	Date Reported: 01/25/13
	Client P.O.:	Date Completed: 01/25/13

WorkOrder: 1301401

January 25, 2013

Dear Leonard:

Enclosed within are:

- 1) The results of the **7** analyzed samples from your project: **#12071.23; Hollis,**
- 2) QC data for the above samples, and
- 3) A copy of the chain of custody.

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

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

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
 Laboratory Manager
 McC Campbell Analytical, Inc.

The analytical results relate only to the items tested.



McC Campbell Analytical, Inc.

1534 Willow Pass Rd. / Pittsburg, Ca. 94565-1701
 www.mcccampbell.com / main@mcccampbell.com
 Telephone: (877) 252-9262 / Fax: (925) 252-9269

1301401

CHAIN OF CUSTODY RECORD

TURN AROUND TIME: RUSH 24 HR 48 HR 72 HR 5 DAY 10 DAY

GeoTracker EDF PDF EDD Write On (DW) EQuIS

Effluent Sample Requiring "J" flag UST Clean Up Fund Project Claim # _____

Report To: Leonard Niles

Bill To: Carol Ramelb

Company: AllWest

carol@allwest1.com

530 Howard St #300

choulihan@allwest1.com

SF, CA 94105

E-Mail: leonard@allwest1.com

Tele: (415) 391-2510

Fax: (415) 391-2008

Project #: 12071.23

Project Name: Hollis

Project Location: Emeryville, CA

Purchase Order#

Sampler Signature: [Signature]

Analysis Request

SAMPLE ID	Location/Field Point Name	SAMPLING		# Containers	MATRIX								METHOD PRESERVED				
		Date	Time		Ground Water	Waste Water	Drinking Water	Sea / Water	Soil	Air	Sludge	Other		HCL	HNO ₃	Other	
B18-10-10.5 →		1/16/13	0922	1									X				
B18-15.5-10 →			0945	1									X				
B25-10-10.5 →			1127	1									X				
B25-15-15.5 →			1141	1									X				
B17-8.5-9 →			1411	1									X				
B19-10-10.5 →			1545	1									X				
B19-14.5-15 →			1600	1									X				

BTEX & TPH as Gas (8021/8015 or 8260) / MTBE TPH as Diesel (8015) <u>and TPH -ws w/silica gel</u>	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	MTBE / BTEX ONLY (EPA 8260/8021)	EPA 505/608 / 8081 (CI Pesticides)	EPA 608 / 8082 PCB's ; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic CI Herbicides)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 <u>SIM</u> / 8310 (PAHs / PNAs)	CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	Metals (200.7 / 200.8 / 6010 / 6020)	Filter sample for DISSOLVED metals analysis
--	--	--------------------------------------	----------------------------------	------------------------------------	---	--------------------------------	---------------------------------------	-------------------------------	--------------------------------	--	---	---	--------------------------------------	---

Olga Houlihan

Carol Ramelb

**MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate \$250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

Relinquished By: [Signature] Date: 1/13/13 Time: 1401 Received By: [Signature]

Relinquished By: [Signature] Date: 1/13/13 Time: 1615 Received By: [Signature]

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

ICE/# 28 COMMENTS: _____

GOOD CONDITION _____

HEAD SPACE ABSENT _____

DECHLORINATED IN LAB _____

APPROPRIATE CONTAINERS _____

PRESERVED IN LAB _____

VOAS O&G METALS OTHER HAZARDOUS: _____

PRESERVATION _____ pH=2 _____



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1301401

ClientCode: AWE

WaterTrax
 WriteOn
 EDF
 Excel
 EQuIS
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:

Leonard Niles
All West Environmental, Inc
530 Howard Street, Ste.300
San Francisco, CA 94105
(415) 391-2510 FAX: (415) 391-2008

Email: Leonard@allwest1.com
cc:
PO:
ProjectNo: #12071.23; Hollis

Bill to:

Darlene Torio
All West Environmental, Inc
530 Howard Street, Ste.300
San Francisco, CA 94105
darlene@allwest1.com

Requested TAT:

5 days

Date Received: **01/17/2013**

Date Printed: **01/17/2013**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1301401-001	B18-10-10.5	Soil	1/16/2013 9:22	<input type="checkbox"/>	A	A	A	A									
1301401-002	B18-15.5-16	Soil	1/16/2013 9:45	<input type="checkbox"/>	A	A		A									
1301401-003	B25-10-10.5	Soil	1/16/2013 11:27	<input type="checkbox"/>	A	A		A									
1301401-004	B25-15-15.5	Soil	1/16/2013 11:41	<input type="checkbox"/>	A	A		A									
1301401-005	B17-8.5-9	Soil	1/16/2013 14:11	<input type="checkbox"/>	A	A		A									
1301401-006	B19-10-10.5	Soil	1/16/2013 15:45	<input type="checkbox"/>	A	A		A									
1301401-007	B19-14.5-15	Soil	1/16/2013 16:00	<input type="checkbox"/>	A	A		A									

Test Legend:

1	8270D-PNA_S	2	G-MBTEX_S	3	PREFDF REPORT	4	TPH(DMO)WSG_S	5	
6		7		8		9		10	
11		12							

Prepared by: Zoraida Cortez

Comments:

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



Sample Receipt Checklist

Client Name: **All West Environmental, Inc**

Date and Time Received: **1/17/2013 5:43:55 PM**

Project Name: **#12071.23; Hollis**

LogIn Reviewed by: **Zoraida Cortez**

WorkOrder N°: **1301401** Matrix: Soil

Carrier: Rob Pringle (MAI Courier)

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature	Cooler Temp: 2.8°C		NA <input type="checkbox"/>
Water - VOA vials have zero headspace / no bubbles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Metal - pH acceptable upon receipt (pH<2)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

(Ice Type: WET ICE)

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

 Comments:



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http://www.mccampbell.com / E-mail: main@mccampbell.com

All West Environmental, Inc
530 Howard Street, Ste.300
San Francisco, CA 94105

Client Project ID: #12071.23; Hollis

Date Sampled: 01/16/13

Date Received: 01/17/13

Client Contact: Leonard Niles

Date Extracted: 01/22/13

Client P.O.:

Date Analyzed: 01/23/13-01/24/13

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Extraction Method: SW3550B

Analytical Method: SW8270C-SIM

Work Order: 1301401

Lab ID	1301401-001A	1301401-002A	1301401-003A	1301401-004A	Reporting Limit for DF = 1	
Client ID	B18-10-10.5	B18-15.5-16	B25-10-10.5	B25-15-15.5		
Matrix	S	S	S	S		
DF	10	1	1	1		

Compound	Concentration				mg/kg	ug/L
Acenaphthene	ND<0.10	ND	ND	ND	0.01	NA
Acenaphthylene	ND<0.10	ND	ND	ND	0.01	NA
Anthracene	ND<0.10	ND	ND	ND	0.01	NA
Benzo (a) anthracene	ND<0.10	ND	0.013	ND	0.01	NA
Benzo (b) fluoranthene	ND<0.10	ND	ND	ND	0.01	NA
Benzo (k) fluoranthene	ND<0.10	ND	ND	ND	0.01	NA
Benzo (g,h,i) perylene	ND<0.10	ND	ND	ND	0.01	NA
Benzo (a) pyrene	ND<0.10	ND	ND	ND	0.01	NA
Chrysene	ND<0.10	ND	0.013	ND	0.01	NA
Dibenzo (a,h) anthracene	ND<0.10	ND	ND	ND	0.01	NA
Fluoranthene	ND<0.10	ND	0.037	ND	0.01	NA
Fluorene	ND<0.10	ND	ND	ND	0.01	NA
Indeno (1,2,3-cd) pyrene	ND<0.10	ND	ND	ND	0.01	NA
1-Methylnaphthalene	0.69	ND	0.014	ND	0.01	NA
2-Methylnaphthalene	1.1	ND	0.028	ND	0.01	NA
Naphthalene	0.47	ND	0.012	ND	0.01	NA
Phenanthrene	ND<0.10	ND	0.043	ND	0.01	NA
Pyrene	ND<0.10	ND	0.033	ND	0.01	NA

Surrogate Recoveries (%)

%SS1	83	78	77	75
%SS2	81	76	78	75

Comments

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this ND means not detected at or above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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



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All West Environmental, Inc
530 Howard Street, Ste.300
San Francisco, CA 94105

Client Project ID: #12071.23; Hollis

Date Sampled: 01/16/13

Date Received: 01/17/13

Client Contact: Leonard Niles

Date Extracted: 01/22/13

Client P.O.:

Date Analyzed: 01/23/13-01/24/13

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Extraction Method: SW3550B

Analytical Method: SW8270C-SIM

Work Order: 1301401

Lab ID	1301401-005A	1301401-006A	1301401-007A	Reporting Limit for DF =1
Client ID	B17-8.5-9	B19-10-10.5	B19-14.5-15	
Matrix	S	S	S	
DF	1	10	1	

Compound	Concentration			mg/kg	ug/L
Acenaphthene	ND	ND<0.10	ND	0.01	NA
Acenaphthylene	ND	ND<0.10	ND	0.01	NA
Anthracene	ND	ND<0.10	ND	0.01	NA
Benzo (a) anthracene	ND	ND<0.10	ND	0.01	NA
Benzo (b) fluoranthene	ND	ND<0.10	ND	0.01	NA
Benzo (k) fluoranthene	ND	ND<0.10	ND	0.01	NA
Benzo (g,h,i) perylene	ND	ND<0.10	ND	0.01	NA
Benzo (a) pyrene	ND	ND<0.10	ND	0.01	NA
Chrysene	ND	ND<0.10	ND	0.01	NA
Dibenzo (a,h) anthracene	ND	ND<0.10	ND	0.01	NA
Fluoranthene	ND	ND<0.10	ND	0.01	NA
Fluorene	ND	ND<0.10	ND	0.01	NA
Indeno (1,2,3-cd) pyrene	ND	ND<0.10	ND	0.01	NA
1-Methylnaphthalene	ND	0.48	0.26	0.01	NA
2-Methylnaphthalene	ND	0.76	0.50	0.01	NA
Naphthalene	ND	0.72	0.50	0.01	NA
Phenanthrene	ND	ND<0.10	0.014	0.01	NA
Pyrene	ND	ND<0.10	ND	0.01	NA

Surrogate Recoveries (%)

%SS1	80	83	77
%SS2	81	75	79

Comments

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this ND means not detected at or above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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



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All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/16/13
	Client Contact: Leonard Niles	Date Received: 01/17/13
	Client P.O.:	Date Analyzed: 01/17/13-01/22/13
		Date Extracted: 01/17/13

Gasoline Range (C6-C12) and Mineral Spirits Range (C9-C12) Volatile Hydrocarbons with BTEX and MTBE*

Extraction Method: SW5030B

Analytical Method: SW8021B/8015Bm

Work Order: 1301401

Lab ID	1301401-001A	1301401-002A	1301401-003A	1301401-004A	Reporting Limit for DF = 1	
Client ID	B18-10-10.5	B18-15.5-16	B25-10-10.5	B25-15-15.5		
Matrix	S	S	S	S		
DF	100	1	1	1		

Compound	Concentration				mg/Kg	ug/L
	TPH(g)	450	ND	16	ND	1.0
TPH(mineral spirits)	430	ND	6.8	ND	1.0	NA
MTBE	ND<5.0	ND	ND	ND	0.05	NA
Benzene	ND<0.50	ND	0.0088	ND	0.005	NA
Toluene	ND<0.50	ND	0.034	ND	0.005	NA
Ethylbenzene	8.0	ND	0.30	ND	0.005	NA
Xylenes	25	ND	0.015	ND	0.005	NA

Surrogate Recoveries (%)

%SS:	---#	96	91	90	
------	------	----	----	----	--

Comments	d2,d9		d1		
----------	-------	--	----	--	--

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

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

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

- d1) weakly modified or unmodified gasoline is significant
- d2) heavier gasoline range compounds are significant (aged gasoline?)
- d9) no recognizable pattern



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All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/16/13
		Date Received: 01/17/13
	Client Contact: Leonard Niles	Date Extracted: 01/17/13
	Client P.O.:	Date Analyzed: 01/17/13-01/22/13

Gasoline Range (C6-C12) and Mineral Spirits Range (C9-C12) Volatile Hydrocarbons with BTEX and MTBE*

Extraction Method: SW5030B

Analytical Method: SW8021B/8015Bm

Work Order: 1301401

Lab ID	1301401-005A	1301401-006A	1301401-007A		Reporting Limit for DF = 1	
Client ID	B17-8.5-9	B19-10-10.5	B19-14.5-15			
Matrix	S	S	S			
DF	1	20	20			

Compound	Concentration				mg/Kg	ug/L
	TPH(g)	ND	360	240		1.0
TPH(mineral spirits)	ND	350	240		1.0	NA
MTBE	ND	ND<1.0	ND<1.0		0.05	NA
Benzene	ND	0.31	0.12		0.005	NA
Toluene	ND	0.23	0.16		0.005	NA
Ethylbenzene	ND	8.8	5.7		0.005	NA
Xylenes	ND	26	14		0.005	NA

Surrogate Recoveries (%)

%SS:	85	---#	---#		
------	----	------	------	--	--

Comments		d1	d1		
-----------------	--	----	----	--	--

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

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

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

- d1) weakly modified or unmodified gasoline is significant
- d2) heavier gasoline range compounds are significant (aged gasoline?)
- d9) no recognizable pattern



All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/16/13
		Date Received: 01/17/13
	Client Contact: Leonard Niles	Date Extracted: 01/17/13
	Client P.O.:	Date Analyzed: 01/18/13-01/24/13

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up*

Extraction method: SW3550B/3630C

Analytical methods: SW8015B

Work Order: 1301401

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	TPH-Motor Oil (C18-C36)	DF	% SS	Comments
1301401-001A	B18-10-10.5	S	60	5.4	1	96	e4,e2
1301401-002A	B18-15.5-16	S	2.4	ND	1	93	e2
1301401-003A	B25-10-10.5	S	3.4	ND	1	96	e2
1301401-004A	B25-15-15.5	S	ND	ND	1	96	
1301401-005A	B17-8.5-9	S	ND	ND	1	97	
1301401-006A	B19-10-10.5	S	32	ND	1	117	e4
1301401-007A	B19-14.5-15	S	11	ND	1	98	e4

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA	ug/L
	S	1.0	5.0	mg/Kg

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

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

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

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:
 e2) diesel range compounds are significant; no recognizable pattern
 e4) gasoline range compounds are significant.



QC SUMMARY REPORT FOR SW8270C

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 74148

WorkOrder: 1301401

EPA Method: SW8270C-SIM		Extraction: SW3550B					Spiked Sample ID: 1301401-004A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	mg/kg	mg/kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
Benzo (a) pyrene	ND	0.20	67.7	63.8	5.98	60.7	30 - 130	30	30 - 130	
Chrysene	ND	0.20	97.2	93.9	3.52	86.1	30 - 130	30	30 - 130	
1-Methylnaphthalene	ND	0.20	102	99.3	2.93	88.1	30 - 130	30	30 - 130	
2-Methylnaphthalene	ND	0.20	84.2	82.7	1.74	73.8	30 - 130	30	30 - 130	
Phenanthrene	ND	0.20	96.6	98	1.43	89.8	30 - 130	30	30 - 130	
Pyrene	ND	0.20	83.2	80.1	3.81	76	30 - 130	30	30 - 130	
%SS1:	75	0.50	82	80	2.47	73	30 - 130	30	30 - 130	
%SS2:	75	0.50	83	81	3.00	73	30 - 130	30	30 - 130	

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

BATCH 74148 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1301401-001A	01/16/13 9:22 AM	01/22/13	01/24/13 7:06 PM	1301401-002A	01/16/13 9:45 AM	01/22/13	01/23/13 9:04 PM
1301401-003A	01/16/13 11:27 AM	01/22/13	01/23/13 9:31 PM	1301401-004A	01/16/13 11:41 AM	01/22/13	01/23/13 7:14 PM
1301401-005A	01/16/13 2:11 PM	01/22/13	01/23/13 9:59 PM	1301401-006A	01/16/13 3:45 PM	01/22/13	01/24/13 7:33 PM
1301401-007A	01/16/13 4:00 PM	01/22/13	01/23/13 10:54 PM				

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



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 74052

WorkOrder: 1301401

EPA Method: SW8021B/8015Bm		Extraction: SW5030B					Spiked Sample ID: 1301371-057A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH(btex) [£]	ND	0.60	103	95.1	8.07	102	70 - 130	20	70 - 130	
MTBE	ND	0.10	90.9	97.2	6.62	88.7	70 - 130	20	70 - 130	
Benzene	ND	0.10	106	99.4	6.21	96.3	70 - 130	20	70 - 130	
Toluene	ND	0.10	104	98.3	5.55	94.6	70 - 130	20	70 - 130	
Ethylbenzene	ND	0.10	104	98.5	5.85	94.9	70 - 130	20	70 - 130	
Xylenes	ND	0.30	104	99.2	4.83	95.5	70 - 130	20	70 - 130	
%SS:	91	0.10	107	99	7.65	70	70 - 130	20	70 - 130	

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

BATCH 74052 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1301401-001A	01/16/13 9:22 AM	01/17/13	01/22/13 7:21 PM	1301401-002A	01/16/13 9:45 AM	01/17/13	01/17/13 11:07 PM
1301401-003A	01/16/13 11:27 AM	01/17/13	01/18/13 12:07 AM	1301401-004A	01/16/13 11:41 AM	01/17/13	01/18/13 12:36 AM
1301401-005A	01/16/13 2:11 PM	01/17/13	01/19/13 9:47 PM	1301401-006A	01/16/13 3:45 PM	01/17/13	01/19/13 10:17 PM
1301401-007A	01/16/13 4:00 PM	01/17/13	01/19/13 6:47 PM				

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



QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 74051

WorkOrder: 1301401

EPA Method: SW8015B		Extraction: SW3550B/3630C					Spiked Sample ID: 1301371-057A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH-Diesel (C10-C23)	ND	40	99.5	99.8	0.318	110	70 - 130	30	70 - 130	
%SS:	96	25	92	92	0	103	70 - 130	30	70 - 130	

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

BATCH 74051 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1301401-001A	01/16/13 9:22 AM	01/17/13	01/24/13 3:30 AM	1301401-002A	01/16/13 9:45 AM	01/17/13	01/23/13 9:33 PM
1301401-003A	01/16/13 11:27 AM	01/17/13	01/18/13 5:55 PM	1301401-004A	01/16/13 11:41 AM	01/17/13	01/18/13 12:35 AM
1301401-005A	01/16/13 2:11 PM	01/17/13	01/18/13 1:46 AM	1301401-006A	01/16/13 3:45 PM	01/17/13	01/19/13 2:21 PM
1301401-007A	01/16/13 4:00 PM	01/17/13	01/19/13 1:13 PM				

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

DHS ELAP Certification 1644

 QA/QC Officer



Analytical Report

All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/16/13
		Date Received: 01/17/13
	Client Contact: Leonard Niles	Date Reported: 01/25/13
	Client P.O.:	Date Completed: 01/25/13

WorkOrder: 1301410

January 25, 2013

Dear Leonard:

Enclosed within are:

- 1) The results of the **4** analyzed samples from your project: **#12071.23; Hollis,**
- 2) QC data for the above samples, and
- 3) A copy of the chain of custody.

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

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

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
 Laboratory Manager
 McC Campbell Analytical, Inc.

The analytical results relate only to the items tested.



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PAGE
1 of 2

1301410

CHAIN OF CUSTODY RECORD

TURN AROUND TIME: RUSH 24 HR 48 HR 72 HR 5 DAY 10 DAY

GeoTracker EDF PDF EDD Write On (DW) EQUIS

Effluent Sample Requiring "J" flag UST Clean Up Fund Project ; Claim # _____

Report To: Leonard Niles Bill To: Carol Ramello
 Company: AllWest carol@allwest1.com
 530 Howard St #300 chaulihan@allwest1.com
 SE, CA 94105 E-Mail: leonard@allwest1.com
 Tele: (415) 391-2510 Fax: (415) 391-2008
 Project #: 12071.23 Project Name: Hollis
 Project Location: Emeryville, CA Purchase Order#
 Sampler Signature: [Signature]

Analysis Request

SAMPLE ID	Location/ Field Point Name	SAMPLING		# Containers	MATRIX												METHOD PRESERVED																					
		Date	Time		Ground Water	Waste Water	Drinking Water	Sea / Water	Soil	Air	Sludge	Other	HCL	HNO ₃	Other	BTEX & TPH as Gas (8021/8015 or 8260) / MTBE	TPH as Diesel (8015) and TPH-m ₂₀ w/silica gel	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	MTBE / BTEX ONLY (EPA 8260/ 8021)	EPA 505/ 608 / 8081 (CI Pesticides)	EPA 608 / 8082 PCB's ; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic CI Herbicides)	EPA 524.2 / 624 / 8260 (VOCs) and TPH-g	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	Metals (200.7 / 200.8 / 6010 / 6020)	Filter sample for DISSOLVED metals analysis							
B18	B18	1/16/13	1000	3	X																																	
B18	B18		1000	1	X																																	
B18	B18		1000	1	X																																	
B25	B25		1330	3	X																																	
B25	B25		1330	1	X																																	
B25	B25		1330	1	X																																	
B17	B17		1426	3	X																																	
B17	B17		1426	1	X																																	
B17	B17		1426	1	X																																	
B19	B19		1620	3	X																																	
B19	B19		1620	1	X																																	

**MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate \$250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

Relinquished By: [Signature] Date: 1/7/13 Time: 1407 Received By: [Signature]
 Relinquished By: [Signature] Date: 1/17/13 Time: 1615 Received By: [Signature]
 Relinquished By: _____ Date: _____ Time: _____ Received By: _____

ICE/T: 9.0 COMMENTS:
 GOOD CONDITION _____
 HEAD SPACE ABSENT _____
 DECHLORINATED IN LAB _____
 APPROPRIATE CONTAINERS _____
 PRESERVED IN LAB _____
 VOAS O&G METALS OTHER HAZARDOUS:
 PRESERVATION pH <2 _____



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1301410

ClientCode: AWE

WaterTrax
 WriteOn
 EDF
 Excel
 EQUIS
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:
 Leonard Niles
 All West Environmental, Inc
 530 Howard Street, Ste.300
 San Francisco, CA 94105
 (415) 391-2510 FAX: (415) 391-2008

Email: Leonard@allwest1.com
 cc:
 PO:
 ProjectNo: #12071.23; Hollis

Bill to:
 Darlene Torio
 All West Environmental, Inc
 530 Howard Street, Ste.300
 San Francisco, CA 94105
 darlene@allwest1.com

Requested TAT: 5 days

Date Received: 01/17/2013

Date Printed: 01/17/2013

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1301410-001	B18	Water	1/16/2013 10:00	<input type="checkbox"/>	B	A	C	A									
1301410-002	B25	Water	1/16/2013 13:30	<input type="checkbox"/>	B	A	C										
1301410-003	B17	Water	1/16/2013 14:26	<input type="checkbox"/>	B	A	C										
1301410-004	B19	Water	1/16/2013 16:20	<input type="checkbox"/>	B	A	C										

Test Legend:

1	8270D-PNA_W	2	GAS8260_W	3	G-MBTX_W	4	PREFD REPORT	5	
6		7		8		9		10	
11		12							

The following SampIDs: 001A, 001C, 002A, 002C, 003A, 003C, 004A, 004C contain testgroup.

Prepared by: Zoraida Cortez

Comments:

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



Sample Receipt Checklist

Client Name: **All West Environmental, Inc**

Date and Time Received: **1/17/2013 8:35:09 PM**

Project Name: **#12071.23; Hollis**

LogIn Reviewed by: **Zoraida Cortez**

WorkOrder N°: **1301410** Matrix: Water

Carrier: Rob Pringle (MAI Courier)

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature	Cooler Temp: 3°C		NA <input type="checkbox"/>
Water - VOA vials have zero headspace / no bubbles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Metal - pH acceptable upon receipt (pH<2)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

(Ice Type: WET ICE)

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

 Comments:



All West Environmental, Inc
530 Howard Street, Ste.300
San Francisco, CA 94105

Client Project ID: #12071.23; Hollis
Client Contact: Leonard Niles
Client P.O.:

Date Sampled: 01/16/13
Date Received: 01/17/13
Date Extracted: 01/22/13
Date Analyzed: 01/22/13

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1301410

Table with columns: Lab ID, Client ID, Matrix, Compound, Concentration *, DF, Reporting Limit. Lists various organic compounds and their detection results.

Surrogate Recoveries (%)

Table showing surrogate recoveries: %SS1: 105, %SS2: 93, %SS3: 76

Comments: b1

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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

sample pH is greater than 2

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



All West Environmental, Inc
530 Howard Street, Ste.300
San Francisco, CA 94105

Client Project ID: #12071.23; Hollis
Client Contact: Leonard Niles
Client P.O.:

Date Sampled: 01/16/13
Date Received: 01/17/13
Date Extracted: 01/22/13
Date Analyzed: 01/22/13

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1301410

Table with 2 columns: Lab ID (1301410-002A), Client ID (B25), Matrix (Water)

Main data table with 8 columns: Compound, Concentration *, DF, Reporting Limit, Compound, Concentration *, DF, Reporting Limit. Lists various organic compounds and their detection results.

Surrogate Recoveries (%)

Table showing surrogate recoveries: %SS1: 104, %SS2: 93, %SS3: 78

Comments: c8,b1

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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

sample pH is greater than 2

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



All West Environmental, Inc
530 Howard Street, Ste.300
San Francisco, CA 94105

Client Project ID: #12071.23; Hollis
Client Contact: Leonard Niles
Client P.O.:

Date Sampled: 01/16/13
Date Received: 01/17/13
Date Extracted: 01/18/13
Date Analyzed: 01/18/13

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1301410

Table with 2 columns: Lab ID (1301410-003A), Client ID (B17), Matrix (Water)

Main data table with 8 columns: Compound, Concentration *, DF, Reporting Limit, Compound, Concentration *, DF, Reporting Limit. Lists various organic compounds and their detection results.

Surrogate Recoveries (%)

Table showing surrogate recoveries: %SS1: 124, %SS2: 107, %SS3: 97

Comments: b1

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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

sample pH is greater than 2

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



Table with client information: All West Environmental, Inc, Client Project ID: #12071.23; Hollis, Date Sampled: 01/16/13, Date Received: 01/17/13, Client Contact: Leonard Niles, Date Extracted: 01/19/13, San Francisco, CA 94105, Client P.O., Date Analyzed: 01/19/13

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1301410

Table with Lab ID: 1301410-004A, Client ID: B19, Matrix: Water

Main data table with columns: Compound, Concentration *, DF, Reporting Limit, Compound, Concentration *, DF, Reporting Limit. Lists various organic compounds and their detection results.

Surrogate Recoveries (%)

Table showing surrogate recoveries: %SS1: 118, %SS2: 106, %SS3: 96

Comments: b1

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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

sample pH is greater than 2

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



McC Campbell Analytical, Inc.

"When Quality Counts"

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

All West Environmental, Inc
530 Howard Street, Ste.300
San Francisco, CA 94105

Client Project ID: #12071.23; Hollis
Client Contact: Leonard Niles
Client P.O.:

Date Sampled: 01/16/13
Date Received: 01/17/13
Date Extracted: 01/23/13
Date Analyzed: 01/24/13-01/25/13

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Extraction Method: SW3510C

Analytical Method: SW8270C-SIM

Work Order: 1301410

Lab ID	1301410-001B	1301410-002B	1301410-003B	1301410-004B	Reporting Limit for DF =1	
Client ID	B18	B25	B17	B19		
Matrix	W	W	W	W		
DF	10	1	1	1		

Compound	Concentration				ug/kg	µg/L
Acenaphthene	ND<5.0	1.1	ND	ND	NA	0.5
Acenaphthylene	ND<5.0	ND	ND	ND	NA	0.5
Anthracene	ND<5.0	ND	ND	ND	NA	0.5
Benzo (a) anthracene	ND<5.0	ND	ND	ND	NA	0.5
Benzo (b) fluoranthene	ND<5.0	ND	ND	ND	NA	0.5
Benzo (k) fluoranthene	ND<5.0	ND	ND	ND	NA	0.5
Benzo (g,h,i) perylene	ND<5.0	ND	ND	ND	NA	0.5
Benzo (a) pyrene	ND<5.0	ND	ND	ND	NA	0.5
Chrysene	ND<5.0	ND	ND	ND	NA	0.5
Dibenzo (a,h) anthracene	ND<5.0	ND	ND	ND	NA	0.5
Fluoranthene	ND<5.0	ND	ND	ND	NA	0.5
Fluorene	ND<5.0	ND	ND	ND	NA	0.5
Indeno (1,2,3-cd) pyrene	ND<5.0	ND	ND	ND	NA	0.5
1-Methylnaphthalene	22	4.4	ND	15	NA	0.5
2-Methylnaphthalene	36	6.8	ND	27	NA	0.5
Naphthalene	67	12	ND	28	NA	0.5
Phenanthrene	ND<5.0	0.88	ND	0.67	NA	0.5
Pyrene	ND<5.0	ND	ND	ND	NA	0.5

Surrogate Recoveries (%)

%SS1	54	76	65	72	
%SS2	---#	73	53	71	
Comments	b1	b1	b1	b1	

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

ND means not detected at or above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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

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



All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/16/13
		Date Received: 01/17/13
	Client Contact: Leonard Niles	Date Extracted 01/18/13-01/19/13
	Client P.O.:	Date Analyzed 01/18/13-01/19/13

TPH(g) by Purge & Trap and GC/MS*

Extraction method: SW5030B

Analytical methods: SW8260B

Work Order: 1301410

Lab ID	Client ID	Matrix	TPH(g)	DF	% SS	Comments
001A	B18	W	8300	10	93	b1
002A	B25	W	270	1	96	b1
003A	B17	W	190	1	94	b1
004A	B19	W	5000	10	93	b1

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

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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



All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/16/13
		Date Received: 01/17/13
	Client Contact: Leonard Niles	Date Extracted 01/18/13-01/23/13
	Client P.O.:	Date Analyzed 01/18/13-01/23/13

Mineral Spirits Range (C9-C12) Volatile Hydrocarbons as Mineral Spirits*

Extraction method: SW5030B

Analytical methods: SW8021B/8015Bm

Work Order: 1301410

Lab ID	Client ID	Matrix	TPH(mineral spirits)	DF	% SS	Comments
001C	B18	W	4800	10	108	d2,b1
002C	B25	W	87	1	118	d2,b1
003C	B17	W	ND	1	99	b1
004C	B19	W	3000	3.3	121	d2,b1

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

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

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

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:
 b1) aqueous sample that contains greater than ~1 vol. % sediment
 d2) heavier gasoline range compounds are significant (aged gasoline?)



All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #12071.23; Hollis	Date Sampled: 01/16/13
		Date Received: 01/17/13
	Client Contact: Leonard Niles	Date Extracted 01/17/13
	Client P.O.:	Date Analyzed 01/20/13-01/23/13

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up*

Extraction method: SW3510C/3630C

Analytical methods: SW8015B

Work Order: 1301410

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	DF	% SS	Comments
1301410-001C	B18	W	1500	1	71	e4,b1
1301410-002C	B25	W	340	1	95	e7,e4,e2,b1
1301410-003C	B17	W	320	1	102	e7,e2,b1
1301410-004C	B19	W	1300	1	100	e4,b1

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

* 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/matrix interference.

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

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:
 b1) aqueous sample that contains greater than ~1 vol. % sediment
 e2) diesel range compounds are significant; no recognizable pattern
 e4) gasoline range compounds are significant.
 e7) oil range compounds are significant



QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 74129

WorkOrder: 1301410

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
tert-Amyl methyl ether (TAME)	ND<5.0	10	86.3	80	5.35	108	70 - 130	20	70 - 130
Benzene	ND<5.0	10	109	106	2.53	106	70 - 130	20	70 - 130
t-Butyl alcohol (TBA)	ND<20	40	118	110	6.37	111	70 - 130	20	70 - 130
Chlorobenzene	ND<5.0	10	104	105	1.51	106	70 - 130	20	70 - 130
1,2-Dibromoethane (EDB)	ND<5.0	10	115	109	5.68	114	70 - 130	20	70 - 130
1,2-Dichloroethane (1,2-DCA)	ND<5.0	10	120	115	4.36	111	70 - 130	20	70 - 130
1,1-Dichloroethene	ND<5.0	10	109	107	2.39	108	70 - 130	20	70 - 130
Diisopropyl ether (DIPE)	ND<5.0	10	114	110	3.74	110	70 - 130	20	70 - 130
Ethyl tert-butyl ether (ETBE)	ND<5.0	10	117	113	3.97	111	70 - 130	20	70 - 130
Methyl-t-butyl ether (MTBE)	260	10	NR	NR	NR	113	N/A	N/A	70 - 130
Toluene	ND<5.0	10	92.9	95.3	2.47	103	70 - 130	20	70 - 130
Trichloroethene	ND<5.0	10	116	111	4.17	113	70 - 130	20	70 - 130
%SS1:	117	25	121	115	5.13	113	70 - 130	20	70 - 130
%SS2:	108	25	105	106	0.920	110	70 - 130	20	70 - 130
%SS3:	106	2.5	100	98	1.83	101	70 - 130	20	70 - 130

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

BATCH 74129 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1301410-001A	01/16/13 10:00 AM	01/22/13	01/22/13 4:09 PM	1301410-002A	01/16/13 1:30 PM	01/22/13	01/22/13 4:52 PM
1301410-003A	01/16/13 2:26 PM	01/18/13	01/18/13 6:02 PM	1301410-004A	01/16/13 4:20 PM	01/19/13	01/19/13 2:13 AM

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



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 74138

WorkOrder: 1301410

EPA Method: SW8021B/8015Bm		Extraction: SW5030B					Spiked Sample ID: 1301377-007A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH(btex) £	ND	60	104	99.8	3.81	105	70 - 130	20	70 - 130	
MTBE	ND	10	93.3	94.4	1.22	88.7	70 - 130	20	70 - 130	
Benzene	ND	10	97	97.1	0.0538	100	70 - 130	20	70 - 130	
Toluene	ND	10	97	96.9	0.136	99.8	70 - 130	20	70 - 130	
Ethylbenzene	ND	10	96.1	96.2	0.0356	97.9	70 - 130	20	70 - 130	
Xylenes	ND	30	96.7	96.4	0.272	97.2	70 - 130	20	70 - 130	
%SS:	104	10	97	98	1.20	97	70 - 130	20	70 - 130	

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

BATCH 74138 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1301410-001C	01/16/13 10:00 AM	01/22/13	01/22/13 8:20 PM	1301410-002C	01/16/13 1:30 PM	01/18/13	01/18/13 4:58 PM
1301410-003C	01/16/13 2:26 PM	01/23/13	01/23/13 9:42 PM	1301410-004C	01/16/13 4:20 PM	01/22/13	01/22/13 10:49 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.
 £ 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 SW8270C

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 74187

WorkOrder: 1301410

EPA Method: SW8270C-SIM		Extraction: SW3510C					Spiked Sample ID: N/A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
Benzo (a) pyrene	N/A	10	N/A	N/A	N/A	59.8	N/A	N/A	30 - 130	
Chrysene	N/A	10	N/A	N/A	N/A	90.7	N/A	N/A	30 - 130	
1-Methylnaphthalene	N/A	10	N/A	N/A	N/A	92.9	N/A	N/A	30 - 130	
2-Methylnaphthalene	N/A	10	N/A	N/A	N/A	76	N/A	N/A	30 - 130	
Phenanthrene	N/A	10	N/A	N/A	N/A	90.8	N/A	N/A	30 - 130	
Pyrene	N/A	10	N/A	N/A	N/A	78.1	N/A	N/A	30 - 130	
%SS1:	N/A	25	N/A	N/A	N/A	76	N/A	N/A	30 - 130	
%SS2:	N/A	25	N/A	N/A	N/A	79	N/A	N/A	30 - 130	

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

BATCH 74187 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1301410-001B	01/16/13 10:00 AM	01/23/13	01/25/13 11:06 AM	1301410-002B	01/16/13 1:30 PM	01/23/13	01/24/13 5:43 PM
1301410-003B	01/16/13 2:26 PM	01/23/13	01/24/13 6:10 PM	1301410-004B	01/16/13 4:20 PM	01/23/13	01/24/13 6:38 PM

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



QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 74050

WorkOrder: 1301410

EPA Method: SW8015B		Extraction: SW3510C/3630C					Spiked Sample ID: N/A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH-Diesel (C10-C23)	N/A	1000	N/A	N/A	N/A	109	N/A	N/A	70 - 130	
%SS:	N/A	625	N/A	N/A	N/A	101	N/A	N/A	70 - 130	

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

BATCH 74050 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1301410-001C	01/16/13 10:00 AM	01/17/13	01/23/13 8:29 AM	1301410-002C	01/16/13 1:30 PM	01/17/13	01/23/13 7:18 AM
1301410-003C	01/16/13 2:26 PM	01/17/13	01/20/13 1:04 PM	1301410-004C	01/16/13 4:20 PM	01/17/13	01/20/13 4:29 PM

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



Analytical Report

All West Environmental, Inc 2141 Mission Street, Ste 100 San Francisco, CA 94110	Client Project ID: #13019.23; Hollis	Date Sampled: 08/01/13-08/02/13
		Date Received: 08/02/13
	Client Contact: Christopher Houlihan	Date Reported: 08/09/13
	Client P.O.:	Date Completed: 08/09/13

WorkOrder: 1308107

August 09, 2013

Dear Christopher:

Enclosed within are:

- 1) The results of the **9** analyzed samples from your project: **#13019.23; Hollis,**
- 2) QC data for the above samples, and
- 3) A copy of the chain of custody.

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

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

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
 Laboratory Manager
 McC Campbell Analytical, Inc.

The analytical results relate only to the items tested.



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1308107

ClientCode: AWE

WaterTrax
 WriteOn
 EDF
 Excel
 EQuIS
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:
 Christopher Houlihan
 All West Environmental, Inc
 2141 Mission Street, Ste 100
 San Francisco, CA 94110
 (415) 391-2510 FAX: (415) 391-2008

Email: choulihan@allwest1.com
 cc: leonard@allwest1.com
 PO:
 ProjectNo: #13019.23; Hollis

Bill to:
 Carol Ramelb
 All West Environmental, Inc
 2141 Mission Street, Ste 100
 San Francisco, CA 94110
 darlene@allwest1.com

Requested TAT: 5 days

Date Received: 08/02/2013
Date Printed: 08/02/2013

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1308107-001	AMW-2-6.5-7	Soil	8/1/2013 12:38	<input type="checkbox"/>	A	A	A	A									
1308107-002	AMW-2-15.5-16	Soil	8/1/2013 13:26	<input type="checkbox"/>	A	A		A									
1308107-003	AMW-2-23-23.5	Soil	8/1/2013 13:34	<input type="checkbox"/>	A	A		A									
1308107-004	AMW-3-6.5-7	Soil	8/2/2013 8:23	<input type="checkbox"/>	A	A		A									
1308107-005	AMW-3-9-9.5	Soil	8/2/2013 8:40	<input type="checkbox"/>	A	A		A									
1308107-006	AMW-3-12-12.5	Soil	8/2/2013 8:46	<input type="checkbox"/>	A	A		A									
1308107-007	AMW-1-6.5-7	Soil	8/2/2013 11:20	<input type="checkbox"/>	A	A		A									
1308107-008	AMW-1-12.5-13	Soil	8/2/2013 11:30	<input type="checkbox"/>	A	A		A									
1308107-009	AMW-1-18.5-19	Soil	8/2/2013 11:44	<input type="checkbox"/>	A	A		A									

Test Legend:

1	8270D-PNA_S	2	G-MBTEX_S	3	PREFDF REPORT	4	TPH(D)_S	5	
6		7		8		9		10	
11		12							

Prepared by: Jena Alfaro

Comments:

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



Sample Receipt Checklist

Client Name: **All West Environmental, Inc**

Date and Time Received: **8/2/2013 6:35:54 PM**

Project Name: **#13019.23; Hollis**

LogIn Reviewed by: **Jena Alfaro**

WorkOrder N°: **1308107** Matrix: Soil

Carrier: Rob Pringle (MAI Courier)

Chain of Custody (COC) Information

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

Sample Receipt Information

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

Sample Preservation and Hold Time (HT) Information

- All samples received within holding time? Yes No
- Container/Temp Blank temperature Cooler Temp: 5°C NA
- Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
- Sample labels checked for correct preservation? Yes No
- Metal - pH acceptable upon receipt (pH<2)? Yes No NA
- Samples Received on Ice? Yes No

(Ice Type: WET ICE)

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

 Comments:



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All West Environmental, Inc
2141 Mission Street, Ste 100
San Francisco, CA 94110

Client Project ID: #13019.23; Hollis
Client Contact: Christopher Houlihan
Client P.O.:

Date Sampled: 08/01/13-08/02/13
Date Received: 08/02/13
Date Extracted: 08/05/13
Date Analyzed: 08/05/13-08/07/13

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Extraction Method: SW3550B

Analytical Method: SW8270C-SIM

Work Order: 1308107

Lab ID	1308107-001A	1308107-002A	1308107-003A	1308107-004A	Reporting Limit for DF = 1	
Client ID	AMW-2-6.5-7	AMW-2-15.5-16	AMW-2-23-23.5	AMW-3-6.5-7		
Matrix	S	S	S	S		
DF	1	20	1	1		

Compound	Concentration				mg/kg	ug/L
Acenaphthene	ND	ND<0.20	ND	ND	0.01	NA
Acenaphthylene	ND	ND<0.20	ND	ND	0.01	NA
Anthracene	ND	ND<0.20	ND	ND	0.01	NA
Benzo (a) anthracene	ND	ND<0.20	ND	ND	0.01	NA
Benzo (b) fluoranthene	ND	ND<0.20	ND	ND	0.01	NA
Benzo (k) fluoranthene	ND	ND<0.20	ND	ND	0.01	NA
Benzo (g,h,i) perylene	ND	ND<0.20	ND	ND	0.01	NA
Benzo (a) pyrene	ND	ND<0.20	ND	ND	0.01	NA
Chrysene	ND	ND<0.20	ND	ND	0.01	NA
Dibenzo (a,h) anthracene	ND	ND<0.20	ND	ND	0.01	NA
Fluoranthene	ND	ND<0.20	ND	ND	0.01	NA
Fluorene	ND	ND<0.20	ND	ND	0.01	NA
Indeno (1,2,3-cd) pyrene	ND	ND<0.20	ND	ND	0.01	NA
1-Methylnaphthalene	ND	1.4	ND	ND	0.01	NA
2-Methylnaphthalene	ND	2.4	ND	ND	0.01	NA
Naphthalene	ND	2.5	ND	ND	0.01	NA
Phenanthrene	ND	ND<0.20	ND	ND	0.01	NA
Pyrene	ND	ND<0.20	ND	ND	0.01	NA

Surrogate Recoveries (%)

%SS1	109	120	118	113
%SS2	105	109	118	115

Comments

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this ND means not detected at or above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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



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http://www.mcccampbell.com / E-mail: main@mcccampbell.com

All West Environmental, Inc 2141 Mission Street, Ste 100 San Francisco, CA 94110	Client Project ID: #13019.23; Hollis	Date Sampled: 08/01/13-08/02/13
		Date Received: 08/02/13
	Client Contact: Christopher Houlihan	Date Extracted: 08/05/13
	Client P.O.:	Date Analyzed: 08/05/13-08/07/13

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Extraction Method: SW3550B

Analytical Method: SW8270C-SIM

Work Order: 1308107

Lab ID	1308107-005A	1308107-006A	1308107-007A	1308107-008A	Reporting Limit for DF = 1	
Client ID	AMW-3-9-9.5	AMW-3-12-12.5	AMW-1-6.5-7	AMW-1-12.5-13		
Matrix	S	S	S	S		
DF	10	5	1	1		

Compound	Concentration				mg/kg	ug/L
Acenaphthene	ND<0.10	ND<0.050	ND	ND	0.01	NA
Acenaphthylene	ND<0.10	ND<0.050	ND	ND	0.01	NA
Anthracene	ND<0.10	ND<0.050	ND	ND	0.01	NA
Benzo (a) anthracene	ND<0.10	ND<0.050	ND	ND	0.01	NA
Benzo (b) fluoranthene	ND<0.10	ND<0.050	ND	ND	0.01	NA
Benzo (k) fluoranthene	ND<0.10	ND<0.050	ND	ND	0.01	NA
Benzo (g,h,i) perylene	ND<0.10	ND<0.050	ND	ND	0.01	NA
Benzo (a) pyrene	ND<0.10	ND<0.050	ND	ND	0.01	NA
Chrysene	ND<0.10	ND<0.050	ND	ND	0.01	NA
Dibenzo (a,h) anthracene	ND<0.10	ND<0.050	ND	ND	0.01	NA
Fluoranthene	ND<0.10	ND<0.050	ND	ND	0.01	NA
Fluorene	ND<0.10	ND<0.050	ND	ND	0.01	NA
Indeno (1,2,3-cd) pyrene	ND<0.10	ND<0.050	ND	ND	0.01	NA
1-Methylnaphthalene	0.93	0.30	ND	ND	0.01	NA
2-Methylnaphthalene	1.6	0.51	ND	ND	0.01	NA
Naphthalene	1.2	0.37	ND	ND	0.01	NA
Phenanthrene	ND<0.10	ND<0.050	ND	ND	0.01	NA
Pyrene	ND<0.10	ND<0.050	ND	ND	0.01	NA

Surrogate Recoveries (%)

%SS1	120	104	124	120
%SS2	110	100	118	117

Comments

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this ND means not detected at or above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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



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All West Environmental, Inc 2141 Mission Street, Ste 100 San Francisco, CA 94110	Client Project ID: #13019.23; Hollis	Date Sampled: 08/01/13-08/02/13
		Date Received: 08/02/13
	Client Contact: Christopher Houlihan	Date Extracted: 08/05/13
	Client P.O.:	Date Analyzed: 08/05/13-08/07/13

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Extraction Method: SW3550B

Analytical Method: SW8270C-SIM

Work Order: 1308107

Lab ID	1308107-009A			Reporting Limit for DF = 1
Client ID	AMW-1-18.5-19			
Matrix	S			
DF	100			

Compound	Concentration			mg/kg	ug/L
	Acenaphthene	ND<1.0			0.01
Acenaphthylene	ND<1.0			0.01	NA
Anthracene	ND<1.0			0.01	NA
Benzo (a) anthracene	ND<1.0			0.01	NA
Benzo (b) fluoranthene	ND<1.0			0.01	NA
Benzo (k) fluoranthene	ND<1.0			0.01	NA
Benzo (g,h,i) perylene	ND<1.0			0.01	NA
Benzo (a) pyrene	ND<1.0			0.01	NA
Chrysene	ND<1.0			0.01	NA
Dibenzo (a,h) anthracene	ND<1.0			0.01	NA
Fluoranthene	ND<1.0			0.01	NA
Fluorene	ND<1.0			0.01	NA
Indeno (1,2,3-cd) pyrene	ND<1.0			0.01	NA
1-Methylnaphthalene	1.2			0.01	NA
2-Methylnaphthalene	1.5			0.01	NA
Naphthalene	ND<1.0			0.01	NA
Phenanthrene	1.4			0.01	NA
Pyrene	ND<1.0			0.01	NA

Surrogate Recoveries (%)

%SS1	---			
%SS2	---			
Comments				

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this ND means not detected at or above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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



All West Environmental, Inc 2141 Mission Street, Ste 100 San Francisco, CA 94110	Client Project ID: #13019.23; Hollis	Date Sampled: 08/01/13-08/02/13
	Client Contact: Christopher Houlihan	Date Received: 08/02/13
	Client P.O.:	Date Extracted: 08/02/13
		Date Analyzed: 08/05/13-08/07/13

Gasoline Range (C6-C12), Mineral Spirits Range (C9-C12) Volatile Hydrocarbons with BTEX and MTBE*

Extraction Method: SW5030B

Analytical Method: SW8021B/8015Bm

Work Order: 1308107

Lab ID	1308107-001A	1308107-002A	1308107-003A	1308107-004A	Reporting Limit for DF = 1	
Client ID	AMW-2-6.5-7	AMW-2-15.5-16	AMW-2-23-23.5	AMW-3-6.5-7		
Matrix	S	S	S	S		
DF	1	20	1	1		

Compound	Concentration				mg/Kg	ug/L
	TPH(g)	ND	430	ND	ND	1.0
TPH(mineral spirits)	ND	440	ND	ND	1.0	NA
MTBE	ND	ND<2.0	ND	ND	0.05	NA
Benzene	ND	1.3	ND	ND	0.005	NA
Toluene	ND	8.3	ND	ND	0.005	NA
Ethylbenzene	ND	10	ND	ND	0.005	NA
Xylenes	ND	45	ND	ND	0.005	NA

Surrogate Recoveries (%)

%SS:	83	---#	92	83	
------	----	------	----	----	--

Comments	d1				
-----------------	----	--	--	--	--

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

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

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:
 d1) weakly modified or unmodified gasoline is significant
 d7) strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram



All West Environmental, Inc 2141 Mission Street, Ste 100 San Francisco, CA 94110	Client Project ID: #13019.23; Hollis	Date Sampled: 08/01/13-08/02/13
	Client Contact: Christopher Houlihan	Date Received: 08/02/13
	Client P.O.:	Date Extracted: 08/02/13
		Date Analyzed: 08/05/13-08/07/13

Gasoline Range (C6-C12), Mineral Spirits Range (C9-C12) Volatile Hydrocarbons with BTEX and MTBE*

Extraction Method: SW5030B

Analytical Method: SW8021B/8015Bm

Work Order: 1308107

Lab ID	1308107-005A	1308107-006A	1308107-007A	1308107-008A	Reporting Limit for DF = 1	
Client ID	AMW-3-9-9.5	AMW-3-12-12.5	AMW-1-6.5-7	AMW-1-12.5-13		
Matrix	S	S	S	S		
DF	10	5	1	1		

Compound	Concentration				mg/Kg	ug/L
	TPH(g)	240	41	ND	ND	1.0
TPH(mineral spirits)	260	44	ND	ND	1.0	NA
MTBE	0.90	ND<0.25	ND	ND	0.05	NA
Benzene	0.26	0.078	ND	ND	0.005	NA
Toluene	1.3	0.28	ND	ND	0.005	NA
Ethylbenzene	5.1	0.96	ND	ND	0.005	NA
Xylenes	18	4.6	ND	ND	0.005	NA

Surrogate Recoveries (%)

%SS:	---#	104	85	80	
------	------	-----	----	----	--

Comments	d1	d1			
----------	----	----	--	--	--

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

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

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:
 d1) weakly modified or unmodified gasoline is significant
 d7) strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram



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All West Environmental, Inc 2141 Mission Street, Ste 100 San Francisco, CA 94110	Client Project ID: #13019.23; Hollis	Date Sampled: 08/01/13-08/02/13
	Client Contact: Christopher Houlihan	Date Received: 08/02/13
	Client P.O.:	Date Extracted: 08/02/13
		Date Analyzed: 08/05/13-08/07/13

Gasoline Range (C6-C12), Mineral Spirits Range (C9-C12) Volatile Hydrocarbons with BTEX and MTBE*

Extraction Method: SW5030B

Analytical Method: SW8021B/8015Bm

Work Order: 1308107

Lab ID	1308107-009A	Reporting Limit for DF = 1
Client ID	AMW-1-18.5-19	
Matrix	S	
DF	1	

Compound	Concentration			mg/Kg	ug/L
	TPH(g)	3.8			1.0
TPH(mineral spirits)	7.5			1.0	NA
MTBE	ND			0.05	NA
Benzene	ND			0.005	NA
Toluene	0.0053			0.005	NA
Ethylbenzene	0.0059			0.005	NA
Xylenes	0.028			0.005	NA

Surrogate Recoveries (%)

%SS:	80			
Comments	d7			

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

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

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

- d1) weakly modified or unmodified gasoline is significant
- d7) strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram



All West Environmental, Inc 2141 Mission Street, Ste 100 San Francisco, CA 94110	Client Project ID: #13019.23; Hollis	Date Sampled: 08/01/13-08/02/13
		Date Received: 08/02/13
	Client Contact: Christopher Houlihan	Date Extracted 08/02/13
	Client P.O.:	Date Analyzed 08/06/13-08/08/13

Total Extractable Petroleum Hydrocarbons*

Extraction method: SW3550B

Analytical methods: SW8015B

Work Order: 1308107

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	DF	% SS	Comments
1308107-001A	AMW-2-6.5-7	S	ND	1	95	
1308107-002A	AMW-2-15.5-16	S	83	1	98	e4,e2
1308107-003A	AMW-2-23-23.5	S	ND	1	123	
1308107-004A	AMW-3-6.5-7	S	1.0	1	121	e7,e2
1308107-005A	AMW-3-9-9.5	S	82	1	100	e4,e7,e2
1308107-006A	AMW-3-12-12.5	S	28	1	98	e4,e2
1308107-007A	AMW-1-6.5-7	S	13	1	95	e7,e1
1308107-008A	AMW-1-12.5-13	S	2.9	1	94	e7,e1
1308107-009A	AMW-1-18.5-19	S	1900	1	109	e7,e1

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

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

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

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

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

- e1) unmodified or weakly modified diesel is significant
- e2) diesel range compounds are significant; no recognizable pattern
- e4) gasoline range compounds are significant.
- e7) oil range compounds are significant



QC SUMMARY REPORT FOR SW8270C

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 80162

WorkOrder: 1308107

EPA Method: SW8270C-SIM		Extraction: SW3550B					Spiked Sample ID: 1308107-009A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	mg/kg	mg/kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
Benzo (a) pyrene	ND<1	0.20	NR	NR	NR	50	N/A	N/A	30 - 130	
Chrysene	ND<1	0.20	NR	NR	NR	58.4	N/A	N/A	30 - 130	
1-Methylnaphthalene	1.2	0.20	NR	NR	NR	71.4	N/A	N/A	30 - 130	
2-Methylnaphthalene	1.5	0.20	NR	NR	NR	60.4	N/A	N/A	30 - 130	
Phenanthrene	1.4	0.20	NR	NR	NR	68.4	N/A	N/A	30 - 130	
Pyrene	ND<1	0.20	NR	NR	NR	63.1	N/A	N/A	30 - 130	
%SS1:	---#	0.50	NR	NR	NR	90	N/A	N/A	30 - 130	
%SS2:	---#	0.50	NR	NR	NR	87	N/A	N/A	30 - 130	

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

BATCH 80162 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1308107-001A	08/01/13 12:38 PM	08/05/13	08/05/13 6:16 PM	1308107-002A	08/01/13 1:26 PM	08/05/13	08/06/13 9:33 PM
1308107-003A	08/01/13 1:34 PM	08/05/13	08/06/13 5:46 PM	1308107-003A	08/01/13 1:34 PM	08/05/13	08/07/13 10:11 PM
1308107-004A	08/02/13 8:23 AM	08/05/13	08/07/13 10:36 PM	1308107-005A	08/02/13 8:40 AM	08/05/13	08/06/13 9:58 PM
1308107-006A	08/02/13 8:46 AM	08/05/13	08/06/13 10:23 PM	1308107-007A	08/02/13 11:20 AM	08/05/13	08/07/13 12:02 AM
1308107-008A	08/02/13 11:30 AM	08/05/13	08/07/13 11:01 PM	1308107-009A	08/02/13 11:44 AM	08/05/13	08/06/13 10:48 PM

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



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 80107

WorkOrder: 1308107

EPA Method: SW8021B/8015Bm		Extraction: SW5030B					Spiked Sample ID: 1308090-024A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH(btex) [£]	ND	0.60	102	98	4.13	107	70 - 130	20	70 - 130	
MTBE	ND	0.10	80.1	76.8	4.13	88	70 - 130	20	70 - 130	
Benzene	ND	0.10	90.7	86.1	5.28	101	70 - 130	20	70 - 130	
Toluene	ND	0.10	93.9	90.7	3.40	103	70 - 130	20	70 - 130	
Ethylbenzene	ND	0.10	94.3	91.6	2.95	103	70 - 130	20	70 - 130	
Xylenes	ND	0.30	102	98.9	2.68	110	70 - 130	20	70 - 130	
%SS:	97	0.10	83	80	2.87	90	70 - 130	20	70 - 130	

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

BATCH 80107 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1308107-001A	08/01/13 12:38 PM	08/02/13	08/05/13 10:48 PM	1308107-002A	08/01/13 1:26 PM	08/02/13	08/05/13 8:19 PM
1308107-003A	08/01/13 1:34 PM	08/02/13	08/07/13 7:08 AM	1308107-004A	08/02/13 8:23 AM	08/02/13	08/05/13 11:47 PM

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



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 80119

WorkOrder: 1308107

EPA Method: SW8021B/8015Bm		Extraction: SW5030B					Spiked Sample ID: 1308109-008A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH(btex) £	ND	0.60	102	105	2.64	106	70 - 130	20	70 - 130	
MTBE	ND	0.10	96.7	96.2	0.486	94.6	70 - 130	20	70 - 130	
Benzene	ND	0.10	110	111	0.359	109	70 - 130	20	70 - 130	
Toluene	ND	0.10	108	109	0.412	109	70 - 130	20	70 - 130	
Ethylbenzene	ND	0.10	115	116	0.105	116	70 - 130	20	70 - 130	
Xylenes	ND	0.30	117	117	0	116	70 - 130	20	70 - 130	
%SS:	91	0.10	95	98	2.79	98	70 - 130	20	70 - 130	

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

BATCH 80119 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1308107-005A	08/02/13 8:40 AM	08/02/13	08/06/13 7:56 PM	1308107-006A	08/02/13 8:46 AM	08/02/13	08/06/13 4:25 PM
1308107-007A	08/02/13 11:20 AM	08/02/13	08/06/13 2:15 AM	1308107-008A	08/02/13 11:30 AM	08/02/13	08/06/13 2:44 AM
1308107-009A	08/02/13 11:44 AM	08/02/13	08/06/13 8:26 PM				

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



QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 80120

WorkOrder: 1308107

EPA Method: SW8015B		Extraction: SW3550B					Spiked Sample ID: 1308107-001A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH-Diesel (C10-C23)	ND	40	102	107	4.77	122	70 - 130	30	70 - 130	
%SS:	95	25	94	92	2.03	96	70 - 130	30	70 - 130	

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

BATCH 80120 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1308107-001A	08/01/13 12:38 PM	08/02/13	08/06/13 12:57 AM	1308107-002A	08/01/13 1:26 PM	08/02/13	08/06/13 3:14 AM
1308107-003A	08/01/13 1:34 PM	08/02/13	08/07/13 7:01 PM	1308107-004A	08/02/13 8:23 AM	08/02/13	08/07/13 5:47 PM
1308107-005A	08/02/13 8:40 AM	08/02/13	08/06/13 6:39 AM	1308107-006A	08/02/13 8:46 AM	08/02/13	08/06/13 2:05 AM
1308107-007A	08/02/13 11:20 AM	08/02/13	08/06/13 7:48 AM	1308107-008A	08/02/13 11:30 AM	08/02/13	08/06/13 5:31 AM
1308107-009A	08/02/13 11:44 AM	08/02/13	08/08/13 5:53 PM				

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



Analytical Report

All West Environmental, Inc 2141 Mission Street, Ste 100 San Francisco, CA 94110	Client Project ID: #13019.23; Hollis	Date Sampled: 08/02/13
		Date Received: 08/02/13
	Client Contact: Christopher Houlihan	Date Reported: 08/07/13
	Client P.O.:	Date Completed: 08/07/13

WorkOrder: 1308110

August 07, 2013

Dear Christopher:

Enclosed within are:

- 1) The results of the **1** analyzed sample from your project: **#13019.23; Hollis,**
- 2) QC data for the above sample, and
- 3) A copy of the chain of custody.

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

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

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
 Laboratory Manager
 McC Campbell Analytical, Inc.

The analytical results relate only to the items tested.



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1308110

ClientCode: AWE

WaterTrax
 WriteOn
 EDF
 Excel
 EQuIS
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:
 Christopher Houlihan
 All West Environmental, Inc
 2141 Mission Street, Ste 100
 San Francisco, CA 94110
 (415) 391-2510 FAX: (415) 391-2008

Email: choulihan@allwest1.com
 cc: leonard@allwest1.com
 PO:
 ProjectNo: #13019.23; Hollis

Bill to:
 Carol Ramelb
 All West Environmental, Inc
 2141 Mission Street, Ste 100
 San Francisco, CA 94110
 darlene@allwest1.com

Requested TAT: 5 days

Date Received: 08/02/2013

Date Printed: 08/02/2013

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1308110-001	Disposal Comp 1	Soil	8/2/2013 13:00	<input type="checkbox"/>	A	A	A										

Test Legend:

1	GAS8260_S	2	LUFTMS_S	3	PREFDF REPORT	4		5	
6		7		8		9		10	
11		12							

The following SampID: 001A contains testgroup.

Prepared by: Jena Alfaro

Comments:

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



Sample Receipt Checklist

Client Name: **All West Environmental, Inc**

Date and Time Received: **8/2/2013 7:13:26 PM**

Project Name: **#13019.23; Hollis**

LogIn Reviewed by: **Jena Alfaro**

WorkOrder N°: **1308110** Matrix: Soil

Carrier: Rob Pringle (MAI Courier)

Chain of Custody (COC) Information

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

Sample Receipt Information

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

Sample Preservation and Hold Time (HT) Information

- All samples received within holding time? Yes No
- Container/Temp Blank temperature Cooler Temp: 5°C NA
- Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
- Sample labels checked for correct preservation? Yes No
- Metal - pH acceptable upon receipt (pH<2)? Yes No NA
- Samples Received on Ice? Yes No

(Ice Type: WET ICE)

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

 Comments:



Table with client information: All West Environmental, Inc, Client Project ID: #13019.23; Hollis, Date Sampled: 08/02/13, Date Received: 08/02/13, Client Contact: Christopher Houlihan, Date Extracted: 08/02/13, San Francisco, CA 94110, Client P.O., Date Analyzed: 08/05/13

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1308110

Table with Lab ID: 1308110-001A, Client ID: Disposal Comp 1, Matrix: Soil

Main data table with columns: Compound, Concentration *, DF, Reporting Limit, Compound, Concentration *, DF, Reporting Limit. Lists various organic compounds and their detection results.

Surrogate Recoveries (%)

Table showing surrogate recoveries: %SS1: 88, %SS2: 68, %SS3: 75

Comments: c9

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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

c9) internal standard is out of acceptance criteria due to matrix interference therefore values are estimated



McC Campbell Analytical, Inc.

"When Quality Counts"

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

All West Environmental, Inc 2141 Mission Street, Ste 100 San Francisco, CA 94110	Client Project ID: #13019.23; Hollis	Date Sampled: 08/02/13
		Date Received: 08/02/13
	Client Contact: Christopher Houlihan	Date Extracted 08/02/13
	Client P.O.:	Date Analyzed 08/05/13

TPH(g) by Purge & Trap and GC/MS*

Extraction method: SW5030B

Analytical methods: SW8260B

Work Order: 1308110

Lab ID	Client ID	Matrix	TPH(g)	DF	% SS	Comments
001A	Disposal Comp 1	S	1.4	1	99	

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

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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



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All West Environmental, Inc 2141 Mission Street, Ste 100 San Francisco, CA 94110	Client Project ID: #13019.23; Hollis	Date Sampled: 08/02/13
		Date Received: 08/02/13
	Client Contact: Christopher Houlihan	Date Extracted: 08/02/13
	Client P.O.:	Date Analyzed: 08/03/13

LUFT 5 Metals*

Extraction method: SW3050B

Analytical methods: SW6020

Work Order: 1308110

Lab ID	Client ID	Matrix	Extraction Type	Cadmium	Chromium	Lead	Nickel	Zinc	DF	% SS	Comments
001A	Disposal Comp 1	S	TOTAL	ND	60	6.4	42	53	1	108	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	TOTAL	NA	NA	NA	NA	NA	NA	NA
	S	TOTAL	0.25	0.5	0.5	0.5	0.5	5.0	mg/Kg

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

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

TOTAL = Hot acid digestion of a representative sample aliquot.
 TRM = Total recoverable metals is the "direct analysis" of a sample aliquot taken from its acid-preserved container.
 DISS = Dissolved metals by direct analysis of 0.45 µm filtered and acidified sample.
 %SS = Percent Recovery of Surrogate Standard
 DF = Dilution Factor



QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 80108

WorkOrder: 1308110

EPA Method: SW8260B		Extraction: SW5030B					Spiked Sample ID: 1308090-024A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
tert-Amyl methyl ether (TAME)	ND	0.050	61.3	45.F1	26.3	83.4	56 - 94	30	70 - 130	
Benzene	ND	0.050	75.1	74.4	0.994	80.8	60 - 106	30	70 - 130	
t-Butyl alcohol (TBA)	ND	0.20	72.9	73	0.129	88.4	56 - 140	30	70 - 130	
Chlorobenzene	ND	0.050	76.8	75.7	1.37	87.3	61 - 108	30	70 - 130	
1,2-Dibromoethane (EDB)	ND	0.050	75.7	74.5	1.53	83.5	54 - 119	30	70 - 130	
1,2-Dichloroethane (1,2-DCA)	ND	0.050	70.8	70.5	0.343	76.9	48 - 115	30	70 - 130	
1,1-Dichloroethene	ND	0.050	76.2	75.6	0.821	73.2	46 - 111	30	70 - 130	
Diisopropyl ether (DIPE)	ND	0.050	75.3	75.5	0.229	80.8	53 - 111	30	70 - 130	
Ethyl tert-butyl ether (ETBE)	ND	0.050	73.5	73.9	0.536	80.1	61 - 104	30	70 - 130	
Methyl-t-butyl ether (MTBE)	ND	0.050	72.4	71.2	1.64	78.2	58 - 107	30	70 - 130	
Toluene	ND	0.050	80	78.4	2.05	86	64 - 114	30	70 - 130	
Trichloroethene	ND	0.050	77	77.1	0.0979	104	60 - 116	30	70 - 130	
%SS1:	100	0.82	100	94	6.56	101	70 - 130	30	70 - 130	
%SS2:	96	0.32	92	91	0.985	77	70 - 130	30	70 - 130	
%SS3:	92	0.032	92	92	0	83	70 - 130	30	70 - 130	
All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE										
F1 = MS/MSD recovery and/or %RPD was out of acceptance criteria; LCS validated the prep batch.										

BATCH 80108 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1308110-001A	08/02/13 1:00 PM	08/02/13	08/05/13 10:41 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 % Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.
 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 SW6020

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 80117

WorkOrder: 1308110

EPA Method: SW6020		Extraction: SW3050B				Spiked Sample ID: N/A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
Cadmium	N/A	50	N/A	N/A	N/A	91.7	N/A	N/A	75 - 125
Chromium	N/A	50	N/A	N/A	N/A	95.3	N/A	N/A	75 - 125
Lead	N/A	50	N/A	N/A	N/A	91.9	N/A	N/A	75 - 125
Nickel	N/A	50	N/A	N/A	N/A	97.2	N/A	N/A	75 - 125
Zinc	N/A	500	N/A	N/A	N/A	96.2	N/A	N/A	75 - 125
%SS:	N/A	500	N/A	N/A	N/A	89	N/A	N/A	70 - 130

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

BATCH 80117 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1308110-001A	08/02/13 1:00 PM	08/02/13	08/03/13 6:55 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 $\% \text{ Recovery} = 100 * (\text{MS-Sample}) / (\text{Amount Spiked}); \text{RPD} = 100 * (\text{MS} - \text{MSD}) / ((\text{MS} + \text{MSD}) / 2).$
 MS / 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.



Analytical Report

All West Environmental, Inc 2141 Mission Street, Ste 100 San Francisco, CA 94110	Client Project ID: #13019.23; Hollis	Date Sampled: 08/07/13
		Date Received: 08/08/13
	Client Contact: Christopher Houlihan	Date Reported: 08/15/13
	Client P.O.:	Date Completed: 08/14/13

WorkOrder: 1308292

August 15, 2013

Dear Christopher:

Enclosed within are:

- 1) The results of the **4** analyzed samples from your project: **#13019.23; Hollis,**
- 2) QC data for the above samples, and
- 3) A copy of the chain of custody.

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

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

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
 Laboratory Manager
 McC Campbell Analytical, Inc.

The analytical results relate only to the items tested.



McCampbell Analytical, Inc.

1534 Willow Pass Rd. / Pittsburg, Ca. 94565-1701
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GLOBAL I.D. T0600102099 1308292

PAGE 1 of 2

CHAIN OF CUSTODY RECORD

TURN AROUND TIME: RUSH 24 HR 48 HR 72 HR 5 DAY 10 DAY

GeoTracker EDF PDF EDD Write On (DW) EQUIS

Effluent Sample Requiring "J" flag UST Clean Up Fund Project ; Claim #_____

Report To: Christopher Houlihan	Bill To: Darlene Torio
Company: Allwest	darlene@allwest1.com
2141 Mission St #100	leonard@allwest1.com
San Francisco CA 94110	E-Mail: choulihan@allwest1.com
Tele: (415) 391-2510	Fax: (415) 391-2008
Project #: 13019.23	Project Name: Hollis
Project Location: Emeryville, CA	Purchase Order#
Sampler Signatures: <i>[Signatures]</i>	

Analysis Request

SAMPLE ID	Location/ Field Point Name	SAMPLING		# Containers	MATRIX								METHOD PRESERVED																																					
		Date	Time		Ground Water	Waste Water	Drinking Water	Sea Water	Soil	Air	Sludge	Other	HCL	HNO3	Other	BTEX & TPH as Gas (8021/8015 or 8260) / MTBE	TPH as Diesel (8015) with silica gel	Total Petroleum Oil & Grease (1664 / 5520 E/R&F)	Total Petroleum Hydrocarbons (418.1)	MTBE / BTEX ONLY (EPA 8260/8021)	EPA 505/608 / 8081 (CI Pesticides)	EPA 608 / 8082 PCP's; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic CI Herbicides)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAAs)	CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	Metals (200.7 / 200.8 / 6010 / 6020)	Filter sample for DISSOLVED metals analysis	TPH-g, TPH-mineral spirits by 8015/8021																		
AMW-3	AMW-3	8/7/13	0951	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
AMW-3	AMW-3		0951	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
AMW-3	AMW-3		0951	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
AMW-3	AMW-3		0951	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
AMW-2	AMW-2		1048	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
AMW-2	AMW-2		1048	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
AMW-2	AMW-2		1048	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
AMW-2	AMW-2		1048	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MW-3	MW-3		1239	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MW-3	MW-3		1239	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MW-3	MW-3		1239	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

**MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate \$250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

Relinquished By: <i>[Signature]</i>	Date: 8/8/13	Time: 1344	Received By: <i>[Signature]</i>	ICE # <i>me</i>	COMMENTS: GOOD CONDITION HEAD SPACE ABSENT DECHLORINATED IN LAB APPROPRIATE CONTAINERS PRESERVED IN LAB
Relinquished By: <i>[Signature]</i>	Date: 8/8/13	Time: 1600	Received By: <i>[Signature]</i>		
Relinquished By:	Date:	Time:	Received By:		

VOAS O&G METALS OTHER HAZARDOUS:
PRESERVATION _____ pH < 2 _____



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GLOBAL ID TO 600102099

PAGE 2
of 2

CHAIN OF CUSTODY RECORD

TURN AROUND TIME: RUSH 24 HR 48 HR 72 HR 5 DAY 10 DAY

GeoTracker EDF PDF EDD Write On (DW) EQUIS

Effluent Sample Requiring "J" flag UST Clean Up Fund Project ; Claim # _____

Report To: Christopher Houlihan

Bill To: Darlene Torio

Company: AllWest

darlene@allwest1.com

2141 Mission St #100

leonard@allwest1.com

San Francisco, CA 94110

E-Mail: choulihan@allwest1.com

Tele: (415) 391-2510

Fax: (415) 391-2008

Project #: 1301923

Project Name:

Project Location: Fremontville, CA

Purchase Order#

Sampler Signature: *[Signature]*

Analysis Request

SAMPLE ID	Location/ Field Point Name	SAMPLING		# Containers	MATRIX							METHOD PRESERVED																							
		Date	Time		Ground Water	Waste Water	Drinking Water	Sea / Water	Soil	Air	Sludge	Other	HCL	HNO ₃	Other	BTEX & TPH as Gas (8021/8015 or 8260) / MTBE	TPH as Diesel (8015) with silicage	Total Petroleum Oil & Grease (1664 / 5520 E/R&F)	Total Petroleum Hydrocarbons (418.1)	MTBE / BTEX ONLY (EPA 8260/8021)	EPA 505/608/8081 (CI Pesticides)	EPA 608 / 8082 PCBs; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic CI Herbicides)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAh)	CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	Metals (200.7 / 200.8 / 6010 / 6020)	Filter sample for DISSOLVED metals analysis				
MW-3	MW-3	8/7/13	1239	1	<input checked="" type="checkbox"/>																														
AMW-1	AMW-1	↓	1400	2	<input checked="" type="checkbox"/>																														
AMW-1	AMW-1	↓	1400	2	<input checked="" type="checkbox"/>																														
AMW-1	AMW-1	↓	1400	1	<input checked="" type="checkbox"/>																														
AMW-1	AMW-1	↓	1400	1	<input checked="" type="checkbox"/>																														

**MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate \$250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

Relinquished By: <i>[Signature]</i>	Date: 8/8/13	Time: 1344	Received By: <i>[Signature]</i>
Relinquished By: <i>[Signature]</i>	Date: 8/8/13	Time: 1600	Received By: <i>[Signature]</i>
Relinquished By: _____	Date: _____	Time: _____	Received By: _____

ICE/r*	COMMENTS:
GOOD CONDITION _____	
HEAD SPACE ABSENT _____	
DECHLORINATED IN LAB _____	
APPROPRIATE CONTAINERS _____	
PRESERVED IN LAB _____	
VOAS _____	
O&G _____	
METALS _____	
OTHER _____	
HAZARDOUS: _____	
PRESERVATION pH-2 _____	



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1308292

ClientCode: AWE

WaterTrax
 WriteOn
 EDF
 Excel
 EQUIS
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:
 Christopher Houlihan
 All West Environmental, Inc
 2141 Mission Street, Ste 100
 San Francisco, CA 94110
 (415) 391-2510 FAX: (415) 391-2008

Email: choulihan@allwest1.com
 cc:
 PO:
 ProjectNo: #13019.23; Hollis

Bill to:
 Carol Ramelb
 All West Environmental, Inc
 2141 Mission Street, Ste 100
 San Francisco, CA 94110
 darlene@allwest1.com

Requested TAT: 5 days

Date Received: 08/08/2013

Date Printed: 08/08/2013

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1308292-001	AMW-3	Water	8/7/2013 9:51	<input type="checkbox"/>	A	C	B	A									
1308292-002	AMW-2	Water	8/7/2013 10:48	<input type="checkbox"/>	A	C	B										
1308292-003	MW-3	Water	8/7/2013 12:39	<input type="checkbox"/>	A	C	B										
1308292-004	AMW-1	Water	8/7/2013 14:00	<input type="checkbox"/>	A	C	B										

Test Legend:

1	8260B_W	2	8270D-PNA_W	3	G-MBTEX_W	4	PREFD REPORT	5	
6		7		8		9		10	
11		12							

The following SampIDs: 001B, 002B, 003B, 004B contain testgroup.

Prepared by: Jena Alfaro

Comments:

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



Sample Receipt Checklist

Client Name: **All West Environmental, Inc**

Date and Time Received: **8/8/2013 5:12:51 PM**

Project Name: **#13019.23; Hollis**

LogIn Reviewed by: **Jena Alfaro**

WorkOrder N°: **1308292** Matrix: Water

Carrier: Rob Pringle (MAI Courier)

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature	Cooler Temp: 2.6°C		NA <input type="checkbox"/>
Water - VOA vials have zero headspace / no bubbles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Metal - pH acceptable upon receipt (pH<2)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

(Ice Type: WET ICE)

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

 Comments:



All West Environmental, Inc
2141 Mission Street, Ste 100
San Francisco, CA 94110

Client Project ID: #13019.23; Hollis
Client Contact: Christopher Houlihan
Client P.O.:

Date Sampled: 08/07/13
Date Received: 08/08/13
Date Extracted: 08/12/13
Date Analyzed: 08/12/13

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1308292

Table with 2 columns: Lab ID, Client ID, Matrix and values: 1308292-001A, AMW-3, Water

Main table with 8 columns: Compound, Concentration *, DF, Reporting Limit, Compound, Concentration *, DF, Reporting Limit. Lists various organic compounds and their detection results.

Surrogate Recoveries (%)

Table with 2 columns: %SS1, %SS2, %SS3 and values: 112, 97, 101

Comments: b1

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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
c8) sample pH is greater than 2



Table with client information: All West Environmental, Inc, Client Project ID: #13019.23; Hollis, Date Sampled: 08/07/13, Date Received: 08/08/13, Client Contact: Christopher Houlihan, Date Extracted: 08/12/13, San Francisco, CA 94110, Client P.O., Date Analyzed: 08/12/13

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1308292

Table with Lab ID: 1308292-002A, Client ID: AMW-2, Matrix: Water

Main data table with columns: Compound, Concentration *, DF, Reporting Limit, Compound, Concentration *, DF, Reporting Limit. Lists various organic compounds and their detection levels.

Surrogate Recoveries (%)

Table showing surrogate recoveries: %SS1: 112, %SS2: 97, %SS3: 103

Comments: b1

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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
c8) sample pH is greater than 2



All West Environmental, Inc
2141 Mission Street, Ste 100
San Francisco, CA 94110

Client Project ID: #13019.23; Hollis
Client Contact: Christopher Houlihan
Client P.O.:

Date Sampled: 08/07/13
Date Received: 08/08/13
Date Extracted: 08/12/13
Date Analyzed: 08/12/13

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1308292

Table with 2 columns: Lab ID (1308292-003A), Client ID (MW-3), Matrix (Water)

Main data table with 8 columns: Compound, Concentration *, DF, Reporting Limit, Compound, Concentration *, DF, Reporting Limit. Lists various organic compounds and their detection results.

Surrogate Recoveries (%)

Table showing surrogate recoveries: %SS1: 112, %SS2: 97, %SS3: 104

Comments: b6, c8

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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
c8) sample pH is greater than 2



All West Environmental, Inc
2141 Mission Street, Ste 100
San Francisco, CA 94110

Client Project ID: #13019.23; Hollis
Client Contact: Christopher Houlihan
Client P.O.:

Date Sampled: 08/07/13
Date Received: 08/08/13
Date Extracted: 08/13/13
Date Analyzed: 08/13/13

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1308292

Table with 2 columns: Lab ID (1308292-004A), Client ID (AMW-1), Matrix (Water)

Main data table with 8 columns: Compound, Concentration *, DF, Reporting Limit, Compound, Concentration *, DF, Reporting Limit. Lists various organic compounds and their detection levels.

Surrogate Recoveries (%)

Table showing surrogate recoveries: %SS1: 113, %SS2: 97, %SS3: 102

Comments: b1

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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
c8) sample pH is greater than 2



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
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http://www.mccampbell.com / E-mail: main@mccampbell.com

All West Environmental, Inc 2141 Mission Street, Ste 100 San Francisco, CA 94110	Client Project ID: #13019.23; Hollis	Date Sampled: 08/07/13
		Date Received: 08/08/13
	Client Contact: Christopher Houlihan	Date Extracted: 08/09/13
	Client P.O.:	Date Analyzed: 08/09/13-08/12/13

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Extraction Method: SW3510C

Analytical Method: SW8270C-SIM

Work Order: 1308292

Lab ID	1308292-001C	1308292-002C	1308292-003C	1308292-004C	Reporting Limit for DF = 1	
Client ID	AMW-3	AMW-2	MW-3	AMW-1		
Matrix	W	W	W	W		
DF	1	1	100	1		

Compound	Concentration				ug/kg	µg/L
Acenaphthene	ND	ND	ND<50	ND	NA	0.5
Acenaphthylene	ND	ND	ND<50	ND	NA	0.5
Anthracene	ND	ND	ND<50	ND	NA	0.5
Benzo (a) anthracene	ND	ND	ND<50	ND	NA	0.5
Benzo (b) fluoranthene	ND	ND	ND<50	ND	NA	0.5
Benzo (k) fluoranthene	ND	ND	ND<50	ND	NA	0.5
Benzo (g,h,i) perylene	ND	ND	ND<50	ND	NA	0.5
Benzo (a) pyrene	ND	ND	ND<50	ND	NA	0.5
Chrysene	ND	ND	ND<50	ND	NA	0.5
Dibenzo (a,h) anthracene	ND	ND	ND<50	ND	NA	0.5
Fluoranthene	ND	ND	ND<50	ND	NA	0.5
Fluorene	ND	ND	ND<50	ND	NA	0.5
Indeno (1,2,3-cd) pyrene	ND	ND	ND<50	ND	NA	0.5
1-Methylnaphthalene	3.2	1.5	390	ND	NA	0.5
2-Methylnaphthalene	ND	1.6	710	ND	NA	0.5
Naphthalene	ND	7.7	890	ND	NA	0.5
Phenanthrene	ND	ND	ND<50	ND	NA	0.5
Pyrene	ND	ND	ND<50	ND	NA	0.5

Surrogate Recoveries (%)

%SS1	86	100	---#	102	
%SS2	80	88	---#	93	
Comments	b1	b1	b6	b1	

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

ND means not detected at or above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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

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



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 http://www.mcccampbell.com / E-mail: main@mcccampbell.com

All West Environmental, Inc 2141 Mission Street, Ste 100 San Francisco, CA 94110	Client Project ID: #13019.23; Hollis	Date Sampled: 08/07/13
		Date Received: 08/08/13
	Client Contact: Christopher Houlihan	Date Extracted: 08/09/13-08/13/13
	Client P.O.:	Date Analyzed: 08/09/13-08/13/13

Gasoline Range (C6-C12) Mineral Spirits Range (C9-C12) Volatile Hydrocarbons as Gasoline & Mineral Spirits*

Extraction method: SW5030B

Analytical methods: SW8021B/8015Bm

Work Order: 1308292

Lab ID	Client ID	Matrix	TPH(g)	TPH(mineral spirits)	DF	% SS	Comments
001B	AMW-3	W	2000	1000	1	---#	d1,b1
002B	AMW-2	W	1300	550	1	126	d1,b1
003B	MW-3	W	130,000	54,000	100	---#	d1,b6
004B	AMW-1	W	ND	ND	1	---#	b1

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

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

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

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:
 b1) aqueous sample that contains greater than ~1 vol. % sediment
 b6) lighter than water immiscible sheen/product is present
 d1) weakly modified or unmodified gasoline is significant



All West Environmental, Inc 2141 Mission Street, Ste 100 San Francisco, CA 94110	Client Project ID: #13019.23; Hollis	Date Sampled: 08/07/13
		Date Received: 08/08/13
	Client Contact: Christopher Houlihan	Date Extracted 08/08/13
	Client P.O.:	Date Analyzed 08/09/13-08/13/13

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up*

Extraction method: SW3510C/3630C

Analytical methods: SW8015B

Work Order: 1308292

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	DF	% SS	Comments
1308292-001B	AMW-3	W	340	1	96	e4,e2,b1
1308292-002B	AMW-2	W	210	1	94	e4,e2,b1
1308292-003B	MW-3	W	24,000	5	108	e4,b6
1308292-004B	AMW-1	W	110	1	110	e7,e1,b1

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

* 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/matrix interference.

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

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:
 b1) aqueous sample that contains greater than ~1 vol. % sediment
 b6) lighter than water immiscible sheen/product is present
 e1) unmodified or weakly modified diesel is significant
 e2) diesel range compounds are significant; no recognizable pattern
 e4) gasoline range compounds are significant.
 e7) oil range compounds are significant



QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 80354

WorkOrder: 1308292

EPA Method: SW8015B		Extraction: SW3510C/3630C					Spiked Sample ID: N/A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH-Diesel (C10-C23)	N/A	1000	N/A	N/A	N/A	104	N/A	N/A	70 - 130	
%SS:	N/A	625	N/A	N/A	N/A	108	N/A	N/A	70 - 130	

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

BATCH 80354 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1308292-001B	08/07/13 9:51 AM	08/08/13	08/09/13 9:51 PM	1308292-002B	08/07/13 10:48 AM	08/08/13	08/09/13 11:04 PM
1308292-003B	08/07/13 12:39 PM	08/08/13	08/13/13 5:15 PM	1308292-004B	08/07/13 2:00 PM	08/08/13	08/09/13 8:38 PM

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



QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 80452

WorkOrder: 1308292

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
tert-Amyl methyl ether (TAME)	ND	20	110	107	2.57	117	70 - 130	20	70 - 130
Benzene	ND	20	99.6	95.8	3.85	99.8	70 - 130	20	70 - 130
t-Butyl alcohol (TBA)	ND	80	118	112	5.02	106	70 - 130	20	70 - 130
Chlorobenzene	ND	20	94.9	92.2	2.87	97.7	70 - 130	20	70 - 130
1,2-Dibromoethane (EDB)	ND	20	104	103	0.626	107	70 - 130	20	70 - 130
1,2-Dichloroethane (1,2-DCA)	ND	20	100	97.2	3.05	102	70 - 130	20	70 - 130
1,1-Dichloroethene	ND	20	109	109	0	109	70 - 130	20	70 - 130
Diisopropyl ether (DIPE)	ND	20	108	105	2.55	109	70 - 130	20	70 - 130
Ethyl tert-butyl ether (ETBE)	ND	20	109	107	1.23	109	70 - 130	20	70 - 130
Methyl-t-butyl ether (MTBE)	ND	20	104	103	0.846	104	70 - 130	20	70 - 130
Toluene	ND	20	93.8	91.1	2.97	97.6	70 - 130	20	70 - 130
Trichloroethene	ND	20	99.2	96.7	2.56	103	70 - 130	20	70 - 130
%SS1:	100	25	101	101	0	102	70 - 130	20	70 - 130
%SS2:	102	25	102	102	0	102	70 - 130	20	70 - 130
%SS3:	99	2.5	96	98	2.85	97	70 - 130	20	70 - 130

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

BATCH 80452 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1308292-002A	08/07/13 10:48 AM	08/12/13	08/12/13 11:04 PM	1308292-003A	08/07/13 12:39 PM	08/12/13	08/12/13 11:47 PM
1308292-004A	08/07/13 2:00 PM	08/13/13	08/13/13 12:30 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 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.
 # surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.
 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: Water

QC Matrix: Water

BatchID: 80461

WorkOrder: 1308292

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
tert-Amyl methyl ether (TAME)	ND	20	104	116	11.4	106	70 - 130	20	70 - 130
Benzene	ND	20	94.2	90.9	3.57	90.9	70 - 130	20	70 - 130
t-Butyl alcohol (TBA)	ND	80	103	100	2.77	92.1	70 - 130	20	70 - 130
Chlorobenzene	ND	20	91.8	88.5	3.68	88.7	70 - 130	20	70 - 130
1,2-Dibromoethane (EDB)	ND	20	102	103	1.02	104	70 - 130	20	70 - 130
1,2-Dichloroethane (1,2-DCA)	ND	20	88.4	87.9	0.568	92.8	70 - 130	20	70 - 130
1,1-Dichloroethene	ND	20	104	99.9	4.03	107	70 - 130	20	70 - 130
Diisopropyl ether (DIPE)	ND	20	99.6	99.4	0.145	98.2	70 - 130	20	70 - 130
Ethyl tert-butyl ether (ETBE)	ND	20	100	100	0	97.4	70 - 130	20	70 - 130
Methyl-t-butyl ether (MTBE)	ND	20	99	99.8	0.784	94.8	70 - 130	20	70 - 130
Toluene	ND	20	91.7	88.2	3.91	93.7	70 - 130	20	70 - 130
Trichloroethene	ND	20	94	90	4.28	96.8	70 - 130	20	70 - 130
%SS1:	109	25	109	111	1.64	110	70 - 130	20	70 - 130
%SS2:	96	25	96	96	0	97	70 - 130	20	70 - 130
%SS3:	95	2.5	98	97	0.563	95	70 - 130	20	70 - 130

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

BATCH 80461 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1308292-001A	08/07/13 9:51 AM	08/12/13	08/12/13 9:35 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 $\% \text{ Recovery} = 100 * (\text{MS-Sample}) / (\text{Amount Spiked}); \text{RPD} = 100 * (\text{MS} - \text{MSD}) / ((\text{MS} + \text{MSD}) / 2).$
 MS / 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.
 # surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.
 Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.



QC SUMMARY REPORT FOR SW8270C

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 80341

WorkOrder: 1308292

EPA Method: SW8270C-SIM		Extraction: SW3510C					Spiked Sample ID: N/A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
Benzo (a) pyrene	N/A	10	N/A	N/A	N/A	59.3	N/A	N/A	30 - 130	
Chrysene	N/A	10	N/A	N/A	N/A	66.4	N/A	N/A	30 - 130	
1-Methylnaphthalene	N/A	10	N/A	N/A	N/A	82.1	N/A	N/A	30 - 130	
2-Methylnaphthalene	N/A	10	N/A	N/A	N/A	68.7	N/A	N/A	30 - 130	
Phenanthrene	N/A	10	N/A	N/A	N/A	74.6	N/A	N/A	30 - 130	
Pyrene	N/A	10	N/A	N/A	N/A	71.9	N/A	N/A	30 - 130	
%SS1:	N/A	25	N/A	N/A	N/A	97	N/A	N/A	30 - 130	
%SS2:	N/A	25	N/A	N/A	N/A	93	N/A	N/A	30 - 130	

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

BATCH 80341 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1308292-001C	08/07/13 9:51 AM	08/09/13	08/12/13 12:39 PM	1308292-002C	08/07/13 10:48 AM	08/09/13	08/09/13 4:52 PM
1308292-003C	08/07/13 12:39 PM	08/09/13	08/12/13 1:04 PM	1308292-004C	08/07/13 2:00 PM	08/09/13	08/09/13 5:43 PM

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



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 80444

WorkOrder: 1308292

EPA Method: SW8021B/8015Bm		Extraction: SW5030B					Spiked Sample ID: 1308318-001A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH(btex) £	ND	60	97.2	95.9	1.42	95.4	70 - 130	20	70 - 130	
MTBE	ND	10	100	90.8	10.1	89	70 - 130	20	70 - 130	
Benzene	ND	10	109	103	6.00	104	70 - 130	20	70 - 130	
Toluene	ND	10	111	104	6.95	106	70 - 130	20	70 - 130	
Ethylbenzene	ND	10	111	103	7.29	105	70 - 130	20	70 - 130	
Xylenes	ND	30	113	104	7.44	106	70 - 130	20	70 - 130	
%SS:	107	10	101	102	0.600	104	70 - 130	20	70 - 130	

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

BATCH 80444 SUMMARY

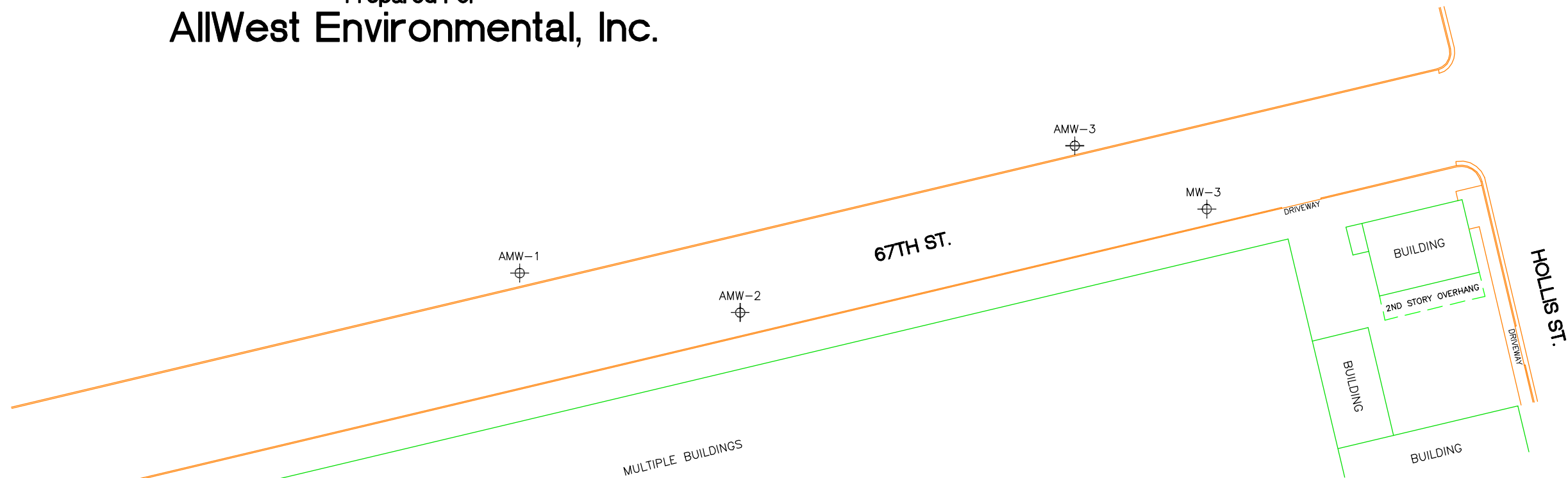
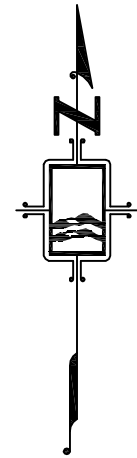
Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1308292-001B	08/07/13 9:51 AM	08/09/13	08/09/13 3:14 PM	1308292-002B	08/07/13 10:48 AM	08/09/13	08/09/13 3:45 PM
1308292-002B	08/07/13 10:48 AM	08/13/13	08/13/13 5:49 AM	1308292-003B	08/07/13 12:39 PM	08/09/13	08/09/13 4:16 PM
1308292-004B	08/07/13 2:00 PM	08/09/13	08/09/13 4:46 PM				

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

APPENDIX F

Monitoring Well Exhibit

Prepared For:
AllWest Environmental, Inc.



DESC.	NORTHING	EASTING	LATITUDE	LONGITUDE	EL. PVC	EL. RIM
AMW-1	2136420. 9	6043758. 3	37. 8486018	-122. 2938246	22. 09	22. 54
AMW-2	2136401. 6	6043865. 8	37. 8485546	-122. 2934511	23. 43	23. 73
AMW-3	2136483. 0	6044028. 9	37. 8487866	-122. 2928917	25. 16	25. 50
MW-3	2136452. 1	6044093. 3	37. 8487051	-122. 2926668	25. 55	26. 00

BASIS OF COORDINATES AND ELEVATIONS:

COORDINATES ARE CALIFORNIA STATE PLANE ZONE 3 COORDINATES FROM GPS OBSERVATIONS USING CSDS VIRTUAL SURVEY NETWORK.

COORDINATE DATUM IS NAD 83.

REFERENCE GEOID IS GEOID03.

VERTICAL DATUM IS NAVD 88 FROM GPS OBSERVATIONS.



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Date: August, 2013
Field: 8-13-13 SF
Scale: 1"=60'
Revised:
Field Book: MW-56
Dwg. No. 0178-002 MAM