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October 28, 2016

To: Ms. Kit Soo, P.G.
Alameda County Environmental Health 1131
Harbor Bay Parkway, Suite 250 Alameda, CA
94502-6577

Ref. No.: 581000

From: GHD

GHD Tel: 510.420.3369

Subject: 800 Franklin Street, Oakland, CA Fuel Leak Case No. RO0000196

No. of Copies	Description/Title	Drawing No./ Document Ref.	Issue
1	Groundwater Monitoring Report – Second Half 2016	26	

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Remarks:

Should you have any questions regarding the contents of the document, please contact Bryan Fong at (510) 420-3369. Thank You.

Copy to: Ms. Peggy Chiu

Completed by: Bryan Fong [Please Print] Signed:

Filing: Correspondence File

GHD
5900 Hollis Street Suite A Emeryville California 94608 USA
T 510 420 0700 F 510 420 9170 W www.ghd.com

With respect to:

Groundwater Monitoring Report Second Half 2016
Dated 10/27/2016
Fuel Leak Case No. RO0000196

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.

Tommy Chiu
Mr. Tommy Chiu

10-27-16
Date

Groundwater Monitoring Report - Second Half 2016

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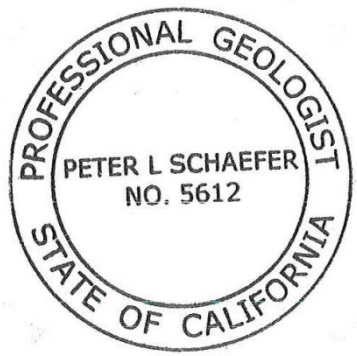
Groundwater Monitoring Report – Second Half 2016

800 Franklin Street
Oakland, California

Prepared for: Chen Tso "Tommy" Chiu

Bryan Fong

Peter Schaefer, PG



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1. Introduction

On behalf of Mr. Tommy Chiu, GHD Services Inc (GHD) is submitting this *Groundwater Monitoring Report – Second Half 2016* for the Chiu Property located at 800 Franklin Street in Oakland, California (**Figure 1**). This groundwater monitoring event was conducted in accordance with directives issued by Alameda County Department of Environmental Health (ACEH).

On August 22, 2016, Chiu family representatives and GHD met with ACEH to discuss the path forward to closure. ACEH's September 14, 2016 electronic correspondence summarize the meeting and requested historical tables and figures, information on the down-gradient Bay Area Rapid Transit (BART) sump, and an additional round of groundwater analysis for volatile organic compounds (VOCs) by October 30, 2016. The VOC data are included herein and the historical tables and figures and BART sump information will be provided under separate cover

1.1 Site Information

Site Address	800 Franklin Street, Oakland
Site Use	Commercial Building
Client and Contact	Tommy Chiu
Consultant and Contact Person	GHD, Bryan A. Fong
Lead Agency and Contact	ACEH, Kit Soo, P.G.
Agency Case No.	RO0000196

2. Site Activities and Results

2.1. Current Sampling Event Activities

On September 13, 2016, Confluence Environmental, Inc. (Confluence) conducted groundwater monitoring and sampling activities at the subject site. Water levels were measured and groundwater samples were collected in wells MW-1, MW-2, MW-3A, and MW-4 through MW-7 (see **Figures 2 and 3**). Well construction details are provided in **Table 1**. GHD's *Standard Field Procedures for Groundwater Monitoring and Sampling* is presented as **Appendix A**. The laboratory analytical report and sample chain of custody (COC) documents are presented as **Appendix B**. Copies of the field data sheets are included as **Appendix C**.

2.1.1 Water Level Measurements

Depth-to-water measurements were recorded to the nearest 0.01-foot from the surveyed reference elevation on the top of the well casing (TOC). Measurements were collected using a conductance-actuated well sounder. Depth to groundwater and calculated groundwater elevation data are presented in **Table 2**.

2.1.2 Groundwater Sampling

Groundwater monitoring included low-flow well purging, measuring groundwater parameters, and sample collection.

Each well was purged prior to sampling using the low-flow purging technique. Each well was purged using a peristaltic pump with minimal drawdown at a flow rate between 200 and 600 milliliters per minute. Depth to water was measured prior to, during, and at the termination of low-flow purging, and also immediately prior to sample collection. Temperature, pH, conductivity, oxygen reduction potential and dissolved oxygen (DO) were measured initially and at regular volume intervals. Well purging continued until consecutive pH, specific conductivity, DO, and temperature measurements were relatively stable. Field measurements, purge volumes, and sample collection data were recorded on field sampling data sheets, included as **Appendix C**.

Groundwater samples were collected from each well using the peristaltic pump. The samples were decanted into 40-milliliter (mL) glass volatile organic analysis (VOA) vials supplied by McCampbell Analytical, Inc. (McCampbell) of Pittsburg, California. Sample containers were labeled, sealed in a plastic bag, placed on ice in a chilled cooler, and transported under COC to McCampbell, a State-certified laboratory, for analysis. The COC used for this monitoring event is included in **Appendix B**.

2.1.3 Equipment Decontamination

To minimize the potential for cross-contamination to occur, the groundwater monitoring equipment was decontaminated prior to being deployed in the first well, and again between each successive well. The tubing for the peristaltic pump was discarded after use at each well.

2.1.4 Sample Analysis

Groundwater samples collected during the Second Half event were analyzed for total petroleum hydrocarbons as gasoline (TPHg) and TPH as diesel (TPHd) with silica gel clean-up by modified Environmental Protection Agency (EPA) Method 8015Bm, and VOCs by EPA Method 8260B.

2.2. Second Half 2016 Monitoring and Sampling Event Results

Groundwater Flow Direction	West-northwest
Hydraulic Gradient	0.005
Measured Groundwater Depth from Top of Casing in Monitoring Wells	22.71 to 23.67 feet
Measureable Separate Phase Hydrocarbons	None

2.2.1 Groundwater Flow Direction and Gradient

Groundwater elevations were calculated by subtracting the depth-to-water measurements from the surveyed TOC elevations. Groundwater elevations were plotted on a site plan and contoured.

Based on depth-to-water data collected during the Second Half 2016 monitoring event, groundwater flow direction was calculated as westerly at a gradient of 0.005. Depth-to-water and groundwater elevation data for the site are presented in **Table 2** and summarized on **Figure 2**.

2.2.2 Groundwater Analytical Results

A summary of the petroleum hydrocarbon concentrations detected in groundwater samples during this event are detailed in the following table and benzene and MTBE data are presented on **Figure 2** and historical groundwater petroleum hydrocarbon data is presented in **Table 2**.

Table A: Hydrocarbon Groundwater Analytical Data

Well ID	TPHd (µg/L)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)
MW-1	<50	NS<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-2	2,300	37,000	1,900	2,200	1,400	4,800	<50	280
MW-3A	1,800	26,000	3,000	200	890	3,300	<50	210
MW-4	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-5	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-6	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-7	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

µg/L = Micrograms per liter
<n = Constituent was not detected at or above laboratory reporting limit

The laboratory notes that gasoline compounds are significant in the TPHd detections in wells MW-2, and MW-3A suggesting that the TPHd detections may be due to gasoline-range hydrocarbons.

Benzene concentrations detected monitoring wells MW-2 and MW-3A continue to exhibit a stable to slightly decreasing trend and no benzene was detected in MW-6 for the first time since December of 2004 (see **Appendix D**). Naphthalene was detected in wells MW-2 and MW-3A at concentrations of 280 and 210 µg/L, respectively. The petroleum hydrocarbon plume is adequately defined, less than 100 ft in length, and continues to exhibit immobility (**Figure 3**).

Other VOCs detected in wells MW-2, MW-3A, MW-4, MW-5, and MW-7 are summarized below in the following table and historical groundwater VOC data is presented in **Table 3**.

Table B: Other VOC Groundwater Analytical Data

Well ID	Chloroform (µg/L)	PCE (µg/L)	n-Propylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	1,3,5-Trimethylbenzene (µg/L)
MW-2	<50	<50	100	750	150
MW-3A	<50	<50	91	790	230
MW-4	0.63	<0.50	<0.50	<0.50	<0.50
MW-5	0.71	<0.50	<0.50	<0.50	<0.50
MW-7	<0.50	0.77	<0.50	<0.50	<0.50

PCE = Tetrachloroethene
<n = Constituent was not detected at or above laboratory reporting limit

Low concentrations of chloroform were detected in wells MW-4 and MW-5 and PCE was detected in well MW-7. Based on the low detected concentrations and the absence of these constituents detected in source area well MW-2, groundwater does not appear to be impacted by the former 1,000-gallon solvent UST. The detected concentrations of chloroform and PCE are below the San Francisco Bay Regional Water Quality Control Board (RWQCB) Tier 1 environmental screening levels (ESLs) of 2.3 and 3.0 µg/L, respectively. No ESLs currently exist for 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and n-propylbenzene. No other VOCs were detected in any of the wells during this groundwater monitoring event.

The laboratory analytical report and sample COC documents are presented as **Appendix B**

2.2.3 GeoTracker Submittal

Data from the Second Half 2016 monitoring event was uploaded to the GeoTracker database.

3. Proposed Activities for the Remaining Second Half 2016

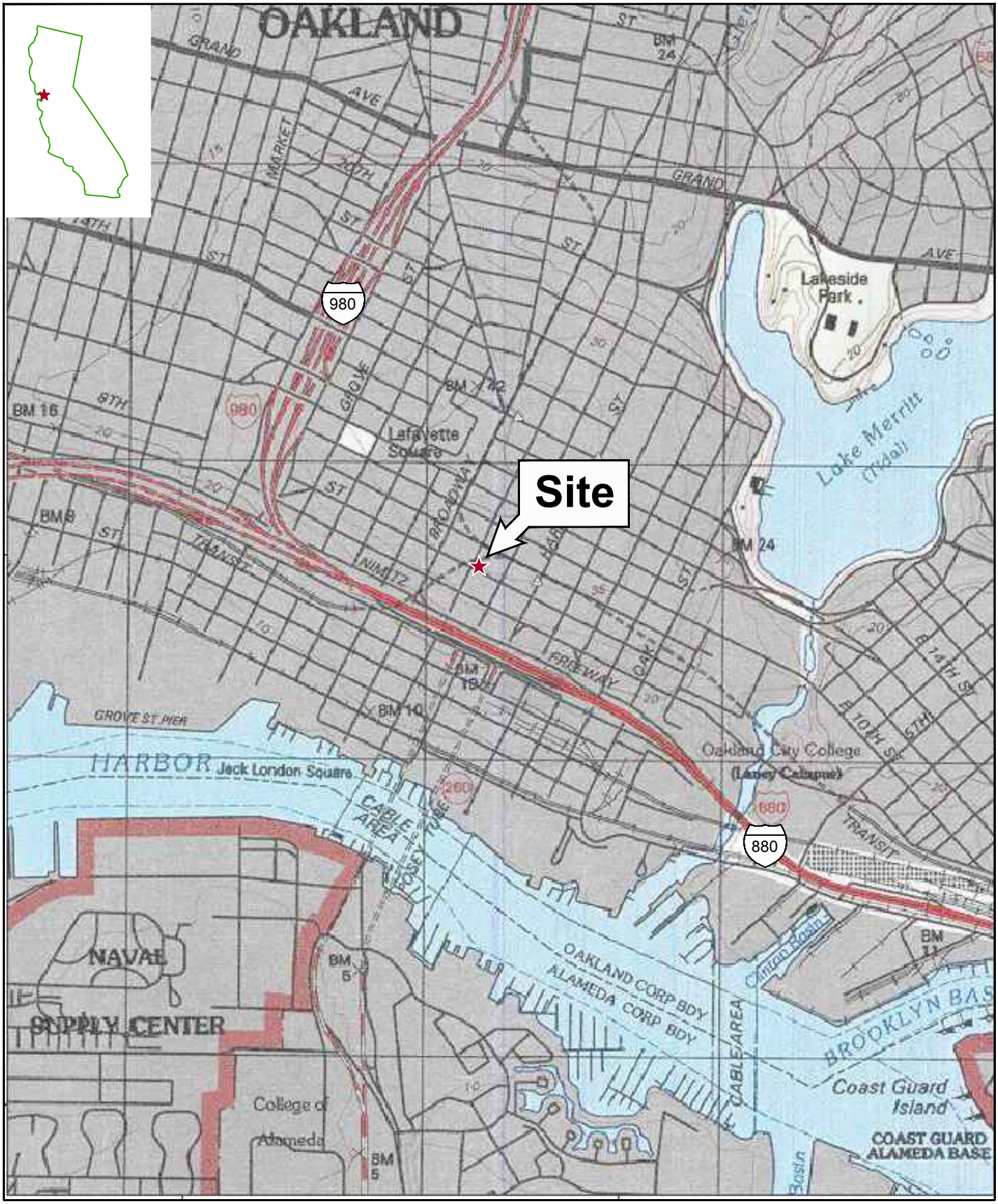
As requested in ACEH's September 14, 2016 electronic correspondence, GHD will submit historical tables and figures and information on the down-gradient BART sump under separate cover by October 30, 2016.

Based on the site conceptual model and stable groundwater monitoring results the site appears to qualify for case closure under the California State Water Resources Control Board's (SWRCB's) *Low Threat Underground Storage Tank Closure Policy* (the Policy). As discussed in the August 22, 2016 meeting, GHD plans to prepare and submit a case closure request during the Second Half 2016.

4. Proposed Activities for First Half 2017

GHD will destroy the wells following ACEH's approval of the low-threat closure request.

Figures



0 500 1500ft

CHIU PROPERTY
800 FRANKLIN STREET
OAKLAND, CALIFORNIA

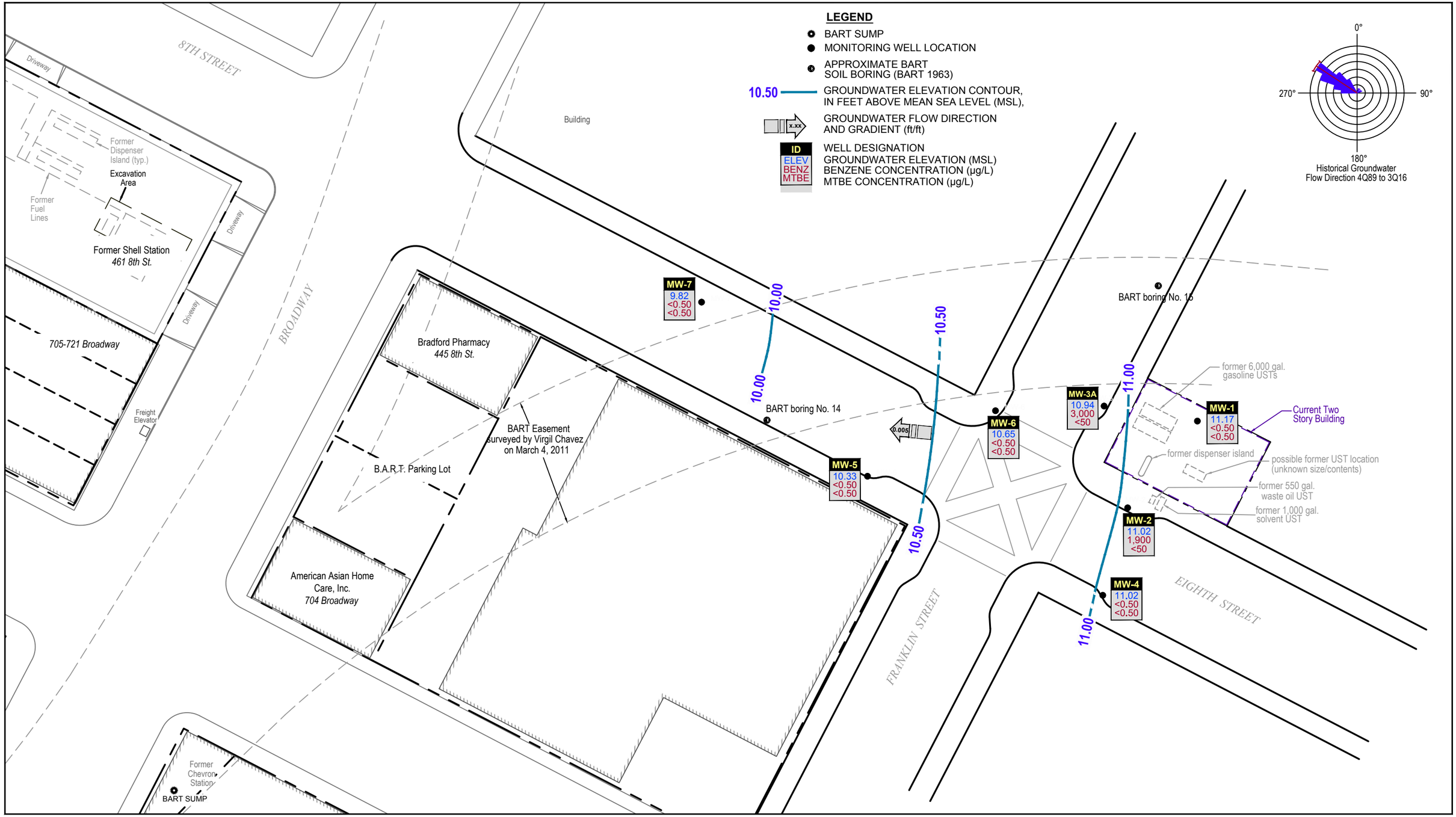
581000-070

Oct 13, 2016

VICINITY MAP

Figure 1

CAD File: I:\Sonoma.Public\0-Users\MDutra\Draft Requests\581000-063(021)-Tagged EM\581000-070(026)\581000-070(026)GN-SO001.DWG



0 20 50ft

CHIU PROPERTY
800 FRANKLIN STREET
OAKLAND, CALIFORNIA

GROUNDWATER ELEVATION CONTOUR and HYDROCARBON CONCENTRATION MAP - SEPTEMBER 13, 2016

Figure 2

581000-070

Oct 18, 2016

CAD File: 581000-070(026)GN-SO002.DWG

LEGEND

- BART SUMP
- MONITORING WELL LOCATION
- APPROXIMATE BART SOIL BORING (BART 1963)
- 46 — BENZENE CONCENTRATION CONTOUR, IN MICROGRAMS PER LITER (µg/L)
- WELL — WELL DESIGNATION
- BENZ — BENZENE CONCENTRATION (µg/L)

0°
270° 90°
180°
Historical Groundwater Flow Direction 4Q89 to 3Q16

8TH STREET
BROADWAY
EIGHTH STREET
FRANKLIN STREET

Driveway
Former Dispenser Island (typ.)
Excavation Area
Former Fuel Lines
Former Shell Station
461 8th St.
705-721 Broadway
Freight Elevator
Building
Bradford Pharmacy
445 8th St.
B.A.R.T. Parking Lot
BART Easement surveyed by Virgil Chavez on March 4, 2011
American Asian Home Care, Inc.
704 Broadway
Former Chevron Station
BART SUMP
BART boring No. 14
BART boring No. 15

MW-7 <0.50
MW-5 <0.50
MW-6 <0.50
MW-3A 3,000
MW-1 <0.50
MW-2 1,900
MW-4 <0.50

46
460

former 6,000 gal. gasoline USTs
Current Two Story Building
former dispenser island
possible former UST location (unknown size/contents)
former 550 gal. waste oil UST
former 1,000 gal. solvent UST

0 20 50ft

CHIU PROPERTY
800 FRANKLIN STREET
OAKLAND, CALIFORNIA

DISSOLVED-PHASE BENZENE ISOCONCENTRATION MAP - SEPTEMBER 13, 2016

581000-070
Oct 18, 2016

Figure 3

CAD File: 581000-070(026)GN-SO003.DWG

Tables

Table 1

Well Construction Details
Chiu Property
800 Franklin Street
Oakland, California

Well ID	Date Installed	Borehole Depth (ft)	Borehole Diameter (in)	Casing Diameter (in)	Screen Interval (ft bgs)	Screen Size (in)	Filter Pack (ft bgs)	Bentonite Seal (ft bgs)	Cement Seal (ft bgs)	TOC Elevation (ft msl)
MW-1	1989	35.0	8.0	2	20.0 - 35.0	0.010	18.0 - 35.0	16.0 - 18.0	0 - 16.0	33.42
MW-2	1989	35.0	8.0	2	20.0 - 35.0	0.010	18.0 - 35.0	16.0 - 18.0	0 - 16.0	33.66
MW-3*	Installed: 1989 Destroyed: 1/29/07	35.0	8.0	2	20.0 - 35.0	0.010	18.0 - 35.0	16.0 - 18.0	0 - 16.0	34.23
MW-3A	2/8/2007	35.0	10.0	4	20.0 - 35.0	0.010	19.0 - 35.0	17.0 - 19.0	0 - 17.0	34.16
MW-4	10/2/1991	35.0	8.0	2	20.0 - 35.0	0.010	18.0 - 35.0	-	0 - 18.0	33.64
MW-5	10/3/1991	35.0	8.0	2	20.0 - 35.0	0.010	18.0 - 35.0	-	0 - 18.0	33.56
MW-6	5/15/1997	35.0	8.0	2	14.5 - 36.25	0.010	14.5 - 36.25	12.5 - 14.5	0 - 12.5	33.98
MW-7	5/23/2012	35.0	8.0	2	18.0 - 35.0	0.010	16.0 - 35.0	14.0 - 16.0	0 - 14.0	33.49

Abbreviations / Notes
ft = feet
in = inches
ft bgs = feet below grade surface
ft msl = feet above mean sea level
TOC = top of casing
* = Monitoring well MW-3 properly destroyed on January 29, 2007 by Cambria.

Table 2

Groundwater Analytical and Elevation Data: TPHg, BTEX, MTBE, and 1,2-DCA
Chiu Property
800 Franklin Street
Oakland, California

Well ID TOC Elevation (ft msl)	Date Sampled	Depth to Water (ft below TOC)	Groundwater Elevation (ft msl)	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	1,2-DCA
				←				µg/L				→
MW-1	10/12/1989	22.87	10.55	ND	--	--	ND	ND	ND	ND	--	8.6
33.42	10/31/1991	--	--	630	960	1,700	3.2	ND<0.5	ND<0.5	130	--	0.0098
34.89	10/21/1992	23.48	11.41	520	--	--	78	38	ND<0.5	120	--	ND
	2/25/1993	22.51	12.38	1,600	--	--	160	190	34	350	--	--
	4/27/1993	22.36	12.53	380	--	--	5.2	ND<0.5	ND<0.5	74	--	--
	10/7/1993	--	12.10	1,000	--	--	81	150	47	230	--	--
33.98	3/28/1994	--	11.91	460	--	--	14	25	14	39	--	--
	4/29/1994	--	--	--	--	--	--	--	--	--	--	--
	6/10/1994	--	11.66	--	--	--	--	--	--	--	--	--
	7/8/1994	--	11.62	--	--	--	--	--	--	--	--	--
	7/26/1994	--	11.48	--	--	--	--	--	--	--	--	--
	8/25/1994	--	11.47	--	--	--	--	--	--	--	--	--
	10/27/1994	22.51	11.47	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--
	1/6/1995	--	12.08	--	--	--	--	--	--	--	--	--
	2/1/1995	--	12.79	--	--	--	--	--	--	--	--	--
	3/29/1995	--	12.75	--	--	--	--	--	--	--	--	--
	10/31/1995	--	12.48	1,400	--	--	15	38	49	510	19	--
	5/21/1997	--	12.49	150	--	--	2.9	1.5	8.6	26	ND<5.0	--
	8/10/2004	23.35	10.63	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
	9/28/2004É	--	--	--	--	--	--	--	--	--	--	--
	12/21/2004	22.93	11.05	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
	3/11/2005É	--	--	--	--	--	--	--	--	--	--	--
	6/16/2005	20.68	13.30	ND<50	--	--	0.64	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
	9/1/2005	20.74	13.24	ND<50	--	--	1.2	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
	12/16/2005	20.95	13.03	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
	3/10/2006	20.34	13.64	ND<50	--	--	0.60	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
	9/15/2006	21.51	12.47	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	ND<0.5
	3/8/2007	21.81	12.17	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	0.72	ND<0.5	ND<5.0	ND<0.5
	9/17/2007	22.08	11.90	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	2.3	ND<0.5	ND<0.5	ND<0.5
	3/4/2008	21.72	12.26	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	9/3/2008	22.70	11.28	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	3/4/2009	22.49	11.49	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.65
	9/8/2009	22.80	11.18	ND<50	ND<50	ND<250	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	ND<0.5
	3/19/2010	22.25	11.73	ND<50	ND<50	--	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	0.58
	9/3/2010	22.51	11.47	ND<50	ND<50	--	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	ND<0.5
	3/4/2011	22.10	11.88	ND<50	ND<50	--	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	ND<0.5
	8/22/2011	22.23	11.75	ND<50	ND<50	--	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	ND<0.5
	3/5/2012	22.61	11.37	ND<50	ND<50	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
	9/27/2012	22.31	11.67	ND<50	ND<50	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
	3/25/2013	22.20	11.78	--	--	--	--	--	--	--	--	--
	9/19/2013	22.84	11.14	--	--	--	--	--	--	--	--	--
	3/13/2014	22.80	11.18	--	--	--	--	--	--	--	--	--
	9/17/2014	←						Well Inaccessible				→
	3/30/2015	22.59	11.39	--	--	--	--	--	--	--	--	--
	9/15/2015	23.19	10.79	--	--	--	--	--	--	--	--	--
	3/9/2016	22.68	11.30	--	--	--	--	--	--	--	--	--
	9/13/2016	**22.81**	**11.17**	**ND<50**	**ND<50**	**--**	**(ND<0.50)**	**(ND<0.50)**	**(ND<0.50)**	**(ND<0.50)**	**(ND<0.50)**	**ND<0.50**

Table 2

Groundwater Analytical and Elevation Data: TPHg, BTEX, MTBE, and 1,2-DCA
Chiu Property
800 Franklin Street
Oakland, California

Well ID TOC Elevation (ft msl)	Date Sampled	Depth to Water (ft below TOC)	Groundwater Elevation (ft msl)	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	1,2-DCA
				←				µg/L				→
MW-2	10/12/1989	23.25	10.40	38,000	--	3,900	1,300	1,200	ND	4,700	--	--
33.66	10/31/1991	--	--	10,000	1,500	--	1,800	1,200	270	960	--	0.17
	11/6/1991	24.02	9.64	--	--	--	--	--	--	--	--	--
	10/21/1992	22.42	11.24	270,000	--	--	9,700	4,500	9,600	56,000	--	15.4
	2/25/1993	21.50	12.16	49,000	--	--	4,300	11,000	1,300	9,100	--	--
	4/27/1993	21.26	12.40	39,000	--	--	1,400	4,000	220	5,200	--	--
	10/7/1993	--	12.04	50,000	--	--	2,700	8,100	940	7,800	--	--
	3/28/1994	--	11.88	20,000	--	--	360	1,300	220	1,800	--	--
	4/29/1994	--	11.87	--	--	--	--	--	--	--	--	--
	6/10/1994	--	11.44	--	--	--	--	--	--	--	--	--
	7/8/1994	--	11.42	--	--	--	--	--	--	--	--	--
	7/26/1994	--	11.22	--	--	--	--	--	--	--	--	--
	8/25/1994	--	11.01	--	--	--	--	--	--	--	--	--
	10/27/1994	22.66	11.00	21,000	--	--	1,200	3,700	600	4,300	--	--
	1/6/1995	--	11.66	--	--	--	--	--	--	--	--	--
	2/1/1995	--	12.21	--	--	--	--	--	--	--	--	--
	3/29/1995	--	12.66	--	--	--	--	--	--	--	--	--
	10/31/1995	--	11.51	45,000	--	--	3,100	8,800	1,200	8,400	810	--
	5/21/1997	--	12.65	18,000	--	--	1,400	4,200	680	3,600	370	--
	8/10/2004	21.03	12.63	47,000 (a)	--	--	4,200	4,900	1,400	6,000	ND<500	--
	9/28/2004	22.95	10.71	--	--	--	--	--	--	--	--	--
	12/21/2004	20.91	12.75	13,000 (a)	--	--	500	310	34	1600	ND<100	--
	3/11/2005	11.35	22.31	32,000 (a)	--	--	970	2,400	890	4,200	ND<1,000	--
	6/16/2005	20.50	13.16	43,000 (a,i)	--	--	1,500	3,400	1,200	5,400	ND<1,200	--
	9/1/2005	20.60	13.06	20,000 (a)	--	--	640	1,700	460	2,200	ND<200	--
	12/16/2005	20.83	12.83	32,000 (a,i)	--	--	1,000	3,100	760	3,800	ND<500	--
	3/10/2006	20.05	13.61	20,000 (a)	--	--	460	1,900	440	2,400	ND<400	--
	9/15/2006	21.31	12.35	43,000 (a)	3,100 (d)	ND<250	1,600	4,400	1,100	5,100	ND<500	ND<10
	3/8/2007	21.62	12.04	30,000 (a,h)	4,600 (d,h)	ND<1,200	1,200	3,400	890	4,500	ND<500	ND<50 (j,h)
	9/17/2007	21.92	11.74	31,000 (a)	6,600 (d,b)	340	790	3,000	700	3,100	ND<100	ND<100
	3/4/2008	--	--	--	--	--	--	--	--	--	--	--
	9/3/2008	22.50	11.16	46,000 (a)	5,100 (d)	370	1,700	8,600	1,400	7,500	ND<250	ND<250
	3/4/2009	22.25	11.41	56,000 (a)	13,000 (d)	1,100	1,500	5,300	990	4,500	ND<10	ND<10
	9/8/2009	22.60	11.06	42,000 (a)	11,000 (d)	1,200	1,400 (1,200)	5,200 (4,900)	970 (890)	5500 (4,900)	ND<100 (ND<100)	ND<100
33.75	3/19/2010 **	21.96	11.70	30,000 (a,h)	12,000 (d,h)	--	(1,000)	(3,500)	(980)	(4,500)	(ND<50)	ND<5.0
	9/3/2010	22.30	11.45	9,500 (a)	1,500 (d)	--	(320)	(290)	(140)	(970)	(ND<12)	ND<12
	3/4/2011	21.85	11.90	12,000 (a)	2,200 (d)	--	(610)	(430)	(290)	(1,400)	(ND<25)	ND<25
	8/22/2011	22.04	11.71	7,900 (a)	1,300 (d)	--	(320)	(270)	(170)	(1,400)	(ND<12)	ND<12
	3/5/2012	22.32	11.43	18,000(a)	1,400 (d)	--	1,200	930	560	2,100	ND<500	--
	9/27/2012	22.16	11.59	6,300 (a)	690 (d)	--	410	290	130	830	ND<70	--
	3/25/2013	22.01	11.74	9,200 (a)	900 (d)	--	820	440	280	1,200	ND<250	--
	9/19/2013	22.68	11.07	20,000 (a)	2,300 (d)	--	1,900	2,200	630	3,100	ND<550	--
	3/13/2014	22.65	11.10	15,000 (a)	1,400 (d)	--	1,400	1,800	550	1,700	ND<350	--
	9/17/2014	23.94	9.81	42,000 (a)	1,900 (b,d)	--	2,300	5,200	1,300	5,700	ND<1,000	--
	3/30/2015	22.49	11.26	29,000 (a)	1,700 (d)	--	2,100	2,400	1,200	3,300	ND<750 (e)	--

Table 2

Groundwater Analytical and Elevation Data: TPHg, BTEX, MTBE, and 1,2-DCA
Chiu Property
800 Franklin Street
Oakland, California

Well ID TOC Elevation (ft msl)	Date Sampled	Depth to Water (ft below TOC)	Groundwater Elevation (ft msl)	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	1,2-DCA
				←				µg/L				→
MW-2	9/15/2015	23.09	10.66	35,000 (a)	2,200 (d)	--	2,400	4,600	1,700	6,500	ND<500	--
(cont.)	3/9/2016	22.55	11.20	29,000 (a)	2,500 (d, k)	--	2,000	1,500	1,400	3,800	ND<700 (e)	--
	9/13/2016	**22.73**	**11.02**	**37,000**	**2,300 (d)**	**--**	**(1,900)**	**(2,200)**	**(1,400)**	**(4,800)**	**(ND<50)**	**ND<50**
MW-3	10/12/1989	24.02	10.21	87,000	--	4,500	3,200	8,800	ND	6,500	--	70.0
34.23	10/31/1991	--	--	310,000	25,000	--	9,300	25,000	5,600	27,000	--	0.058
	11/6/1991	23.52	10.71	--	--	--	--	--	--	--	--	--
	10/21/1992	23.32	10.91	22,000	--	--	10,000	4,300	790	2,100	--	ND
	2/25/1993	22.51	11.72	29,000	--	--	8,400	5,400	1,300	3,300	--	--
	4/27/1993	22.37	11.86	50,000	--	--	8,200	8,700	1,000	5,400	--	--
	10/7/1993	--	14.19	1,700	--	--	3,100	3,700	400	1,700	--	--
	3/28/1994	--	11.52	53,000	--	--	3,900	4,600	710	2,500	--	--
	4/29/1994	--	11.34	--	--	--	--	--	--	--	--	--
	6/10/1994	--	11.13	--	--	--	--	--	--	--	--	--
	7/8/1994	--	11.09	--	--	--	--	--	--	--	--	--
	7/26/1994	--	10.94	--	--	--	--	--	--	--	--	--
	8/25/1994	--	10.80	--	--	--	--	--	--	--	--	--
	10/27/1994	23.56	10.67	8,500	--	--	2,700	2,700	490	2,000	--	--
	1/6/1995	--	11.33	--	--	--	--	--	--	--	--	--
	2/1/1995	--	11.79	--	--	--	--	--	--	--	--	--
	3/29/1995	--	12.10	--	--	--	--	--	--	--	--	--
	10/31/1995	--	11.23	19,000	--	--	4,400	4,600	720	2,900	410	--
	5/21/1997	--	11.68	4,000	--	--	810	840	190	690	ND<100	--
	9/28/2004					Well is damaged. Unable to measure depth to water or collect sample.						
	12/21/2004					Well is damaged. Unable to measure depth to water or collect sample.						
	3/11/2005					Well is damaged. Unable to measure depth to water or collect sample.						
	6/16/2005					Well is damaged. Unable to measure depth to water or collect sample.						
	9/1/2005					Well is damaged. Unable to measure depth to water or collect sample.						
	12/16/2005					Well is damaged. Unable to measure depth to water or collect sample.						
	3/10/2006					Well is damaged. Unable to measure depth to water or collect sample.						
	9/15/2006					Well is damaged. Unable to measure depth to water or collect sample.						
	1/29/2007					Well properly destroyed by Cambria.						
MW-3A	1/29/2007						**MW-3A replaces MW-3**					
34.16	3/8/2007	22.42	11.74	30,000 (a,i)	1,700 (d,i)	ND<250	2,600	4,400	710	4,600	ND<1,000	ND<50 (j)
	9/17/2007	22.65	11.51	9,800 (a)	980 (d)	ND<250	1,100	1,800	270	1,100	ND<25	ND<25
	3/4/2008	22.31	11.85	21,000 (a,i)	1,700 (d,i)	ND<250	2,600	5,000	810	3,500	ND<50	ND<50
	9/3/2008	23.11	11.05	13,000 (a)	880 (d)	ND<250	1,400	2,100	370	1,500	ND<50	ND<50
	3/4/2009	22.98	11.18	12,000 (a)	810 (d)	ND<250	1,000	1,700	330	1,200	ND<5.0	7.2
	9/8/2009	23.25	10.91	8,900 (a)	780 (d)	ND<250	870 (830)	1300 (1,200)	260 (200)	1100 (880)	ND<25 (ND<25)	ND<25
	3/19/2010	22.79	11.37	16,000 (a)	1,700 (d)	--	(1,900)	(3,200)	(620)	(2,800)	(ND<50)	10
	9/3/2010	23.02	11.14	35,000 (a)	1,600 (d)	--	(5,300)	(6,500)	(1,100)	(5,100)	(ND<120)	ND<120
	3/4/2011	22.60	11.56	35,000 (a)	3,300 (d)	--	(5,000)	(6,400)	(1,900)	(8,800)	(ND<100)	ND<100
	8/22/2011	22.71	11.45	42,000 (a)	2,700 (d)	--	(5,700)	(6,300)	(1,800)	(7,800)	(ND<120)	ND<120
	3/5/2012	22.99	11.17	49,000(a)	1500 (d)	--	4,400	2,800	1,900	8,200	ND<800	--
	9/27/2012	22.85	11.31	51,000 (a)	3,200 (d)	--	5,100	4,000	2,000	8,300	ND<800	--
	3/25/2013	22.72	11.44	43,000 (a)	2,900 (d)	--	4,200	2,700	1,700	6,300	ND<250	--

Table 2

Groundwater Analytical and Elevation Data: TPHg, BTEX, MTBE, and 1,2-DCA
Chiu Property
800 Franklin Street
Oakland, California

Well ID TOC Elevation (ft msl)	Date Sampled	Depth to Water (ft below TOC)	Groundwater Elevation (ft msl)	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	1,2-DCA
				←				µg/L				→
MW-3A	9/19/2013	23.30	10.86	31,000 (a)	3,100 (d)	--	3,200	2,100	1,500	6,200	ND<170	--
(cont.)	3/13/2014	23.21	10.95	39,000 (a,k)	6,100 (b,d,l)	--	3,200	1,200	1,900	7,200	ND<200	--
	9/17/2014	23.46	10.70	39,000 (a)	1,500 (d)	--	3,300	1,200	1,500	5,900	ND<1,000	--
	3/30/2015	23.05	11.11	22,000 (a)	1,800 (d)	--	2,500	730	800	3,300	ND<180 (e)	--
	9/15/2015	23.58	10.58	26,000 (a)	1,700 (d)	--	3,200	1,200	1,200	4,900	ND<500	--
	3/9/2016	23.14	11.02	19,000 (a)	3,700 (d, k)	--	1,500	140	550	2,300	ND<500	--
	9/13/2016	**23.22**	**10.94**	**26,000**	**1,800 (d)**	**--**	**(3,000)**	**(200)**	**(890)**	**(3,300)**	**(ND<50)**	**ND<50**
MW-4	10/31/1991	--	--	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	ND
33.64	11/6/1991	23.32	10.32	--	--	--	--	--	--	--	--	--
	10/21/1992	22.10	11.54	410	--	--	3.1	29	6.8	47	--	ND
	2/25/1993	21.13	12.51	170	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--
	4/27/1993	20.74	12.90	100	--	--	ND<0.5	ND<0.5	ND<0.5	0.9	--	--
	10/7/1993	--	12.52	240	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--
	3/28/1994	--	12.34	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--
	4/29/1994	--	11.33	--	--	--	--	--	--	--	--	--
	6/10/1994	--	11.55	--	--	--	--	--	--	--	--	--
	7/8/1994	--	11.54	--	--	--	--	--	--	--	--	--
	7/26/1994	--	11.30	--	--	--	--	--	--	--	--	--
	8/25/1994	--	11.09	--	--	--	--	--	--	--	--	--
	10/27/1994	22.69	10.95	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--
	1/6/1995	--	11.70	--	--	--	--	--	--	--	--	--
	2/1/1995	--	12.34	--	--	--	--	--	--	--	--	--
	3/29/1995	--	12.76	--	--	--	--	--	--	--	--	--
	10/31/1995	--	11.61	80	--	--	ND<0.5	0.6	ND<0.5	1.0	ND<0.5	--
	5/21/1997	--	12.08	ND<50	--	--	11	120	27	180	ND<5.0	--
	9/28/2004	22.72	10.92	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
	12/21/2004	20.65	12.99	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
	3/11/2005	20.20	13.44	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
	6/16/2005	20.38	13.26	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
	9/1/2005	20.48	13.16	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
	12/16/2005	20.78	12.86	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
	3/10/2006	19.81	13.83	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
	9/15/2006	21.16	12.48	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	ND<0.5
	3/8/2007	21.52	12.12	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	ND<0.5
	9/17/2007	21.84	11.80	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	3/4/2008	21.41	12.23	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	9/3/2008	22.50	11.14	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	3/4/2009	22.15	11.49	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	9/8/2009	22.56	11.08	ND<50	ND<50	ND<250	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	ND<0.5
33.73	3/19/2010 *	21.88	11.76	ND<50	ND<50	--	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	ND<0.5
	9/3/2010	22.21	11.52	ND<50	ND<50	--	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	ND<0.5
	3/4/2011	21.78	11.95	ND<50	ND<50	--	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	ND<0.5
	8/22/2011	21.92	11.81	ND<50	ND<50	--	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	ND<0.5
	3/5/2012	22.34	11.39	ND<50	ND<50	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
	9/27/2012	21.98	11.75	ND<50	ND<50	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
	3/25/2013	21.95	11.78	--	--	--	--	--	--	--	--	--

Table 2

Groundwater Analytical and Elevation Data: TPHg, BTEX, MTBE, and 1,2-DCA
Chiu Property
800 Franklin Street
Oakland, California

Well ID TOC Elevation (ft msl)	Date Sampled	Depth to Water (ft below TOC)	Groundwater Elevation (ft msl)	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	1,2-DCA
				←				µg/L				→
MW-4	9/19/2013	←						Inaccessible				→
(cont.)	3/13/2014	22.62	11.11	--	--	--	--	--	--	--	--	--
	9/17/2014	22.99	10.74	--	--	--	--	--	--	--	--	--
	3/30/2015	22.49	11.24	ND<50	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--
	9/15/2015	22.12	11.61	--	--	--	--	--	--	--	--	--
	3/9/2016	22.56	11.17	--	--	--	--	--	--	--	--	--
	9/13/2016	**22.71**	**11.02**	**ND<50**	**ND<50**	**--**	**(ND<0.50)**	**(ND<0.50)**	**(ND<0.50)**	**(ND<0.50)**	**(ND<0.50)**	**ND<0.50**
MW-5	10/31/1991	--	--	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--
33.51	11/6/1991	24.00	9.51	ND	--	--	ND	ND	ND	ND	--	--
	10/21/1992	23.24	10.27	840	--	--	17	120	39	180	--	--
33.56	2/25/1993	22.40	11.16	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--
	4/27/1993	22.15	11.41	260	--	--	53	19	1.2	2.4	--	--
	10/7/1993	--	11.06	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--
	3/28/1994	--	10.95	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--
	4/29/1994	--	10.91	--	--	--	--	--	--	--	--	--
	6/10/1994	--	10.68	--	--	--	--	--	--	--	--	--
	7/8/1994	--	10.60	--	--	--	--	--	--	--	--	--
	7/26/1994	--	10.45	--	--	--	--	--	--	--	--	--
	8/25/1994	--	10.28	--	--	--	--	--	--	--	--	--
	10/27/1994	23.50	10.06	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--
	1/6/1995	--	10.78	--	--	--	--	--	--	--	--	--
	2/1/1995	--	11.25	--	--	--	--	--	--	--	--	--
	3/29/1995	--	11.63	--	--	--	--	--	--	--	--	--
	10/31/1995	--	10.64	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--
	5/21/1997	--	11.04	260	--	--	2.4	33	7.7	56	ND<5.0	--
	9/28/2004	23.70	9.86	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	1.5	ND<5.0	--
	12/21/2004	21.40	12.16	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
	3/11/2005	21.40	12.16	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
	6/16/2005	21.63	11.93	ND<50 (i)	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
	9/1/2005	21.65	11.91	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
	12/16/2005	21.94	11.62	ND<50 (i)	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
	3/10/2006	21.11	12.45	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
	9/15/2006	22.20	11.36	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	ND<0.5
	3/8/2007	22.44	11.12	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	ND<0.5
	9/17/2007	22.73	10.83	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	3/4/2008	22.32	11.24	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	9/3/2008	23.13	10.43	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	3/4/2009	22.95	10.61	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	9/8/2009	23.21	10.35	ND<50	ND<50	ND<250	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	ND<0.5
33.67	3/19/2010 *	22.72	10.84	ND<50	ND<50	--	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	ND<0.5
	9/3/2010	23.03	10.64	ND<50	ND<50	--	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	ND<0.5
	3/4/2011	22.60	11.07	ND<50	ND<50	--	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	ND<0.5
	8/22/2011	22.63	11.04	ND<50	ND<50	--	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	ND<0.5
	3/5/2012	22.94	10.73	ND<50	ND<50	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
	9/27/2012	22.75	10.92	ND<50	ND<50	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
	3/25/2013	22.73	10.94	--	--	--	--	--	--	--	--	--

Table 2

Groundwater Analytical and Elevation Data: TPHg, BTEX, MTBE, and 1,2-DCA
Chiu Property
800 Franklin Street
Oakland, California

Well ID TOC Elevation (ft msl)	Date Sampled	Depth to Water (ft below TOC)	Groundwater Elevation (ft msl)	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	1,2-DCA
				←				µg/L				→
MW-5	9/19/2013	23.34	10.33	--	--	--	--	--	--	--	--	--
(cont.)	3/13/2014	23.32	10.35	--	--	--	--	--	--	--	--	--
	9/17/2014	23.57	10.10	--	--	--	--	--	--	--	--	--
	3/30/2015	23.10	10.57	ND<50	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--
	9/15/2015	23.62	10.05	--	--	--	--	--	--	--	--	--
	3/9/2016	23.21	10.46	--	--	--	--	--	--	--	--	--
	9/13/2016	**23.34**	**10.33**	**ND<50**	**ND<50**	**--**	**(ND<0.50)**	**(ND<0.50)**	**(ND<0.50)**	**(ND<0.50)**	**(ND<0.50)**	**ND<0.50**
MW-6	5/21/1997	--	11.26	760	--	--	2.5	1.7	ND<0.50	25	10	--
33.98	9/28/2004	24.00	9.98	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
	12/21/2004	21.61	12.37	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
	3/11/2005	21.60	12.38	340 (a)	--	--	1.9	2.6	0.68	0.61	ND<5.0	--
	6/16/2005	21.81	12.17	1,300 (a)	--	--	58	8.3	6.1	4.0	ND<25	--
	9/1/2005	21.82	12.16	1,900 (a)	--	--	150	19	18	76	ND<12	--
	12/16/2005	22.03	11.95	3,600 (a,i)	--	--	560	63	33	230	ND<50	--
	3/10/2006	21.46	12.52	2,200 (a)	--	--	240	10	20	87	ND<50	--
	9/15/2006	22.46	11.52	1,800 (a)	480 (d)	ND<250	10	6.7	9.9	42	ND<17	ND<0.5
	3/8/2007	22.64	11.34	4,300 (a)	890 (d)	ND<250	260	36	29	140	ND<60	ND<10 (j)
	9/17/2007	22.88	11.10	7,000 (a)	970 (d)	ND<250	760	28	46	270	ND<10	ND<10
	3/4/2008	22.51	11.47	400 (a)	74 (d)	ND<250	46	ND<1.0	1.0	6.0	ND<1.0	ND<1.0
	9/3/2008	23.24	10.74	280 (a)	69 (d, b)	ND<250	2.9	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	3/4/2009	23.14	10.84	670 (a)	150 (d)	ND<250	68	13	ND<2.5	12	ND<2.5	ND<2.5
	9/8/2009	23.38	10.60	8,000 (a)	1,400 (d)	ND<250	870 (770)	16 (ND<12)	34 (17)	1500 (1,200)	ND<12 (ND<12)	ND<12
34.05	3/19/2010 *	22.93	11.05	8,900 (a)	1,200 (d)	--	(2,900)	(ND<100)	(ND<100)	(ND<100)	(ND<5.0)	15
	9/3/2010	23.19	10.86	4,600 (a)	710 (d)	--	(1,500)	(33)	(35)	(79)	(ND<25)	ND<25
	3/4/2011	22.78	11.27	3,700 (a)	410 (d)	--	(1,300)	(170)	(70)	(200)	(ND<25)	ND<25
	8/22/2011	22.85	11.20	490 (a)	120 (b,d)	--	(190)	(ND<5.0)	(ND<5.0)	(ND<5.0)	(ND<5.0)	ND<5.0
	3/5/2012	23.16	10.89	190 (a)	65 (b,d)	--	38	2.7	1.4	7.3	ND<15	--
	9/27/2012	22.91	11.14	79 (a)	ND<50	--	11	ND<0.5	ND<0.5	0.90	ND<5.0	--
	3/25/2013	22.87	11.18	59 (a)	ND<50	--	12	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
	9/19/2013	23.40	10.65	8,500 (a)	1,100 (d)	--	3,200	48	52	92	ND<250	--
	3/13/2014	23.36	10.69	2,300 (a)	140 (b,d)	--	900	3.1	11	16	ND<17	--
	9/17/2014	23.61	10.44	7,600 (a)	830 (d)	--	2,600	45.0	55	130	ND<100	--
	3/30/2015	23.19	10.86	850 (a)	93 (d)	--	260	2.7	7.8	12	ND<5.0	--
	9/15/2015	23.68	10.37	820 (a)	200 (d, m)	--	220	5.5	5.7	14	ND<10	--
	3/9/2016	23.27	10.78	1,300 (a)	180 (d)	--	370	5.4	2.2	6.5	ND<45 (e)	--
	9/13/2016	**23.40**	**10.65**	**ND<50**	**ND<50**	**--**	**(ND<0.50)**	**(ND<0.50)**	**(ND<0.50)**	**(ND<0.50)**	**(ND<0.50)**	**ND<0.50**
MW-7	6/25/2012	22.98	10.51	ND<50	ND<50	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
33.49	9/27/2012	23.22	10.27	ND<50	ND<50	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
	12/4/2012	23.46	10.03	ND<50	ND<50	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
	3/25/2013	23.19	10.30	ND<50	ND<50	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
	9/19/2013	23.65	9.84	ND<50	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--
	3/13/2014	23.60	9.89	ND<50	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--
	9/17/2014	23.73	9.76	ND<50	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--
	3/30/2015	23.44	10.05	ND<50	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--
	9/15/2015	23.81	9.68	ND<50	ND<50	--	ND<0.50	ND<0.50	ND<0.50	1.0	ND<5.0	--

Table 2

Groundwater Analytical and Elevation Data: TPHg, BTEX, MTBE, and 1,2-DCA
Chiu Property
800 Franklin Street
Oakland, California

Well ID TOC Elevation (ft msl)	Date Sampled	Depth to Water (ft below TOC)	Groundwater Elevation (ft msl)	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	1,2-DCA
				←				µg/L				→
	3/9/2016	23.53	9.96	ND<50	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.5	ND<5.0	--
	9/13/2016	**23.67**	**9.82**	**ND<50**	**ND<50**	**--**	**(ND<0.50)**	**(ND<0.50)**	**(ND<0.50)**	**(ND<0.50)**	**(ND<0.50)**	**ND<0.50**
Grab Groundwater												
B-7	3/11/2011	--	--	ND<50 (i)	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--
B-8	3/11/2011	--	--	ND<50 (i)	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--
B-9	3/12/2011	--	--	ND<50 (i)	--	--	ND<0.5	3.0	ND<0.5	ND<0.5	--	--

Abbreviations and Notes:

TOC Elevation = Top of well casing elevation
ft msl = Feet above mean sea level
ft below TOC = Feet below top of casing
µg/L = Micrograms per liter
TPHg = Total petroleum hydrocarbons as gasoline by EPA Method 8015C
TPHd = Total petroleum hydrocarbons as diesel by EPA Method 8015C with silica gel cleanup
TPHmo = Total petroleum hydrocarbons as motor oil by EPA Method 8015C with silica gel cleanup
BTEX = Benzene, toluene, ethylbenzene, and total xylenes by EPA Method 8260B, prior to September 3, 2008 by EPA Method 8021B
MTBE = Methyl tertiary-butyl ether by EPA Method 8260B, prior to September 3, 2008 by EPA Method 8021B
1,2-DCA = 1,2-Dichloroethane by EPA Method SW8260B, prior to 2006 by EPA Method 601
Other VOCs analyzed by EPA Method SW8260B, prior to 2006 by EPA Method 601
Sheen = A sheen was observed on the water's surface
Field = Observed in the field
Lab = Observed in analytical laboratory
(a) = unmodified or weakly modified gasoline is significant
(b) = diesel range compounds are significant; no recognizable pattern
(d) = gasoline range compounds are significant
(e) = reporting limit for MTBE raised due to co-elution with non-target peaks
(h) = lighter than water immiscible sheen/product is present
(i) = liquid sample that contains ~1 vol. % sediment
(j) = sample diluted due to high organic content/matrix interference
(k) = surrogate recovery outside of the control limits due to coelution with another peak(s) / cluttered chromatogram.
(l) = oil range compounds are significant
(m) = Stoddard solvent/mineral spirit may be present
ND<5.0 = Not detected above detection limit.
ND = Not detected above laboratory reporting limit
-- = Not available, not analyzed, or not applicable
* = Surveyed September 7, 2006; updated to table May 24, 2010
** = Surveyed March 8, 2007; updated to table May 24, 2010
É = Unable to access well due to denial by current tenant

Table 3

Groundwater Analytical Data: VOCs
Chiu Property
800 Franklin Street
Oakland, California

Well ID	Date Sampled	Bromo-Dichloro-methane (mg/L)	n-Butyl-benzene (mg/L)	Chloroform (mg/L)	1,2-Dichloro-ethane (mg/L)	1,2-Dichloro-propane (mg/L)	Isopropyl-benzene (mg/L)	4-Isopropyl - toluene (mg/L)	Naphthalene (mg/L)	n-Propyl-benzene (mg/L)	1,1,1-Trichloro-ethane	tertiary-Butyl Alcohol	1,2,4-Trimethyl-benzene (mg/L)	1,3,5-Trimethyl-benzene (mg/L)	Tetrachloro-ethene (mg/L)	Other VOCs (mg/L)
MW-1	9/21/1989	ND<0.5	--	0.8	8.6	ND<0.5	--	--	--	--	ND<0.5	--	--	--	ND<0.5	ND
	10/31/1991	ND<0.4	--	ND<0.4	9.8	ND<0.4	--	--	--	--	ND<2.0	--	--	--	ND<0.4	ND
	10/21/1992	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--
	9/15/2006	--	--	6.4	ND<0.5	--	--	--	--	--	--	--	--	--	--	--
	3/8/2007	--	--	6.9	ND<0.5	--	--	--	--	--	--	--	--	--	--	--
	9/17/2007	ND<0.5	ND<0.5	4.7	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND
	3/4/2008	ND<0.5	ND<0.5	1.3	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND
	9/3/2008	ND<0.5	ND<0.5	0.98	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<0.5	ND<0.5	ND<0.5	ND
	3/4/2009	ND<0.5	ND<0.5	ND<0.5	0.65	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<0.5	ND<0.5	ND<0.5	ND
	9/8/2009	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<0.5	ND<0.5	ND<0.5	ND
	3/19/2010	ND<0.5	ND<0.5	ND<0.5	0.58	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<0.5	ND<0.5	ND<0.5	ND
	9/3/2010	ND<0.5	ND<0.5	1.2	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<0.5	ND<0.5	ND<0.5	ND
	3/4/2011	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<0.5	ND<0.5	ND<0.5	ND
	8/22/2011	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<0.5	ND<0.5	ND<0.5	ND
	9/13/2016	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<2.0**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND**
MW-2	9/21/1989	ND<20.0	--	ND<20.0	ND<20.0	ND<20.0	--	--	--	--	ND<20.0	--	--	--	ND<20.0	ND
	10/31/1991	ND<0.4	--	ND<0.4	170	ND<0.4	--	--	--	--	ND<2.0	--	--	--	ND<0.4	ND
	10/21/1992	--	--	--	15.4	--	--	--	--	--	--	--	--	--	--	--
	9/15/2006	--	--	16	ND<10	--	--	--	--	--	--	--	--	--	--	--
	3/8/2007	--	--	ND<50	ND<50	--	--	--	--	--	--	--	--	--	--	--
	9/17/2007	ND<100	ND<100	ND<100	ND<100	ND<100	ND<100	ND<100	110	100	ND<100	ND<1,000	1,000	220	ND<100	ND
	9/3/2008	ND<250	ND<250	ND<250	ND<250	ND<250	ND<250	ND<250	310	ND<250	ND<250	ND<1,000	1,400	320	ND<250	ND
	3/4/2009	ND<10	55	ND<10	ND<10	ND<10	88	25	140	190	ND<10	ND<40	1,200	250	ND<10	ND
	9/8/2009	ND<100	ND<100	ND<0.5	ND<100	ND<100	ND<100	ND<100	200	110	ND<100	ND<100	1,300	180	ND<100	ND
	3/19/2010	ND<50	65	ND<5.0	ND<50	ND<50	78	ND<50	240	180	ND<50	ND<200	1,400	370	ND<50	ND
	9/3/2010	ND<12	15	ND<12	ND<12	ND<12	43	ND<12	71	71	ND<12	ND<50	570	120	ND<12	ND
	3/4/2011	ND<25	26	ND<25	ND<25	ND<25	61	ND<25	110	89	ND<25	ND<25	650	160	ND<25	ND
	8/22/2011	ND<12	ND<12	ND<0.5	ND<12	ND<12	18	ND<12	55	35	ND<12	ND<50	420	76	ND<12	ND
	9/13/2016	**ND<50**	**ND<50**	**ND<50**	**ND<50**	**ND<50**	**ND<50**	**ND<50**	**280**	**100**	**ND<50**	**ND<200**	**750**	**150**	**ND<50**	**ND**
MW-3A	9/21/1989	ND<20.0	--	ND<20.0	ND<20.0	ND<20.0	--	--	--	--	ND<20.0	--	--	--	ND<20.0	ND
	10/31/1991	ND<0.4	--	ND<0.4	58.0	0.68	--	--	--	--	1.4	--	--	--	ND<0.4	ND
	10/21/1992	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--
	3/8/2007	--	--	ND<50	ND<50	--	--	--	--	--	--	--	--	--	--	--
	9/17/2007	ND<25	ND<25	ND<25	ND<25	ND<25	ND<25	ND<25	27	27	ND<25	ND<250	220	55	ND<25	ND
	3/4/2008	ND<50	ND<50	ND<50	ND<50	ND<50	ND<50	ND<50	110	80	ND<50	ND<200	580	160	ND<50	ND
	9/3/2008	ND<50	ND<50	ND<50	ND<50	ND<50	ND<50	ND<50	62	62	ND<50	ND<200	240	58	ND<50	ND
	3/4/2009	ND<5.0	15	7.9	7.2	ND<5.0	14	ND<5.0	67	37	ND<5.0	ND<2.0	230	68	ND<5.0	ND
	9/8/2009	ND<25	ND<25	6.3	ND<25	ND<25	ND<25	ND<25	39	ND<25	ND<25	ND<100	110	ND<25	ND<25	ND
	3/19/2010	ND<50	ND<50	ND<5.0	10	ND<50	ND<50	ND<50	150	57	ND<50	ND<200	460	110	ND<50	ND
	9/3/2010	ND<0.5	ND<0.5	ND<120	ND<0.5	ND<0.5	ND<0.5	ND<0.5	160	ND<0.5	ND<0.5	ND<2.0	580	130	ND<0.5	ND
	3/4/2011	ND<100	ND<100	ND<100	ND<100	ND<100	ND<100	ND<100	240	130	ND<100	ND<400	940	300	ND<100	ND
	8/22/2011	ND<120	ND<120	ND<0.5	ND<120	ND<120	ND<120	ND<120	200	ND<120	ND<120	ND<500	930	190	ND<120	ND
	9/13/2016	**ND<50**	**ND<50**	**ND<50**	**ND<50**	**ND<50**	**ND<50**	**ND<50**	**210**	**91**	**ND<0.50**	**ND<200**	**790**	**230**	**ND<50**	**ND**
MW-4	10/31/1991	ND<0.4	--	2.6	ND<0.4	ND<0.4	--	--	--	--	ND<2.0	--	--	--	ND<0.4	ND
	10/21/1992	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--
	9/15/2006	--	--	28	ND<0.5	--	--	--	--	--	--	--	--	--	--	--
	3/8/2007	--	--	23	ND<0.5	--	--	--	--	--	--	--	--	--	--	--
	9/17/2007	ND<0.5	ND<0.5	18	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND
	3/4/2008	ND<0.5	ND<0.5	13	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<0.5	ND<0.5	ND<0.5	ND
	9/3/2008	ND<0.5	ND<0.5	12	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<0.5	ND<0.5	ND<0.5	ND
	3/4/2009	ND<0.5	ND<0.5	14	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<0.5	ND<0.5	ND<0.5	ND
	9/8/2009	ND<0.5	ND<0.5	11	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<0.5	ND<0.5	ND<0.5	ND
	3/19/2010	ND<0.5	ND<0.5	10	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<0.5	ND<0.5	ND<0.5	ND

Table 3

Groundwater Analytical Data: VOCs
Chiu Property
800 Franklin Street
Oakland, California

Well ID	Date Sampled	Bromo-Dichloro-methane (mg/L)	n-Butyl-benzene (mg/L)	Chloroform (mg/L)	1,2-Dichloro-ethane (mg/L)	1,2-Dichloro-propane (mg/L)	Isopropyl-benzene (mg/L)	4-Isopropyl - toluene (mg/L)	Naphthalene (mg/L)	n-Propyl-benzene (mg/L)	1,1,1-Trichloro-ethane	tertiary-Butyl Alcohol	1,2,4-Trimethyl-benzene (mg/L)	1,3,5-Trimethyl-benzene (mg/L)	Tetrachloro-ethene (mg/L)	Other VOCs (mg/L)
	9/3/2010	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<0.5	ND<0.5	ND<0.5	ND
	3/4/2011	ND<0.5	ND<0.5	1.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<0.5	ND<0.5	ND<0.5	ND
	8/22/2011	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<0.5	ND<0.5	ND<0.5	ND
	9/13/2016	**ND<0.50**	**ND<0.50**	**0.63**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<2.0**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND**
MW-5	10/31/1991	ND<0.4	--	1.1	ND<0.4	ND<0.4	--	--	--	--	ND<2.0	--	--	--	ND<0.4	ND
	10/21/1992	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--
	9/15/2006	--	--	10	ND<0.5	--	--	--	--	--	--	--	--	--	--	--
	3/8/2007	--	--	18	ND<0.5	--	--	--	--	--	--	--	--	--	--	--
	9/17/2007	0.77	ND<0.5	14	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND
	3/4/2008	0.64	ND<0.5	19	ND<0.5	ND<1.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<2.0	ND<0.5	ND<0.5	ND<0.5	ND
	9/3/2008	ND<0.5	ND<0.5	17	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<0.5	ND<0.5	ND<0.5	ND
	3/4/2009	ND<0.5	ND<0.5	14	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<0.5	ND<0.5	ND<0.5	ND
	9/8/2009	ND<0.5	ND<0.5	11	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<0.5	ND<0.5	ND<0.5	ND
	3/19/2010	ND<0.5	ND<0.5	14	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<0.5	ND<0.5	ND<0.5	ND
	9/3/2010	ND<0.5	ND<0.5	7.2	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<0.5	ND<0.5	ND<0.5	ND
	3/4/2011	ND<0.5	ND<0.5	3.4	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<0.5	ND<0.5	ND<0.5	ND
	8/22/2011	ND<0.5	ND<0.5	1.9	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<0.5	ND<0.5	ND<0.5	ND
	9/13/2016	**ND<0.50**	**ND<0.50**	**0.71**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<2.0**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND**
MW-6	9/15/2006	--	--	3.2	ND<0.5	--	--	--	--	--	--	--	--	--	--	--
	3/8/2007	--	--	ND<10	ND<10	--	--	--	--	--	--	--	--	--	--	--
	9/17/2007	ND<10	16	ND<10	ND<10	ND<10	62.0	ND<10	160	150	ND<10	ND<100	13	ND<10	ND<10	ND
	3/4/2008	ND<1.0	1.2	ND<1.0	ND<1.0	ND<1.0	4.8	ND<1.0	5.9	9.7	ND<1.0	ND<4.0	ND<1.0	ND<1.0	ND<1.0	ND
	9/3/2008	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.73	ND<0.5	1.7	0.96	ND<0.5	ND,2.0	ND<0.5	ND<0.5	ND<0.5	ND
	3/4/2009	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	7.4	ND<2.5	13	19	ND<2.5	13	ND<2.5	ND<2.5	ND<2.5	ND
	9/8/2009	ND<12	ND<12	ND<0.5	ND<12	ND<12	20	ND<12	120	58	ND<12	ND<50	160	48	ND<12	ND
	3/19/2010	ND<5.0	ND<5.0	ND<5.0	15.0	ND<5.0	ND<5.0	ND<5.0	250	120	ND<5.0	ND<20	ND<5.0	ND<5.0	ND<5.0	ND
	9/3/2010	ND<25	ND<25	ND<25	ND<25	ND<25	36	ND<25	130	80	ND<25	ND<100	ND<25	ND<25	ND<25	ND
	3/4/2011	ND<25	ND<25	ND<25	ND<25	ND<25	26.0	ND<25	100	51	ND<25	ND<100	ND<25	ND<25	ND<25	ND
	8/22/2011	ND<5.0	ND<5.0	0.86	ND<5.0	ND<5.0	6.3	ND<5.0	ND<5.0	10	ND<5.0	ND<20	ND<5.0	ND<5.0	ND<5.0	ND
	9/13/2016	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<2.0**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND**
MW-7	**9/13/2016**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<2.0**	**ND<0.50**	**ND<0.50**	**0.77**	**ND**

Abbreviations and Notes:
µg/L = Micrograms per liter
VOC = Volatile organic compounds analyzed gy EPA Method 8260B; prior to 2006, analyzed by EPA Method 601
ND = Not detected above laboratory reporting limit
-- = Not available, not analyzed, or not applicable

Appendices

Appendix A
Standard Field Procedures for Groundwater Monitoring and Sampling

GHD Services, Inc.

STANDARD FIELD PROCEDURES FOR
GROUNDWATER MONITORING AND SAMPLING

This document presents standard field methods for groundwater monitoring, purging and sampling, and well development. These procedures are designed to comply with Federal, State and local regulatory guidelines. GHD Services, Inc.'s field procedures are summarized below.

Groundwater Elevation Monitoring

Prior to performing monitoring activities, the historical monitoring and analytical data of each monitoring well shall be reviewed to determine if any of the wells are likely to contain non-aqueous phase liquid (NAPL) and to determine the order in which the wells will be monitored (i.e. cleanest to dirtiest). Groundwater monitoring should not be performed when the potential exists for surface water to enter the well (i.e. flooding during a rainstorm).

Prior to monitoring, each well shall be opened and the well cap removed to allow water levels to stabilize and equilibrate. The condition of the well box and well cap shall be observed and recommended repairs noted. Any surface water that may have entered and flooded the well box should be evacuated prior to removing the well cap. In wells with no history of NAPL, the static water level and total well depth shall be measured to the nearest 0.01 foot with an electronic water level meter. Wells with the highest contaminant concentrations shall be measured last. In wells with a history of NAPL, the NAPL level/thickness and static water level shall be measured to the nearest 0.01 foot using an electronic interface probe. The water level meter and/or interface probe shall be thoroughly cleaned and decontaminated at the beginning of the monitoring event and between each well. Monitoring equipment shall be washed using soapy water consisting of Liqui-nox™ or Alconox™ followed by one rinse of clean tap water and then two rinses of distilled water.

Groundwater Purging and Sampling

Prior to groundwater purging and sampling, the historical analytical data of each monitoring well shall be reviewed to determine the order in which the wells should be purged and sampled (i.e. cleanest to dirtiest). No purging or groundwater sampling shall be performed on wells with a measurable thickness of NAPL or floating NAPL globules. If a sheen is observed, the well should be purged and a groundwater sample collected only if no NAPL is present. Wells shall be purged either by hand using a disposal or PVC bailer or by using an aboveground pump (e.g. peristaltic or Wattera™) or down-hole pump (e.g. Grundfos™ or DC Purger pump).

Groundwater wells shall be purged approximately three to ten well-casing volumes (depending on the regulatory agency requirements) or until groundwater parameters of temperature, pH, and conductivity have stabilized to within 10% for three consecutive readings. Temperature, pH, and conductivity shall be measured and recorded at least once per well casing volume removed. The total volume of groundwater removed shall be recorded along with any other notable physical characteristic such as color and odor. If required, field parameters such as turbidity, dissolved oxygen (DO), and oxidation-

reduction potential (ORP) shall also be measured prior to collection of each groundwater sample.

Groundwater samples shall be collected after the well has been purged. If the well is slow to recharge, a sample shall be collected after the water column is allowed to recharge to 80% of the pre-purging static water level. If the well does not recover to 80% in 2 hours, a sample shall be collected once there is enough groundwater in the well. Groundwater samples shall be collected using clean disposable bailers or pumps (if an operating remediation system exists on site and the project manager approves of its use for sampling) and shall be decanted into clean containers supplied by the analytical laboratory. New latex gloves and disposable tubing or bailers shall be used for sampling each well. If a PVC bailer or down-hole pump is used for groundwater purging, it shall be decontaminated before purging each well by using soapy water consisting of Liqui-nox™ or Alconox™ followed by one rinse of clean tap water and then two rinses of distilled water. If a submersible pump with non-dedicated discharge tubing is used for groundwater purging, both the inside and outside of pump and discharge tubing shall be decontaminated as described above.

Sample Handling

Except for samples that will be tested in the field, or that require special handling or preservation, samples shall be stored in coolers chilled to 4° C for shipment to the analytical laboratory. Samples shall be labeled, placed in protective foam sleeves or bubble wrap as needed, stored on crushed ice at or below 4° C, and submitted under chain-of-custody (COC) to the laboratory. The laboratory shall be notified of the sample shipment schedule and arrival time. Samples shall be shipped to the laboratory within a time frame to allow for extraction and analysis to be performed within the standard sample holding times.

Sample labels shall be filled out using indelible ink and must contain the site name; field identification number; the date, time, and location of sample collection; notation of the type of sample; identification of preservatives used; remarks; and the signature of the sampler. Field identification must be sufficient to allow easy cross-reference with the field datasheet.

All samples submitted to the laboratory shall be accompanied by a COC record to ensure adequate documentation. A copy of the COC shall be retained in the project file. Information on the COC shall consist of the project name and number; project location; sample numbers; sampler/recorder's signature; date and time of collection of each sample; sample type; analyses requested; name of person receiving the sample; and date of receipt of sample.

Laboratory-supplied trip blanks shall accompany the samples and be analyzed to check for cross-contamination, if requested by the project manager.

Waste Handling and Disposal

Groundwater extracted during sampling shall be stored onsite in sealed U.S. DOT H17 55-gallon drums and shall be labeled with the contents, date of generation, generator identification, and consultant contact. Extracted groundwater may be disposed offsite by a licensed waste handler or may be treated and discharged via an operating onsite groundwater extraction/treatment system.

Appendix B
McCampbell Analytical, Inc. – Laboratory Analytical Reports

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1609730

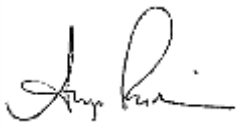
Report Created for: GHD

5900 Hollis St, Suite A
Emeryville, CA 94608

Project Contact: Eric Chodoroff
Project P.O.:
Project Name: F1-160913; 800 Franklin St, Oakland

Project Received: 09/16/2016

Analytical Report reviewed & approved for release on 09/23/2016 by:



Angela Rydelius,
Laboratory Manager

McCampbell Analytical, Inc.
"When Quality Counts"
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http://www.mccampbell.com / E-mail: main@mccampbell.com

Glossary of Terms & Qualifier Definitions

Client: GHD
Project: F1-160913; 800 Franklin St, Oakland
WorkOrder: 1609730

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

Analytical Qualifiers

d1	weakly modified or unmodified gasoline is significant
e4	gasoline range compounds are significant.

McCampbell Analytical, Inc.
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Analytical Report

Client:	GHD	**WorkOrder:**	1609730
Date Received:	9/16/16 15:40	**Extraction Method:**	SW5030B
Date Prepared:	9/19/16-9/20/16	**Analytical Method:**	SW8260B
Project:	F1-160913; 800 Franklin St, Oakland	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-6	1609730-001B	Water	09/13/2016 07:10	GC16	126816

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	09/19/2016 11:26
tert-Amyl methyl ether (TAME)	ND	0.50	1	09/19/2016 11:26
Benzene	ND	0.50	1	09/19/2016 11:26
Bromobenzene	ND	0.50	1	09/19/2016 11:26
Bromochloromethane	ND	0.50	1	09/19/2016 11:26
Bromodichloromethane	ND	0.50	1	09/19/2016 11:26
Bromoform	ND	0.50	1	09/19/2016 11:26
Bromomethane	ND	0.50	1	09/19/2016 11:26
2-Butanone (MEK)	ND	2.0	1	09/19/2016 11:26
t-Butyl alcohol (TBA)	ND	2.0	1	09/19/2016 11:26
n-Butyl benzene	ND	0.50	1	09/19/2016 11:26
sec-Butyl benzene	ND	0.50	1	09/19/2016 11:26
tert-Butyl benzene	ND	0.50	1	09/19/2016 11:26
Carbon Disulfide	ND	0.50	1	09/19/2016 11:26
Carbon Tetrachloride	ND	0.50	1	09/19/2016 11:26
Chlorobenzene	ND	0.50	1	09/19/2016 11:26
Chloroethane	ND	0.50	1	09/19/2016 11:26
Chloroform	ND	0.50	1	09/19/2016 11:26
Chloromethane	ND	0.50	1	09/19/2016 11:26
2-Chlorotoluene	ND	0.50	1	09/19/2016 11:26
4-Chlorotoluene	ND	0.50	1	09/19/2016 11:26
Dibromochloromethane	ND	0.50	1	09/19/2016 11:26
1,2-Dibromo-3-chloropropane	ND	0.20	1	09/19/2016 11:26
1,2-Dibromoethane (EDB)	ND	0.50	1	09/19/2016 11:26
Dibromomethane	ND	0.50	1	09/19/2016 11:26
1,2-Dichlorobenzene	ND	0.50	1	09/19/2016 11:26
1,3-Dichlorobenzene	ND	0.50	1	09/19/2016 11:26
1,4-Dichlorobenzene	ND	0.50	1	09/19/2016 11:26
Dichlorodifluoromethane	ND	0.50	1	09/19/2016 11:26
1,1-Dichloroethane	ND	0.50	1	09/19/2016 11:26
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	09/19/2016 11:26
1,1-Dichloroethene	ND	0.50	1	09/19/2016 11:26
cis-1,2-Dichloroethene	ND	0.50	1	09/19/2016 11:26
trans-1,2-Dichloroethene	ND	0.50	1	09/19/2016 11:26
1,2-Dichloropropane	ND	0.50	1	09/19/2016 11:26
1,3-Dichloropropane	ND	0.50	1	09/19/2016 11:26
2,2-Dichloropropane	ND	0.50	1	09/19/2016 11:26

(Cont.)

NELAP 4033ORELAP

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Analytical Report

Client:	GHD	**WorkOrder:**	1609730
Date Received:	9/16/16 15:40	**Extraction Method:**	SW5030B
Date Prepared:	9/19/16-9/20/16	**Analytical Method:**	SW8260B
Project:	F1-160913; 800 Franklin St, Oakland	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-6	**1609730-001B**	**Water**	**09/13/2016 07:10**	**GC16**	**126816**

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	09/19/2016 11:26
cis-1,3-Dichloropropene	ND	0.50	1	09/19/2016 11:26
trans-1,3-Dichloropropene	ND	0.50	1	09/19/2016 11:26
Diisopropyl ether (DIPE)	ND	0.50	1	09/19/2016 11:26
Ethylbenzene	ND	0.50	1	09/19/2016 11:26
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	09/19/2016 11:26
Freon 113	ND	0.50	1	09/19/2016 11:26
Hexachlorobutadiene	ND	0.50	1	09/19/2016 11:26
Hexachloroethane	ND	0.50	1	09/19/2016 11:26
2-Hexanone	ND	0.50	1	09/19/2016 11:26
Isopropylbenzene	ND	0.50	1	09/19/2016 11:26
4-Isopropyl toluene	ND	0.50	1	09/19/2016 11:26
Methyl-t-butyl ether (MTBE)	ND	0.50	1	09/19/2016 11:26
Methylene chloride	ND	0.50	1	09/19/2016 11:26
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	09/19/2016 11:26
Naphthalene	ND	0.50	1	09/19/2016 11:26
n-Propyl benzene	ND	0.50	1	09/19/2016 11:26
Styrene	ND	0.50	1	09/19/2016 11:26
1,1,1,2-Tetrachloroethane	ND	0.50	1	09/19/2016 11:26
1,1,2,2-Tetrachloroethane	ND	0.50	1	09/19/2016 11:26
Tetrachloroethene	ND	0.50	1	09/19/2016 11:26
Toluene	ND	0.50	1	09/19/2016 11:26
1,2,3-Trichlorobenzene	ND	0.50	1	09/19/2016 11:26
1,2,4-Trichlorobenzene	ND	0.50	1	09/19/2016 11:26
1,1,1-Trichloroethane	ND	0.50	1	09/19/2016 11:26
1,1,2-Trichloroethane	ND	0.50	1	09/19/2016 11:26
Trichloroethene	ND	0.50	1	09/19/2016 11:26
Trichlorofluoromethane	ND	0.50	1	09/19/2016 11:26
1,2,3-Trichloropropane	ND	0.50	1	09/19/2016 11:26
1,2,4-Trimethylbenzene	ND	0.50	1	09/19/2016 11:26
1,3,5-Trimethylbenzene	ND	0.50	1	09/19/2016 11:26
Vinyl Chloride	ND	0.50	1	09/19/2016 11:26
Xylenes, Total	ND	0.50	1	09/19/2016 11:26

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Analytical Report

Client:	GHD	**WorkOrder:**	1609730
Date Received:	9/16/16 15:40	**Extraction Method:**	SW5030B
Date Prepared:	9/19/16-9/20/16	**Analytical Method:**	SW8260B
Project:	F1-160913; 800 Franklin St, Oakland	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-6	**1609730-001B**	**Water**	**09/13/2016 07:10**	**GC16**	**126816**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	93	70-130		09/19/2016 11:26
Toluene-d8	88	70-130		09/19/2016 11:26
4-BFB	88	70-130		09/19/2016 11:26

Analyst(s): KF

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Analytical Report

Client:	GHD	**WorkOrder:**	1609730
Date Received:	9/16/16 15:40	**Extraction Method:**	SW5030B
Date Prepared:	9/19/16-9/20/16	**Analytical Method:**	SW8260B
Project:	F1-160913; 800 Franklin St, Oakland	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-4	**1609730-002B**	**Water**	**09/13/2016 07:45**	**GC16**	**126816**

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	09/19/2016 12:07
tert-Amyl methyl ether (TAME)	ND	0.50	1	09/19/2016 12:07
Benzene	ND	0.50	1	09/19/2016 12:07
Bromobenzene	ND	0.50	1	09/19/2016 12:07
Bromochloromethane	ND	0.50	1	09/19/2016 12:07
Bromodichloromethane	ND	0.50	1	09/19/2016 12:07
Bromoform	ND	0.50	1	09/19/2016 12:07
Bromomethane	ND	0.50	1	09/19/2016 12:07
2-Butanone (MEK)	ND	2.0	1	09/19/2016 12:07
t-Butyl alcohol (TBA)	ND	2.0	1	09/19/2016 12:07
n-Butyl benzene	ND	0.50	1	09/19/2016 12:07
sec-Butyl benzene	ND	0.50	1	09/19/2016 12:07
tert-Butyl benzene	ND	0.50	1	09/19/2016 12:07
Carbon Disulfide	ND	0.50	1	09/19/2016 12:07
Carbon Tetrachloride	ND	0.50	1	09/19/2016 12:07
Chlorobenzene	ND	0.50	1	09/19/2016 12:07
Chloroethane	ND	0.50	1	09/19/2016 12:07
Chloroform	**0.63**	0.50	1	09/19/2016 12:07
Chloromethane	ND	0.50	1	09/19/2016 12:07
2-Chlorotoluene	ND	0.50	1	09/19/2016 12:07
4-Chlorotoluene	ND	0.50	1	09/19/2016 12:07
Dibromochloromethane	ND	0.50	1	09/19/2016 12:07
1,2-Dibromo-3-chloropropane	ND	0.20	1	09/19/2016 12:07
1,2-Dibromoethane (EDB)	ND	0.50	1	09/19/2016 12:07
Dibromomethane	ND	0.50	1	09/19/2016 12:07
1,2-Dichlorobenzene	ND	0.50	1	09/19/2016 12:07
1,3-Dichlorobenzene	ND	0.50	1	09/19/2016 12:07
1,4-Dichlorobenzene	ND	0.50	1	09/19/2016 12:07
Dichlorodifluoromethane	ND	0.50	1	09/19/2016 12:07
1,1-Dichloroethane	ND	0.50	1	09/19/2016 12:07
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	09/19/2016 12:07
1,1-Dichloroethene	ND	0.50	1	09/19/2016 12:07
cis-1,2-Dichloroethene	ND	0.50	1	09/19/2016 12:07
trans-1,2-Dichloroethene	ND	0.50	1	09/19/2016 12:07
1,2-Dichloropropane	ND	0.50	1	09/19/2016 12:07
1,3-Dichloropropane	ND	0.50	1	09/19/2016 12:07
2,2-Dichloropropane	ND	0.50	1	09/19/2016 12:07

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Analytical Report

Client:	GHD	**WorkOrder:**	1609730
Date Received:	9/16/16 15:40	**Extraction Method:**	SW5030B
Date Prepared:	9/19/16-9/20/16	**Analytical Method:**	SW8260B
Project:	F1-160913; 800 Franklin St, Oakland	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-4	**1609730-002B**	**Water**	**09/13/2016 07:45**	**GC16**	**126816**

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	09/19/2016 12:07
cis-1,3-Dichloropropene	ND	0.50	1	09/19/2016 12:07
trans-1,3-Dichloropropene	ND	0.50	1	09/19/2016 12:07
Diisopropyl ether (DIPE)	ND	0.50	1	09/19/2016 12:07
Ethylbenzene	ND	0.50	1	09/19/2016 12:07
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	09/19/2016 12:07
Freon 113	ND	0.50	1	09/19/2016 12:07
Hexachlorobutadiene	ND	0.50	1	09/19/2016 12:07
Hexachloroethane	ND	0.50	1	09/19/2016 12:07
2-Hexanone	ND	0.50	1	09/19/2016 12:07
Isopropylbenzene	ND	0.50	1	09/19/2016 12:07
4-Isopropyl toluene	ND	0.50	1	09/19/2016 12:07
Methyl-t-butyl ether (MTBE)	ND	0.50	1	09/19/2016 12:07
Methylene chloride	ND	0.50	1	09/19/2016 12:07
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	09/19/2016 12:07
Naphthalene	ND	0.50	1	09/19/2016 12:07
n-Propyl benzene	ND	0.50	1	09/19/2016 12:07
Styrene	ND	0.50	1	09/19/2016 12:07
1,1,1,2-Tetrachloroethane	ND	0.50	1	09/19/2016 12:07
1,1,2,2-Tetrachloroethane	ND	0.50	1	09/19/2016 12:07
Tetrachloroethene	ND	0.50	1	09/19/2016 12:07
Toluene	ND	0.50	1	09/19/2016 12:07
1,2,3-Trichlorobenzene	ND	0.50	1	09/19/2016 12:07
1,2,4-Trichlorobenzene	ND	0.50	1	09/19/2016 12:07
1,1,1-Trichloroethane	ND	0.50	1	09/19/2016 12:07
1,1,2-Trichloroethane	ND	0.50	1	09/19/2016 12:07
Trichloroethene	ND	0.50	1	09/19/2016 12:07
Trichlorofluoromethane	ND	0.50	1	09/19/2016 12:07
1,2,3-Trichloropropane	ND	0.50	1	09/19/2016 12:07
1,2,4-Trimethylbenzene	ND	0.50	1	09/19/2016 12:07
1,3,5-Trimethylbenzene	ND	0.50	1	09/19/2016 12:07
Vinyl Chloride	ND	0.50	1	09/19/2016 12:07
Xylenes, Total	ND	0.50	1	09/19/2016 12:07

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Analytical Report

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Date Received:	9/16/16 15:40	**Extraction Method:**	SW5030B
Date Prepared:	9/19/16-9/20/16	**Analytical Method:**	SW8260B
Project:	F1-160913; 800 Franklin St, Oakland	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-4	**1609730-002B**	**Water**	**09/13/2016 07:45**	**GC16**	**126816**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	94	70-130		09/19/2016 12:07
Toluene-d8	88	70-130		09/19/2016 12:07
4-BFB	91	70-130		09/19/2016 12:07

Analyst(s): KF

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Analytical Report

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Date Received:	9/16/16 15:40	**Extraction Method:**	SW5030B
Date Prepared:	9/19/16-9/20/16	**Analytical Method:**	SW8260B
Project:	F1-160913; 800 Franklin St, Oakland	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5	**1609730-003B**	**Water**	**09/13/2016 08:10**	**GC16**	**126816**

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	09/19/2016 12:51
tert-Amyl methyl ether (TAME)	ND	0.50	1	09/19/2016 12:51
Benzene	ND	0.50	1	09/19/2016 12:51
Bromobenzene	ND	0.50	1	09/19/2016 12:51
Bromochloromethane	ND	0.50	1	09/19/2016 12:51
Bromodichloromethane	ND	0.50	1	09/19/2016 12:51
Bromoform	ND	0.50	1	09/19/2016 12:51
Bromomethane	ND	0.50	1	09/19/2016 12:51
2-Butanone (MEK)	ND	2.0	1	09/19/2016 12:51
t-Butyl alcohol (TBA)	ND	2.0	1	09/19/2016 12:51
n-Butyl benzene	ND	0.50	1	09/19/2016 12:51
sec-Butyl benzene	ND	0.50	1	09/19/2016 12:51
tert-Butyl benzene	ND	0.50	1	09/19/2016 12:51
Carbon Disulfide	ND	0.50	1	09/19/2016 12:51
Carbon Tetrachloride	ND	0.50	1	09/19/2016 12:51
Chlorobenzene	ND	0.50	1	09/19/2016 12:51
Chloroethane	ND	0.50	1	09/19/2016 12:51
Chloroform	**0.71**	0.50	1	09/19/2016 12:51
Chloromethane	ND	0.50	1	09/19/2016 12:51
2-Chlorotoluene	ND	0.50	1	09/19/2016 12:51
4-Chlorotoluene	ND	0.50	1	09/19/2016 12:51
Dibromochloromethane	ND	0.50	1	09/19/2016 12:51
1,2-Dibromo-3-chloropropane	ND	0.20	1	09/19/2016 12:51
1,2-Dibromoethane (EDB)	ND	0.50	1	09/19/2016 12:51
Dibromomethane	ND	0.50	1	09/19/2016 12:51
1,2-Dichlorobenzene	ND	0.50	1	09/19/2016 12:51
1,3-Dichlorobenzene	ND	0.50	1	09/19/2016 12:51
1,4-Dichlorobenzene	ND	0.50	1	09/19/2016 12:51
Dichlorodifluoromethane	ND	0.50	1	09/19/2016 12:51
1,1-Dichloroethane	ND	0.50	1	09/19/2016 12:51
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	09/19/2016 12:51
1,1-Dichloroethene	ND	0.50	1	09/19/2016 12:51
cis-1,2-Dichloroethene	ND	0.50	1	09/19/2016 12:51
trans-1,2-Dichloroethene	ND	0.50	1	09/19/2016 12:51
1,2-Dichloropropane	ND	0.50	1	09/19/2016 12:51
1,3-Dichloropropane	ND	0.50	1	09/19/2016 12:51
2,2-Dichloropropane	ND	0.50	1	09/19/2016 12:51

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Client:	GHD	**WorkOrder:**	1609730
Date Received:	9/16/16 15:40	**Extraction Method:**	SW5030B
Date Prepared:	9/19/16-9/20/16	**Analytical Method:**	SW8260B
Project:	F1-160913; 800 Franklin St, Oakland	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5	1609730-003B	Water	09/13/2016 08:10	GC16	126816

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	09/19/2016 12:51
cis-1,3-Dichloropropene	ND	0.50	1	09/19/2016 12:51
trans-1,3-Dichloropropene	ND	0.50	1	09/19/2016 12:51
Diisopropyl ether (DIPE)	ND	0.50	1	09/19/2016 12:51
Ethylbenzene	ND	0.50	1	09/19/2016 12:51
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	09/19/2016 12:51
Freon 113	ND	0.50	1	09/19/2016 12:51
Hexachlorobutadiene	ND	0.50	1	09/19/2016 12:51
Hexachloroethane	ND	0.50	1	09/19/2016 12:51
2-Hexanone	ND	0.50	1	09/19/2016 12:51
Isopropylbenzene	ND	0.50	1	09/19/2016 12:51
4-Isopropyl toluene	ND	0.50	1	09/19/2016 12:51
Methyl-t-butyl ether (MTBE)	ND	0.50	1	09/19/2016 12:51
Methylene chloride	ND	0.50	1	09/19/2016 12:51
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	09/19/2016 12:51
Naphthalene	ND	0.50	1	09/19/2016 12:51
n-Propyl benzene	ND	0.50	1	09/19/2016 12:51
Styrene	ND	0.50	1	09/19/2016 12:51
1,1,1,2-Tetrachloroethane	ND	0.50	1	09/19/2016 12:51
1,1,2,2-Tetrachloroethane	ND	0.50	1	09/19/2016 12:51
Tetrachloroethene	ND	0.50	1	09/19/2016 12:51
Toluene	ND	0.50	1	09/19/2016 12:51
1,2,3-Trichlorobenzene	ND	0.50	1	09/19/2016 12:51
1,2,4-Trichlorobenzene	ND	0.50	1	09/19/2016 12:51
1,1,1-Trichloroethane	ND	0.50	1	09/19/2016 12:51
1,1,2-Trichloroethane	ND	0.50	1	09/19/2016 12:51
Trichloroethene	ND	0.50	1	09/19/2016 12:51
Trichlorofluoromethane	ND	0.50	1	09/19/2016 12:51
1,2,3-Trichloropropane	ND	0.50	1	09/19/2016 12:51
1,2,4-Trimethylbenzene	ND	0.50	1	09/19/2016 12:51
1,3,5-Trimethylbenzene	ND	0.50	1	09/19/2016 12:51
Vinyl Chloride	ND	0.50	1	09/19/2016 12:51
Xylenes, Total	ND	0.50	1	09/19/2016 12:51

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Date Prepared:	9/19/16-9/20/16	**Analytical Method:**	SW8260B
Project:	F1-160913; 800 Franklin St, Oakland	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5	**1609730-003B**	**Water**	**09/13/2016 08:10**	**GC16**	**126816**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	93	70-130		09/19/2016 12:51
Toluene-d8	91	70-130		09/19/2016 12:51
4-BFB	90	70-130		09/19/2016 12:51

Analyst(s): KF

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Analytical Report

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Date Received:	9/16/16 15:40	**Extraction Method:**	SW5030B
Date Prepared:	9/19/16-9/20/16	**Analytical Method:**	SW8260B
Project:	F1-160913; 800 Franklin St, Oakland	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1	1609730-004B	Water	09/13/2016 08:35	GC16	126816

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	09/19/2016 14:30
tert-Amyl methyl ether (TAME)	ND	0.50	1	09/19/2016 14:30
Benzene	ND	0.50	1	09/19/2016 14:30
Bromobenzene	ND	0.50	1	09/19/2016 14:30
Bromochloromethane	ND	0.50	1	09/19/2016 14:30
Bromodichloromethane	ND	0.50	1	09/19/2016 14:30
Bromoform	ND	0.50	1	09/19/2016 14:30
Bromomethane	ND	0.50	1	09/19/2016 14:30
2-Butanone (MEK)	ND	2.0	1	09/19/2016 14:30
t-Butyl alcohol (TBA)	ND	2.0	1	09/19/2016 14:30
n-Butyl benzene	ND	0.50	1	09/19/2016 14:30
sec-Butyl benzene	ND	0.50	1	09/19/2016 14:30
tert-Butyl benzene	ND	0.50	1	09/19/2016 14:30
Carbon Disulfide	ND	0.50	1	09/19/2016 14:30
Carbon Tetrachloride	ND	0.50	1	09/19/2016 14:30
Chlorobenzene	ND	0.50	1	09/19/2016 14:30
Chloroethane	ND	0.50	1	09/19/2016 14:30
Chloroform	ND	0.50	1	09/19/2016 14:30
Chloromethane	ND	0.50	1	09/19/2016 14:30
2-Chlorotoluene	ND	0.50	1	09/19/2016 14:30
4-Chlorotoluene	ND	0.50	1	09/19/2016 14:30
Dibromochloromethane	ND	0.50	1	09/19/2016 14:30
1,2-Dibromo-3-chloropropane	ND	0.20	1	09/19/2016 14:30
1,2-Dibromoethane (EDB)	ND	0.50	1	09/19/2016 14:30
Dibromomethane	ND	0.50	1	09/19/2016 14:30
1,2-Dichlorobenzene	ND	0.50	1	09/19/2016 14:30
1,3-Dichlorobenzene	ND	0.50	1	09/19/2016 14:30
1,4-Dichlorobenzene	ND	0.50	1	09/19/2016 14:30
Dichlorodifluoromethane	ND	0.50	1	09/19/2016 14:30
1,1-Dichloroethane	ND	0.50	1	09/19/2016 14:30
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	09/19/2016 14:30
1,1-Dichloroethene	ND	0.50	1	09/19/2016 14:30
cis-1,2-Dichloroethene	ND	0.50	1	09/19/2016 14:30
trans-1,2-Dichloroethene	ND	0.50	1	09/19/2016 14:30
1,2-Dichloropropane	ND	0.50	1	09/19/2016 14:30
1,3-Dichloropropane	ND	0.50	1	09/19/2016 14:30
2,2-Dichloropropane	ND	0.50	1	09/19/2016 14:30

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Date Prepared:	9/19/16-9/20/16	**Analytical Method:**	SW8260B
Project:	F1-160913; 800 Franklin St, Oakland	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1	**1609730-004B**	**Water**	**09/13/2016 08:35**	**GC16**	**126816**

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	09/19/2016 14:30
cis-1,3-Dichloropropene	ND	0.50	1	09/19/2016 14:30
trans-1,3-Dichloropropene	ND	0.50	1	09/19/2016 14:30
Diisopropyl ether (DIPE)	ND	0.50	1	09/19/2016 14:30
Ethylbenzene	ND	0.50	1	09/19/2016 14:30
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	09/19/2016 14:30
Freon 113	ND	0.50	1	09/19/2016 14:30
Hexachlorobutadiene	ND	0.50	1	09/19/2016 14:30
Hexachloroethane	ND	0.50	1	09/19/2016 14:30
2-Hexanone	ND	0.50	1	09/19/2016 14:30
Isopropylbenzene	ND	0.50	1	09/19/2016 14:30
4-Isopropyl toluene	ND	0.50	1	09/19/2016 14:30
Methyl-t-butyl ether (MTBE)	ND	0.50	1	09/19/2016 14:30
Methylene chloride	ND	0.50	1	09/19/2016 14:30
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	09/19/2016 14:30
Naphthalene	ND	0.50	1	09/19/2016 14:30
n-Propyl benzene	ND	0.50	1	09/19/2016 14:30
Styrene	ND	0.50	1	09/19/2016 14:30
1,1,1,2-Tetrachloroethane	ND	0.50	1	09/19/2016 14:30
1,1,2,2-Tetrachloroethane	ND	0.50	1	09/19/2016 14:30
Tetrachloroethene	ND	0.50	1	09/19/2016 14:30
Toluene	ND	0.50	1	09/19/2016 14:30
1,2,3-Trichlorobenzene	ND	0.50	1	09/19/2016 14:30
1,2,4-Trichlorobenzene	ND	0.50	1	09/19/2016 14:30
1,1,1-Trichloroethane	ND	0.50	1	09/19/2016 14:30
1,1,2-Trichloroethane	ND	0.50	1	09/19/2016 14:30
Trichloroethene	ND	0.50	1	09/19/2016 14:30
Trichlorofluoromethane	ND	0.50	1	09/19/2016 14:30
1,2,3-Trichloropropane	ND	0.50	1	09/19/2016 14:30
1,2,4-Trimethylbenzene	ND	0.50	1	09/19/2016 14:30
1,3,5-Trimethylbenzene	ND	0.50	1	09/19/2016 14:30
Vinyl Chloride	ND	0.50	1	09/19/2016 14:30
Xylenes, Total	ND	0.50	1	09/19/2016 14:30

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Date Prepared:	9/19/16-9/20/16	**Analytical Method:**	SW8260B
Project:	F1-160913; 800 Franklin St, Oakland	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1	**1609730-004B**	**Water**	**09/13/2016 08:35**	**GC16**	**126816**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	94	70-130		09/19/2016 14:30
Toluene-d8	87	70-130		09/19/2016 14:30
4-BFB	85	70-130		09/19/2016 14:30

Analyst(s): KF

(Cont.)

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Analytical Report

Client:	GHD	**WorkOrder:**	1609730
Date Received:	9/16/16 15:40	**Extraction Method:**	SW5030B
Date Prepared:	9/19/16-9/20/16	**Analytical Method:**	SW8260B
Project:	F1-160913; 800 Franklin St, Oakland	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3A	**1609730-005B**	**Water**	**09/13/2016 08:55**	**GC18**	**126816**

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	1000	100	09/20/2016 21:53
tert-Amyl methyl ether (TAME)	ND	50	100	09/20/2016 21:53
Benzene	**3000**	50	100	09/20/2016 21:53
Bromobenzene	ND	50	100	09/20/2016 21:53
Bromochloromethane	ND	50	100	09/20/2016 21:53
Bromodichloromethane	ND	50	100	09/20/2016 21:53
Bromoform	ND	50	100	09/20/2016 21:53
Bromomethane	ND	50	100	09/20/2016 21:53
2-Butanone (MEK)	ND	200	100	09/20/2016 21:53
t-Butyl alcohol (TBA)	ND	200	100	09/20/2016 21:53
n-Butyl benzene	ND	50	100	09/20/2016 21:53
sec-Butyl benzene	ND	50	100	09/20/2016 21:53
tert-Butyl benzene	ND	50	100	09/20/2016 21:53
Carbon Disulfide	ND	50	100	09/20/2016 21:53
Carbon Tetrachloride	ND	50	100	09/20/2016 21:53
Chlorobenzene	ND	50	100	09/20/2016 21:53
Chloroethane	ND	50	100	09/20/2016 21:53
Chloroform	ND	50	100	09/20/2016 21:53
Chloromethane	ND	50	100	09/20/2016 21:53
2-Chlorotoluene	ND	50	100	09/20/2016 21:53
4-Chlorotoluene	ND	50	100	09/20/2016 21:53
Dibromochloromethane	ND	50	100	09/20/2016 21:53
1,2-Dibromo-3-chloropropane	ND	20	100	09/20/2016 21:53
1,2-Dibromoethane (EDB)	ND	50	100	09/20/2016 21:53
Dibromomethane	ND	50	100	09/20/2016 21:53
1,2-Dichlorobenzene	ND	50	100	09/20/2016 21:53
1,3-Dichlorobenzene	ND	50	100	09/20/2016 21:53
1,4-Dichlorobenzene	ND	50	100	09/20/2016 21:53
Dichlorodifluoromethane	ND	50	100	09/20/2016 21:53
1,1-Dichloroethane	ND	50	100	09/20/2016 21:53
1,2-Dichloroethane (1,2-DCA)	ND	50	100	09/20/2016 21:53
1,1-Dichloroethene	ND	50	100	09/20/2016 21:53
cis-1,2-Dichloroethene	ND	50	100	09/20/2016 21:53
trans-1,2-Dichloroethene	ND	50	100	09/20/2016 21:53
1,2-Dichloropropane	ND	50	100	09/20/2016 21:53
1,3-Dichloropropane	ND	50	100	09/20/2016 21:53
2,2-Dichloropropane	ND	50	100	09/20/2016 21:53

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Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3A	**1609730-005B**	**Water**	**09/13/2016 08:55**	**GC18**	**126816**

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	50	100	09/20/2016 21:53
cis-1,3-Dichloropropene	ND	50	100	09/20/2016 21:53
trans-1,3-Dichloropropene	ND	50	100	09/20/2016 21:53
Diisopropyl ether (DIPE)	ND	50	100	09/20/2016 21:53
Ethylbenzene	**890**	50	100	09/20/2016 21:53
Ethyl tert-butyl ether (ETBE)	ND	50	100	09/20/2016 21:53
Freon 113	ND	50	100	09/20/2016 21:53
Hexachlorobutadiene	ND	50	100	09/20/2016 21:53
Hexachloroethane	ND	50	100	09/20/2016 21:53
2-Hexanone	ND	50	100	09/20/2016 21:53
Isopropylbenzene	ND	50	100	09/20/2016 21:53
4-Isopropyl toluene	ND	50	100	09/20/2016 21:53
Methyl-t-butyl ether (MTBE)	ND	50	100	09/20/2016 21:53
Methylene chloride	ND	50	100	09/20/2016 21:53
4-Methyl-2-pentanone (MIBK)	ND	50	100	09/20/2016 21:53
Naphthalene	**210**	50	100	09/20/2016 21:53
n-Propyl benzene	**91**	50	100	09/20/2016 21:53
Styrene	ND	50	100	09/20/2016 21:53
1,1,1,2-Tetrachloroethane	ND	50	100	09/20/2016 21:53
1,1,2,2-Tetrachloroethane	ND	50	100	09/20/2016 21:53
Tetrachloroethene	ND	50	100	09/20/2016 21:53
Toluene	**200**	50	100	09/20/2016 21:53
1,2,3-Trichlorobenzene	ND	50	100	09/20/2016 21:53
1,2,4-Trichlorobenzene	ND	50	100	09/20/2016 21:53
1,1,1-Trichloroethane	ND	50	100	09/20/2016 21:53
1,1,2-Trichloroethane	ND	50	100	09/20/2016 21:53
Trichloroethene	ND	50	100	09/20/2016 21:53
Trichlorofluoromethane	ND	50	100	09/20/2016 21:53
1,2,3-Trichloropropane	ND	50	100	09/20/2016 21:53
1,2,4-Trimethylbenzene	**790**	50	100	09/20/2016 21:53
1,3,5-Trimethylbenzene	**230**	50	100	09/20/2016 21:53
Vinyl Chloride	ND	50	100	09/20/2016 21:53
Xylenes, Total	**3300**	50	100	09/20/2016 21:53

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Project:	F1-160913; 800 Franklin St, Oakland	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3A	**1609730-005B**	**Water**	**09/13/2016 08:55**	**GC18**	**126816**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	98	70-130		09/20/2016 21:53
Toluene-d8	90	70-130		09/20/2016 21:53
4-BFB	107	70-130		09/20/2016 21:53

Analyst(s): HK

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Date Prepared:	9/19/16-9/20/16	**Analytical Method:**	SW8260B
Project:	F1-160913; 800 Franklin St, Oakland	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2	**1609730-006B**	**Water**	**09/13/2016 09:15**	**GC18**	**126816**

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	1000	100	09/20/2016 22:32
tert-Amyl methyl ether (TAME)	ND	50	100	09/20/2016 22:32
Benzene	**1900**	50	100	09/20/2016 22:32
Bromobenzene	ND	50	100	09/20/2016 22:32
Bromochloromethane	ND	50	100	09/20/2016 22:32
Bromodichloromethane	ND	50	100	09/20/2016 22:32
Bromoform	ND	50	100	09/20/2016 22:32
Bromomethane	ND	50	100	09/20/2016 22:32
2-Butanone (MEK)	ND	200	100	09/20/2016 22:32
t-Butyl alcohol (TBA)	ND	200	100	09/20/2016 22:32
n-Butyl benzene	ND	50	100	09/20/2016 22:32
sec-Butyl benzene	ND	50	100	09/20/2016 22:32
tert-Butyl benzene	ND	50	100	09/20/2016 22:32
Carbon Disulfide	ND	50	100	09/20/2016 22:32
Carbon Tetrachloride	ND	50	100	09/20/2016 22:32
Chlorobenzene	ND	50	100	09/20/2016 22:32
Chloroethane	ND	50	100	09/20/2016 22:32
Chloroform	ND	50	100	09/20/2016 22:32
Chloromethane	ND	50	100	09/20/2016 22:32
2-Chlorotoluene	ND	50	100	09/20/2016 22:32
4-Chlorotoluene	ND	50	100	09/20/2016 22:32
Dibromochloromethane	ND	50	100	09/20/2016 22:32
1,2-Dibromo-3-chloropropane	ND	20	100	09/20/2016 22:32
1,2-Dibromoethane (EDB)	ND	50	100	09/20/2016 22:32
Dibromomethane	ND	50	100	09/20/2016 22:32
1,2-Dichlorobenzene	ND	50	100	09/20/2016 22:32
1,3-Dichlorobenzene	ND	50	100	09/20/2016 22:32
1,4-Dichlorobenzene	ND	50	100	09/20/2016 22:32
Dichlorodifluoromethane	ND	50	100	09/20/2016 22:32
1,1-Dichloroethane	ND	50	100	09/20/2016 22:32
1,2-Dichloroethane (1,2-DCA)	ND	50	100	09/20/2016 22:32
1,1-Dichloroethene	ND	50	100	09/20/2016 22:32
cis-1,2-Dichloroethene	ND	50	100	09/20/2016 22:32
trans-1,2-Dichloroethene	ND	50	100	09/20/2016 22:32
1,2-Dichloropropane	ND	50	100	09/20/2016 22:32
1,3-Dichloropropane	ND	50	100	09/20/2016 22:32
2,2-Dichloropropane	ND	50	100	09/20/2016 22:32

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Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2	1609730-006B	Water	09/13/2016 09:15	GC18	126816

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	50	100	09/20/2016 22:32
cis-1,3-Dichloropropene	ND	50	100	09/20/2016 22:32
trans-1,3-Dichloropropene	ND	50	100	09/20/2016 22:32
Diisopropyl ether (DIPE)	ND	50	100	09/20/2016 22:32
Ethylbenzene	**1400**	50	100	09/20/2016 22:32
Ethyl tert-butyl ether (ETBE)	ND	50	100	09/20/2016 22:32
Freon 113	ND	50	100	09/20/2016 22:32
Hexachlorobutadiene	ND	50	100	09/20/2016 22:32
Hexachloroethane	ND	50	100	09/20/2016 22:32
2-Hexanone	ND	50	100	09/20/2016 22:32
Isopropylbenzene	ND	50	100	09/20/2016 22:32
4-Isopropyl toluene	ND	50	100	09/20/2016 22:32
Methyl-t-butyl ether (MTBE)	ND	50	100	09/20/2016 22:32
Methylene chloride	ND	50	100	09/20/2016 22:32
4-Methyl-2-pentanone (MIBK)	ND	50	100	09/20/2016 22:32
Naphthalene	**280**	50	100	09/20/2016 22:32
n-Propyl benzene	**100**	50	100	09/20/2016 22:32
Styrene	ND	50	100	09/20/2016 22:32
1,1,1,2-Tetrachloroethane	ND	50	100	09/20/2016 22:32
1,1,2,2-Tetrachloroethane	ND	50	100	09/20/2016 22:32
Tetrachloroethene	ND	50	100	09/20/2016 22:32
Toluene	**2200**	50	100	09/20/2016 22:32
1,2,3-Trichlorobenzene	ND	50	100	09/20/2016 22:32
1,2,4-Trichlorobenzene	ND	50	100	09/20/2016 22:32
1,1,1-Trichloroethane	ND	50	100	09/20/2016 22:32
1,1,2-Trichloroethane	ND	50	100	09/20/2016 22:32
Trichloroethene	ND	50	100	09/20/2016 22:32
Trichlorofluoromethane	ND	50	100	09/20/2016 22:32
1,2,3-Trichloropropane	ND	50	100	09/20/2016 22:32
1,2,4-Trimethylbenzene	**750**	50	100	09/20/2016 22:32
1,3,5-Trimethylbenzene	**150**	50	100	09/20/2016 22:32
Vinyl Chloride	ND	50	100	09/20/2016 22:32
Xylenes, Total	**4800**	50	100	09/20/2016 22:32

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Project:	F1-160913; 800 Franklin St, Oakland	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2	**1609730-006B**	**Water**	**09/13/2016 09:15**	**GC18**	**126816**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	95	70-130		09/20/2016 22:32
Toluene-d8	91	70-130		09/20/2016 22:32
4-BFB	102	70-130		09/20/2016 22:32

Analyst(s): HK

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Date Prepared:	9/19/16-9/20/16	**Analytical Method:**	SW8260B
Project:	F1-160913; 800 Franklin St, Oakland	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-7	1609730-007B	Water	09/13/2016 09:40	GC16	126880

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	09/20/2016 22:28
tert-Amyl methyl ether (TAME)	ND	0.50	1	09/20/2016 22:28
Benzene	ND	0.50	1	09/20/2016 22:28
Bromobenzene	ND	0.50	1	09/20/2016 22:28
Bromochloromethane	ND	0.50	1	09/20/2016 22:28
Bromodichloromethane	ND	0.50	1	09/20/2016 22:28
Bromoform	ND	0.50	1	09/20/2016 22:28
Bromomethane	ND	0.50	1	09/20/2016 22:28
2-Butanone (MEK)	ND	2.0	1	09/20/2016 22:28
t-Butyl alcohol (TBA)	ND	2.0	1	09/20/2016 22:28
n-Butyl benzene	ND	0.50	1	09/20/2016 22:28
sec-Butyl benzene	ND	0.50	1	09/20/2016 22:28
tert-Butyl benzene	ND	0.50	1	09/20/2016 22:28
Carbon Disulfide	ND	0.50	1	09/20/2016 22:28
Carbon Tetrachloride	ND	0.50	1	09/20/2016 22:28
Chlorobenzene	ND	0.50	1	09/20/2016 22:28
Chloroethane	ND	0.50	1	09/20/2016 22:28
Chloroform	ND	0.50	1	09/20/2016 22:28
Chloromethane	ND	0.50	1	09/20/2016 22:28
2-Chlorotoluene	ND	0.50	1	09/20/2016 22:28
4-Chlorotoluene	ND	0.50	1	09/20/2016 22:28
Dibromochloromethane	ND	0.50	1	09/20/2016 22:28
1,2-Dibromo-3-chloropropane	ND	0.20	1	09/20/2016 22:28
1,2-Dibromoethane (EDB)	ND	0.50	1	09/20/2016 22:28
Dibromomethane	ND	0.50	1	09/20/2016 22:28
1,2-Dichlorobenzene	ND	0.50	1	09/20/2016 22:28
1,3-Dichlorobenzene	ND	0.50	1	09/20/2016 22:28
1,4-Dichlorobenzene	ND	0.50	1	09/20/2016 22:28
Dichlorodifluoromethane	ND	0.50	1	09/20/2016 22:28
1,1-Dichloroethane	ND	0.50	1	09/20/2016 22:28
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	09/20/2016 22:28
1,1-Dichloroethene	ND	0.50	1	09/20/2016 22:28
cis-1,2-Dichloroethene	ND	0.50	1	09/20/2016 22:28
trans-1,2-Dichloroethene	ND	0.50	1	09/20/2016 22:28
1,2-Dichloropropane	ND	0.50	1	09/20/2016 22:28
1,3-Dichloropropane	ND	0.50	1	09/20/2016 22:28
2,2-Dichloropropane	ND	0.50	1	09/20/2016 22:28

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Date Prepared:	9/19/16-9/20/16	**Analytical Method:**	SW8260B
Project:	F1-160913; 800 Franklin St, Oakland	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-7	1609730-007B	Water	09/13/2016 09:40	GC16	126880

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	09/20/2016 22:28
cis-1,3-Dichloropropene	ND	0.50	1	09/20/2016 22:28
trans-1,3-Dichloropropene	ND	0.50	1	09/20/2016 22:28
Diisopropyl ether (DIPE)	ND	0.50	1	09/20/2016 22:28
Ethylbenzene	ND	0.50	1	09/20/2016 22:28
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	09/20/2016 22:28
Freon 113	ND	0.50	1	09/20/2016 22:28
Hexachlorobutadiene	ND	0.50	1	09/20/2016 22:28
Hexachloroethane	ND	0.50	1	09/20/2016 22:28
2-Hexanone	ND	0.50	1	09/20/2016 22:28
Isopropylbenzene	ND	0.50	1	09/20/2016 22:28
4-Isopropyl toluene	ND	0.50	1	09/20/2016 22:28
Methyl-t-butyl ether (MTBE)	ND	0.50	1	09/20/2016 22:28
Methylene chloride	ND	0.50	1	09/20/2016 22:28
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	09/20/2016 22:28
Naphthalene	ND	0.50	1	09/20/2016 22:28
n-Propyl benzene	ND	0.50	1	09/20/2016 22:28
Styrene	ND	0.50	1	09/20/2016 22:28
1,1,1,2-Tetrachloroethane	ND	0.50	1	09/20/2016 22:28
1,1,2,2-Tetrachloroethane	ND	0.50	1	09/20/2016 22:28
Tetrachloroethene	**0.77**	0.50	1	09/20/2016 22:28
Toluene	ND	0.50	1	09/20/2016 22:28
1,2,3-Trichlorobenzene	ND	0.50	1	09/20/2016 22:28
1,2,4-Trichlorobenzene	ND	0.50	1	09/20/2016 22:28
1,1,1-Trichloroethane	ND	0.50	1	09/20/2016 22:28
1,1,2-Trichloroethane	ND	0.50	1	09/20/2016 22:28
Trichloroethene	ND	0.50	1	09/20/2016 22:28
Trichlorofluoromethane	ND	0.50	1	09/20/2016 22:28
1,2,3-Trichloropropane	ND	0.50	1	09/20/2016 22:28
1,2,4-Trimethylbenzene	ND	0.50	1	09/20/2016 22:28
1,3,5-Trimethylbenzene	ND	0.50	1	09/20/2016 22:28
Vinyl Chloride	ND	0.50	1	09/20/2016 22:28
Xylenes, Total	ND	0.50	1	09/20/2016 22:28

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Date Prepared:	9/19/16-9/20/16	**Analytical Method:**	SW8260B
Project:	F1-160913; 800 Franklin St, Oakland	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-7	**1609730-007B**	**Water**	**09/13/2016 09:40**	**GC16**	**126880**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	97	70-130		09/20/2016 22:28
Toluene-d8	84	70-130		09/20/2016 22:28
4-BFB	90	70-130		09/20/2016 22:28

Analyst(s): KF

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Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
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Analytical Report

Client:	GHD	**WorkOrder:**	1609730
Date Received:	9/16/16 15:40	**Extraction Method:**	SW5030B
Date Prepared:	9/18/16-9/22/16	**Analytical Method:**	SW8021B/8015Bm
Project:	F1-160913; 800 Franklin St, Oakland	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-6	**1609730-001A**	**Water**	**09/13/2016 07:10**	**GC7**	**126782**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	09/22/2016 07:23
MTBE	---	5.0	1	09/22/2016 07:23
Benzene	---	0.50	1	09/22/2016 07:23
Toluene	---	0.50	1	09/22/2016 07:23
Ethylbenzene	---	0.50	1	09/22/2016 07:23
Xylenes	---	1.5	1	09/22/2016 07:23

Surrogates	REC (%)	Limits	
aaa-TFT	113	89-115	09/22/2016 07:23

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-4	**1609730-002A**	**Water**	**09/13/2016 07:45**	**GC19**	**126782**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	09/18/2016 20:14
MTBE	---	5.0	1	09/18/2016 20:14
Benzene	---	0.50	1	09/18/2016 20:14
Toluene	---	0.50	1	09/18/2016 20:14
Ethylbenzene	---	0.50	1	09/18/2016 20:14
Xylenes	---	1.5	1	09/18/2016 20:14

Surrogates	REC (%)	Limits	
aaa-TFT	88	70-130	09/18/2016 20:14

Analyst(s): IA

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Analytical Report

Client: GHD
Date Received: 9/16/16 15:40
Date Prepared: 9/18/16-9/22/16
Project: F1-160913; 800 Franklin St, Oakland

WorkOrder: 1609730
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5	1609730-003A	Water	09/13/2016 08:10	GC19	126782

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	09/18/2016 19:43
MTBE	---	5.0	1	09/18/2016 19:43
Benzene	---	0.50	1	09/18/2016 19:43
Toluene	---	0.50	1	09/18/2016 19:43
Ethylbenzene	---	0.50	1	09/18/2016 19:43
Xylenes	---	1.5	1	09/18/2016 19:43

Surrogates	REC (%)	Limits	
aaa-TFT	87	70-130	09/18/2016 19:43

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1	1609730-004A	Water	09/13/2016 08:35	GC19	126782

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	09/18/2016 18:40
MTBE	---	5.0	1	09/18/2016 18:40
Benzene	---	0.50	1	09/18/2016 18:40
Toluene	---	0.50	1	09/18/2016 18:40
Ethylbenzene	---	0.50	1	09/18/2016 18:40
Xylenes	---	1.5	1	09/18/2016 18:40

Surrogates	REC (%)	Limits	
aaa-TFT	84	70-130	09/18/2016 18:40

Analyst(s): IA

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Analytical Report

Client:	GHD	**WorkOrder:**	1609730
Date Received:	9/16/16 15:40	**Extraction Method:**	SW5030B
Date Prepared:	9/18/16-9/22/16	**Analytical Method:**	SW8021B/8015Bm
Project:	F1-160913; 800 Franklin St, Oakland	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3A	**1609730-005A**	**Water**	**09/13/2016 08:55**	**GC19**	**126782**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	**26,000**	2500	50	09/22/2016 06:54
MTBE	**---**	250	50	09/22/2016 06:54
Benzene	**---**	25	50	09/22/2016 06:54
Toluene	**---**	25	50	09/22/2016 06:54
Ethylbenzene	**---**	25	50	09/22/2016 06:54
Xylenes	**---**	75	50	09/22/2016 06:54

Surrogates	REC (%)	Limits	
aaa-TFT	102	89-115	09/22/2016 06:54

Analyst(s): IA Analytical Comments: d1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2	**1609730-006A**	**Water**	**09/13/2016 09:15**	**GC19**	**126782**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	**37,000**	5000	100	09/22/2016 06:24
MTBE	**---**	500	100	09/22/2016 06:24
Benzene	**---**	50	100	09/22/2016 06:24
Toluene	**---**	50	100	09/22/2016 06:24
Ethylbenzene	**---**	50	100	09/22/2016 06:24
Xylenes	**---**	150	100	09/22/2016 06:24

Surrogates	REC (%)	Limits	
aaa-TFT	105	89-115	09/22/2016 06:24

Analyst(s): IA Analytical Comments: d1

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Angela Rydelius, Lab Manager

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Analytical Report

Client:	GHD	**WorkOrder:**	1609730
Date Received:	9/16/16 15:40	**Extraction Method:**	SW5030B
Date Prepared:	9/18/16-9/22/16	**Analytical Method:**	SW8021B/8015Bm
Project:	F1-160913; 800 Franklin St, Oakland	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-7	1609730-007A	Water	09/13/2016 09:40	GC19	126782

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	09/18/2016 20:46
MTBE	---	5.0	1	09/18/2016 20:46
Benzene	---	0.50	1	09/18/2016 20:46
Toluene	---	0.50	1	09/18/2016 20:46
Ethylbenzene	---	0.50	1	09/18/2016 20:46
Xylenes	---	1.5	1	09/18/2016 20:46

Surrogates	REC (%)	Limits	
aaa-TFT	88	70-130	09/18/2016 20:46

Analyst(s): IA

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Analytical Report

Client:	GHD	**WorkOrder:**	1609730
Date Received:	9/16/16 15:40	**Extraction Method:**	SW3510C/3630C
Date Prepared:	9/16/16	**Analytical Method:**	SW8015B
Project:	F1-160913; 800 Franklin St, Oakland	**Unit:**	µg/L

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-6	1609730-001A	Water	09/13/2016 07:10	GC11B	126680

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	09/17/2016 04:03

Surrogates	REC (%)	Limits	
C9	87	70-130	09/17/2016 04:03

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-4	1609730-002A	Water	09/13/2016 07:45	GC11B	126680

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	09/17/2016 02:06

Surrogates	REC (%)	Limits	
C9	86	70-130	09/17/2016 02:06

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5	1609730-003A	Water	09/13/2016 08:10	GC11B	126680

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	09/17/2016 04:42

Surrogates	REC (%)	Limits	
C9	87	70-130	09/17/2016 04:42

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1	1609730-004A	Water	09/13/2016 08:35	GC11B	126680

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	09/17/2016 02:45

Surrogates	REC (%)	Limits	
C9	88	70-130	09/17/2016 02:45

Analyst(s): TK

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Analytical Report

Client: GHD
Date Received: 9/16/16 15:40
Date Prepared: 9/16/16
Project: F1-160913; 800 Franklin St, Oakland

WorkOrder: 1609730
Extraction Method: SW3510C/3630C
Analytical Method: SW8015B
Unit: µg/L

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3A	1609730-005A	Water	09/13/2016 08:55	GC11B	126680

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**1800**	50	1	09/19/2016 17:12

Surrogates	REC (%)	Limits	
C26	91	70-130	09/19/2016 17:12

Analyst(s): TK Analytical Comments: e4

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2	1609730-006A	Water	09/13/2016 09:15	GC11B	126680

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**2300**	50	1	09/19/2016 17:53

Surrogates	REC (%)	Limits	
C26	92	70-130	09/19/2016 17:53

Analyst(s): TK Analytical Comments: e4

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-7	1609730-007A	Water	09/13/2016 09:40	GC11B	126680

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	09/19/2016 18:33

Surrogates	REC (%)	Limits	
C9	92	70-130	09/19/2016 18:33

Analyst(s): TK

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Quality Control Report

Client:	GHD	**WorkOrder:**	1609730
Date Prepared:	9/19/16	**BatchID:**	126816
Date Analyzed:	9/19/16	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	F1-160913; 800 Franklin St, Oakland	**Sample ID:**	MB/LCS-126816 1609730-001BMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	9.25	0.50	10	-	92	54-140
Benzene	ND	9.15	0.50	10	-	91	47-158
Bromobenzene	ND	-	0.50	-	-	-	-
Bromochloromethane	ND	-	0.50	-	-	-	-
Bromodichloromethane	ND	-	0.50	-	-	-	-
Bromoform	ND	-	0.50	-	-	-	-
Bromomethane	ND	-	0.50	-	-	-	-
2-Butanone (MEK)	ND	-	2.0	-	-	-	-
t-Butyl alcohol (TBA)	ND	32.0	2.0	40	-	80	42-140
n-Butyl benzene	ND	-	0.50	-	-	-	-
sec-Butyl benzene	ND	-	0.50	-	-	-	-
tert-Butyl benzene	ND	-	0.50	-	-	-	-
Carbon Disulfide	ND	-	0.50	-	-	-	-
Carbon Tetrachloride	ND	-	0.50	-	-	-	-
Chlorobenzene	ND	8.67	0.50	10	-	87	43-157
Chloroethane	ND	-	0.50	-	-	-	-
Chloroform	ND	-	0.50	-	-	-	-
Chloromethane	ND	-	0.50	-	-	-	-
2-Chlorotoluene	ND	-	0.50	-	-	-	-
4-Chlorotoluene	ND	-	0.50	-	-	-	-
Dibromochloromethane	ND	-	0.50	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.20	-	-	-	-
1,2-Dibromoethane (EDB)	ND	9.61	0.50	10	-	96	44-155
Dibromomethane	ND	-	0.50	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.50	-	-	-	-
Dichlorodifluoromethane	ND	-	0.50	-	-	-	-
1,1-Dichloroethane	ND	-	0.50	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	9.20	0.50	10	-	92	66-125
1,1-Dichloroethene	ND	10.0	0.50	10	-	100	47-149
cis-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
1,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,3-Dichloropropane	ND	-	0.50	-	-	-	-
2,2-Dichloropropane	ND	-	0.50	-	-	-	-

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Quality Control Report

Client:	GHD	**WorkOrder:**	1609730
Date Prepared:	9/19/16	**BatchID:**	126816
Date Analyzed:	9/19/16	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	F1-160913; 800 Franklin St, Oakland	**Sample ID:**	MB/LCS-126816 1609730-001BMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
1,1-Dichloropropene	ND	-	0.50	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
Diisopropyl ether (DIPE)	ND	9.53	0.50	10	-	95	57-136
Ethylbenzene	ND	-	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	9.65	0.50	10	-	97	55-137
Freon 113	ND	-	0.50	-	-	-	-
Hexachlorobutadiene	ND	-	0.50	-	-	-	-
Hexachloroethane	ND	-	0.50	-	-	-	-
2-Hexanone	ND	-	0.50	-	-	-	-
Isopropylbenzene	ND	-	0.50	-	-	-	-
4-Isopropyl toluene	ND	-	0.50	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	8.96	0.50	10	-	90	53-139
Methylene chloride	ND	-	0.50	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.50	-	-	-	-
Naphthalene	ND	-	0.50	-	-	-	-
n-Propyl benzene	ND	-	0.50	-	-	-	-
Styrene	ND	-	0.50	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
Tetrachloroethene	ND	-	0.50	-	-	-	-
Toluene	ND	8.32	0.50	10	-	83	52-137
1,2,3-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.50	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.50	-	-	-	-
Trichloroethene	ND	9.66	0.50	10	-	97	43-157
Trichlorofluoromethane	ND	-	0.50	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.50	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.50	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.50	-	-	-	-
Vinyl Chloride	ND	-	0.50	-	-	-	-
Xylenes, Total	ND	-	0.50	-	-	-	-

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Quality Control Report

Client:	GHD	**WorkOrder:**	1609730
Date Prepared:	9/19/16	**BatchID:**	126816
Date Analyzed:	9/19/16	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	F1-160913; 800 Franklin St, Oakland	**Sample ID:**	MB/LCS-126816 1609730-001BMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
Dibromofluoromethane	23.5	24.4		25	94	97	70-130
Toluene-d8	22.2	21.9		25	89	88	70-130
4-BFB	2.22	2.10		2.5	89	84	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	10.8	10.9	10	ND	108	109	69-139	1.32	20
Benzene	10.0	9.87	10	ND	97	96	69-141	1.31	20
t-Butyl alcohol (TBA)	43.0	47.0	40	ND	107	118	41-152	9.06	20
Chlorobenzene	8.48	8.23	10	ND	85	82	77-120	3.06	20
1,2-Dibromoethane (EDB)	9.47	9.52	10	ND	95	95	76-135	0	20
1,2-Dichloroethane (1,2-DCA)	10.2	10.4	10	ND	102	104	73-139	1.42	20
1,1-Dichloroethene	9.98	9.67	10	ND	100	97	59-140	3.17	20
Diisopropyl ether (DIPE)	10.4	10.2	10	ND	104	102	72-140	1.44	20
Ethyl tert-butyl ether (ETBE)	10.9	11.0	10	ND	109	110	71-140	0.583	20
Methyl-t-butyl ether (MTBE)	10.5	10.7	10	ND	105	107	73-139	2.09	20
Toluene	8.42	8.14	10	ND	82	80	71-128	3.43	20
Trichloroethene	9.96	9.80	10	ND	100	98	64-132	1.64	20
Surrogate Recovery									
Dibromofluoromethane	25.0	25.0	25		100	100	73-131	0	20
Toluene-d8	20.5	20.4	25		82	82	72-117	0	20
4-BFB	2.35	2.37	2.5		94	95	74-116	0.763	20

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Quality Control Report

Client:	GHD	**WorkOrder:**	1609730
Date Prepared:	9/20/16	**BatchID:**	126880
Date Analyzed:	9/20/16	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	F1-160913; 800 Franklin St, Oakland	**Sample ID:**	MB/LCS-126880 1609762-014AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	10.3	0.50	10	-	103	54-140
Benzene	ND	10.1	0.50	10	-	101	47-158
Bromobenzene	ND	-	0.50	-	-	-	-
Bromochloromethane	ND	-	0.50	-	-	-	-
Bromodichloromethane	ND	-	0.50	-	-	-	-
Bromoform	ND	-	0.50	-	-	-	-
Bromomethane	ND	-	0.50	-	-	-	-
2-Butanone (MEK)	ND	-	2.0	-	-	-	-
t-Butyl alcohol (TBA)	ND	37.4	2.0	40	-	94	42-140
n-Butyl benzene	ND	-	0.50	-	-	-	-
sec-Butyl benzene	ND	-	0.50	-	-	-	-
tert-Butyl benzene	ND	-	0.50	-	-	-	-
Carbon Disulfide	ND	-	0.50	-	-	-	-
Carbon Tetrachloride	ND	-	0.50	-	-	-	-
Chlorobenzene	ND	8.54	0.50	10	-	85	43-157
Chloroethane	ND	-	0.50	-	-	-	-
Chloroform	ND	-	0.50	-	-	-	-
Chloromethane	ND	-	0.50	-	-	-	-
2-Chlorotoluene	ND	-	0.50	-	-	-	-
4-Chlorotoluene	ND	-	0.50	-	-	-	-
Dibromochloromethane	ND	-	0.50	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.20	-	-	-	-
1,2-Dibromoethane (EDB)	ND	8.85	0.50	10	-	88	44-155
Dibromomethane	ND	-	0.50	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.50	-	-	-	-
Dichlorodifluoromethane	ND	-	0.50	-	-	-	-
1,1-Dichloroethane	ND	-	0.50	-	-	-	-
1,1-Dichloroethene	ND	10.0	0.50	10	-	100	47-149
1,2-Dichloroethane (1,2-DCA)	ND	10.3	0.50	10	-	103	66-125
cis-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
1,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,3-Dichloropropane	ND	-	0.50	-	-	-	-
2,2-Dichloropropane	ND	-	0.50	-	-	-	-

(Cont.)

NELAP 4033ORELAP

QA/QC Officer

McCampbell 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

Quality Control Report

Client:	GHD	**WorkOrder:**	1609730
Date Prepared:	9/20/16	**BatchID:**	126880
Date Analyzed:	9/20/16	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	F1-160913; 800 Franklin St, Oakland	**Sample ID:**	MB/LCS-126880 1609762-014AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
1,1-Dichloropropene	ND	-	0.50	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
Diisopropyl ether (DIPE)	ND	10.3	0.50	10	-	103	57-136
Ethylbenzene	ND	-	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	10.7	0.50	10	-	107	55-137
Freon 113	ND	-	0.50	-	-	-	-
Hexachlorobutadiene	ND	-	0.50	-	-	-	-
Hexachloroethane	ND	-	0.50	-	-	-	-
2-Hexanone	ND	-	0.50	-	-	-	-
Isopropylbenzene	ND	-	0.50	-	-	-	-
4-Isopropyl toluene	ND	-	0.50	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	9.99	0.50	10	-	100	53-139
Methylene chloride	ND	-	0.50	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.50	-	-	-	-
Naphthalene	ND	-	0.50	-	-	-	-
n-Propyl benzene	ND	-	0.50	-	-	-	-
Styrene	ND	-	0.50	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
Tetrachloroethene	ND	-	0.50	-	-	-	-
Toluene	ND	8.78	0.50	10	-	88	52-137
1,2,3-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.50	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.50	-	-	-	-
Trichloroethene	ND	9.78	0.50	10	-	98	43-157
Trichlorofluoromethane	ND	-	0.50	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.50	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.50	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.50	-	-	-	-
Vinyl Chloride	ND	-	0.50	-	-	-	-
Xylenes, Total	ND	-	0.50	-	-	-	-

(Cont.)

NELAP 4033ORELAP

QA/QC Officer

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Quality Control Report

Client:	GHD	**WorkOrder:**	1609730
Date Prepared:	9/20/16	**BatchID:**	126880
Date Analyzed:	9/20/16	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	F1-160913; 800 Franklin St, Oakland	**Sample ID:**	MB/LCS-126880 1609762-014AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
Dibromofluoromethane	24.0	24.5		25	96	98	70-130
Toluene-d8	21.2	21.4		25	85	86	70-130
4-BFB	2.22	2.52		2.5	89	101	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	10.7	11.0	10	ND	107	110	69-139	2.95	20
Benzene	10.0	10.2	10	ND	100	102	69-141	1.80	20
t-Butyl alcohol (TBA)	41.6	43.7	40	ND	104	109	41-152	4.87	20
Chlorobenzene	8.74	8.82	10	ND	87	88	77-120	0.918	20
1,2-Dibromoethane (EDB)	9.80	9.88	10	ND	98	99	76-135	0.797	20
1,1-Dichloroethene	10.4	10.4	10	ND	104	105	59-140	0.866	20
1,2-Dichloroethane (1,2-DCA)	10.1	10.5	10	ND	101	105	73-139	3.22	20
Diisopropyl ether (DIPE)	10.6	11.0	10	ND	106	110	72-140	3.29	20
Ethyl tert-butyl ether (ETBE)	10.8	11.3	10	ND	108	113	71-140	4.50	20
Methyl-t-butyl ether (MTBE)	10.6	10.9	10	ND	106	109	73-139	3.30	20
Toluene	8.44	8.48	10	ND	83	84	71-128	0.545	20
Trichloroethene	10.0	10.2	10	ND	100	102	64-132	1.89	20
Surrogate Recovery									
Dibromofluoromethane	24.1	24.3	25		96	97	70-130	0.787	20
Toluene-d8	20.0	20.1	25		80	80	70-130	0	20
4-BFB	2.24	2.30	2.5		90	92	70-130	2.69	20

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Quality Control Report

Client:	GHD	**WorkOrder:**	1609730
Date Prepared:	9/18/16	**BatchID:**	126782
Date Analyzed:	9/18/16	**Extraction Method:**	SW5030B
Instrument:	GC19	**Analytical Method:**	SW8021B/8015Bm
Matrix:	Water	**Unit:**	µg/L
Project:	F1-160913; 800 Franklin St, Oakland	**Sample ID:**	MB/LCS-126782 1609762-009BMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	60.1	40	60	-	100	85-112
MTBE	ND	9.66	5.0	10	-	97	74-127
Benzene	ND	9.92	0.50	10	-	99	81-124
Toluene	ND	10.3	0.50	10	-	103	79-131
Ethylbenzene	ND	10.6	0.50	10	-	106	86-127
Xylenes	ND	32.0	1.5	30	-	107	87-133
Surrogate Recovery							
aaa-TFT	8.89	9.24		10	89	92	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	NR	NR		39000	NR	NR	-	NR	
MTBE	NR	NR		ND<500	NR	NR	-	NR	
Benzene	NR	NR		4600	NR	NR	-	NR	
Toluene	NR	NR		11000	NR	NR	-	NR	
Ethylbenzene	NR	NR		1200	NR	NR	-	NR	
Xylenes	NR	NR		22000	NR	NR	-	NR	
Surrogate Recovery									
aaa-TFT	NR	NR			NR	NR	-	NR	

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Quality Control Report

Client:	GHD	**WorkOrder:**	1609730
Date Prepared:	9/15/16	**BatchID:**	126680
Date Analyzed:	9/16/16	**Extraction Method:**	SW3510C/3630C
Instrument:	GC6B	**Analytical Method:**	SW8015B
Matrix:	Water	**Unit:**	µg/L
Project:	F1-160913; 800 Franklin St, Oakland	**Sample ID:**	MB/LCS/LCSD-126680

QC Report for SW8015B w/ SG Clean-Up

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
TPH-Diesel (C10-C23)	ND	50	-	-	-
TPH-Motor Oil (C18-C36)	ND	250	-	-	-
Surrogate Recovery					
C9	562		625	90	65-122

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	1160	1180	1000	116	118	61-157	1.77	30
Surrogate Recovery								
C9	567	557	625	91	89	65-122	1.75	30

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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1609730 **ClientCode: CETE**

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

Report to:
Eric Chodoroff
GHD
5900 Hollis St, Suite A
Emeryville, CA 94608
(510) 420-0700 FAX: (510) 420-9170

Email: eric.chodoroff@ghd.com
cc/3rd Party: bryan.fong@ghd.com;
PO:
ProjectNo: F1-160913; 800 Franklin St, Oakland

Bill to:
Jeffrey Cloud
GHD
5900 Hollis St, Ste. A
Emeryville, CA 94608
Jeffrey.Cloud@ghd.com

Requested TAT: **5 days;**

Date Received: **09/16/2016**
Date Logged: **09/16/2016**

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
1609730-001	MW-6	Water	9/13/2016 7:10	☐	B	A	A	A								
1609730-002	MW-4	Water	9/13/2016 7:45	☐	B	A		A								
1609730-003	MW-5	Water	9/13/2016 8:10	☐	B	A		A								
1609730-004	MW-1	Water	9/13/2016 8:35	☐	B	A		A								
1609730-005	MW-3A	Water	9/13/2016 8:55	☐	B	A		A								
1609730-006	MW-2	Water	9/13/2016 9:15	☐	B	A		A								
1609730-007	MW-7	Water	9/13/2016 9:40	☐	B	A		A								

Test Legend:

1	8260B_W	2	G-MBTEX_W	3	PREDF REPORT	4	TPH(D)WSG_W
5		6		7		8	
9		10		11		12	

Prepared by: Maria Venegas

The following SampIDs: 001A, 002A, 003A, 004A, 005A, 006A, 007A contain testgroup Multi RangeWSG_W.

Comments:

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

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WORK ORDER SUMMARY

Client Name: GHD
Project: F1-160913; 800 Franklin St, Oakland
Comments:

QC Level: LEVEL 2
Client Contact: Eric Chodoroff
Contact's Email: eric.chodoroff@ghd.com

Work Order: 1609730
Date Logged: 9/16/2016

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

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1609730-001A	MW-6	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	3	2 VOAs w/HCL + 2-aVOAs (multi-range)	☐	9/13/2016 7:10	5 days	Present	☐	
1609730-001B	MW-6	Water	SW8260B (VOCs)	1	VOA w/ HCl	☐	9/13/2016 7:10	5 days	Present	☐	
1609730-002A	MW-4	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	3	2 VOAs w/HCL + 2-aVOAs (multi-range)	☐	9/13/2016 7:45	5 days	Present	☐	
1609730-002B	MW-4	Water	SW8260B (VOCs)	1	VOA w/ HCl	☐	9/13/2016 7:45	5 days	Present	☐	
1609730-003A	MW-5	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	3	2 VOAs w/HCL + 2-aVOAs (multi-range)	☐	9/13/2016 8:10	5 days	Present	☐	
1609730-003B	MW-5	Water	SW8260B (VOCs)	1	VOA w/ HCl	☐	9/13/2016 8:10	5 days	Present	☐	
1609730-004A	MW-1	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	3	2 VOAs w/HCL + 2-aVOAs (multi-range)	☐	9/13/2016 8:35	5 days	Present	☐	
1609730-004B	MW-1	Water	SW8260B (VOCs)	1	VOA w/ HCl	☐	9/13/2016 8:35	5 days	Present	☐	
1609730-005A	MW-3A	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	3	2 VOAs w/HCL + 2-aVOAs (multi-range)	☐	9/13/2016 8:55	5 days	Present	☐	
1609730-005B	MW-3A	Water	SW8260B (VOCs)	1	VOA w/ HCl	☐	9/13/2016 8:55	5 days	Present	☐	
1609730-006A	MW-2	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	3	2 VOAs w/HCL + 2-aVOAs (multi-range)	☐	9/13/2016 9:15	5 days	Present	☐	
1609730-006B	MW-2	Water	SW8260B (VOCs)	1	VOA w/ HCl	☐	9/13/2016 9:15	5 days	Present	☐	
1609730-007A	MW-7	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	3	2 VOAs w/HCL + 2-aVOAs (multi-range)	☐	9/13/2016 9:40	5 days	Present	☐	
1609730-007B	MW-7	Water	SW8260B (VOCs)	1	VOA w/ HCl	☐	9/13/2016 9:40	5 days	Present	☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

Confluence Environmental, Inc.
3308 El Camino Ave, Suite 300 #148
Sacramento, CA 95821
916-760-7641 - main
916-473-8617 - fax
www.confluence-env.com

1609730

Chain of Custody

Project Name: 800 Franklin St, Oakland - Chiu Property
Job Number: F1-160913
TAT: (STANDARD) 5 DAY 2 DAY 24 HOUR OTHER:

Lab: McCampbell	Site Address: 800 Franklin St, Oakland	Confluence PM: Jason Brown
Address: 1534 Willow Pass Rd, Pittsburg, CA 94565	California Global ID No.: T0600100050	Phone / Fax: 916-760-7641 / 916-473-8617
Contact:	Include EDF w/ Report: (Yes) No	Confluence Log Code: CESC
Phone/ Fax: 925-252-9262	Consultant / PM: GHD / Eric Chodoroff	Report to: Bryan Fong & Eric Chodoroff
	Phone / Fax: 510-385-0509	Invoice to: GHD

	Sample ID	Time	Date	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: HCl	Preservative: NaOH	Preservative:	Requested Analysis: TPH-G (8015)	Requested Analysis: VOC's w/BTEX, MTBE (8260)	Requested Analysis: TPH-D w/ sgc	Requested Analysis:	Requested Analysis:	Requested Analysis:	Requested Analysis:	Requested Analysis:	Requested Analysis:	Notes and Comments
+	MW-6	0710	9/13/16		X			4	2			2			X	X	X							
+	MW-4	0745			X			4	2			2			X	X	X							
+	MW-5	0810			X			4	2			2			X	X	X							
+	MW-1	0835			X			4	2			2			X	X	X							
+	MW-3A	0855			X			4	2			2			X	X	X							
+	MW-2	0915			X			4	2			2			X	X	X							
+	MW-7	0940	↓		X			4	2			2			X	X	X							

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: A. Feeney						
Sampler's Company: Confluence Environmental		9-16-16	1155		9-16-16	1155
Shipment Date:		9-16-16	1540		9/16/16	1540
Shipment Method:						

Special Instructions:

ICE/t° 6.3
GOOD CONDITION
HEAD SPACE ABSENT
DECHLORINATED IN LAB
APPROPRIATE CONTAINERS
pH ADJUSTED IN LAB

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

Sample Receipt Checklist

Client Name:	**GHD**	Date and Time Received:	**9/16/2016 15:40**
Project Name:	**F1-160913; 800 Franklin St, Oakland**	Date Logged:	**9/16/2016**
WorkOrder №:	**1609730** Matrix: Water	Received by:	Maria Venegas
Carrier:	David Shaver (MAI Courier)	Logged by:	Maria Venegas

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	☐	
Sample/Temp Blank temperature	Temp: 6.3°C				NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes	☑	No	☐	NA ☐
Sample labels checked for correct preservation?	Yes	☑	No	☐	
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes	☐	No	☐	NA ☑
Samples Received on Ice?	Yes	☑	No	☐	
	(Ice Type: WET ICE)				

UCMR3 Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522?	Yes	☐	No	☐	NA ☑
Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539?	Yes	☐	No	☐	NA ☑

Comments:

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3308 El Camino Ave, Suite 300 # 148
Sacramento, CA 95821
916-760-7641 - main
916-473-8617 - fax
www.confluence-env.com

Chain of Custody

Project Name: 800 Franklin St, Oakland

Job Number: F1-160913

TAT: (STANDARD) 5 DAY 2 DAY 24 HOUR OTHER:

Lab: McCampbell	Site Address: 800 Franklin St. Oakland	Confluence PM: Jason Brown
Address: 1534 Willow Pass Rd, Pittsburg, CA 94565	California Global ID No.: T0600100050	Phone / Fax: 916-760-7641 / 916-473-8617
Contact:	Include EDF w/ Report: (Yes) No	Confluence Log Code: CESC
Phone/ Fax: 925-252-9262	Consultant / PM: GHD / Eric Chodoroff	Report to: Bryan Fong & Eric Chodoroff
	Phone / Fax: 510-385-0509	Invoice to: GHD

	Sample ID	Time	Date	Matrix: Soil Solid	Matrix: Water Liquid	Matrix: Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: HCl	Preservative: NaOH	Preservative:	Preservative:	Requested Analysis: TPH-G (8015)	Requested Analysis: VOC's w BTEX, MTBE (8260)	Requested Analysis: TPH-D w sgc	Requested Analysis:	Requested Analysis:	Requested Analysis:	Requested Analysis:	Requested Analysis:	Requested Analysis:	Requested Analysis:	Notes and Comments
	MW-6	0710	9/13/16		X			4	2			2				X	X	X								
	MW-4	0745	"		X			4	2			2				X	X	X								
	MW-5	0810	"		X			4	2			2				X	X	X								
	MW-1	0835	"		X			4	2			2				X	X	X								
	MW-3A	0855	"		X			4	2			2				X	X	X								
	MW-2	0915	"		X			4	2			2				X	X	X								
	MW-7	0940	"		X			4	2			2				X	X	X								

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: A. Feeney						
Sampler's Company: Confluence Environmental						
Shipment Date:						
Shipment Method:						

Special Instructions:

Appendix C
Confluence Environmental, Inc. - Field Data Sheets

Meter Calibration Log

EQUIPMENT MAKE	EQUIPMENT MODEL	SERIAL NUMBER	DATE	TIME	TEMP OF CALIBRATION STANDARD (°C or °F)	pH STANDARD 4	pH STANDARD 7	pH STANDARD 10	SPECIFIC CONDUCTANCE 1413 µS/cm	ORP See below mV	DISSOLVED OXYGEN 100 mg/L or %
YSI	Pro plus	15G105184	9/13/16	0700	15.1	4.0	7.0	10.0	1413	244.4	100%

Confluence Environmental, Inc.

ORP Values (degrees in C then value): 5:257.0 10:250.5 15:244.0 20:237.5 25:231.0 30:224.5 35:218.0 40:211.5

Well Maintenance Inspection Form

Client: CRA Site: CRA Date: 9/13/16

Job #: FI-160913 Technician: A. Feeney Page 1 of 1

Inspection Point	Well Inspected - No Corrective Action Required	Entry Indicates Deficiency: Cap non-functional	Lock non-functional	Lock missing	Bolts missing (# missing / # total tabs)	Tabs stripped (# stripped / # total tabs.)	Tabs broken (# broken / # of total tabs)	Annular seal incomplete	Apron damaged	Rim / Lid broken	Trip Hazard	Below Grade	Other (explain in notes)	Well Not Inspected (explain in notes)	Notes (Note any repairs made while on site)
MW-1															
MW-2	X														
MW-3A	X														
MW-4	-			X											Water in box
MW-5			X												
MW-6	X														
MW-7				X											

Notes:

Repair codes: **rt**=retap/ bolts added or replaced **as**=annular seal repair,

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Water Level Measurements

Job Number: F1-160913 Date: 9/13/16 Client: CRA

Site: Chiu Property

Well I.D.	Time	Dia	Depth to NAPL	Thickness of NAPL	Depth to water (DTW)	Total Depth (measured)	Total Depth (historical)	Ref Point (TOC)/TOB		
MW-1	0824	2			22.81	33.35		TOC		
MW-2	0630	2			22.73	33.88				
MW-3A	0640	4			23.22	33.99				
MW-4	0625	2			22.71	33.90				
MW-5	0642	2			23.34	34.61				
MW-6	0633	2			23.40	32.55				
MW-7	0920	2			23.67	35.06				

Purging And Sampling Data Sheet

Job#: F1-160913	**Sampler:** A Feeney	**Client:** CRA
Well ID: MW-1	**Date:** 9/13/16	**Site:** Chiu Property, Oakland
Well diam: 1/4" 1" (2") 3" 4" 6" Other:	**DTW:** 22.81	**Total Depth:** 33.35
Purge equip: ES - diam: Bladder (Peri) Waterra Positive Air Displacement Ext. System disp bailer teflon bailer other:	**Tubing:** OD: New (Dedicated) NA	
Purge method: 3-5 Case Volume (Micro/Low-Flow) Extraction Other:		
Pump depth/ intake: 28'	**Multipliers:** 1"= 0.04 2"= 0.16 3"= 0.37 4"= 0.65 5"=1.02 6"= 1.47 Radius^2 X 0.163	
(TD - DTW X Multiplier = 1 Volume	80% Recovery (TD - DTW X 0.20 + DTW)	

1 Volume = _____ X _____ = _____ (Total Purge) 80%=_____

Time	Temp (°C/ °F)	pH	Cond (mS / µS)	Turbidity (NTU)	Purge Rate (gal or mL/ min)	Volume Removed (gal / L)	DO (mg/l)	ORP (mv)	DTW	Notes
0825	20.8	6.19	980	27	100	.3	0.94	153.9	22.83	
0828	20.7	6.16	980	24	|	.6	0.86	158.0	22.83	
0831	20.8	6.15	981	23	|	.9	0.89	158.9	22.83	
0834	20.8	6.15	981	22	|	1.2	0.90	159.5	22.83	

Did well dewater? YES (NO)	Total volume removed: 1.2 (gal / (L))	
Sample method: Disp Bailer (Ded. Tubing) New Tubing Ext. Port Other:		
Sample date: 9/13/16	Sample time: 0835	DTW at sample: 22.83
Sample ID: MW-1	Lab: McCampbell	Number of bottles: 4
Analysis: TPH-G, BTEX, MTBE, TPH-D		
Equipment blank ID @	Field blank ID @	
Duplicate ID:	Pre-purge DO:	Post purge DO:
$Fe2^+$:	Pre-purge ORP:	Post purge ORP:
NAPL depth:	Volume of NAPL:	Volume removed: ml

Purging And Sampling Data Sheet

Job#: F1-160913	**Sampler:** A Feeney	**Client:** CRA
Well ID: MW-2	**Date:** 9/13/16	**Site:** Chiu Property, Oakland
Well diam: 1/4" 1" (2") 3" 4" 6" Other:	**DTW:** 22.73	**Total Depth:** 33.88
Purge equip: ES - diam: Bladder (Peri) Waterra Positive Air Displacement Ext. System		
disp bailer teflon bailer other:	**Tubing:** OD: New (Dedicated) NA	
Purge method: 3-5 Case Volume (Micro/Low-Flow) Extraction Other:		
Pump depth/ intake: 28.5	**Multipliers:** 1"= 0.04 2"= 0.16 3"= 0.37 4"= 0.65 5"=1.02 6"= 1.47 Radius^2 X 0.163	
(TD - DTW X Multiplier = 1 Volume	80% Recovery (TD - DTW X 0.20 + DTW)	

1 Volume = _____ X _____ = _____ (Total Purge) 80%=_____

Time	Temp (°C / °F)	pH	Cond (mS / µS)	Turbidity (NTU)	Purge Rate (gal or mL/ min)	Volume Removed (gal / L)	DO (mg/l)	ORP (mv)	DTW	Notes
0902	21.2	6.58	1445	7.5	100	.3	0.38	-69.4	22.89	odor
0905	21.1	6.63	1470	5.8	"	.6	0.66	-92.2	22.84	"
0908	21.2	6.64	1470	4.5	"	.9	0.89	-97.9	22.85	"
0911	21.1	6.64	1471	4.9	"	1.2	0.92	-101.0	22.85	"
0914	21.1	6.65	1474	4.8	"	1.5	0.93	-100.1	22.85	"

Did well dewater? YES (NO)	Total volume removed: 1.5 (gal / L)	
Sample method: Disp Bailer (Ded. Tubing) New Tubing Ext. Port Other:		
Sample date: 9/13/16	Sample time: 0915	DTW at sample: 22.85
Sample ID: MW-2	Lab: McCampbell	Number of bottles: 4
Analysis: TPH-G, BTEX, MTBE, TPH-D		
Equipment blank ID @	Field blank ID @	
Duplicate ID:	Pre-purge DO:	Post purge DO:
$Fe2^+$:	Pre-purge ORP:	Post purge ORP:
NAPL depth:	Volume of NAPL:	Volume removed: ml

Purging And Sampling Data Sheet

Job#: F1-160913	**Sampler:** A Feeney	**Client:** CRA
Well ID: MW-3A	**Date:** 9/13/16	**Site:** Chiu Property, Oakland
Well diam: 1/4" 1" 2" 3" (4") 6" Other:		**DTW:** 23.22 **Total Depth:** 33.99
Purge equip: ES - diam: Bladder (Peri) Waterra Positive Air Displacement Ext. System		
disp bailer teflon bailer other:	**Tubing:** OD: New (Dedicated) NA	
Purge method: 3-5 Case Volume (Micro/Low-Flow) Extraction Other:		
Pump depth/ intake: 28.5	**Multipliers:** 1"= 0.04 2"= 0.16 3"= 0.37 4"= 0.65 5"=1.02 6"= 1.47 Radius² X 0.163	
(TD - DTW X Multiplier = 1 Volume	80% Recovery (TD - DTW X 0.20 + DTW)	

1 Volume = _____ X _____ = _____ (Total Purge) 80%=_____

Time	Temp (°C/ °F)	pH	Cond (mS / µS)	Turbidity (NTU)	Purge Rate (gal or mL/ min)	Volume Removed (gal / L)	DO (mg/l)	ORP (mv)	DTW	Notes
0843	18.6	6.38	1098	4.9	100	.3	0.60	-66.0	23.29	odor
0846	19.1	6.45	1097	4.5		.6	1.02	-80.8	23.29	
0849	19.2	6.45	1099	4.6		.9	1.10	-82.1	23.29	
0852	19.1	6.45	1102	4.7		1.2	1.08	-82.9	23.29	

Did well dewater? YES (NO)	Total volume removed: 1.2 (gal / L)	
Sample method: Disp Bailer (Ded. Tubing) New Tubing Ext. Port Other:		
Sample date: 9/13/16	Sample time: 0855	DTW at sample: 23.29
Sample ID: MW-3A	Lab: McCampbell	Number of bottles: 4
Analysis: TPH-G, BTEX, MTBE, TPH-D		
Equipment blank ID @	Field blank ID @	
Duplicate ID:	Pre-purge DO:	Post purge DO:
$Fe2^+$:	Pre-purge ORP:	Post purge ORP:
NAPL depth:	Volume of NAPL:	Volume removed: ml

Purging And Sampling Data Sheet

Job#: F1-160913	**Sampler:** A Feeney	**Client:** CRA
Well ID: MW-4	**Date:** 9/13/16	**Site:** Chiu Property, Oakland
Well diam: 1/4" 1" 2" 3" 4" 6" Other:		**DTW:** 22.71 **Total Depth:** 38.90
Purge equip: ES - diam: Bladder (Peri) Waterra Positive Air Displacement Ext. System		
disp bailer teflon bailer other:	**Tubing:** OD: New (Dedicated) NA	
Purge method: 3-5 Case Volume (Micro/Low-Flow) Extraction Other:		
Pump depth/ intake: 28'	**Multipliers:** 1"= 0.04 2"= 0.16 3"= 0.37 4"= 0.65 5"=1.02 6"= 1.47 Radius^2 X 0.163	
(TD - DTW X Multiplier = 1 Volume	80% Recovery (TD - DTW X 0.20 + DTW)	

1 Volume = _____ X _____ = _____ (Total Purge) 80%=_____

Time	Temp (C) / °F)	pH	Cond (mS / (S)	Turbidity (NTU)	Purge Rate (gal or mL/ min)	Volume Removed (gal / (L)	DO (mg/l)	ORP (mv)	DTW	Notes
0728	18.8	6.45	1698	6.5	100	.3	1.29	33.7	22.77	
0731	19.1	6.42	1704	4.9		.6	1.04	37.3	22.77	
0734	19.4	6.40	1709	4.5		.9	0.97	48.2	22.77	
0737	19.3	6.40	1712	4.4		1.2	0.99	55.7	22.77	
0740	19.3	6.40	1710	4.6		1.5	1.02	57.8	22.77	

Did well dewater? YES (NO)	Total volume removed: 1.5 (gal / (L))	
Sample method: Disp Bailer (Ded. Tubing) New Tubing Ext. Port Other:		
Sample date: 9/13/16	Sample time: 0745	DTW at sample: 22.77
Sample ID: MW-4	Lab: McCampbell	Number of bottles: 4
Analysis: TPH-G, BTEX, MTBE, TPH-D		
Equipment blank ID @	Field blank ID @	
Duplicate ID:	Pre-purge DO:	Post purge DO:
$Fe2^+$:	Pre-purge ORP:	Post purge ORP:
NAPL depth:	Volume of NAPL:	Volume removed: ml

Purging And Sampling Data Sheet

Job#: F1-160913	**Sampler:** A Feeney	**Client:** CRA
Well ID: MW-5	**Date:** 9/13/16	**Site:** Chiu Property, Oakland
Well diam: 1/4" 1" (2") 3" 4" 6" Other:	**DTW:** 23.34	**Total Depth:** 34.61
Purge equip: ES - diam: Bladder (Peri) Waterra Positive Air Displacement Ext. System		
disp bailer teflon bailer other:	**Tubing:** OD: New (Dedicated) NA	
Purge method: 3-5 Case Volume (Micro/Low-Flow) Extraction Other:		
Pump depth/ intake: 28'	**Multipliers:** 1"= 0.04 2"= 0.16 3"= 0.37 4"= 0.65 5"=1.02 6"= 1.47 Radius² X 0.163	
(TD - DTW X Multiplier = 1 Volume	80% Recovery (TD - DTW X 0.20 + DTW)	

1 Volume = _____ X _____ = _____ (Total Purge) 80%= _____

Time	Temp (°C) °F)	pH	Cond (mS / µS)	Turbidity (NTU)	Purge Rate (gal or mL/min)	Volume Removed (gal / L)	DO (mg/l)	ORP (mv)	DTW	Notes
0753	19.3	6.45	1481	5.5	100	.3	0.41	126.4	23.40	
0756	19.3	6.42	1519	4.9	|	.6	0.30	131.0	23.40	
0759	19.6	6.41	1521	4.5	|	.9	0.43	138.2	23.40	
0802	19.5	6.41	1523	4.4	|	1.2	0.45	143.2	23.40	
0805	19.7	6.40	1518	4.5	|	1.5	0.47	143.6	23.40	

Did well dewater? YES (NO)	Total volume removed: 1.5 (gal / L)
Sample method: Disp Bailer (Ded. Tubing) New Tubing Ext. Port Other:	
Sample date: 9/13/16 Sample time: 0810	DTW at sample: 23.40
Sample ID: MW-5 Lab: McCampbell	Number of bottles: 4
Analysis: TPH-G, BTEX, MTBE, TPH-D	
Equipment blank ID @	Field blank ID @
Duplicate ID:	Pre-purge DO: / Post purge DO:
$Fe2^{+}$:	Pre-purge ORP: / Post purge ORP:
NAPL depth: / Volume of NAPL:	Volume removed: ml

Purging And Sampling Data Sheet

Job#: F1-160913	**Sampler:** A Feeney	**Client:** CRA
Well ID: MW-6	**Date:** 9/13/16	**Site:** Chiu Property, Oakland
Well diam: 1/4" 1" (2") 3" 4" 6" Other:		**DTW:** 23.40 **Total Depth:** 32.55
Purge equip: ES - diam: Bladder (Peri) Waterra Positive Air Displacement Ext. System disp bailer teflon bailer other:		**Tubing:** OD: New (Dedicated) NA
Purge method: 3-5 Case Volume (Micro/Low-Flow) Extraction Other:		
Pump depth/ intake: 27.5	**Multipliers:** 1"= 0.04 2"= 0.16 3"= 0.37 4"= 0.65 5"=1.02 6"= 1.47 Radius² X 0.163	
(TD - DTW X Multiplier = 1 Volume	80% Recovery (TD - DTW X 0.20 + DTW)	

1 Volume = _____ X _____ = _____ (Total Purge) 80%=_____

Time	Temp (°C) °F)	pH	Cond (mS / µS)	Turbidity (NTU)	Purge Rate (gal or mL/ min)	Volume Removed (gal / L)	DO (mg/l)	ORP (mv)	DTW	Notes
0700	19.1	6.38	1025	8.8	100	.3	0.35	45.4	23.57	
0703	19.0	6.41	1045	7.1	|	.6	0.41	55.7	23.55	
0706	19.3	6.44	1069	5.5	|	.9	0.44	58.9	23.55	
0709	19.1	6.42	1074	5.8	|	1.2	0.45	60.7	23.55	

Did well dewater? YES (NO)	Total volume removed: 1.2 (gal / L)	
Sample method: Disp Bailer (Ded. Tubing) New Tubing Ext. Port Other:		
Sample date: 9/13/16	Sample time: 0710	DTW at sample: 23.55
Sample ID: MW-6	Lab: McCampbell	Number of bottles: 4
Analysis: TPH-G, BTEX, MTBE, TPH-D		
Equipment blank ID @	Field blank ID @	
Duplicate ID:	Pre-purge DO:	Post purge DO:
$Fe2^{+}$:	Pre-purge ORP:	Post purge ORP:
NAPL depth:	Volume of NAPL:	Volume removed: ml

Purging And Sampling Data Sheet

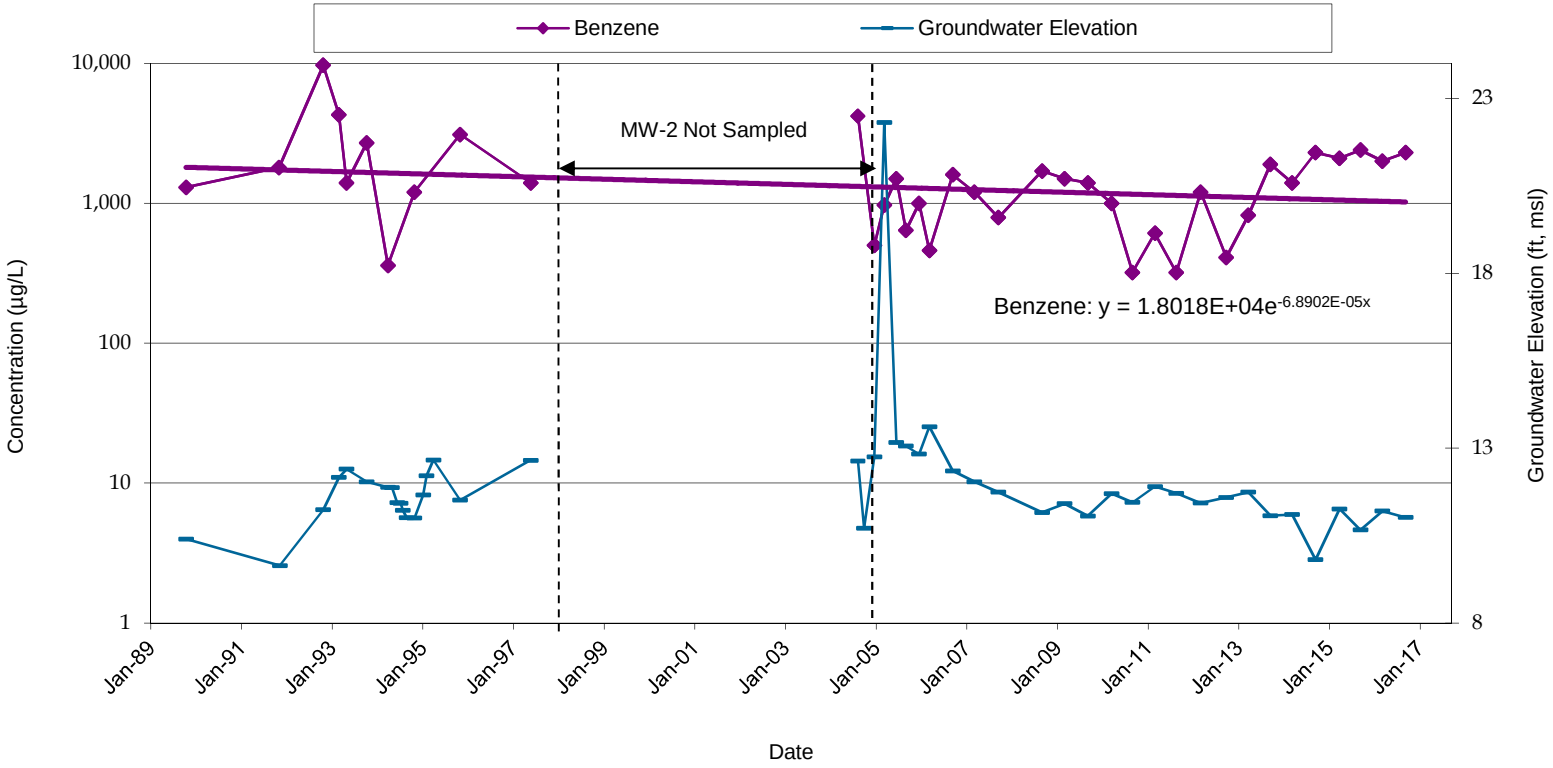
Job#: F1-160913	**Sampler:** A Feeney	**Client:** CRA
Well ID: MW-7	**Date:** 9/13/16	**Site:** Chiu Property, Oakland
Well diam: 1/4" 1" (2") 3" 4" 6" Other:		**DTW:** 23.67 **Total Depth:** 35.06
Purge equip: ES - diam: Bladder (Peri) Waterra Positive Air Displacement Ext. System		
disp bailer teflon bailer other:	**Tubing:** OD: New (Dedicated) NA	
Purge method: 3-5 Case Volume (Micro/Low-Flow) Extraction Other:		
Pump depth/ intake:	**Multipliers:** 1"= 0.04 2"= 0.16 3"= 0.37 4"= 0.65 5"=1.02 6"= 1.47 Radius² X 0.163	
(TD - DTW X Multiplier = 1 Volume	80% Recovery (TD - DTW X 0.20 + DTW)	

1 Volume = _____ X _____ = _____ (Total Purge) 80%=_____

Time	Temp (°C / °F)	pH	Cond (mS / µS)	Turbidity (NTU)	Purge Rate (gal or mL / min)	Volume Removed (gal / L)	DO (mg/l)	ORP (mv)	DTW	Notes
0925	20.7	6.75	1297	5.5	100	.3	0.54	7.4	23.67	
0928	21.0	6.70	1260	4.9		.6	0.78	33.0	23.67	
0931	21.1	6.70	1247	4.5		.9	0.87	36.7	23.67	
0934	21.0	6.68	1239	4.5		1.2	0.89	39.7	23.67	
0937	21.0	6.67	1235	4.3		1.5	0.97	40.5	23.67	

Did well dewater? YES (NO)	Total volume removed: 1.5 (gal / (L))	
Sample method: Disp Bailer (Ded. Tubing) New Tubing Ext. Port Other:		
Sample date: 9/13/16	Sample time: 0940	DTW at sample: 23.67
Sample ID: MW-7	Lab: McCampbell	Number of bottles: 4
Analysis: TPH-G, BTEX, MTBE, TPH-D		
Equipment blank ID @	Field blank ID @	
Duplicate ID:	Pre-purge DO:	Post purge DO:
$Fe2^+$:	Pre-purge ORP:	Post purge ORP:
NAPL depth:	Volume of NAPL:	Volume removed: ml

Appendix D
Trend Analysis Graphs



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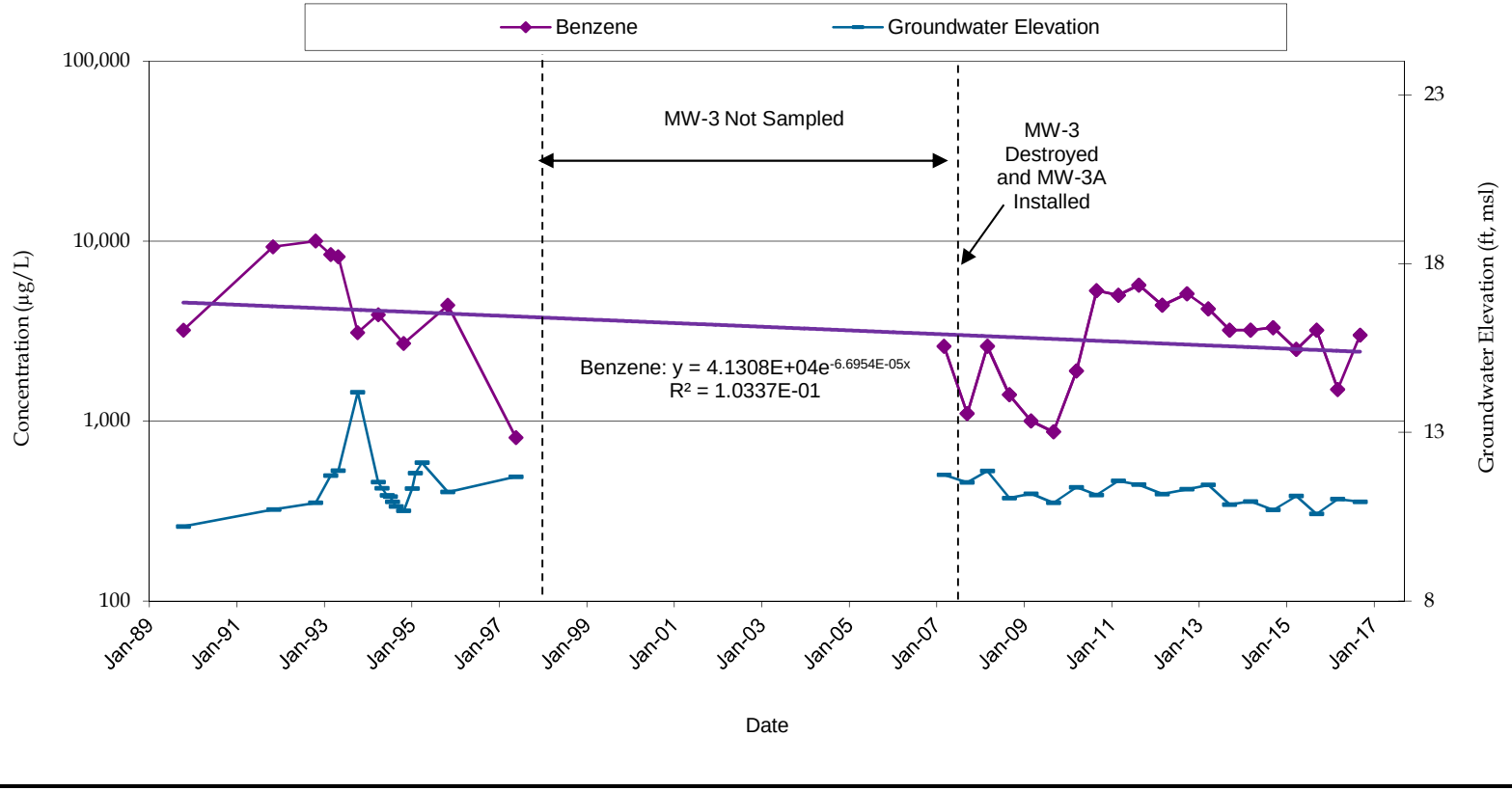
MW-2: BENZENE CONCENTRATIONS AND GROUNDWATER ELEVATION



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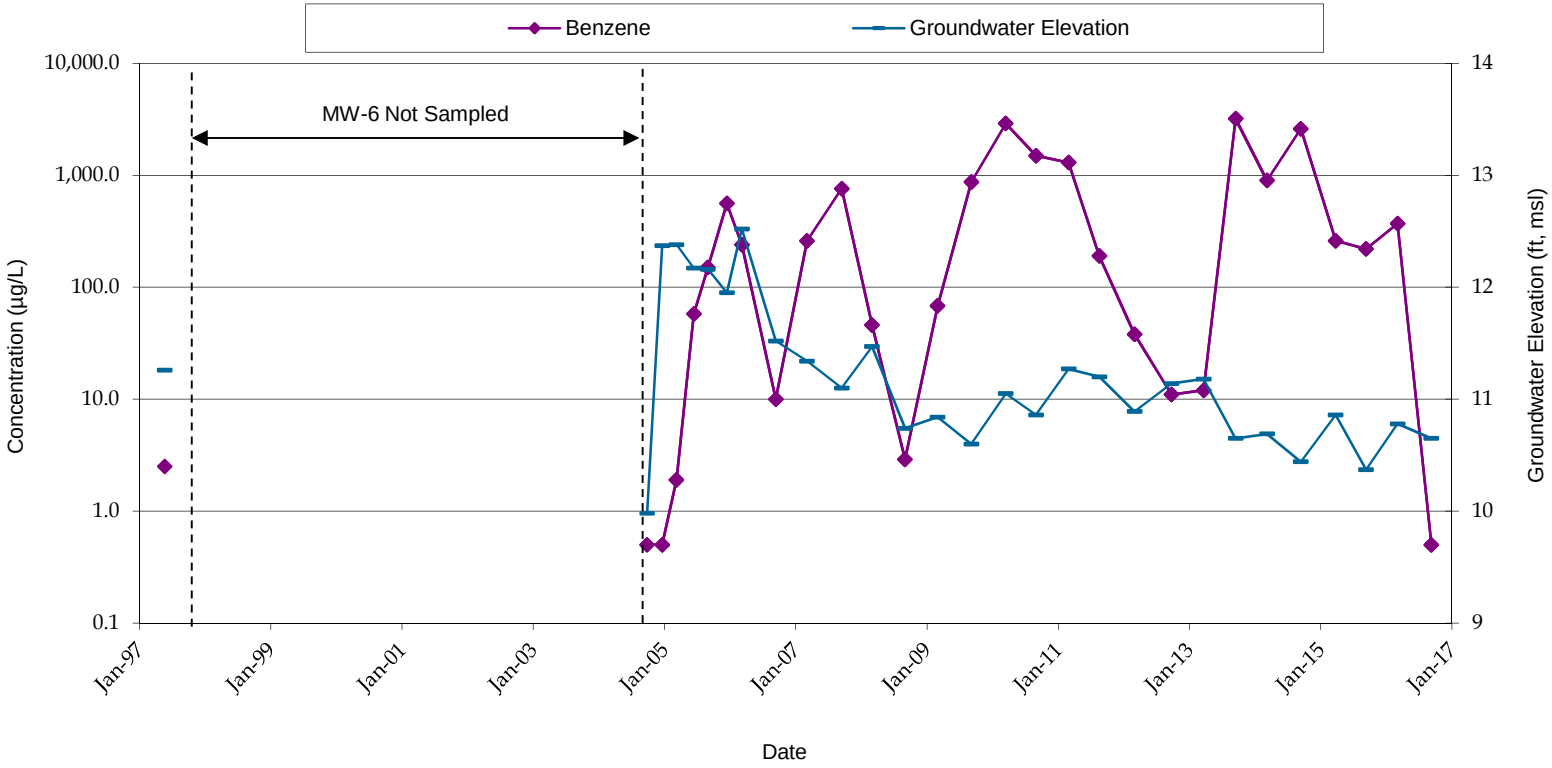
MW-3/3A: BENZENE CONCENTRATIONS AND GROUNDWATER ELEVATION



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MW-6: BENZENE CONCENTRATIONS AND GROUNDWATER ELEVATION

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