

RECEIVED

By Alameda County Environmental Health at 3:25 pm, Aug 08, 2013

MCG Investments, LLC
c/o Kay & Merkle
100 The Embarcadero – Penthouse
San Francisco, CA 94105
(415) 357-1200

July 11, 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 Second Quarter 2013 Groundwater Monitoring Letter 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, we submit this transmittal letter and accompanying *Second Quarter 2012 Groundwater Monitoring* letter 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

530 Howard Street, Suite 300
San Francisco, CA 94105
Tel 415.391.2510
Fax 415.391.2008

July 11, 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: Second Quarter 2013 Groundwater Monitoring, Former McGrath Steel,
6655 Hollis Street, Emeryville, California 94608, ACEH Fuel Leak Case No.
R00000063, GeoTracker Global ID No. T0600102099
AllWest Project Number 13052.28**

Dear Mr. Detterman:

AllWest Environmental, Inc. (AllWest) performed the Second Quarter 2013 groundwater monitoring of well MW-3 on June 27, 2013 at the above-referenced subject site (Figures 1 and 2). The work was performed in response to the request by Alameda County Health Care Services Agency, Environmental Health Department (ACEH) in their letter of November 8, 2012 requesting the placement of the subject site on a quarterly groundwater monitoring interval in order to quickly gather contaminant trends and light non-aqueous phase liquid (LNAPL) trend data.

Purpose and Scope of Work

The purpose of the field activities performed by AllWest was to evaluate current groundwater conditions in monitoring well MW-3, which was installed in 1995 adjacent to former underground storage tanks (USTs) at the subject site (Figure 2). The scope of work was proposed in our *Additional Site Characterization and Interim Remedial Action Workplan* dated September 27, 2011 and our *Additional Site Characterization Workplan Addendum* dated July 31, 2012 (AllWest, September 2011 and July 2012). Site background information is also presented in the AllWest workplans (AllWest September 2011 and July 2012).

The scope of work performed included measuring free product, purging well MW-3, and collecting a groundwater sample for laboratory analysis.

Field Activities

On June 27, 2013, AllWest measured floating free product (LNAPL) thickness in monitoring well MW-3 using an electronic oil/water interface probe. LNAPL thickness in monitoring well MW-3 was not detected by the probe on this date; however, product sheen and hydrocarbon odor were

observed. Three casing volumes (approximately 10 gallons) of water were then purged prior to sample collection using a disposable polyethylene bailer. Samples were collected in two 40 milliliter (ml) VOA vials and one 1-liter amber glass bottle, all preserved with hydrochloric acid (HCl). All groundwater samples were preserved by storing them in an ice chest cooled to 4°C with crushed ice immediately after their collection and during transportation to the laboratory. Purged groundwater was stored onsite in a 55-gallon drum pending test results for profiling to determine the proper disposal method.

Well construction, depth to water and product thickness data are included in Table 1. Standard operating procedures for groundwater monitoring well sampling are included in Attachment A. The field log is included in Attachment B.

Analytical Results

The groundwater sample was transported in an iced cooler under chain of custody to a State of California certified independent analytical laboratory, McCampbell Analytical, Inc., (McCampbell) of Pittsburg, California. The groundwater sample collected from monitoring well MW-3 on June 27, 2013 was analyzed for total petroleum hydrocarbons as diesel (TPH-d) by EPA Method 8015B with silica gel clean-up, total petroleum hydrocarbons as gasoline (TPH-g) and volatile organic compounds (VOCs) by EPA Method 8260B, and polynuclear aromatic hydrocarbons (PAHs) by EPA Method 8270SW. TPH-mineral spirits (TPH-ms) analysis has been discontinued, as authorized by the ACEH e-mail of March 26, 2013.

TPH-g and TPH-d were detected in the groundwater sample collected from MW-3 at respective concentrations of 18,000 micrograms per liter (µg/L) and 2,300 µg/L. Benzene, toluene, ethylbenzene and total xylenes were detected at respective concentrations of 1,900 µg/L, 2,000 µg/L, 540 µg/L and 2,700 µg/L.

The fuel oxygenate methyl tertiary butyl ether (MTBE) was detected at a concentration of 1,900 µg/L. Other VOCs detected were tertiary butyl alcohol (TBA), naphthalene, 1,2,4- trimethylbenzene, n-propyl benzene and 1,3,5-trimethylbenzene at respective concentrations of 520 µg/L, 170 µg/L, 650 µg/L, 84 µg/L, and 200 µg/L. The PAHs 1-methylnaphthalene, 2-methylnaphthalene, and naphthalene were detected at respective concentrations of 30 µg/L, 52 µg/L, and 120 µg/L. Naphthalene is an analyte in both the EPA Method 8260B and 8270C suites. A summary of groundwater sample analytical results is included in Table 2. Copies of the laboratory analytical and QA/QC reports and chain-of-custody records are included in Attachment C.

Environmental Screening Levels

To assess if the identified petroleum hydrocarbons in the groundwater pose a risk to human health and the environment, detected analyte concentrations were compared with their corresponding California Regional Water Quality Control Board, San Francisco Bay Region (SFRWQCB) Environmental Screening Levels (ESLs) for commercial/industrial land use where groundwater is a potential drinking water resource (RWQCB, *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Tables A and F-1a*, Interim Final – May 2013). Although not currently used as a drinking water resource, groundwater in the subject site vicinity has been designated as a potential drinking water resource in the SFRWQCB Basin Plan (December 2011).

TPH-g, TPH-d, benzene, toluene, ethylbenzene, total xylenes (BTEX), MTBE, TBA, naphthalene and 2-methylnaphthalene concentrations in the groundwater sample from MW-3 exceeded their respective ESLs of 100 µg/L, 100 µg/L, 1.0 µg/L, 40 µg/L, 30 µg/L, 20 µg/L, 5.0 µg/L, 12 µg/L, 6.2 µg/L and 2.1 µg/L, where groundwater is a potential drinking water resource.

Concentrations were also compared with their corresponding SFRWQCB ESLs for commercial/industrial land use where groundwater is not a potential drinking water resource (RWQCB, *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Tables B and F-1b*, Interim Final – May 2013).

TPH-g, TPH-d, BTEX, MTBE, naphthalene and 2-methylnaphthalene were detected in the groundwater sample from well MW-3 at concentrations exceeding their respective ESLs of 500 µg/L, 640 µg/L, 27 µg/L, 130 µg/L, 43 µg/L, 100 µg/L, 1,800 µg/L, 24 µg/L and 2.1 µg/L, where groundwater is not a potential drinking water resource (Table 2).

Conclusions and Recommendations

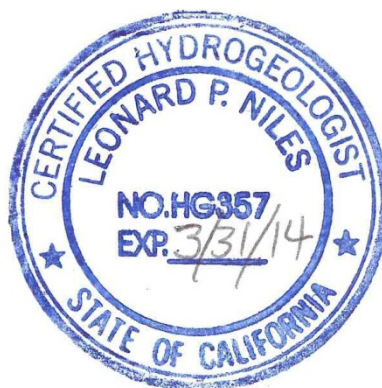
AllWest recommends continuation of quarterly groundwater monitoring in MW-3 pending additional site characterization. AllWest submitted an *Additional Site Characterization Workplan Addendum* dated July 31, 2012 to ACEH proposing additional subsurface investigation. The workplan was approved by ACEH in their letter of November 8, 2012. The subsurface investigation, including installation of additional groundwater monitoring wells, is scheduled to take place during July 2013, with a report to be submitted by August 16, 2013. ACEH requested in a telephone conversation on March 14, 2013 that interim remediation of free product be implemented. AllWest recommends the installation of a passive product skimming device in monitoring well MW-3, with monthly removal of accumulated product.

If you have any questions, or would like to further discuss the above issues, please call me at (415) 391-2510, extension 109.

Sincerely,

AllWest Environmental, Inc.


Leonard P. Niles, R.G., C.H.G.
Senior Project Manager



CC: Walter F. Merkle, MCG Investments LLC

FIGURES:

- Figure 1: Site Map
- Figure 2: Site Plan with Boring and Well Locations

TABLES:

- Table 1: Summary of Well Construction Details, Product Thickness and Groundwater Elevation Data
- Table 2: Summary of Groundwater Analytical Data

ATTACHMENTS:

- Attachment A: Groundwater Monitoring Well Development and Sampling Standard Operating Procedures
- Attachment B: Groundwater Monitoring Well Development, Purging and Sampling Field Logs
- Attachment C: Laboratory Analytical Reports and Chain-of-Custody Documents

FIGURES

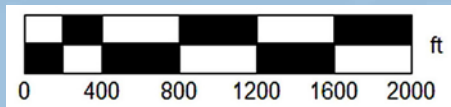
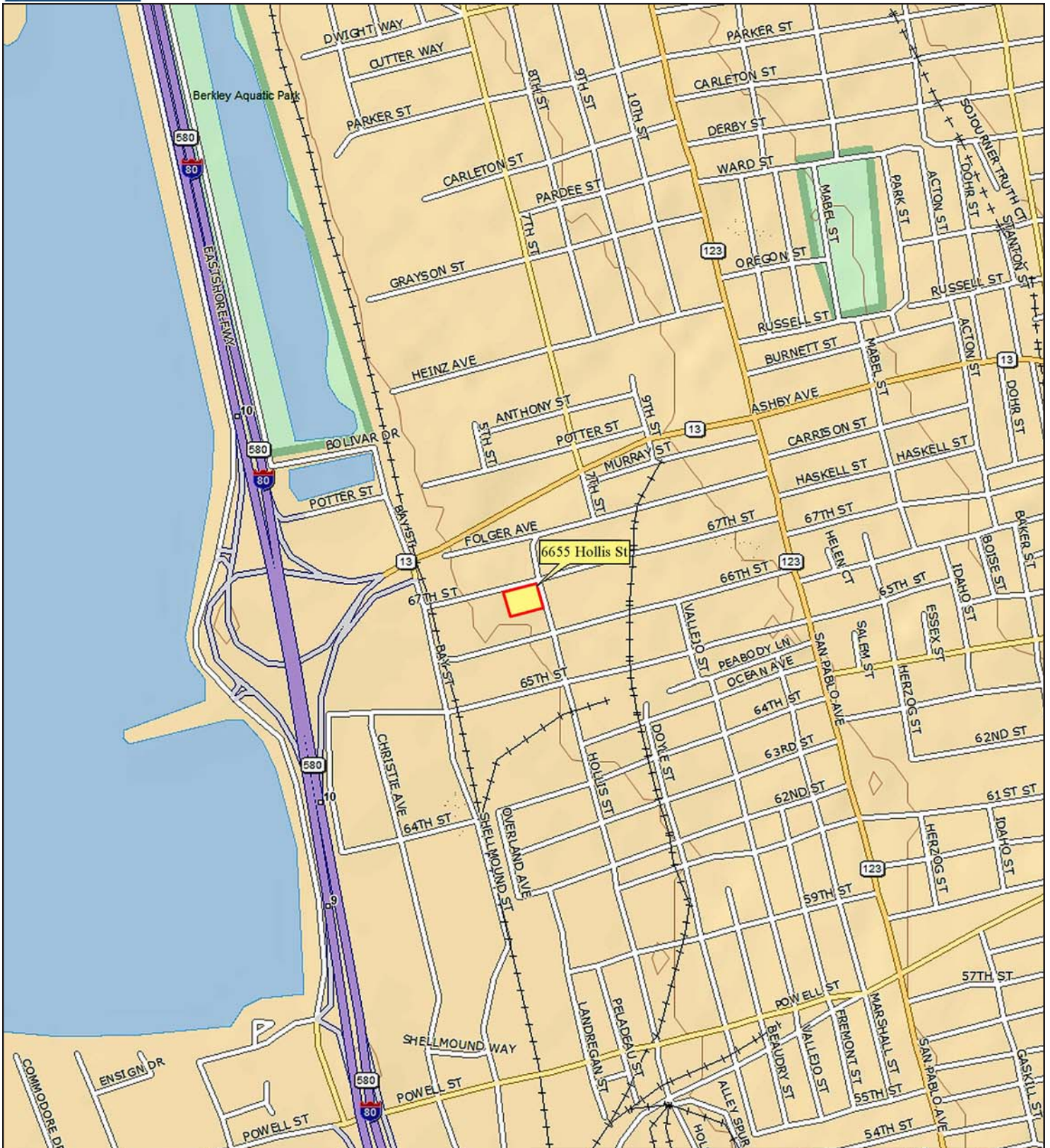








FIGURE 1
SITE VICINITY MAP

6655 HOLLIS STREET
EMERYVILLE, CALIFORNIA
SOURCE: DELORME TOPO 8.0

PROJECT NO.
13052.28

PREPARED BY: C. RAMELB
DATE: 01/02/13



	<p>Legend</p> <ul style="list-style-type: none">  MW-3 Existing Monitoring Well (ESC, 1995)  MW-1 Former Monitoring Well (Clearprint / ESC, Destroyed 2005)  B-1 Boring (Weiss Associates, 1998)  B-8 Boring (Weiss Associates, 2005)  Former USTs and Fuel Dispensers 	<p>FIGURE 2: SITE PLAN WITH BORING AND WELL LOCATIONS</p>	<p>Scale: 1 in = 80 ft Photo: Google Earth</p>	<p>N ↑</p>
		<p>Site Name: Former McGrath Steel, 6655 Hollis Street, Emeryville, CA</p>	<p>Date: 7/18/12 By: Leonard Niles</p>	<p>Project Number: 13052.28</p>

TABLES

TABLE 1
Summary of Well Construction Details,
Product Thickness and Groundwater Elevation Data

Former McGrath Steel
6655 Hollis Street
Emeryville, California
AllWest Project No. 13052.28

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

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

Notes:

* Groundwater level measurement only, no sampling

bgs below ground surface

TOC Top of Well Casing

feet msl 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.

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

NM Not Measured

TABLE 2
Summary of Groundwater Analytical Data
Former McGrath Steel
6655 Hollis Street
Emeryville, California
AllWest Project No. 13052.28

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)	PAHs/PNAs (µg/L)
MW-3	10/17/1995	8,600	ND <100	220	NA	730	2,100	270	1,400	NA	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)	NA
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)	NA
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)	NA
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)	NA
MW-3 (qualifiers)	3/27/2013	100,000	NA	53,000 e4, e2	NA	5,900	16,000	3,700	21,000	2,400	990 (naphthalene), 5,500 (1,2,4-trimethylbenzene), 630 (n-propyl benzene), 1,700 (1,3,5-trimethylbenzene), ND, reporting limits vary (others)	640 (1-methylnaphthalene), 1,200 (2-methylnaphthalene), 1,600 (naphthalene), ND <100 (others)
RWQCB Commercial/Industrial ESLs, drinking water*		100	100	100	100	1.0	40	30	20	5.0	12 (TBA) 0.5 (1,3-dichloropropene) 6.2 (naphthalene) NE or vary (others)	2.1 (2-methylnaphthalene), 6.2 (naphthalene), NE (others)
RWQCB Commercial/Industrial ESLs, non-drinking water*		500	500	640	640	27	130	43	100	1,800	18,000 (TBA) 24 (1,3-dichloropropene) 24 (naphthalene) NE or vary (others)	2.1 (2-methylnaphthalene), 24 (naphthalene), NE (others)

Notes:

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

TPH-g = Total petroleum hydrocarbons as gasoline, analytical method SW8015Bm, 10/17/95, 8/22/05 & 12/20/05; analytical method SW8260B on other dates.

TPH-ms = Total petroleum hydrocarbons as mineral spirits, analytical method SW8015Bm.

TPH-d = Total petroleum hydrocarbons as diesel, C10-C23, analytical method SW8015B with silica gel cleanup for 8/2/12 and 12/18/12.

TPH-mo = Total petroleum hydrocarbons as motor oil, C18-C36, analytical method SW8015B with silica gel cleanup.

MTBE = Methyl tert-butyl ether, analytical method SW8260B.

PAHs/PNAs = Polynuclear Aromatic Hydrocarbons, analytical method SW8270C-SIM

TBA = tertiary butyl alcohol, analytical method SW8260B

Benzene, Toluene, Ethylbenzene, Xylenes (BTEX), analytical method SW8021B on 10/17/95 only; 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 February 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 February 2013.

* The subject site lies within the Emeryville Brownfields Groundwater Management Zone, and has been designated as Groundwater Management Zone B by the SFRWQCB where groundwater is not currently being used as a drinking water resource.

Laboratory Qualifiers:

L - lighter hydrocarbons contributed to the quantitation

Y - sample exhibits chromatographic pattern which does not resemble standard

d1 - weakly modified or unmodified gasoline is significant

e2 - diesel range compounds are significant; no recognizable pattern

e4 - gasoline-range compounds are significant

Attachments



Groundwater Monitoring Well Development and Sampling

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.



AllWest

PURGE TABLE

WELL ID: MW-3

Page 1 of 1

SITE NAME: Former McGrath Steel	LOCATION: Emeryville, CA
PROJECT NO: 13052, 28	DATE PURGED: 6/27/13
PURGED/SAMPLED BY: C. Houlihan	DATE SAMPLED: 6/27/13
TIME SAMPLED: 1215	DEPTH TO BOTTOM (feet): 29.42
DEPTH TO WATER (feet): 9.90	WATER COLUMN HEIGHT (feet): 19.52
CALCULATED PURGE (gallons): 9.36	CASING VOLUME (gallons): 3.12
ACTUAL PURGE (gallons): 10	

DEVELOPMENT _____ QUARTERLY BIANNUAL _____ OTHER _____

SAMPLE TYPE: Groundwater Surface Water _____ Other _____

CASING DIAMETER: 2" 3" _____ 4" _____

Casing Volume (gallons per foot): (0.16) (0.38) (0.66)

(gallons per foot):

$0.16(19.52) = 3.12$

$\times 3 = 9.36$

FIELD MEASUREMENTS

VOLUME (gal)	TIME	TEMP (degrees C)	pH	CONDUCTIVITY (µS)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTU)
2	1120	19.5	6.03	2398		clear/silty
4	1130	19.2	6.06	2063		silty
6	1137	18.9	6.08	2006		silty
8	1145	18.9	6.11	1960		silty
10	1155	18.9	6.13	1859		cloudy

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER (feet): 11.51 Analyses: TPA-d, no SO₄, VOCs, TPA-g 8260

80% RECHARGE: Y/N

SAMPLE TURBIDITY: Cloudy

ODOR: HC SAMPLE BOTTLE/PRESERVATIVE: 1 L Amber/HCL, 2 VOAs/HCL

1 L Amber/Unpreserved

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: DTW 9.90'
No free product detected



Analytical Report

All West Environmental, Inc 530 Howard Street, Ste.300 San Francisco, CA 94105	Client Project ID: #13052.28; Hollis	Date Sampled: 06/27/13
		Date Received: 07/01/13
	Client Contact: Christopher Houlihan	Date Reported: 07/08/13
	Client P.O.:	Date Completed: 07/08/13

WorkOrder: 1306812

July 08, 2013

Dear Christopher:

Enclosed within are:

- 1) The results of the **1** analyzed sample from your project: **#13052.28; 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: 1306812

ClientCode: AWE

WaterTrax
 WriteOn
 EDF
 Excel
 EQuIS
 Email
 HardCopy
 ThirdParty
 J-flag

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

Email: choulihan@allwest1.com
 cc: Leonard@allwest1.com
 PO:
 ProjectNo: #13052.28; Hollis

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

Requested TAT: 5 days

Date Received: 06/28/2013

Date Printed: 07/01/2013

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	
1306812-001	MW-3	Water	6/27/2013 12:15	<input type="checkbox"/>	C	A	A	B									

Test Legend:

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

The following SamplID: 001A contains testgroup.

Prepared by: Maria Venegas

Comments:

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



Sample Receipt Checklist

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

Date and Time Received: **6/28/2013 5:00:00 PM**

Project Name: **#13052.28; Hollis**

LogIn Reviewed by: **Maria Venegas**

WorkOrder N°: **1306812** 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: 4.2°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: #13052.28; Hollis
Client Contact: Christopher Houlihan
Client P.O.:

Date Sampled: 06/27/13
Date Received: 07/01/13
Date Extracted: 07/06/13
Date Analyzed: 07/06/13

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1306812

Table with 2 columns: Lab ID, Client ID, Matrix and corresponding values: 1306812-001A, MW-3, 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: 102, %SS2: 99, %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.



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"When Quality Counts"

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

Client Project ID: #13052.28; Hollis
Client Contact: Christopher Houlihan
Client P.O.:

Date Sampled: 06/27/13
Date Received: 07/01/13
Date Extracted: 07/03/13
Date Analyzed: 07/05/13

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

Extraction Method: SW3510C

Analytical Method: SW8270C-SIM

Work Order: 1306812

Lab ID	1306812-001C				Reporting Limit for DF =1	
Client ID	MW-3					
Matrix	W					
DF	10					
Compound	Concentration				ug/kg	µg/L
Acenaphthene	ND<5.0				NA	0.5
Acenaphthylene	ND<5.0				NA	0.5
Anthracene	ND<5.0				NA	0.5
Benzo (a) anthracene	ND<5.0				NA	0.5
Benzo (b) fluoranthene	ND<5.0				NA	0.5
Benzo (k) fluoranthene	ND<5.0				NA	0.5
Benzo (g,h,i) perylene	ND<5.0				NA	0.5
Benzo (a) pyrene	ND<5.0				NA	0.5
Chrysene	ND<5.0				NA	0.5
Dibenzo (a,h) anthracene	ND<5.0				NA	0.5
Fluoranthene	ND<5.0				NA	0.5
Fluorene	ND<5.0				NA	0.5
Indeno (1,2,3-cd) pyrene	ND<5.0				NA	0.5
1-Methylnaphthalene	30				NA	0.5
2-Methylnaphthalene	52				NA	0.5
Naphthalene	120				NA	0.5
Phenanthrene	ND<5.0				NA	0.5
Pyrene	ND<5.0				NA	0.5
Surrogate Recoveries (%)						
%SS1	58					
%SS2	53					
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.



QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 79114

WorkOrder: 1306812

EPA Method: SW8260B		Extraction: SW5030B					Spiked Sample ID: 1306821-001A			
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	20	NR	NR	NR	110	N/A	N/A	70 - 130	
Benzene	ND<5.0	20	NR	NR	NR	91.4	N/A	N/A	70 - 130	
t-Butyl alcohol (TBA)	ND<20	80	NR	NR	NR	123	N/A	N/A	70 - 130	
Chlorobenzene	ND<5.0	20	NR	NR	NR	91.2	N/A	N/A	70 - 130	
1,2-Dibromoethane (EDB)	ND<5.0	20	NR	NR	NR	107	N/A	N/A	70 - 130	
1,2-Dichloroethane (1,2-DCA)	ND<5.0	20	NR	NR	NR	102	N/A	N/A	70 - 130	
1,1-Dichloroethene	ND<5.0	20	NR	NR	NR	92.2	N/A	N/A	70 - 130	
Diisopropyl ether (DIPE)	ND<5.0	20	NR	NR	NR	106	N/A	N/A	70 - 130	
Ethyl tert-butyl ether (ETBE)	ND<5.0	20	NR	NR	NR	111	N/A	N/A	70 - 130	
Methyl-t-butyl ether (MTBE)	ND<5.0	20	NR	NR	NR	115	N/A	N/A	70 - 130	
Toluene	ND<5.0	20	NR	NR	NR	91.5	N/A	N/A	70 - 130	
Trichloroethene	ND<5.0	20	NR	NR	NR	103	N/A	N/A	70 - 130	
%SS1:	104	25	NR	NR	NR	104	N/A	N/A	70 - 130	
%SS2:	100	25	NR	NR	NR	99	N/A	N/A	70 - 130	
%SS3:	91	2.5	NR	NR	NR	88	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 79114 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1306812-001A	06/27/13 12:15 PM	07/06/13	07/06/13 2:54 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.
 # 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: 79011

WorkOrder: 1306812

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	64.9	N/A	N/A	30 - 130
Chrysene	N/A	10	N/A	N/A	N/A	93.7	N/A	N/A	30 - 130
1-Methylnaphthalene	N/A	10	N/A	N/A	N/A	101	N/A	N/A	30 - 130
2-Methylnaphthalene	N/A	10	N/A	N/A	N/A	84.7	N/A	N/A	30 - 130
Phenanthrene	N/A	10	N/A	N/A	N/A	94.4	N/A	N/A	30 - 130
Pyrene	N/A	10	N/A	N/A	N/A	110	N/A	N/A	30 - 130
%SS1:	N/A	25	N/A	N/A	N/A	99	N/A	N/A	30 - 130
%SS2:	N/A	25	N/A	N/A	N/A	98	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 79011 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1306812-001C	06/27/13 12:15 PM	07/03/13	07/05/13 9:20 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 % Recovery = $100 * (MS - Sample) / (Amount Spiked)$; $RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)$.
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.
 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: 78898

WorkOrder: 1306812

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	97.7	N/A	N/A	70 - 130	
%SS:	N/A	625	N/A	N/A	N/A	98	N/A	N/A	70 - 130	

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

BATCH 78898 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1306812-001B	06/27/13 12:15 PM	07/01/13	07/02/13 4:26 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.