September 12, 2017

RECEIVED
By Alameda County Environmental Health 11:06 am, Oct 17, 2017

Ms. Karel Detterman
Alameda County Environmental Health
1131 Harbon Parkway, Suite 250
Alameda, California 94502

Subject: Perjury Statement and Report Transmittal
Zimmerman Property
3442 Adeline Street
Oakland, CA
AEI Project No. 281939
ACDEH Fuel Leak Case No. RO0002936

Dear Ms. Detterman:

I declare under penalty of perjury that the information and/or recommendations contained in the attached report, *Semi Annual Groundwater Monitoring Report, First Semester 2017* dated September 12, 2017 for the above-referenced site are true and correct to the best of my knowledge.

If you have questions or need additional information, please contact me at (925) 457 - 5607 or Mr. Jonathan Sanders at AEI Consultants at (925) 250 - 6009

Sincerely,

Bill Mouat

Representative of the Steffi R. Zimmerman Trust

September 6, 2017

SEMI ANNUAL GROUNDWATER MONITORING REPORT, FIRST SEMESTER 2017

Property Identification:
Zimmerman Property
3442 Adeline Street
Oakland, California

AEI Project No. 281939
ACDEH Site No RO0002936
Global ID T0600183099

Prepared for:
Steffi R. Zimmerman Trust
c/o Mr. Bill Mouat
3289 Lomas Verdes Place
Lafayette, California

Prepared by:
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San Jose, California 95124
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SIGNATURES

This document was prepared by, or under the direction of, the undersigned:

Jonathan E. Sanders, E.I.T.
Project Engineer

Trent A. Weise, P.E.
Principal Engineer

AEI Consultants

1. INTRODUCTION

On behalf of the Steffi Zimmerman Trust (the Trust), AEI Consultants (AEI) has prepared this report documenting the first semester of 2017 groundwater monitoring performed at 3442 Adeline Street in the City of Oakland, Alameda County, California (" the Site"). Groundwater monitoring is currently performed at the Site on a semi-annual under the oversight of the Alameda County Department of Environmental Health (DEH). This report documents the procedures and findings of the semiannual groundwater monitoring event performed on January 25, 2017.

2. SITE SETTING

The Site is an approximately one acre parcel located on the southwest corner of 35th Street and Chestnut Street in an urban mixed commercial/industrial and residential area of the city of Oakland in California. The Site is fully developed with two conjoined warehouse buildings and attached canopy. Ground cover at the site consists of concrete paving throughout with no asphalt and no landscaped areas. Within the interior of easternmost warehouse building, the concrete paving is overlain by artificial turf or heavy rubber mats. The Site is fully enclosed by exterior walls to on-site improvements where present and a perimeter fence where no buildings are present. Access to the site is through a gate along Adeline street or through four roll-up doors along chestnut street. The general location of the Site is depicted in Figure 1 while the layout of the Site is depicted on Figure 2.

The Site is currently enrolled in the California State Water Resources Control Board's ("the Waterboard's") Underground Storage Tank (UST) Clean Up Fund (CUF) and is registered on the Waterboard's Geotracker database under global ID T0600183099. The Site is enrolled in the UST CUF due to the historic presence of a 3,750-gallon steel single-wall UST from a location immediately adjacent to the eastern property boundary which was removed from the ground on February 22, 2000 by the Clearwater Group (Clearwater). Sidewall soil and grab groundwater samples collected during the removal of the UST indicate that a release of petroleum hydrocarbons had occurred from the UST. Subsurface investigations to characterize the lateral and vertical extent of the petroleum hydrocarbon release and remedial activities have been conducted at the Site from 2006 to 2016.

There are currently eleven permanent soil gas probes (VB-06 through VB-16), seven monitoring wells (MW-01 through MW-07), one air sparge well (IW-01), and four de-watering wells (BF-1, BF-2, BF-3, and BF-5) installed at the Site. Details pertaining to the construction of the monitoring wells, air sparge well, and dewatering wells are included in Table 1.

The Site is currently undergoing assessment in pursuit of closure under the Waterboard's *Low-Threat Underground Storage Tank Case Closure Policy* (LTCP).

3. STATUS REPORT

This section summarizes the activities conducted during the first semester of 2017 and the activities proposed for the next reporting quarter.

3.1. Activities Conducted

The following activities were conducted during the first semester of 2017.

- Performed the groundwater monitoring event for the first semester of 2017 on January 25, 2017.
- Performed the groundwater monitoring event for the second semester of 2017 on June 13, 2017 in concurrence with the implementation of the *Updated Site Conceptual Model and Soil and Soil Vapor Investigation* dated November 15, 2016 and approved with comment by the ACDEH on May 12, 2017.
- Implement the work plan for additional soil vapor investigation included in the *Updated Site Conceptual Model and Soil and Soil Vapor Investigation Report* dated November 15, 2016 and approved with comment by the ACDEH on May 12, 2017.

3.2. Activities Proposed – Second Semester 2017

The following activities have been completed or are anticipated for the second semester of 2017:

- Implement additional subsurface investigation in pending review and acceptance of the Perform the *Data Gap Investigation, Updated Conceptual Site Model, and Additional Subsurface Investigation Work Plan* which is to be submitted under a separate cover.
- Conduct a quarterly soil vapor sampling event in the fourth quarter of 2017, pending approval by the ACDEH

4. SUMMARY OF GROUNDWATER MONITORING ACTIVITIES

This section describes the groundwater monitoring activities performed during the reporting period. Groundwater monitoring and sampling activities were conducted in general accordance with the California Environmental Protection Agency's Department of Toxic Substance Control's *Representative Sampling of Groundwater for Hazardous Substances* dated July 1995 and revised June 2006 (the *Guidance Manual for Groundwater Investigations*).

4.1. Monitoring Well Condition Assessment

Prior to conducting sampling activities, AEI conducted a monitoring well condition assessment of each of the wells to be sampled (MW-1 through MW-7, IW-1, BF-1, and BF-5). This assessment consisted of inspecting the condition of the casing, well box, well plug, bolts, and lid for indications of wear or failure. No damage, anomalies, or needed repairs were noted. Monitoring well construction details, including total depth and screened intervals are summarized in Table 1.

4.2. Groundwater Elevation Gauging

Prior to purging and sampling activities, AEI removed the well caps from each of the ten wells to be sampled (MW-1 through MW-7, IW-1, BF-1, and BF-5) and allowed for groundwater to equilibrate with atmospheric pressure for a minimum of fifteen minutes. Following the equilibration with ambient pressure, depth to groundwater from the top of the well casing was gauged using a flat tape electric water level meter laser marked in 1/100 foot increments. Depth

to groundwater was then used in conjunction with the surveyed top of casing elevations to calculate groundwater elevation. Table 2 presents a summary of the groundwater elevation data from this and previous groundwater monitoring events, and Table 3 presents the average shallow groundwater elevation and gradient as calculated by the plane of best fit. Figure 3 and Figure 4 depict groundwater potentiometric surface and gradient trends for the first semester 2017 and second semester 2017 groundwater monitoring events respectively. Hydrographs depicting changes in depth to groundwater as well as the concentration of benzene and TPH-g are provided in Appendix C for each of the monitoring wells monitored during this event.

Groundwater was encountered in each of the ten well sampled during each of the monitoring event. Shallow groundwater gradient was calculated using the plane of best fit method. The groundwater elevation from IW-1 was excluded due to the horizontal construction of the well. Based on the groundwater elevation data collected as part of this monitoring event, groundwater generally relieved to the southwest with a gradient of 0.223 vertical feet per linear foot. The calculated direction and magnitude of the groundwater gradient are consistent with historical observations. No anomalies related to groundwater surface were reported during the first semester of 2017.

4.3. Groundwater Quality Monitoring Activities

Following groundwater level measurements, groundwater samples were collected from wells MW-1 through MW-7, BF-1, BF-5, and IW-1. Each well was first purged using low flow purging techniques. Purging and sampling was conducted using a peristaltic pump and water quality parameters were monitored at approximately five minute intervals using a Horiba U-52 water quality meter equipped with a flow through cell. During purging and sampling, the pump intake was situated at the center of the saturated screened interval and flow rate was adjusted to be in equilibrium with the recharge rate of the well. The recharge rate of the monitoring well was determined by adjusting the flow rate of the pump to the maximum flow possible without inducing a measurable drawdown. Groundwater was purged until water quality parameters [eg: temperature, pH, specific conductivity, dissolved oxygen (DO), and oxidation-reduction potential (ORP), and turbidity] reached their respective stabilization criteria at which point a groundwater sample was collected.

Groundwater samples from each of the wells sampled were collected in laboratory-supplied, HCl preserved 40-milliliter (mL) volatile organic analysis vials (VOAs). VOAs were sealed with no visible headspace and preserved with hydrochloric acid. Each VOA was sealed, labeled, and placed in an ice-chilled cooler. Samples were then transported under chain of custody protocols to McCampbell Analytical, Inc. of Pittsburg, California.

Each sample collected was analyzed for total petroleum hydrocarbons as gasoline (TPH-g), benzene, toluene, ethylbenzene and total xylenes (BTEX) and methyl tertiary butyl ether (MTBE) using US EPA Testing Method 8021B and volatile organic compounds (VOCs) including 8260B.

Groundwater field data sheets presenting the sampling details are included as Appendix A.

No anomalies or variations to sampling methods are reported for the January 25, 2017 and June 13, 2017 sampling events except the following:

- During the June 2017 sampling event, the dissolved oxygen sensor malfunctioned and was unable to be repaired in the field. As such, dissolved oxygen readings were not collected as part of this groundwater monitoring event.
- Pumping rates in MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, and IW-1 were the lowest that the equipment was capable of maintaining, however, the total draw-down exceeded the threshold for low-flow sampling of 4-inches recommended by the *Guidance Manual for Groundwater Investigations*.
- A hydrocarbon odor was noted during purging and sampling of MW-6 and MW-7.

4.4. Quality Assurance / Quality Control Measures

Standard Quality Assurance/Quality Control (QA/QC) measures were implemented during the sample collection, transport, and chemical analysis process. The QA/QC measures consisted evaluating laboratory performance of surrogate spike recovery, matrix spike/matrix spike duplicate (MS/MSD), method blank, and laboratory control spike (LCS) analyses. The primary objective of these QA/QC measures is to ensure that resulting analytical data are reproducible, are of adequate quality for their intended use, and are representative of actual conditions. No anomalies were found in the data resulting from analysis of samples collected during the first semester of 2017 except for the following:

- During the analysis of samples collected from MW-3 and MW-7 by US EPA Method 8021B and 8015Bm, the analyst noted that surrogate recovery in the analytical samples collected from MW-3 and MW-7 was outside of the accepted recovery limits due to the presence of unmodified or weakly modified gasoline resulting in a cluttered chromatogram. As a result, the reporting limit for MTBE was raised above the typical reporting limit for this method.

5. GROUNDWATER QUALITY MONITORING RESULTS

Table 4 presents a summary of selected compounds detected in groundwater during the first semester of 2017 event and historical groundwater monitoring events. Figure 5 and Figure 6 presents posted and contoured concentrations of benzene in groundwater and TPH-g in groundwater respectively. The sample results can be summarized as follows:

- None of the target analytes (TPH-g, BTEX, of MTBE) were present above their respective laboratory reporting limits in samples collected from MW-1, MW-4, MW-5, MW-6, IW-1, BF-1, or BF-5.
- Benzene and toluene were reported as present above their respective laboratory reporting limits for both analytical methods (US EPA Method 8021b/ US EPA Method 8260b) in the samples collected from MW-2 at concentrations of 1.4/1.1 micrograms per liter (µg/L) for benzene and 1.6/1.1 µg/L for toluene. Ethylbenzene was reported as present at a concentration of 0.56 µg/L using method 8021b, but was below the reporting limit of 0.50 µg/L using method 8260b. No other target analytes were present above their respective laboratory reporting limits.
- TPH-g, benzene, toluene, ethylbenzene, and xylenes were reported as present above their respective laboratory reporting limits in the sample collected from MW-3 at concentrations of

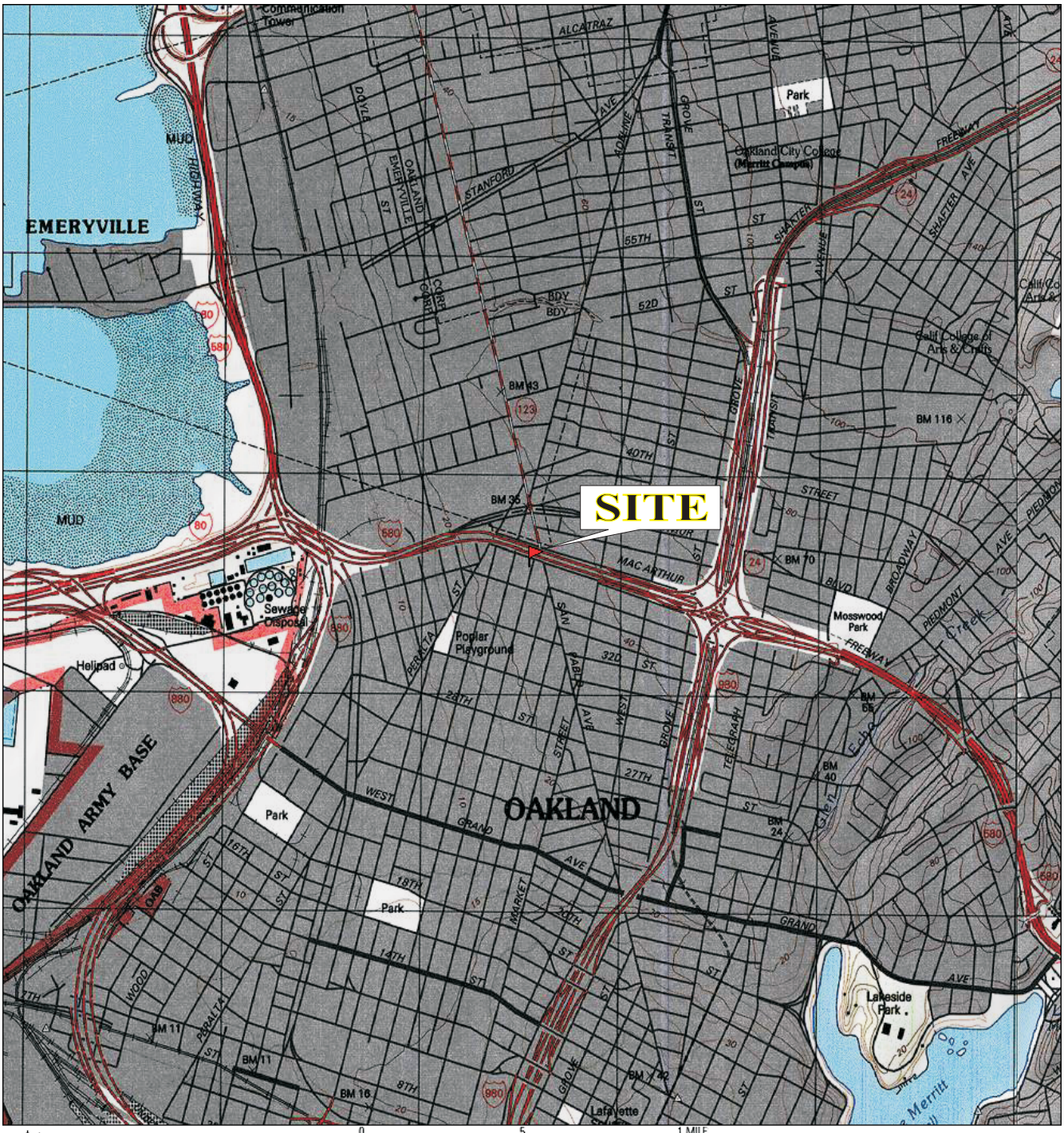
7,300 µg/L, 1,900/1,500 µg/L, 17/<25 µg/L, 99/90 µg/L, and 59/37 µg/L respectively. MTBE was not reported as present above its laboratory reporting limits (<200/<25).

- TPH-g, benzene, toluene, ethylbenzene, and xylenes were reported as present above their respective laboratory reporting limits in the sample collected from MW-7 at concentrations of 3,200 µg/L, 190/140 µg/L, 8.0/5.1 µg/L, 7.2/7.0 µg/L, and 11/6.7 µg/L respectively. MTBE was not reported as present above its laboratory reporting limits (<150/<5.0).

6. CLOSING

Based on the findings of this routine groundwater monitoring event, AEI recommends the routine semi-annual groundwater monitoring be continued.

FIGURES



AEI CONSULTANTS 2500 Camino Diablo, Suite 200, Walnut Creek, CA 94597	
Site Location Map	
3442 Adeline Street Oakland, CA 94608	**FIGURE 1** Job No: 281939

N

Gas line estimated
2-4 ft bgs

ADELINE STREET

Btm SS
8.0 ft bgs

Wtr line 6 ft bgs

DRIVE

GATE

MW-6 SB-31 SB-30

VB-15 VB-17

RESIDENCE (NO BASEMENT)

CANOPY SB-24

SB-26

VB-14 MW-5 VB-18

SB-23

VB-16

SHED

SB-25

VB-19

SB-22 MW-4 SB-29

SB-21 SB-27

VB-11 VB-13

MW-2

VB-12 SB-13 SB-28

VB-20

SB-14

SB-12

VB-8 VB-9 SB-20

SB-3 MW-3

VB-10 SB-28

VB-22

SB-2 SB-15

VB-2 SW1 SW4 SW6 SW7

VB-6 SB-5 BF-3 BF-5 SW10

BF-2 SB-11 B3

SB-1 MW-1 B1 B2 VB-7 VB-21

VB-1 SB-4

SW2 BF-1 SW9

SB-32 SW3 SW5 SW8 SB-6

S3 IW-1

SB-8

S4 S2

VB-4 SB-7 VB-5 VB-3 S1 SB-10

SB-19 MW-7 SB-16

SB-9

10"Sanitary Sewer

Btm SS
8.0 ft bgs

6" Gas Line

Wtr line 7 ft bgs

CHESTNUT STREET

SB-18 SB-17

Wtr line estimated
2.5 ft bgs

VACANT LOT

RESIDENCE (3425 CHESTNUT ST)

RESIDENCE (3431 CHESTNUT ST)

SIDEWALK AREA

35TH STREET

LEGEND

0 30 60 APPROXIMATE SCALE IN FEET or MILES

- SB-1 AEI Soil Boring
- S-1 Clear Water Soil Sample
- SW1 Base Soil Sample
- B-1 Sidewall Soil Sample
- VB-1 Temporary Soil Vapor Probe
- VB-4 Permanent Soil Vapor Probe
- BF-1 Backfill Well Casings
- MW-1 Monitoring Well Casings
- IW-1 Injection Well
- Abandon AEI Soil Boring
- Abandon Base Soil Sample
- Site Boundary
- DW Domestic Water
- SS Sanitary Sewer
- NG Natural Gas
- Interim Source Removal Excavation (2009)

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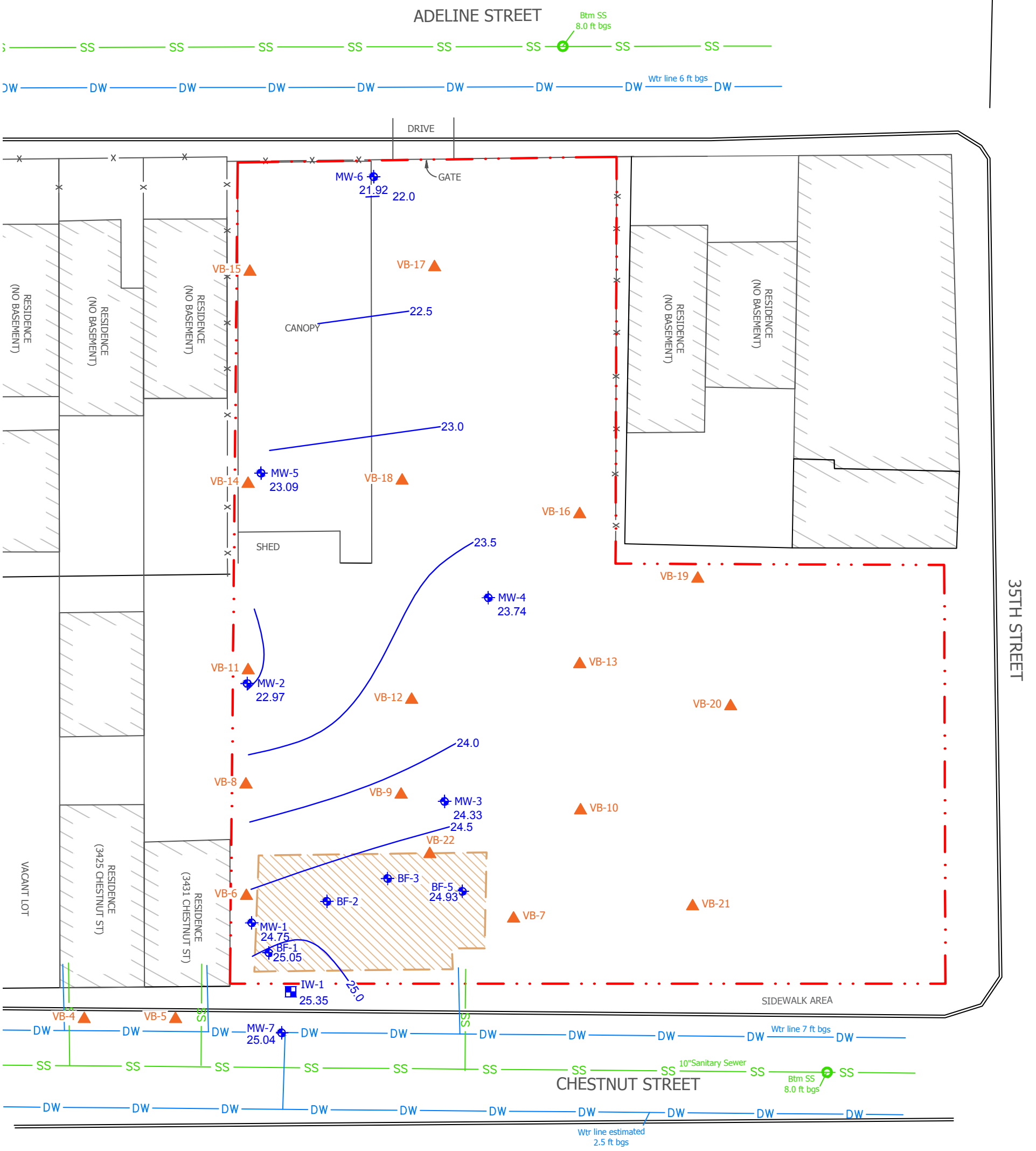
2500 Camino Diablo
Walnut Creek, California

SITE PLAN

3442 ADELINE STREET
OAKLAND, CA 94608

FIGURE 2
Project No. 281939



LEGEND

0 30 60 APPROXIMATE SCALE IN FEET or MILES

- VB-4 Permanent Soil Vapor Probe
- BF-1 Backfill Well Casings
- MW-1 Monitoring Well Casings
- IW-1 Injection Well
- 27.5 Groundwater Potentiometric Surface (feet NAVD88)
- Site Boundary
- DW Domestic Water
- SS Sanitary Sewer
- Interim Source Removal Excavation (2009)

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2500 Camino Diablo
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GROUNDWATER POTENTIOMETRIC SURFACE JANUARY 2017

3442 ADELINE STREET
OAKLAND, CA 94608

FIGURE 3
Project No. 281939

ADELINE STREET

Btm SS
8.0 ft bgs

SS SS SS SS SS SS SS SS

DW DW DW DW DW DW DW DW Wtr line 6 ft bgs DW

DRIVE

GATE

MW-6
21.92

22.0

VB-15

VB-17

RESIDENCE (NO BASEMENT)

RESIDENCE (NO BASEMENT)

RESIDENCE (NO BASEMENT)

RESIDENCE (NO BASEMENT)

RESIDENCE (NO BASEMENT)

CANOPY

22.5

23.0

VB-14

MW-5
23.09

VB-18

VB-16

SHED

23.5

VB-19

MW-4
23.74

VB-11

MW-2
22.97

VB-12

VB-13

VB-20

24.0

VB-8

VB-9

MW-3
24.33

24.5

VB-10

VB-22

VACANT LOT

RESIDENCE (3425 CHESTNUT ST)

RESIDENCE (3431 CHESTNUT ST)

VB-6

BF-3

BF-5
24.93

BF-2

VB-7

VB-21

MW-1
24.75

BF-1
25.05

IW-1
25.35

25.0

35TH STREET

SIDEWALK AREA

VB-4

VB-5

SS

SS

DW DW DW MW-7
25.04 DW DW DW DW DW DW DW Wtr line 7 ft bgs DW

SS SS SS SS SS SS SS SS 10"Sanitary Sewer SS Btm SS
8.0 ft bgs SS

CHESTNUT STREET

DW DW DW DW DW DW DW DW DW DW DW

Wtr line estimated
2.5 ft bgs

LEGEND

0 30 60 APPROXIMATE SCALE IN FEET or MILES

- VB-4 — Permanent Soil Vapor Probe
- BF-1 — Backfill Well Casings
- MW-1 — Monitoring Well Casings
- IW-1 — Injection Well
- 27.5 — Groundwater Potentiometric Surface (feet NAVD88)
- Site Boundary
- DW — Domestic Water
- SS — Sanitary Sewer
- Interim Source Removal Excavation (2009)

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GROUNDWATER POTENTIOMETRIC SURFACE JUNE 2017

3442 ADELINE STREET
OAKLAND, CA 94608

FIGURE 4
Project No. 281939

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ADELINE STREET

Btm SS 8.0 ft bgs

Wtr line 6 ft bgs

DRIVE

GATE

CANOPY

SHED

SIDEWALK AREA

35TH STREET

CHESTNUT STREET

10"Sanitary Sewer

Btm SS 8.0 ft bgs

Wtr line 7 ft bgs

Wtr line estimated

RESIDENCE (NO BASEMENT)

RESIDENCE

MW-6 SB-31 270 (2008)

SB-30 <0.5 (2008)

VB-15

VB-17 6.0 (2017)

SB-24 80 (2008) 1

SB-26 22 (2008)

MW-6		
DATE	TPH-g	BENZENE
01/12/2016	63	1.8
07/21/2016	<50	<0.5/0.5
01/25/2017	<50	<0.5/<0.5
06/13/2017	330	1.4

MW-4		
DATE	TPH-g	BENZENE
01/13/2016	<50	<0.5
07/22/2016	<50	<0.5/0.5
01/25/2017	<50	<0.5/<0.5
06/13/2017	<50	<0.5

MW-3		
DATE	TPH-g	BENZENE
07/22/2016	16,000	4,800/5,100
01/25/2017	7,300	1,900/1,500
06/13/2017	11,000	2,300

MW-5		
DATE	TPH-g	BENZENE
01/12/2016	110	2.7
07/22/2016	<50	<0.5/0.5
01/25/2017	<50	<0.5/<0.5
06/13/2017	<50	<0.5

VB-14 MW-5 SB-23 9,000 (2008)

VB-18 <0.50 (2017)

VB-16 42 (2008)

SB-25 42 (2008)

MW-2		
DATE	TPH-g	BENZENE
01/13/2016	330	97
07/22/2016	<50	1.9/2.0
01/25/2017	<50	1.4/1.1

SB-22 MW-4

VB-19 83 (2017)

7.4 (2008)

SB-29 <0.5 (2008)

1 1,600 (2007) SB-21

VB-11 MW-2

5,300 (2007) VB-12 SB-13

VB-13

SB-27

1.3 (2008)

SB-28

VB-20 5.7 (2017)

SB-14 2,600 (2007)

3,400 (2007) SB-20 MW-3

1000 100 10

VB-10

SB-28 1.3 (2008)

VB-8 2.4 (2007) SB-3

SB-12 5,200 (2007)

VB-9

MW-1		
DATE	TPH-g	BENZENE
01/12/2016	<50	<0.5
07/22/2016	<50	<0.5/0.5
01/25/2017	<50	<0.5/<0.5
06/13/2017	<50	<0.5

1.8 (2007) SB-2

VB-22

SB-15 7,700 (2008)

BF-1		
DATE	TPH-g	BENZENE
01/12/2016	<50	<0.5
07/22/2016	<50	<0.5/0.5
01/25/2017	<50	<0.5/<0.5
06/13/2017	<50	<0.5

2,000 (2007) 6

BF-3 BF-5

BF-2

VB-7

SB-1 MW-1 BF-1 110 (2007)

VB-21 600 (2017)

SB-32

SB-6 17 (2007)

SB-8 IW-1

VB-4 SB-7 VB-5

SB-10 3,800 (2007)

SB-19 <0.50 (2007)

91 (2017)

MW-7 1000 440 (2007) SB-9

SB-16 0.60 (2007)

17 (2017)

<0.50 (2007)

30 (2007)

SB-18 SB-17

MW-7		
DATE	TPH-g	BENZENE
01/12/2016	1,800	400
07/21/2016	6,700	1,400/1,400
06/13/2017	10,000	1,900

IW-1		
DATE	TPH-g	BENZENE
01/12/2016	<50	<0.5
07/21/2016	<50	<0.5/0.5
01/25/2017	<50	<0.5/<0.5
06/13/2017	<50	<0.5

BF-5		
DATE	TPH-g	BENZENE
01/12/2016	<50	<0.5
07/22/2016	<50	<0.5/0.5
01/25/2017	<50	<0.5/<0.5
06/13/2017	<50	<0.5

LEGEND

SB-1 AEI Soil Boring
VB-4 Permanent Soil Vapor Probe
BF-1 Backfill Well Casings
MW-1 Monitoring Well Casings
IW-1 Injection Well

Site Boundary
DW Domestic Water
SS Sanitary Sewer
Interim Source Removal Excavation (2009)
10 Benzene in Groundwater Isoconcentration Contour (µg/L)
<0.50 (2017) Grab Groundwater Benzene Analytical Result (ug/L) / Grab Groundwater Sample Collection Year

0 30 60 APPROXIMATE SCALE IN FEET or MILES

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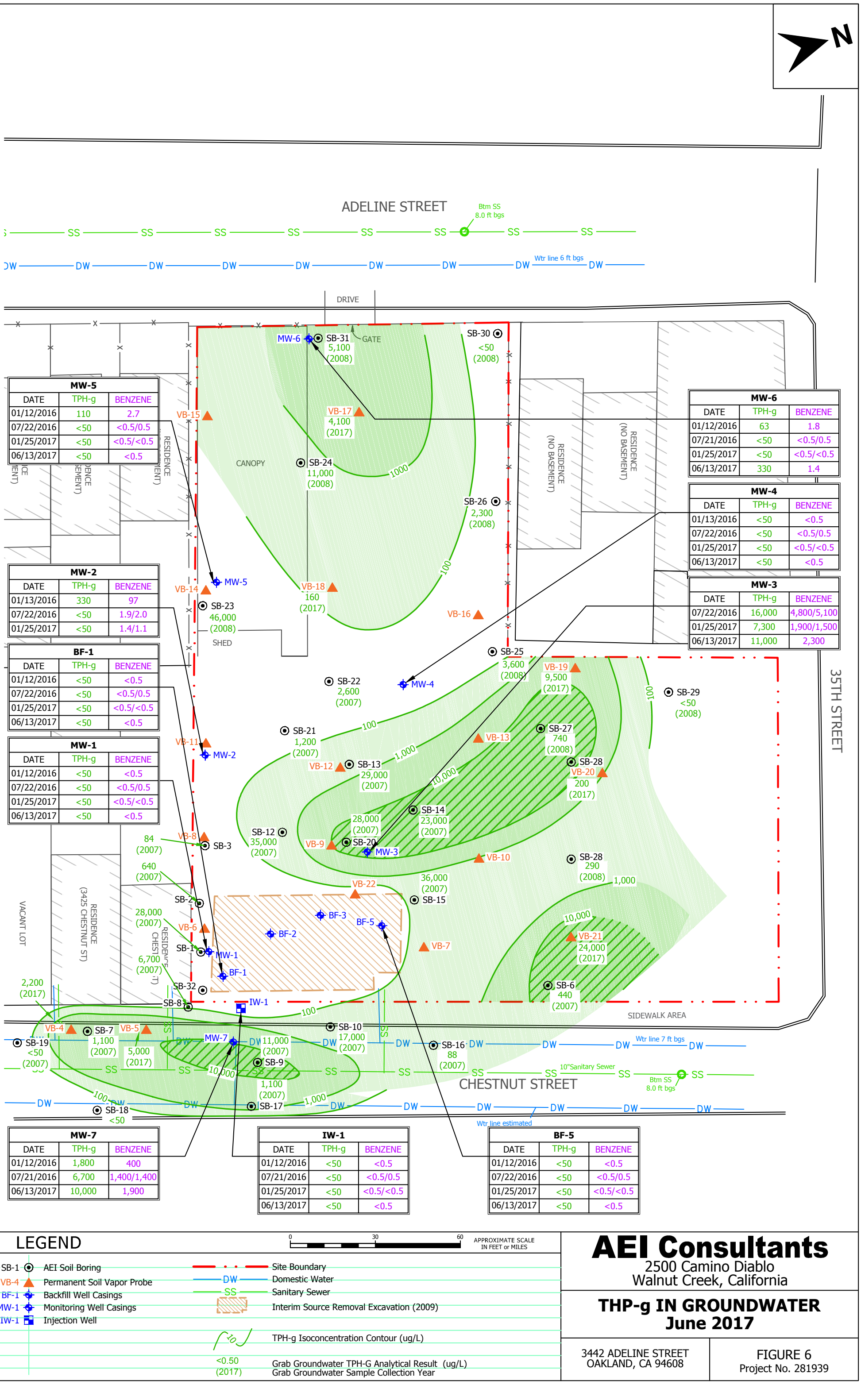
Walnut Creek, California

BENZENE IN GROUNDWATER JUNE 2017

3442 ADELINE STREET
OAKLAND, CA 94608

FIGURE 6
Project No. 281939

P:\Companywide Projects\280000 Series\281939 Oakland, CA\SM\281939 Zimmerman PM\Deliverables\2017 08 18 - 2017 S1 And S2 GW Monitoring Report\01_Figures\Working Files\2017S2 GWM Report_V01_JES - 09/06/2017



MW-5		
DATE	TPH-g	BENZENE
01/12/2016	110	2.7
07/22/2016	<50	<0.5/0.5
01/25/2017	<50	<0.5/<0.5
06/13/2017	<50	<0.5

MW-6		
DATE	TPH-g	BENZENE
01/12/2016	63	1.8
07/21/2016	<50	<0.5/0.5
01/25/2017	<50	<0.5/<0.5
06/13/2017	330	1.4

MW-4		
DATE	TPH-g	BENZENE
01/13/2016	<50	<0.5
07/22/2016	<50	<0.5/0.5
01/25/2017	<50	<0.5/<0.5
06/13/2017	<50	<0.5

MW-3		
DATE	TPH-g	BENZENE
07/22/2016	16,000	4,800/5,100
01/25/2017	7,300	1,900/1,500
06/13/2017	11,000	2,300

MW-2		
DATE	TPH-g	BENZENE
01/13/2016	330	97
07/22/2016	<50	1.9/2.0
01/25/2017	<50	1.4/1.1

BF-1		
DATE	TPH-g	BENZENE
01/12/2016	<50	<0.5
07/22/2016	<50	<0.5/0.5
01/25/2017	<50	<0.5/<0.5
06/13/2017	<50	<0.5

MW-1		
DATE	TPH-g	BENZENE
01/12/2016	<50	<0.5
07/22/2016	<50	<0.5/0.5
01/25/2017	<50	<0.5/<0.5
06/13/2017	<50	<0.5

MW-7		
DATE	TPH-g	BENZENE
01/12/2016	1,800	400
07/21/2016	6,700	1,400/1,400
06/13/2017	10,000	1,900

IW-1		
DATE	TPH-g	BENZENE
01/12/2016	<50	<0.5
07/21/2016	<50	<0.5/0.5
01/25/2017	<50	<0.5/<0.5
06/13/2017	<50	<0.5

BF-5		
DATE	TPH-g	BENZENE
01/12/2016	<50	<0.5
07/22/2016	<50	<0.5/0.5
01/25/2017	<50	<0.5/<0.5
06/13/2017	<50	<0.5

LEGEND

0 30 60 APPROXIMATE SCALE IN FEET or MILES

- SB-1 AEI Soil Boring
- VB-4 Permanent Soil Vapor Probe
- BF-1 Backfill Well Casings
- MW-1 Monitoring Well Casings
- IW-1 Injection Well
- Site Boundary
- DW Domestic Water
- SS Sanitary Sewer
- Interim Source Removal Excavation (2009)
- 10 TPH-g Isoconcentration Contour (ug/L)
- <0.50 (2017) Grab Groundwater TPH-G Analytical Result (ug/L) / Grab Groundwater Sample Collection Year

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2500 Camino Diablo
Walnut Creek, California

THP-g IN GROUNDWATER
June 2017

3442 ADELINE STREET
OAKLAND, CA 94608

FIGURE 6
Project No. 281939

TABLES

TABLE 1
Well Construction Details
Zimmerman Property
3442 Adeline Street
Oakland, CA

Well ID	Date Installed	Top of Casing Elevation (ft)	Well Box Rim Elevation (ft)	Well Depth (ft bgs)	Casing Material	Casing Diameter (in)	Sceened Interval (ft bgs)	Slot Size (in)	Sand Interval (ft bgs)	Sand Size
BF-1	03/09/09	31.87	32.14	13	PVC	4	9-13	0.020	8-13	# 2/12
BF-2	03/09/09	NA	NA	13	PVC	4	9-13	0.020	8-13	# 2/12
BF-3	03/09/09	NA	NA	13	PVC	4	8-13	0.020	7-13	# 2/12
BF-5	03/09/09	32.28	32.59	13	PVC	4	8-13	0.020	7-13	# 2/12
MW-1	04/01/09	31.12	32.13	17	PVC	4	7-17	0.020	6-17	# 2/12
MW-2	04/01/09	31.19	31.43	17	PVC	4	7-17	0.020	6-17	# 2/12
MW-3	04/01/09	32.07	32.39	17	PVC	4	7-17	0.020	6-17	# 2/12
MW-4	04/02/09	31.68	31.98	17	PVC	2	7-17	0.020	6-17	# 2/12
MW-5	05/12/09	30.39	30.82	17	PVC	2	7-17	0.020	6-17	# 2/12
MW-6	04/02/09	29.34	29.96	17	PVC	2	7-17	0.020	6-17	# 2/12
MW-7	05/13/09	31.04	31.45	17	PVC	2	7-17	0.020	6-17	# 2/12
IW-1	05/12/09	31.66	31.90	15	SS	2	13-15	40 mesh	12-15	# 2/12

Notes:

Elevations provided in reference to North American Vertical Datum 1988

bgs	below ground surface
ft	feet
in	inches
PVC	polyvinylchloride
SS	stainless steel
NA	no available information

TABLE 2
Groundwater Elevation Data
Zimmerman Property
3442 Adeline Street
Oakland, CA

Well ID (Screen Interval)	Date Collected	Top of Casing Elevation (ft)	Depth to Water (ft)	Groundwater Elevation (ft)
MW-1 (7-17)	6/10/09	31.12	7.01	24.11
	8/27/09	31.12	6.96	24.16
	12/15/09	31.12	5.96	25.16
	3/12/10	31.12	5.06	26.06
	10/21/10	31.12	7.00	24.12
	5/5/11	31.12	5.88	25.24
	4/25/12	31.12	5.33	25.79
	12/12/12	31.12	5.35	25.77
	4/4/13	31.12	6.63	24.49
	4/30/14	31.12	5.42	25.70
	1/12/16	31.12	6.07	25.05
	7/22/16	31.12	8.85	22.27
	1/25/17	31.12	4.16	26.96
	6/13/2017	31.12	6.37	24.75
MW-2 (7-17)	6/10/09	31.19	9.50	21.69
	8/27/09	31.19	10.50	20.69
	12/15/09	31.19	8.68	22.51
	3/12/10	31.19	5.09	26.10
	10/21/10	31.19	7.51	23.68
	5/5/11	31.19	6.68	24.51
	4/25/12	31.19	5.58	25.61
	12/12/12	31.19	6.47	24.72
	4/4/13	31.19	7.56	23.63
	4/30/14	31.19	6.62	24.57
	1/13/16	31.19	7.06	24.13
	7/22/16	31.19	9.94	21.25
	1/25/17	31.19	4.27	26.92
	6/13/2017	31.19	8.22	22.97
MW-3 (7-17)	6/10/09	32.07	8.44	23.63
	8/27/09	32.07	8.59	23.48
	12/15/09	32.07	7.66	24.41
	3/12/10	Well inaccessible	----	----
	10/21/10	Well inaccessible	----	----
	7/22/16	32.07	9.98	22.09
	1/25/17	32.07	4.79	27.28
	6/13/2017	32.07	7.74	24.33
MW-4 (7-17)	6/10/09	31.68	9.45	22.23
	8/27/09	31.68	10.29	21.39
	12/15/09	31.68	8.19	23.49
	3/12/10	31.68	5.45	26.23
	10/21/10	31.68	9.93	21.75
	5/5/11	31.68	6.60	25.08
	4/25/12	31.68	5.73	25.95
	12/12/12	31.68	6.21	25.47
	4/4/13	31.68	7.88	23.80

TABLE 2
Groundwater Elevation Data
Zimmerman Property
3442 Adeline Street
Oakland, CA

Well ID (Screen Interval)	Date Collected	Top of Casing Elevation (ft)	Depth to Water (ft)	Groundwater Elevation (ft)
MW-4 (continued)	4/30/14	31.68	6.92	24.76
	1/13/16	31.68	6.34	25.34
	7/22/16	31.68	10.50	21.18
	1/25/17	31.68	4.01	27.67
	6/13/2017	31.68	7.94	23.74
MW-5 (7-17)	6/10/09	30.39	9.13	21.26
	8/27/09	30.39	9.54	20.85
	12/15/09	30.39	8.33	22.06
	3/12/10	Well inaccessible	----	----
	10/21/10	30.39	6.85	23.54
	5/5/11	30.39	3.25	27.14
	4/25/12	30.39	4.50	25.89
	12/12/12	30.39	5.43	24.96
	4/4/13	30.39	7.25	23.14
	4/30/14	Well inaccessible	----	----
	1/12/16	30.39	5.65	24.74
	7/21/16	30.39	9.75	20.64
	1/25/17	30.39	3.08	27.31
	6/13/2017	30.39	7.30	23.09
MW-6 (7-17)	6/10/09	29.34	9.98	19.36
	8/27/09	29.34	11.84	17.50
	12/15/09	29.34	8.33	21.01
	3/12/10	29.34	4.66	24.68
	10/21/10	29.34	10.00	19.34
	5/5/11	29.34	5.59	23.75
	4/25/12	29.34	4.82	24.52
	12/20/12	29.34	5.23	24.11
	4/4/13	29.34	7.37	21.97
	4/30/14	29.34	5.89	23.45
	1/12/16	29.34	5.67	23.67
	7/21/16	29.34	10.40	18.94
	1/25/17	29.34	3.59	25.75
	6/13/2017	29.34	7.42	21.92
MW-7 (7-17)	6/10/09	31.04	6.53	24.51
	8/27/09	31.04	6.19	24.85
	12/15/09	31.04	5.71	25.33
	3/12/10	31.04	5.34	25.70
	10/21/10	31.04	6.59	24.45
	5/5/11	31.04	5.98	25.06
	4/25/12	31.04	5.71	25.33
	12/20/12	Well inaccessible	----	----
	4/4/13	31.04	6.18	24.86
	4/30/14	31.04	6.29	24.75
	1/12/16	31.04	5.61	25.43
	7/21/16	31.04	7.36	23.68

TABLE 2
Groundwater Elevation Data
Zimmerman Property
3442 Adeline Street
Oakland, CA

Well ID (Screen Interval)	Date Collected	Top of Casing Elevation (ft)	Depth to Water (ft)	Groundwater Elevation (ft)
MW-7	1/25/17	31.04	4.61	26.43
(continued)	6/13/2017	31.04	6.00	25.04
IW-1	6/10/09	31.66	7.65	24.01
(13-15)	8/27/09	31.66	7.70	23.96
	12/15/09	31.66	10.99	20.67
	3/12/10	31.66	6.00	25.66
	10/21/10	31.66	9.35	22.31
	5/5/11	31.66	6.73	24.93
	4/25/12	31.66	8.05	23.61
	12/20/12	31.66	12.88	18.78
	4/4/13	31.66	12.81	18.85
	4/30/14	31.66	6.01	25.65
	1/12/16	31.66	6.33	25.33
	7/21/16	31.66	8.31	23.35
	1/25/17	31.66	5.48	26.18
	6/13/2017	31.66	6.31	25.35
BF-1	7/21/16	31.87	8.40	23.47
	1/25/17	31.87	4.56	27.31
	6/13/2017	31.87	6.82	25.05
BF-5	7/21/16	32.28	8.95	23.33
	1/25/17	32.28	5.12	27.16
	6/13/2017	32.28	7.35	24.93

Notes:

Data from current reporting period

Elevations provided in feet above North American Vertical Datum 1988

TABLE 3
Summary of Groundwater Elevation and Flow

Zimmerman Property
3442 Adeline Street
Oakland, CA

Date	Average Water Table Elevation (ft)	Change from Previous Episode (ft)	Flow Direction (gradient) (ft/ft)
6/10/2009	22.40	----	West (0.019)
8/27/2009	21.85	-0.55	West (0.019)
12/15/2009	23.42	1.58	West (0.018)
3/12/2010	25.75	2.33	West (0.004)
10/21/2010	22.81	-2.94	North Northwest (0.041)
5/5/2011	25.13	2.32	West (0.01)
4/25/2012	25.52	0.38	West (0.01)
12/20/2012	25.01	-0.51	West (0.01)
4/4/2013	23.41	-1.60	West (0.01)
4/30/2014	24.62	1.21	West (0.01)
1/12-13/2016	24.55	-0.07	West (0.01)
7/21-22/2016	20.91	-3.64	West (0.01)

Notes:
Data from current reporting period
Elevations provided in reference to North American Vertical Datum 1988

TABLE 4
Summary of Groundwater Monitoring Well Analytical Data
Zimmerman Property
3442 Adeline Street
Oakland, CA

Sample ID	Date	Depth to Water (ft)	TPH-g (µg/L)	TPH-d (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
MW-1	04/17/09	7.01	220	97	10	<0.5	3.0	5.4	<5.0
	08/27/09	6.96	7,000	----	610	10	320	220	<180
	09/17/09	----	92	----	0.91	0.70	<0.5	<0.5	<15
	12/15/09	5.96	2500	----	170	6.4	66	120	<50
	03/12/10	5.06	500	----	4.0	1.1	0.6	0.7	<5.0
	10/21/10	7.00	<50	----	<0.5	<0.5	<0.5	<0.5	<5.0
	05/05/11	5.88	<50	----	<0.5	<0.5	<0.5	<0.5	<5.0
	04/25/12	5.33	<50	----	<0.5	<0.5	<0.5	<0.5	<5.0
	12/20/12	5.35	<50	----	<0.5	<0.5	<0.5	<0.5	<5.0
	04/04/13	6.63	<50	----	<0.5	<0.5	<0.5	<0.5	<5.0
	04/30/14	5.42	83	----	<0.5	0.53	<0.5	<0.5	<5.0
	01/12/16	6.07	<50	----	<0.5	<0.5	<0.5	<1.5	<5.0
	07/22/16	8.85	<50	----	<0.5/0.5	<0.5	<0.5	<1.5	<5.0
	01/25/17	4.16	<50	----	<0.5/<0.5	<0.5/<0.5	<0.5/<0.5	<1.5/<0.5	<5.0/<0.5
	06/13/17	6.37	<50	----	<0.50	<0.50	<0.50	<1.5	<5.0
MW-2	04/17/09	9.50	7,000	2,200	850	19	93	470	<100
	08/27/09	10.50	26,000	----	3,600	<25	1,200	3,000	<1,200
	12/15/09	8.68	25,000	----	2,900	70	1,500	2,400	<250
	03/12/10	5.69	7,300	----	590	7.0	6.4	680	<350
	10/21/10	7.51	1,900	----	140	1.4	28	140	<15
	05/05/11	6.68	27,000	----	2,300	13	1,700	2,600	<180
	04/25/12	5.58	9,600	----	440	8.8	260	920	<120
	12/20/12	6.47	2,900	----	63	2.6	21	85	<35
	04/04/13	7.56	7,900	----	960	10	380	690	<150
	04/30/14	6.62	<50	----	<0.5	<0.5	<0.5	<0.5	<5.0
	01/13/16	7.06	330	----	97	<0.5	2.5	14	<5.0
	07/22/16	9.94	<50	----	1.9/2.0	<0.5	<0.5	<1.5	<5.0
	01/25/17	4.27	<50	----	1.4/1.1	<0.5/<0.5	0.56/<0.5	1.6/1.1	<5.0/<0.5
	06/13/17	8.22	<50	----	<0.50	<0.50	<0.50	<1.5	<5.0
MW-3	04/17/09	8.44	10,000	2,200	930	5.6	270	920	<110
	08/27/09	8.59	17,000	----	3,800	38	730	710	<250
	09/17/09	----	260	----	1.8	1.0	<0.5	2.1	<15
	10/14/09	----	1,800	----	220	13	37	130	<30
	12/15/09	7.66	4,900	----	890	13	160	130	<50
	03/12/10	Well inaccessible							
	10/21/10	Well inaccessible							
	07/22/16	9.98	16,000	----	4,800/5,100	28	52	42	<150
	01/25/17	4.79	7,300	----	1,900/1,500	17/<25	99/80	59/37	<200/<25
	06/13/17	7.74	11,000	----	2,300	<25	110	<75	<250

TABLE 4
Summary of Groundwater Monitoring Well Analytical Data
Zimmerman Property
3442 Adeline Street
Oakland, CA

Sample ID	Date	Depth to Water (ft)	TPH-g (µg/L)	TPH-d (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
MW-4	04/17/09	9.45	4,700	1,200	140	2.0	28	18	<30
	08/27/09	10.29	4,300	----	75	11	8.6	3.4	<25
	12/15/09	8.19	3,000	----	64	11	5.6	3.3	<15
	03/12/10	5.45	6,100	----	1,200	14	170	6.2	<35
	10/21/10	9.93	1,900	----	120	4.7	5.7	1.8	<15
	05/05/11	6.60	4,900	----	560	2.6	41	17	<25
	04/25/12	5.73	330	----	23	1.4	2.0	4.2	<5.0
	12/20/12	6.21	150	----	5.8	<0.5	<0.5	<0.5	<5.0
	04/04/13	7.88	1,000	----	30	4.6	0.61	0.65	<5.0
	04/30/14	6.92	<50	----	<0.5	<0.5	<0.5	<0.5	<5.0
	01/13/16	6.34	<50	----	<0.5	<0.5	<0.5	<1.5	<5.0
	07/22/16	10.50	<50	----	<0.5/0.5	<0.5	<0.5	<1.5	<5.0
	01/25/17	4.01	<50	----	<0.5/<0.5	<0.5/<0.5	<0.5/<0.5	<1.5/<0.5	<5.0/<0.5
	06/13/17	7.94	<50	----	<0.50	<0.50	<0.50	<1.5	<5.0
MW-5	05/22/09	9.13	14,000	2,800	3,000	12	340	420	<100
	08/27/09	9.54	25,000	----	3,300	36	110	160	<400
	12/15/09	8.33	8,200	----	1,200	6.9	300	610	<250
	03/12/10	Well inaccessible							
	10/21/10	6.85	<50	----	1.3	<0.5	<0.5	<0.5	<5.0
	05/05/11	3.25	790	----	140	1.0	29	30	<20
	04/25/12	4.51	67	----	3.4	<0.5	1.4	0.83	<5.0
	12/20/12	5.43	<50	----	<0.5	<0.5	<0.5	<0.5	<5.0
	04/04/13	7.25	<50	----	<0.5	<0.5	<0.5	<0.5	<5.0
	04/30/14	Well inaccessible			----	----	----	----	----
	01/12/16	5.65	110	----	2.7	<0.5	<0.5	<1.5	<5.0
	07/21/16	9.75	<50	----	<0.5/0.5	<0.5	<0.5	<1.5	<5.0
	01/25/17	3.08	<50	----	<0.5/<0.5	<0.5/<0.5	<0.5/<0.5	<1.5/<0.5	<5.0/<0.5
	06/13/17	7.36	<50	----	<0.50	<0.50	<0.50	<1.5	<5.0
MW-6	04/17/09	9.98	5,600	1,000	210	3.0	180	160	<300
	08/27/09	11.84	2,200	----	98	7.9	20	1.1	<120
	12/15/09	8.59	4,700	----	370	6.9	260	300	<250
	03/12/10	4.66	9,300	----	210	12	250	110	<90
	10/21/10	10.00	380	----	35	1.2	4.6	3.8	<5.0
	05/05/11	5.59	7,000	----	80	2.9	120	28	<75
	04/25/12	4.82	7,400	----	99	11.0	100	27	<150
	12/20/12	5.23	5,500	----	81	3.1	78	16	<50
	04/04/13	7.37	5,300	----	76	5.7	50	12	<70
	04/30/14	5.89	670	----	12	2.4	2.3	0.77	<5.0
	01/12/16	5.67	63	----	1.8	<0.5	<0.5	<1.5	<5.0
	07/21/16	10.40	<50	----	<0.5/0.5	<0.5	<0.5	<1.5	<5.0
	01/25/17	3.59	<50	----	<0.5/<0.5	<0.5/<0.5	<0.5/<0.5	<1.5/<0.5	<5.0/<0.5
	06/13/17	7.42	330	----	1.4	<0.50	2.3	<1.5	<5.0

TABLE 4
Summary of Groundwater Monitoring Well Analytical Data
Zimmerman Property
3442 Adeline Street
Oakland, CA

Sample ID	Date	Depth to Water (ft)	TPH-g (µg/L)	TPH-d (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
MW-7	04/17/09	6.53	12,000	3,700	1,000	37	100	36	<120
	08/27/09	6.19	12,000	----	550	30	130	33	<100
	12/15/09	5.71	9,600	----	620	26	140	20	<100
	03/12/10	5.34	10,000	----	850	33	87	28	<25
	10/21/10	6.59	7,900	----	1,100	22	44	21	<180
	05/05/11	5.98	9,300	----	690	23	42	21	<200
	04/25/12	5.71	8,600	----	1,000	31	10	20	<75
	12/20/12	Well inaccessible							
	04/04/13	6.18	12,000	----	2,800	51	96	37	<210
	04/30/14	6.29	220	----	39	0.75	0.53	<0.5	<5.0
	01/12/16	5.61	1,800	----	400	6.8	9.7	7.6	31
	07/21/16	7.36	6,700	----	1,400/1,400	29	36	28	<400
	01/25/17	4.61	3,200	----	190/140	8.0/5.1	7.2/7.0	11/6.7	<150/<5.0
	06/13/17	6.00	10,000	----	1,900	46	180	85	<250
IW-1	05/22/09	7.65	1,200	680	58	2.7	2.3	18	<15
	08/27/09	7.70	160	----	4.1	0.5	0.8	1.6	<5.0
	09/17/09	----	300	----	8.0	1.5	1.4	0.85	<5.0
	12/15/09	10.99	220	----	5.4	1.4	0.65	0.7	<5.0
	03/12/10	6.00	<50	----	1.9	<0.5	<0.5	<0.5	<5.0
	10/21/10	9.35	<50	**----**	<0.5	<0.5	<0.5	<0.5	<5.0
	05/05/11	6.73	<50	**----**	<0.5	<0.5	<0.5	<0.5	<5.0
	04/25/12	8.05	<50	**----**	0.91	<0.5	<0.5	0.57	<5.0
	12/20/12	12.88	<50	----	<0.5	<0.5	<0.5	<0.5	<5.0
	04/04/13	12.81	<50	----	<0.5	<0.5	<0.5	<0.5	<5.0
	04/30/14	6.01	<50	----	<0.5	<0.5	<0.5	<0.5	<5.0
	01/12/16	6.33	<50	----	<0.5	<0.5	<0.5	<1.5	<5.0
	07/21/16	6.33	<50	----	<0.5/0.5	<0.5	<0.5	<1.5	<5.0
	01/25/17	5.48	<50	----	<0.5/<0.5	<0.5/<0.5	<0.5/<0.5	<1.5/<0.5	<5.0/<0.5
	06/13/17	6.31	<50	----	<0.50	<0.50	<0.50	<1.5	<5.0
BF-1	03/27/09	----	19,000	----	890	27	460	1,200	<250
	06/17/09	----	6,700	----	840	19	170	150	<150
	08/10/09	----	11,000	----	710	14	440	290	<120
	08/27/09	----	9,600	----	590	14	350	220	<90
	09/13/09	----	<50	----	1.2	<0.5	<0.5	<0.5	<5.0
	10/14/09	----	2,400	----	83	1.9	5.0	120	<10
	12/11/09	6.70	200	----	12	<0.5	2.2	9.6	<5.0
	03/12/10	5.61	<50	----	2.9	<0.5	<0.5	<0.5	<0.5
	10/21/10	7.95	560	----	68	1.5	6.7	25	<5.0
	05/05/11	6.25	<50	----	0.65	<0.5	<0.5	<0.5	<5.0
	04/25/12	5.85	<50	----	<0.5	<0.5	<0.5	<0.5	<5.0
	12/20/12	5.82	<50	----	<0.5	<0.5	<0.5	<0.5	<5.0
	04/04/13	6.78	<50	----	<0.5	<0.5	<0.5	<0.5	<5.0
	04/30/14	5.36	<50	----	<0.5	<0.5	<0.5	<0.5	<5.0
BF-1	01/12/16	6.58	<50	----	<0.5	<0.5	<0.5	<1.5	<5.0

TABLE 4
Summary of Groundwater Monitoring Well Analytical Data
Zimmerman Property
3442 Adeline Street
Oakland, CA

Sample ID	Date	Depth to Water (ft)	TPH-g (µg/L)	TPH-d (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
(continued)	07/22/16	8.40	<50	----	<0.5/0.5	<0.5	<0.5	<1.5	<5.0
)	01/25/17	4.56	<50	----	<0.5/<0.5	<0.5/<0.5	<0.5/<0.5	<1.5/<0.5	<5.0/<0.5
)	06/13/17	6.82	<50	----	<0.50	<0.50	<0.50	<1.5	<5.0
BF-5	08/27/09	----	170	----	32	0.55	4.2	220	<25
	10/14/09	----	<50	----	<0.5	<0.5	<0.5	<0.5	<5.0
	12/11/09	7.25	130	**----**	40	<0.5	0.91	<0.5	<5.0
	03/12/10	6.09	<50	**----**	4.3	<0.5	0.91	<0.5	<5.0
	10/21/10	8.62	80	**----**	8.8	<0.5	1.4	4.5	<5.0
	05/05/11	6.75	<50	**----**	<0.5	<0.5	<0.5	<0.5	<5.0
	04/25/12	6.37	<50	**----**	<0.5	<0.5	<0.5	<0.5	<5.0
	12/20/12	6.33	<50	----	<0.5	<0.5	<0.5	<0.5	<5.0
	04/04/13	7.25	<50	----	<0.5	<0.5	<0.5	<0.5	<5.0
	04/30/14	5.83	<50	----	<0.5	<0.5	<0.5	<0.5	<5.0
	01/12/16	7.09	<50	----	<0.5	<0.5	<0.5	<1.5	<5.0
	07/22/16	8.95	<50	----	<0.5/0.5	<0.5	<0.5	<1.5	<5.0
	01/25/17	5.12	<50	----	<0.5/<0.5	<0.5/<0.5	<0.5/<0.5	<1.5/<0.5	<5.0/<0.5
	06/13/17	7.35	<50	----	<0.50	<0.50	<0.50	<1.5	<5.0

Notes:

µg/L	micrograms of analyte per liter of sample
	Data from current reporting period
MTBE	methyl tert-butyl ether
TPH-d	total petroleum hydrocarbons as diesel
TPH-g	total petroleum hydrocarbons as gasoline
---	No Data

TABLE 5
Summary of Grab Groundwater Analytical Data
Zimmerman Property
3442 Adeline Street
Oakland, CA

Sample ID	Date	TPH-g µg/L	TPH-d µg/L	Benzene µg/L	Toluene µg/L	Ethyl-Benzene µg/L	Xylenes µg/L	MTBE µg/L	TAME µg/L	ETBE µg/L	TBA µg/L	DIPE µg/L
Pit Water	02/22/00	7,400	34,000	3,300	930	400	6,200	---	---	---	---	---
S-1	6/23/06	20,000	<10,000	980	70	1,500	1,100	---	---	---	---	---
S-2	6/23/06	31,000	<4,000	7,000	260	920	2,800	---	---	---	---	---
S-3	6/23/06	23,000	<1,500	490	67	1,200	3,300	---	---	---	---	---
S-4	6/23/06	120,000	<40,000	200	<15	3,500	2,900	---	---	---	---	---
SB-1	10/1/2007	28,000	6,100	2,000	77	1,600	4,100	<25	<25	<25	<250	<25
SB-2	10/1/2007	640	300	1.8	2.2	1.1	4.9	<0.5	<0.5	<0.5	<5.0	<0.5
SB-3	10/1/2007	84	<50	2.4	<0.5	4.2	11	<0.5	<0.5	<0.5	<5.0	<0.5
SB-4	10/1/2007	20,000	2,200	6,600	110	390	430	<17	<17	<17	430	<17
SB-5	10/1/2007	22,000	7,400	1,900	86	1,200	2,100	<5.0	<5.0	<5.0	120	<5.0
SB-6	10/1/2007	440	---	17	<0.5	0.99	2.2	2.0	<0.5	<0.5	18	<0.5
SB-7	10/3/2007	2,000	1,000	30	5.1	56	82	6.1	<0.5	<0.5.	<5.0	<0.5
SB-8	10/3/2007	6,700	1,600	110	6.3	160	140	<0.5	<0.5	<0.5	12	<0.5
SB-9	10/3/2007	11,000	5,700	440	14	720	1,000	<1.7	<1.7	<1.7	37	<1.7
SB-10	10/3/2007	17,000	1,700	3,800	55	420	830	<10	<10	<10	510	11

TABLE 5
Summary of Grab Groundwater Analytical Data
Zimmerman Property
3442 Adeline Street
Oakland, CA

Sample ID	Date	TPH-g	TPH-d	Benzene	Toluene	Ethyl-Benzene	Xylenes	MTBE	TAME	ETBE	TBA	DIPE
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
SB-11	10/3/2007	83,000	4,300	10,000	640	2,700	7,900	<25	<25	<25	840	<25
SB-12	12/20/2007	35,000	4,900	5,200	110	1,000	1,800	<450	---	---	---	---
SB-13	12/20/2007	29,000	5,100	5,300	80	1,400	3,900	<250	---	---	---	---
SB-14	12/20/2007	23,000	12,000	2,600	15	1,500	1,800	<240	---	---	---	---
SB-15	12/20/2007	36,000	3,000	7,700	190	1,600	4,700	<350	---	---	---	---
SB-16	12/20/2007	88	480	0.60	<0.5	<0.5	0.83	<5.0	---	---	---	---
SB-17	12/20/2007	1,100	320	<0.5	6.2	<0.5	4.2	<5.0	---	---	---	---
SB-18	12/20/2007	<50	1,800	<0.5	<0.5	<0.5	<0.5	<5.0	---	---	---	---
SB-19	12/20/2007	<50	280	<0.5	<0.5	<0.5	<0.5	<5.0	---	---	---	---
SB-20	12/20/2007	28,000	3,900	3,400	22	1,200	930	<160	---	---	---	---
SB-21	12/21/2007	8,100	1,200	1,600	<5.0	160	84	<50	---	---	---	---
SB-22	12/21/2007	2,600	620	110	0.90	150	55	<10	---	---	---	---
SB-23	5/14/2008	46,000	4,800	9,000	40	2,300	5,200	<450	---	---	---	---
SB-24	5/14/2008	11,000	2,900	80	<5.0	440	290	<50	---	---	---	---
SB-25	5/9/2008	3,600	1,300	42	1.90	65	36	<5.0	---	---	---	---
SB-26	5/14/2008	2,300	770	22	2.1	<1.0	2.4	<10	---	---	---	---

TABLE 5
Summary of Grab Groundwater Analytical Data
Zimmerman Property
3442 Adeline Street
Oakland, CA

Sample ID	Date	TPH-g µg/L	TPH-d µg/L	Benzene µg/L	Toluene µg/L	Ethyl-Benzene µg/L	Xylenes µg/L	MTBE µg/L	TAME µg/L	ETBE µg/L	TBA µg/L	DIPE µg/L
SB-27	5/14/2008	740	180	7.4	3.70	<0.5	1.0	<5.0	---	---	---	---
SB-28	5/16/2008	290	72	1.3	0.93	2.7	4.0	<5.0	---	---	---	---
SB-29	5/16/2008	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	---	---	---	---
SB-30	5/14/2008	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	---	---	---	---
SB-31	5/14/2008	5,100	770	270	6.3	79	7.2	<110	---	---	---	---
VB-4	6/13/2017	2,200	710	17	1.1	4.0	1.7	<5.0	<5.0	<5.0	11	<5.0
VB-5	6/13/2017	5,000	4,400	91	<5.0	93	25	<5.0	<5.0	<5.0	<20	<5.0
VB-17	6/13/2017	4,100	1,400	6.0	<0.50	18	1.4	<0.50	<0.50	<0.50	<2.0	<0.50
VB-18	6/13/2017	160	260	<0.50	<0.50	3.0	0.9	<0.50	<0.50	<0.50	<2.0	<0.50
VB-19	6/13/2017	9,500	2,200	83	<5.0	40	<5.0	<5.0	<5.0	<5.0	<20	<5.0
VB-20	6/13/2017	200	65	5.7	5.6	0.72	1.1	<0.50	<0.50	<0.50	13	<0.50
VB-21	6/13/2017	29,000	24,000	600	<25	150	<25	<25	<25	<25	<100	<25

Notes:

µg/L	micrograms of analyte per liter of sample	TAME	tert-amyl methyl ether	TPH-g	total petroleum hydrocarbons a
DIPE	Di-isopropyl Ether	TBA	tertiary butyl alcohol	MTBE	methyl tert-butyl ether
ETBE	ethyl tert-butyl ether	TPH-d	total petroleum hydrocarbons as diesel	---	No Data
	Data from current reporting period				

APPENDIX A

GROUNDWATER FIELD DATA SHEETS

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-1

Project Name:	Zimmerman	Date of Sampling:	1/25/17 ~~1/12/2016~~
Job Number:	281939	Name of Sampler:	~~A. Armstrong~~ NB
Project Address:	3442 Adeline St. Oakland Cal		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4"		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	31.12		
Depth of Well	17.00		
Depth to Water (from top of casing)	4.16		
Water Elevation (feet above msl)	26.96		
Well Volumes Purged	Micropurged		
Actual Volume Purged (~~liters~~) ML	~~31,713,05~~ 2350		
Appearance of Purge Water	clear		
Free Product Present?	No	Thickness (ft):	----

GROUNDWATER SAMPLES

Number of Samples/Container Size: 3 VOA

	Time	Vol Removed M (Liters)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
	Stabilization Criteria		3%	+/-0.1	3%	10%> 0.5 mg/L	+/- 10	Sample if not achieved within 3-gallons
DTW	1018	Start purge						NTU
4.42	1023	200	17.19	4.05	736	34.13	-31.2	6.03
4.60	1028	700	17.13	4.38	735	32.61	-30.4	3.85
4.75	1033	1200	17.02	4.56	734	37.17	-29.7	2.35
4.89	1040	1800	16.98	4.81	733	32.02	-32.1	2.08
5.01	1045	2050	16.94	4.91	733	31.31	-32.3	1.23
5.10	1050	2350	16.93	4.83	733	31.20	-24.0	1.12
	1050	Sample						

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Bottom of drop tube at 11.5 feet bgs. Purge rate <0.5 liters per minute.

Water drawdown should be <0.32 feet

Pump at minimum speed

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-2

Project Name:	Zimmerman	Date of Sampling:	1/25/17 ~~1/12/2016~~
Job Number:	281939	Name of Sampler:	~~A. Armstrong~~ NB
Project Address:	3442 Adeline St. Oakland Cal		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4"		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	31.19		
Depth of Well	17.00		
Depth to Water (from top of casing)	4.27		
Water Elevation (feet above msl)	26.92		
Well Volumes Purged	Micropurged		
Actual Volume Purged (liters)	1500		
Appearance of Purge Water	Clear		
Free Product Present?	No	Thickness (ft):	----

GROUNDWATER SAMPLES

Number of Samples/Container Size: 3 VOA

	Time	Vol Removed (Liters)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
	Stabilization Criteria		3%	+/-0.1	3%	10%> 0.5 mg/L	+/- 10	Sample if not achieved within 3-gallons
DTW	1212	Start Purge						NTU
4.55	1220	~~4.55~~ 350	16.96	2.40	453	46.72	20.8	6.18
4.68	1225	700	16.99	2.78	449	46.88	15.9	2.55
4.82	1230	1100	17.02	2.96	448	46.00	12.4	1.84
4.97	1235	1500	16.97	2.93	448	46.21	10.0	1.53
	1235	Sample						

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Bottom of drop tube at 11.0 feet bgs. Purge rate <0.5 liters per minute.
Water drawdown should be <0.32 feet
Pump at minimum speed

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-3

Project Name:	Zimmerman	Date of Sampling:	~~1/12/2016~~ 1/25/17
Job Number:	281939	Name of Sampler:	~~A. Armstrong~~ NB
Project Address:	3442 Adeline St. Oakland Cal		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4"		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	32.07		
Depth of Well	17.00		
Depth to Water (from top of casing)	4.79		
Water Elevation (feet above msl)	27.28		
Well Volumes Purged	Micropurged		
Actual Volume Purged (liters)	2750		
Appearance of Purge Water	Clear		
Free Product Present?	No	Thickness (ft):	----

GROUNDWATER SAMPLES

Number of Samples/Container Size: 3 VOA

	Time	Vol Removed m(Liters)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
	Stabilization Criteria		3%	+/-0.1	3%	10%> 0.5 mg/L	+/- 10	Sample if not achieved within 3-gallons
DTW	1109	Start Purge						NTU
5.14	1119	500	17.36	4.53	1244	2.03	-104.7	5.52
5.25	1124	750	17.44	4.55	1243	1.44	-106.3	5.13
5.38	1129	1050	17.48	4.49	1244	0.75	-107.7	4.42
5.56	1134	1450	17.57	4.37	1244	0.62	-109.6	4.52
5.65	1139	1850	17.62	4.42	1245	0.50	-112.0	5.07
5.82	1144	2250	17.67	4.29	1245	0.44	-113.0	3.62
5.98	1150	2750	17.72	4.20	1245	0.41	-112.5	3.96
	1150	Sample						

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

~~Well inaccesable - covered by carpet, concrete?, not locatable.~~

Water drawdown should be <0.32 feet

Pump at minimum speed

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-4

Project Name:	Zimmerman	Date of Sampling:	1/25/17 ~~1/12/2016~~
Job Number:	281939	Name of Sampler:	~~A. Armstrong~~ NB
Project Address:	3442 Adeline St. Oakland Cal		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2"		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	31.68		
Depth of Well	17.00		
Depth to Water (from top of casing)	4.01		
Water Elevation (feet above msl)	27.67		
Well Volumes Purged	Micropurged		
Actual Volume Purged ~~(liters)~~ ML	1050		
Appearance of Purge Water	clear		
Free Product Present?	No	Thickness (ft):	----

GROUNDWATER SAMPLES

Number of Samples/Container Size: 3 VOA

Time	Vol Removed (Liters)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
Stabilization Criteria		3%	+/-0.1	3%	10%> 0.5 mg/L	+/- 10	Sample if not achieved within 3-gallons
DTW 1250	Start Purge						NTU
4.80 1300	400	17.06	3.23	370	42.62	24.4	14.6
5.25 1305	700	17.09	3.20	368	42.39	23.1	6.67
5.53 1310	1050	17.15	3.19	368	42.30	22.0	3.28
1310	Sample						

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Bottom of drop tube at 11.0 feet bgs. Purge rate <0.5 liters per minute.

~~Water drawdown should be <0.32 feet~~

Pump at lowest possible setting

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-5

Project Name:	Zimmerman	Date of Sampling:	1/25/17 ~~1/12/2016~~
Job Number:	281939	Name of Sampler:	~~A. Armstrong~~ NB
Project Address:	3442 Adeline St. Oakland Cal		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2"		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	30.39		
Depth of Well	17.00		
Depth to Water (from top of casing)	3.08		
Water Elevation (feet above msl)	27.31		
Well Volumes Purged	Micropurged		
Actual Volume Purged ~~(liters)~~ mL	1200		
Appearance of Purge Water	Clear		
Free Product Present?	No	Thickness (ft):	----

GROUNDWATER SAMPLES

Number of Samples/Container Size: 3 VOA

	Time	Vol Removed (Liters)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
	Stabilization Criteria		3%	+/-0.1	3%	10%> 0.5 mg/L	+/- 10	Sample if not achieved within 3-gallons
DTW	1323	Start Purge						NTU
3.93	1328	200	14.81	4.97	922	32.15	-4.3	15.0
4.32	1333	500	14.69	5.01	921	31.88	-2.5	12.6
4.62	1338	900	14.61	5.10	921	29.03	-3.5	9.36
4.91	1343	1200	14.63	5.10	921	28.48	-4.2	7.79
	1343	Sample						

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Bottom of drop tube at 10.0 feet bgs. Purge rate <0.5 liters per minute.
Water drawdown should be <0.32
Pump at minimum speed

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-6

Project Name:	Zimmerman	Date of Sampling:	1/25/17 ~~1/12/2016~~
Job Number:	281939	Name of Sampler:	~~A. Armstrong~~ NB
Project Address:	3442 Adeline St. Oakland Cal		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2"		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	29.34		
Depth of Well	17.00		
Depth to Water (from top of casing)	3.59		
Water Elevation (feet above msl)	25.75		
Well Volumes Purged	Micropurged		
Actual Volume Purged ~~(liters)~~ mL	~~3.0~~ 1300		
Appearance of Purge Water	~~Clear~~ clear		
Free Product Present?	No	Thickness (ft):	----

GROUNDWATER SAMPLES

Number of Samples/Container Size: 3 VOA

Time	Vol Removed (Liters)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
Stabilization Criteria		3%	+/-0.1	3%	10%> 0.5 mg/L	+/- 10	Sample if not achieved within 3-gallons
DTW 1358	Start Purge						NTU
1408	500	15.14	4.50	655	17.32	-6.3	3.28
1413	1000	15.28	4.36	657	17.38	-2.3	1.34
1418	1300	15.21	4.34	658	17.45	-1.8	1.29
1418	Sample						

21.42
3.85
5.15

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Clear with slight hydrocarbon odor.

Bottom of drop tube at 13.0 feet bgs. Purge rate <0.5 liters per minute.

Water drawdown should be <0.32 feet

Pump at minimum speed

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-7

Project Name:	Zimmerman	Date of Sampling:	1/25/17 ~~1/12/2016~~
Job Number:	281939	Name of Sampler:	~~A. Armstrong~~ NB
Project Address:	3442 Adeline St. Oakland Cal		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2"		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	31.04		
Depth of Well	17.00		
Depth to Water (from top of casing)	4.61		
Water Elevation (feet above msl)	26.213		
Well Volumes Purged	Micropurged		
Actual Volume Purged ~~(liters)~~ mL	2000		
Appearance of Purge Water	clear		
Free Product Present?	No	Thickness (ft):	----

GROUNDWATER SAMPLES

Number of Samples/Container Size: 3 VOA

Time	Vol Removed (Liters)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
Stabilization Criteria		3%	+/-0.1	3%	10%> 0.5 mg/L	+/- 10	Sample if not achieved within 3-gallons
DTW							NTU
1450	Start Purge						
5.21 1500	350	17.65	4.46	926	1.46	-106.2	2.91
5.22 1505	850	17.61	4.14	925	0.89	-105.1	2.93
5.23 1510	1200	17.61	4.16	923	0.69	-106.7	2.61
5.24 1515	1600	17.60	4.25	921	0.53	-114.0	3.21
5.26 1520	2000	17.52	4.32	918	0.48	-115.8	3.03
1520	Sample						

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Clear with strong hydrocarbon odors.

Bottom of drop tube at 12.0 feet bgs. Purge rate <0.5 liters per minute.

Water drawdown should be <0.32 feet

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: IW-1

Project Name:	Zimmerman	Date of Sampling:	1/25/17 ~~1/12/2016~~
Job Number:	281939	Name of Sampler:	~~A. Armstrong~~ NB
Project Address:	3442 Adeline St. Oakland Cal		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2"		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	31.66		
Depth of Well	15.00		
Depth to Water (from top of casing)	5.48		
Water Elevation (feet above msl)	26.18		
Well Volumes Purged	Micropurged		
Actual Volume Purged (liters)	1650		
Appearance of Purge Water	clear		
Free Product Present?	No	Thickness (ft):	----

GROUNDWATER SAMPLES

Number of Samples/Container Size: 3 VOA

	Time	Vol Removed (Liters)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
	Stabilization Criteria		3%	+/-0.1	3%	10%> 0.5 mg/L	+/- 10	Sample if not achieved within 3-gallons
	1530	Start Purge						
6.62	1535	~~600~~ 200	17.53	2.72	1073	2.11	-79.0	1.02
7.27	1540	600	17.46	3.70	1078	0.82	-103.9	0.60
8.00	1545	950	17.49	3.78	1080	0.61	-108.5	0.53
8.70	1550	1300	17.57	3.58	1081	0.52	-109.5	0.71
9.15	1555	1650	17.58	3.51	1082	0.46	-109.1	0.45
	1555	Sample						

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Clear with no odors.

Bottom of drop tube at 13.0 feet bgs. Purge rate <0.5 liters per minute.

~~Water drawdown should be <0.32 feet.~~

Pump at lowest setting

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: BF-1

Project Name:	Zimmerman	Date of Sampling:	~~1/12/2016~~ 1/25/17
Job Number:	281939	Name of Sampler:	~~A. Armstrong~~ NB
Project Address:	3442 Adeline St. Oakland Cal		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4"		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	~~Unsurveyed~~ 31.87		
Depth of Well	12.00		
Depth to Water (from top of casing)	4.56		
Water Elevation (feet above msl)	27.31		
Well Volumes Purged	Micropurged		
Actual Volume Purged (liters) mL	2900		
Appearance of Purge Water	Clear		
Free Product Present?	No	Thickness (ft):	----

GROUNDWATER SAMPLES

Number of Samples/Container Size: 3 VOA

Time	Vol Removed (Liters)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
Stabilization Criteria		3%	+/-0.1	3%	10%> 0.5 mg/L	+/- 10	Sample if not achieved within 3-gallons
DTW							
	0949 Start Purge						NTU
4.56	0954	500	17.64	4.53	1037	1.63	-77.0	0.14
4.56	0959	1300	17.80	4.59	1036	1.56	-84.1	0.00
4.56	1004	2100	17.84	4.73	1036	1.57	-90.1	0.00
4.56	1009	2900	17.87	4.74	1036	1.21	-92.9	0.00
	1009	Sample						

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Clear with no hydrocarbon odor.
Bottom of drop tube at 10.0 feet bgs. Purge rate <0.5 liters per minute.
Water drawdown should be <0.32 feet

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: BF-5

Project Name:	Zimmerman	Date of Sampling:	~~1/12/2016~~ 1/25/17
Job Number:	281939	Name of Sampler:	~~A. Armstrong~~ NB
Project Address:	3442 Adeline St. Oakland Cal		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4"		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	~~Unsurveyed~~ 32.28		
Depth of Well	12.00		
Depth to Water (from top of casing)	5.12		
Water Elevation (feet above msl)	27.16		
Well Volumes Purged	Micropurged		
Actual Volume Purged ~~(liters)~~ ML	3550		
Appearance of Purge Water	Clear		
Free Product Present?	No	Thickness (ft):	----

GROUNDWATER SAMPLES

Number of Samples/Container Size: 3 VOA

Time	Vol Removed M(Liters)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
Stabilization Criteria		3%	+/-0.1	3%	10%> 0.5 mg/L	+/- 10	Sample if not achieved within 3-gallons
0902	Start Purge						(NTU)
Dtw 5.12 0914	300	16.94	4.13	1126	30.34	-31.1	0.21
5.12 0919	800	17.49	3.97	1124	30.78	-24.0	0.00
5.12 0924	1550	17.92	3.80	1124	31.50	-20.2	0.00
5.12 0929	2550	18.14	3.71	1123	31.74	-17.8	0.00
5.12 0934	3550	18.19	3.69	1122	31.84	-16.0	0.00
0934	Sample						

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

~~Clear, no odor~~ NB Clear, No odor

Bottom of drop tube at 11.0 feet bgs. Purge rate <0.5 liters per minute.

Water drawdown should be <0.32 feet

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: IW-1

Project Name:	Zimmerman	Date of Sampling:	6/13/17
Job Number:	281939	Name of Sampler:	WBH
Project Address:	3442 Adeline St. Oakland Cal		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2"		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	31.66		
Depth of Well	15.00		
Depth to Water (from top of casing)	6.31		
Water Elevation (feet above msl)			
Well Volumes Purged	Micropurged		
Actual Volume Purged (mL)	2700		
Appearance of Purge Water	Clear		
Free Product Present?	No	Thickness (ft):	

GROUNDWATER SAMPLES

Number of Samples/Container Size: 3 VOA

Time	Vol Removed (mL)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
Stabilization Criteria		3%	+/-0.1	3%	10%> 0.5 mg/L	+/- 10	Sample if not achieved within 3-gallons
1516				Start			
1521	1000mL	20.35	6.80	1126	—	-39.7	8.61
1526	1500	20.43	6.82	1127	—	-53.0	9.81
1531	2100	20.46	6.82	1127	—	-60.0	10.95
1536	2700	20.59	6.83	1128	—	-77.0	11.77
		1537	Start sample				

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Purged as slow as possible, turdity LO4

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-1

Project Name:	Zimmerman	Date of Sampling:	6/13/17
Job Number:	281939	Name of Sampler:	LOBH
Project Address:	3442 Adeline St. Oakland Cal		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4"		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	31.12		
Depth of Well	17.00		
Depth to Water (from top of casing)	6.37		
Water Elevation (feet above msl)			
Well Volumes Purged	Micropurged		
Actual Volume Purged (mL)	2400		
Appearance of Purge Water	Clear		
Free Product Present?	NO	Thickness (ft):	---

GROUNDWATER SAMPLES

Number of Samples/Container Size: 3 VOA

Time	Vol Removed (mL)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
Stabilization Criteria		3%	+/-0.1	3%	10%> 0.5 mg/L	+/- 10	Sample if not achieved within 3-gallons
1341		Start					
1346	800	18.62	6.98	931	—	216.0	6.59
1351	1600	18.52	7.00	932	—	225.8	6.69
1356	2400	18.49	7.00	931	—	232.5	6.84
1357		Begin Sampling					

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Forgot Turbidity, Purged Slowly

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-2

Project Name:	Zimmerman	Date of Sampling:	6/13/13
Job Number:	281939	Name of Sampler:	WBH
Project Address:	3442 Adeline St. Oakland Cal		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4"		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	31.19		
Depth of Well	17.00		
Depth to Water (from top of casing)	8.22		
Water Elevation (feet above msl)			
Well Volumes Purged	Micropurged		
Actual Volume Purged (mL)	2700		
Appearance of Purge Water	Clear		
Free Product Present?	No	Thickness (ft):	

GROUNDWATER SAMPLES

Number of Samples/Container Size: 3 VOA

Time	Vol Removed (mL)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
Stabilization Criteria		3%	+/-0.1	3%	10%> 0.5 mg/L	+/- 10	Sample if not achieved within 3-gallons
1221			Start				
1226	900	16.02	6.10	573	—	231.1	8.54
1231	1800	17.97	6.39	571	—	227.0	8.68
1236	~~1805~~ 2700	17.98	6.40	569	—	225.3	8.~~88~~82
		Start	Sample	@	1237		

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Turbidity @ 1.06

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-3

Project Name:	Zimmerman	Date of Sampling:	6/13/17
Job Number:	281939	Name of Sampler:	LOBH
Project Address:	3442 Adeline St. Oakland Cal		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4"		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	32.07		
Depth of Well	17.00		
Depth to Water (from top of casing)	7.74		
Water Elevation (feet above msl)			
Well Volumes Purged	Micropurged		
Actual Volume Purged (mL)	2400		
Appearance of Purge Water	Clear		
Free Product Present?	N/A	Thickness (ft):	

GROUNDWATER SAMPLES

Number of Samples/Container Size: 3 VOA

Time	Vol Removed (mL)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
Stabilization Criteria		3%	+/-0.1	3%	10%> 0.5 mg/L	+/- 10	Sample if not achieved within 3-gallons
1145		Start					
1150	800	19.13	6.45	1236	-	-48.7	8.0
1155	1600	19.23	6.77	1237	-	-67.9	8.07
1200	2400	19.31	6.75	1237	-	-69.7	8.112
			Start	sample	1201		

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Slight odor of diesel Turbid 1.13

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-4

Project Name:	Zimmerman	Date of Sampling:	6/13/17
Job Number:	281939	Name of Sampler:	WBH
Project Address:	3442 Adeline St. Oakland Cal		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2"		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	31.68		
Depth of Well	17.00		
Depth to Water (from top of casing)	7.94		
Water Elevation (feet above msl)			
Well Volumes Purged	Micropurged		
Actual Volume Purged (mL)	3000		
Appearance of Purge Water	Clear		
Free Product Present?	No	Thickness (ft):	

GROUNDWATER SAMPLES

Number of Samples/Container Size: 3 VOA

Time	Vol Removed (mL)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
Stabilization Criteria		3%	+/-0.1	3%	10%> 0.5 mg/L	+/- 10	Sample if not achieved within 3-gallons
1030				Start			
1035	900	18.24	6.07	434	33.31	215.1	8.56
1040	1600	18.24	6.11	432	32.67	222.5	8.74
1045	2300	18.29	6.09	430	30.53	237.2	8.91
1050	3000	18.31	6.09	427	—	249.4	9.10
		Start	sample	1054			

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Cannot purge slow enough to stop drawdown
No well box cover DO meter not working
Turbid 5.42

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-5

Project Name:	Zimmerman	Date of Sampling:	6/13/17
Job Number:	281939	Name of Sampler:	WBA
Project Address:	3442 Adeline St. Oakland Cal		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2"		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	30.39		
Depth of Well	17.00		
Depth to Water (from top of casing)	7.30		
Water Elevation (feet above msl)			
Well Volumes Purged	Micropurged		
Actual Volume Purged (mL)	3200		
Appearance of Purge Water	Clear		
Free Product Present?	No	Thickness (ft):	

GROUNDWATER SAMPLES

Number of Samples/Container Size: 3 VOA

Time	Vol Removed (mL)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
Stabilization Criteria		3%	+/-0.1	3%	10%> 0.5 mg/L	+/- 10	Sample if not achieved within 3-gallons
1420			Start				
1425	800	16.57	6.74	1151	—	246.6	7.71
1430	1600	16.47	6.69	1145	—	252.3	7.89
1435	2400	16.39	6.808	1140	—	251.6	8.09
1440	3200	16.39	6.70	1140	—	252.0	8.28
		Start Sampling 1440					

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Turbidity 8.39

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-6

Project Name:	Zimmerman	Date of Sampling:	6/13/17
Job Number:	281939	Name of Sampler:	WBH
Project Address:	3442 Adeline St. Oakland Cal		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2"		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	29.34		
Depth of Well	17.00		
Depth to Water (from top of casing)	7.42		
Water Elevation (feet above msl)			
Well Volumes Purged	Micropurged		
Actual Volume Purged (mL)	8806		
Appearance of Purge Water	Clear		
Free Product Present?	No	Thickness (ft):	

GROUNDWATER SAMPLES

Number of Samples/Container Size: 3 VOA

Time	Vol Removed (mL)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments PTG
Stabilization Criteria		3%	+/-0.1	3%	10%> 0.5 mg/L	+/- 10	Sample if not achieved within 3-gallons
0857			Start Purge				
0902	600mL	18.08	6.49	744	1.45	-24.4	7.61
0907	1600mL	18.06	6.51	724	1.61	-14.3	7.77
0912	2400	18.04	6.43	7246	1.38	12.7	7.94
0917	3000mL	18.05	6.47	695	1.75	36.3	8.04
0922	3600	18.10	6.47	695	2.44	55.7	8.19
0927	4200	18.16	6.50	696	4.16	50.9	8.34
0932	4800	18.15	6.56	726	2.35	-1.9	8.50
0937	5400	18.19	6.45	709	5.52	27.1	8.65
0942	6000	18.21	6.52	692	10.10	63.0	8.74

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Purging as slowly as possible

Sample @ 1005 Turbidity 3.72

0947	6600	18.27	6.58	716	6.05	16.9	8.94
0952	7200	18.42	6.57	696	10.92	56.6	9.08
0957	8000	18.41	6.67	685	LM 5.56	8.6	9.24
1002	8800	18.48	6.32	683	5.37	123.8	9.39

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-7

Project Name:	Zimmerman	Date of Sampling:	6/13/17
Job Number:	281939	Name of Sampler:	WBH
Project Address:	3442 Adeline St. Oakland Cal		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2"		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	31.04		
Depth of Well	17.00		
Depth to Water (from top of casing)	6.0		
Water Elevation (feet above msl)			
Well Volumes Purged	Micropurged		
Actual Volume Purged (mL)	2600		
Appearance of Purge Water	Clear		
Free Product Present?	-	Thickness (ft):	-

GROUNDWATER SAMPLES

Number of Samples/Container Size: 3 VOA

Time	Vol Removed (mL)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
Stabilization Criteria		3%	+/-0.1	3%	10%> 0.5 mg/L	+/- 10	Sample if not achieved within 3-gallons
1600			Start				
1605	500	20.77	7.00	1052	-	-85.4	6.49
1610	1200	20.81	7.05	1053	-	-91.4	6.58
1615	1900	20.56	7.05	1054	-	-96.3	6.62
1620	2600	20.36	7.05	1048	-	-100.4	6.62
1621			start	sampling			

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Turbidity 3.7 Slight smell of hydrocarbons

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: BF-1

Project Name:	Zimmerman	Date of Sampling:	6/13/17
Job Number:	281939	Name of Sampler:	WBH
Project Address:	3442 Adeline St. Oakland Cal		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4"		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	31.87		
Depth of Well	12.00		
Depth to Water (from top of casing)	6.82		
Water Elevation (feet above msl)			
Well Volumes Purged	Micropurged		
Actual Volume Purged (mL)	3600		
Appearance of Purge Water	Clear		
Free Product Present?	No	Thickness (ft):	

GROUNDWATER SAMPLES

Number of Samples/Container Size: 3 VOA

Time	Vol Removed (mL)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
Stabilization Criteria		3%	+/-0.1	3%	10%> 0.5 mg/L	+/- 10	Sample if not achieved within 3-gallons
1303			Start				
1308	900	19.03	6.95	991	=	215.4	6.84
1313	1800	19.06	7.01	1005	=	190.0	6.88
1318	2700	19.13	7.01	1015	=	168.2	6.94
1323	3600	19.13	6.95	1030	-	157.8	6.89
	Start @		1324				

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Turbid @ 0.03

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: BF-5

Project Name:	Zimmerman	Date of Sampling:	6/13/17
Job Number:	281939	Name of Sampler:	WBH
Project Address:	3442 Adeline St. Oakland Cal		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4"		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	32.28		
Depth of Well	12.00		
Depth to Water (from top of casing)	7.85		
Water Elevation (feet above msl)			
Well Volumes Purged	Micropurged		
Actual Volume Purged (mL)	2700		
Appearance of Purge Water	Clear		
Free Product Present?	No	Thickness (ft):	

GROUNDWATER SAMPLES

Number of Samples/Container Size: 3 VOA

Time	Vol Removed (mL)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
Stabilization Criteria		3%	+/-0.1	3%	10%> 0.5 mg/L	+/- 10	Sample if not achieved within 3-gallons
1108				Start			
1113	900	19.12	6.89	1109	—	277.8	7.35
1118	1800	19.13	6.70	1109	—	299.0	7.35
1123	2700	19.14	6.72	1108	—	354.0	7.35
1126			Sample				

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Purged as slowly as possible. Turbid 0.91

APPENDIX B

LABORATORY ANALYTICAL AND CHAIN OF CUSTODY DOCUMENTATION

McCampbell Analytical, Inc.
"When Quality Counts"

Analytical Report

WorkOrder: 1701C18

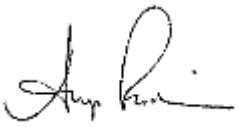
Report Created for: AEI Consultants

2500 Camino Diablo, Ste.#200
Walnut Creek, CA 94597

Project Contact: Jonathan Sanders
Project P.O.: 124632
Project Name: 281939; 3442 Adeline St, Oakland, California

Project Received: 01/27/2017

Analytical Report reviewed & approved for release on 02/03/2017 by:



Angela Rydelius,
Laboratory Manager

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Glossary of Terms & Qualifier Definitions

Client: AEI Consultants
Project: 281939; 3442 Adeline St, Oakland, California
WorkOrder: 1701C18

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)

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Glossary of Terms & Qualifier Definitions

Client: AEI Consultants
Project: 281939; 3442 Adeline St, Oakland, California
WorkOrder: 1701C18

Analytical Qualifiers

S	surrogate spike recovery outside accepted recovery limits
c4	surrogate recovery outside of the control limits due to coelution with another peak(s) / cluttered chromatogram.
d1	weakly modified or unmodified gasoline is significant
d17	Reporting limit for MTBE raised due to co-elution with non-target peaks.

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Received:	1/27/17 15:10	**Extraction Method:**	SW5030B
Date Prepared:	1/27/17-1/30/17	**Analytical Method:**	SW8260B
Project:	281939; 3442 Adeline St, Oakland, California	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1	1701C18-001B	Water	01/26/2017 10:50	GC18	133313

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	01/27/2017 21:33
tert-Amyl methyl ether (TAME)	ND	0.50	1	01/27/2017 21:33
Benzene	ND	0.50	1	01/27/2017 21:33
Bromobenzene	ND	0.50	1	01/27/2017 21:33
Bromochloromethane	ND	0.50	1	01/27/2017 21:33
Bromodichloromethane	ND	0.50	1	01/27/2017 21:33
Bromoform	ND	0.50	1	01/27/2017 21:33
Bromomethane	ND	0.50	1	01/27/2017 21:33
2-Butanone (MEK)	ND	2.0	1	01/27/2017 21:33
t-Butyl alcohol (TBA)	ND	2.0	1	01/27/2017 21:33
n-Butyl benzene	ND	0.50	1	01/27/2017 21:33
sec-Butyl benzene	ND	0.50	1	01/27/2017 21:33
tert-Butyl benzene	ND	0.50	1	01/27/2017 21:33
Carbon Disulfide	ND	0.50	1	01/27/2017 21:33
Carbon Tetrachloride	ND	0.50	1	01/27/2017 21:33
Chlorobenzene	ND	0.50	1	01/27/2017 21:33
Chloroethane	ND	0.50	1	01/27/2017 21:33
Chloroform	**0.89**	0.50	1	01/27/2017 21:33
Chloromethane	ND	0.50	1	01/27/2017 21:33
2-Chlorotoluene	ND	0.50	1	01/27/2017 21:33
4-Chlorotoluene	ND	0.50	1	01/27/2017 21:33
Dibromochloromethane	ND	0.50	1	01/27/2017 21:33
1,2-Dibromo-3-chloropropane	ND	0.20	1	01/27/2017 21:33
1,2-Dibromoethane (EDB)	ND	0.50	1	01/27/2017 21:33
Dibromomethane	ND	0.50	1	01/27/2017 21:33
1,2-Dichlorobenzene	ND	0.50	1	01/27/2017 21:33
1,3-Dichlorobenzene	ND	0.50	1	01/27/2017 21:33
1,4-Dichlorobenzene	ND	0.50	1	01/27/2017 21:33
Dichlorodifluoromethane	ND	0.50	1	01/27/2017 21:33
1,1-Dichloroethane	ND	0.50	1	01/27/2017 21:33
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	01/27/2017 21:33
1,1-Dichloroethene	ND	0.50	1	01/27/2017 21:33
cis-1,2-Dichloroethene	ND	0.50	1	01/27/2017 21:33
trans-1,2-Dichloroethene	ND	0.50	1	01/27/2017 21:33
1,2-Dichloropropane	ND	0.50	1	01/27/2017 21:33
1,3-Dichloropropane	ND	0.50	1	01/27/2017 21:33
2,2-Dichloropropane	ND	0.50	1	01/27/2017 21:33

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Received:	1/27/17 15:10	**Extraction Method:**	SW5030B
Date Prepared:	1/27/17-1/30/17	**Analytical Method:**	SW8260B
Project:	281939; 3442 Adeline St, Oakland, California	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1	1701C18-001B	Water	01/26/2017 10:50	GC18	133313

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	01/27/2017 21:33
cis-1,3-Dichloropropene	ND	0.50	1	01/27/2017 21:33
trans-1,3-Dichloropropene	ND	0.50	1	01/27/2017 21:33
Diisopropyl ether (DIPE)	ND	0.50	1	01/27/2017 21:33
Ethylbenzene	ND	0.50	1	01/27/2017 21:33
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	01/27/2017 21:33
Freon 113	ND	0.50	1	01/27/2017 21:33
Hexachlorobutadiene	ND	0.50	1	01/27/2017 21:33
Hexachloroethane	ND	0.50	1	01/27/2017 21:33
2-Hexanone	ND	0.50	1	01/27/2017 21:33
Isopropylbenzene	ND	0.50	1	01/27/2017 21:33
4-Isopropyl toluene	ND	0.50	1	01/27/2017 21:33
Methyl-t-butyl ether (MTBE)	ND	0.50	1	01/27/2017 21:33
Methylene chloride	ND	0.50	1	01/27/2017 21:33
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	01/27/2017 21:33
Naphthalene	ND	0.50	1	01/27/2017 21:33
n-Propyl benzene	ND	0.50	1	01/27/2017 21:33
Styrene	ND	0.50	1	01/27/2017 21:33
1,1,1,2-Tetrachloroethane	ND	0.50	1	01/27/2017 21:33
1,1,2,2-Tetrachloroethane	ND	0.50	1	01/27/2017 21:33
Tetrachloroethene	ND	0.50	1	01/27/2017 21:33
Toluene	ND	0.50	1	01/27/2017 21:33
1,2,3-Trichlorobenzene	ND	0.50	1	01/27/2017 21:33
1,2,4-Trichlorobenzene	ND	0.50	1	01/27/2017 21:33
1,1,1-Trichloroethane	ND	0.50	1	01/27/2017 21:33
1,1,2-Trichloroethane	ND	0.50	1	01/27/2017 21:33
Trichloroethene	ND	0.50	1	01/27/2017 21:33
Trichlorofluoromethane	ND	0.50	1	01/27/2017 21:33
1,2,3-Trichloropropane	ND	0.50	1	01/27/2017 21:33
1,2,4-Trimethylbenzene	ND	0.50	1	01/27/2017 21:33
1,3,5-Trimethylbenzene	ND	0.50	1	01/27/2017 21:33
Vinyl Chloride	ND	0.50	1	01/27/2017 21:33
Xylenes, Total	ND	0.50	1	01/27/2017 21:33

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Date Prepared:	1/27/17-1/30/17	**Analytical Method:**	SW8260B
Project:	281939; 3442 Adeline St, Oakland, California	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1	**1701C18-001B**	**Water**	**01/26/2017 10:50**	**GC18**	**133313**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	104	70-130		01/27/2017 21:33
Toluene-d8	103	70-130		01/27/2017 21:33
4-BFB	104	70-130		01/27/2017 21:33

Analyst(s): HK

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Analytical Report

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Date Received:	1/27/17 15:10	**Extraction Method:**	SW5030B
Date Prepared:	1/27/17-1/30/17	**Analytical Method:**	SW8260B
Project:	281939; 3442 Adeline St, Oakland, California	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2	1701C18-002B	Water	01/26/2017 12:35	GC18	133313

Analytes	Result	RL	DF	Date Analyzed
Acetone	**12**	10	1	01/27/2017 22:12
tert-Amyl methyl ether (TAME)	ND	0.50	1	01/27/2017 22:12
Benzene	**1.1**	0.50	1	01/27/2017 22:12
Bromobenzene	ND	0.50	1	01/27/2017 22:12
Bromochloromethane	ND	0.50	1	01/27/2017 22:12
Bromodichloromethane	ND	0.50	1	01/27/2017 22:12
Bromoform	ND	0.50	1	01/27/2017 22:12
Bromomethane	ND	0.50	1	01/27/2017 22:12
2-Butanone (MEK)	ND	2.0	1	01/27/2017 22:12
t-Butyl alcohol (TBA)	**4.7**	2.0	1	01/27/2017 22:12
n-Butyl benzene	ND	0.50	1	01/27/2017 22:12
sec-Butyl benzene	ND	0.50	1	01/27/2017 22:12
tert-Butyl benzene	ND	0.50	1	01/27/2017 22:12
Carbon Disulfide	ND	0.50	1	01/27/2017 22:12
Carbon Tetrachloride	ND	0.50	1	01/27/2017 22:12
Chlorobenzene	ND	0.50	1	01/27/2017 22:12
Chloroethane	ND	0.50	1	01/27/2017 22:12
Chloroform	**0.65**	0.50	1	01/27/2017 22:12
Chloromethane	ND	0.50	1	01/27/2017 22:12
2-Chlorotoluene	ND	0.50	1	01/27/2017 22:12
4-Chlorotoluene	ND	0.50	1	01/27/2017 22:12
Dibromochloromethane	ND	0.50	1	01/27/2017 22:12
1,2-Dibromo-3-chloropropane	ND	0.20	1	01/27/2017 22:12
1,2-Dibromoethane (EDB)	ND	0.50	1	01/27/2017 22:12
Dibromomethane	ND	0.50	1	01/27/2017 22:12
1,2-Dichlorobenzene	ND	0.50	1	01/27/2017 22:12
1,3-Dichlorobenzene	ND	0.50	1	01/27/2017 22:12
1,4-Dichlorobenzene	ND	0.50	1	01/27/2017 22:12
Dichlorodifluoromethane	ND	0.50	1	01/27/2017 22:12
1,1-Dichloroethane	ND	0.50	1	01/27/2017 22:12
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	01/27/2017 22:12
1,1-Dichloroethene	ND	0.50	1	01/27/2017 22:12
cis-1,2-Dichloroethene	ND	0.50	1	01/27/2017 22:12
trans-1,2-Dichloroethene	ND	0.50	1	01/27/2017 22:12
1,2-Dichloropropane	ND	0.50	1	01/27/2017 22:12
1,3-Dichloropropane	ND	0.50	1	01/27/2017 22:12
2,2-Dichloropropane	ND	0.50	1	01/27/2017 22:12

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Analytical Report

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Date Prepared:	1/27/17-1/30/17	**Analytical Method:**	SW8260B
Project:	281939; 3442 Adeline St, Oakland, California	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2	**1701C18-002B**	**Water**	**01/26/2017 12:35**	**GC18**	**133313**

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	01/27/2017 22:12
cis-1,3-Dichloropropene	ND	0.50	1	01/27/2017 22:12
trans-1,3-Dichloropropene	ND	0.50	1	01/27/2017 22:12
Diisopropyl ether (DIPE)	ND	0.50	1	01/27/2017 22:12
Ethylbenzene	ND	0.50	1	01/27/2017 22:12
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	01/27/2017 22:12
Freon 113	ND	0.50	1	01/27/2017 22:12
Hexachlorobutadiene	ND	0.50	1	01/27/2017 22:12
Hexachloroethane	ND	0.50	1	01/27/2017 22:12
2-Hexanone	ND	0.50	1	01/27/2017 22:12
Isopropylbenzene	ND	0.50	1	01/27/2017 22:12
4-Isopropyl toluene	ND	0.50	1	01/27/2017 22:12
Methyl-t-butyl ether (MTBE)	ND	0.50	1	01/27/2017 22:12
Methylene chloride	ND	0.50	1	01/27/2017 22:12
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	01/27/2017 22:12
Naphthalene	ND	0.50	1	01/27/2017 22:12
n-Propyl benzene	ND	0.50	1	01/27/2017 22:12
Styrene	ND	0.50	1	01/27/2017 22:12
1,1,1,2-Tetrachloroethane	ND	0.50	1	01/27/2017 22:12
1,1,2,2-Tetrachloroethane	ND	0.50	1	01/27/2017 22:12
Tetrachloroethene	ND	0.50	1	01/27/2017 22:12
Toluene	ND	0.50	1	01/27/2017 22:12
1,2,3-Trichlorobenzene	ND	0.50	1	01/27/2017 22:12
1,2,4-Trichlorobenzene	ND	0.50	1	01/27/2017 22:12
1,1,1-Trichloroethane	ND	0.50	1	01/27/2017 22:12
1,1,2-Trichloroethane	ND	0.50	1	01/27/2017 22:12
Trichloroethene	ND	0.50	1	01/27/2017 22:12
Trichlorofluoromethane	ND	0.50	1	01/27/2017 22:12
1,2,3-Trichloropropane	ND	0.50	1	01/27/2017 22:12
1,2,4-Trimethylbenzene	ND	0.50	1	01/27/2017 22:12
1,3,5-Trimethylbenzene	ND	0.50	1	01/27/2017 22:12
Vinyl Chloride	ND	0.50	1	01/27/2017 22:12
Xylenes, Total	**1.1**	0.50	1	01/27/2017 22:12

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Date Prepared:	1/27/17-1/30/17	**Analytical Method:**	SW8260B
Project:	281939; 3442 Adeline St, Oakland, California	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2	**1701C18-002B**	**Water**	**01/26/2017 12:35**	**GC18**	**133313**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	105	70-130		01/27/2017 22:12
Toluene-d8	102	70-130		01/27/2017 22:12
4-BFB	108	70-130		01/27/2017 22:12

Analyst(s): HK

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Date Prepared:	1/27/17-1/30/17	**Analytical Method:**	SW8260B
Project:	281939; 3442 Adeline St, Oakland, California	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3	1701C18-003B	Water	01/26/2017 11:50	GC18	133313

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	500	50	01/30/2017 20:37
tert-Amyl methyl ether (TAME)	ND	25	50	01/30/2017 20:37
Benzene	**1500**	25	50	01/30/2017 20:37
Bromobenzene	ND	25	50	01/30/2017 20:37
Bromochloromethane	ND	25	50	01/30/2017 20:37
Bromodichloromethane	ND	25	50	01/30/2017 20:37
Bromoform	ND	25	50	01/30/2017 20:37
Bromomethane	ND	25	50	01/30/2017 20:37
2-Butanone (MEK)	ND	100	50	01/30/2017 20:37
t-Butyl alcohol (TBA)	ND	100	50	01/30/2017 20:37
n-Butyl benzene	ND	25	50	01/30/2017 20:37
sec-Butyl benzene	ND	25	50	01/30/2017 20:37
tert-Butyl benzene	ND	25	50	01/30/2017 20:37
Carbon Disulfide	ND	25	50	01/30/2017 20:37
Carbon Tetrachloride	ND	25	50	01/30/2017 20:37
Chlorobenzene	ND	25	50	01/30/2017 20:37
Chloroethane	ND	25	50	01/30/2017 20:37
Chloroform	ND	25	50	01/30/2017 20:37
Chloromethane	ND	25	50	01/30/2017 20:37
2-Chlorotoluene	ND	25	50	01/30/2017 20:37
4-Chlorotoluene	ND	25	50	01/30/2017 20:37
Dibromochloromethane	ND	25	50	01/30/2017 20:37
1,2-Dibromo-3-chloropropane	ND	10	50	01/30/2017 20:37
1,2-Dibromoethane (EDB)	ND	25	50	01/30/2017 20:37
Dibromomethane	ND	25	50	01/30/2017 20:37
1,2-Dichlorobenzene	ND	25	50	01/30/2017 20:37
1,3-Dichlorobenzene	ND	25	50	01/30/2017 20:37
1,4-Dichlorobenzene	ND	25	50	01/30/2017 20:37
Dichlorodifluoromethane	ND	25	50	01/30/2017 20:37
1,1-Dichloroethane	ND	25	50	01/30/2017 20:37
1,2-Dichloroethane (1,2-DCA)	ND	25	50	01/30/2017 20:37
1,1-Dichloroethene	ND	25	50	01/30/2017 20:37
cis-1,2-Dichloroethene	ND	25	50	01/30/2017 20:37
trans-1,2-Dichloroethene	ND	25	50	01/30/2017 20:37
1,2-Dichloropropane	ND	25	50	01/30/2017 20:37
1,3-Dichloropropane	ND	25	50	01/30/2017 20:37
2,2-Dichloropropane	ND	25	50	01/30/2017 20:37

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Project:	281939; 3442 Adeline St, Oakland, California	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3	1701C18-003B	Water	01/26/2017 11:50	GC18	133313

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	25	50	01/30/2017 20:37
cis-1,3-Dichloropropene	ND	25	50	01/30/2017 20:37
trans-1,3-Dichloropropene	ND	25	50	01/30/2017 20:37
Diisopropyl ether (DIPE)	ND	25	50	01/30/2017 20:37
Ethylbenzene	**80**	25	50	01/30/2017 20:37
Ethyl tert-butyl ether (ETBE)	ND	25	50	01/30/2017 20:37
Freon 113	ND	25	50	01/30/2017 20:37
Hexachlorobutadiene	ND	25	50	01/30/2017 20:37
Hexachloroethane	ND	25	50	01/30/2017 20:37
2-Hexanone	ND	25	50	01/30/2017 20:37
Isopropylbenzene	**27**	25	50	01/30/2017 20:37
4-Isopropyl toluene	ND	25	50	01/30/2017 20:37
Methyl-t-butyl ether (MTBE)	ND	25	50	01/30/2017 20:37
Methylene chloride	ND	25	50	01/30/2017 20:37
4-Methyl-2-pentanone (MIBK)	ND	25	50	01/30/2017 20:37
Naphthalene	**44**	25	50	01/30/2017 20:37
n-Propyl benzene	**60**	25	50	01/30/2017 20:37
Styrene	ND	25	50	01/30/2017 20:37
1,1,1,2-Tetrachloroethane	ND	25	50	01/30/2017 20:37
1,1,2,2-Tetrachloroethane	ND	25	50	01/30/2017 20:37
Tetrachloroethene	ND	25	50	01/30/2017 20:37
Toluene	ND	25	50	01/30/2017 20:37
1,2,3-Trichlorobenzene	ND	25	50	01/30/2017 20:37
1,2,4-Trichlorobenzene	ND	25	50	01/30/2017 20:37
1,1,1-Trichloroethane	ND	25	50	01/30/2017 20:37
1,1,2-Trichloroethane	ND	25	50	01/30/2017 20:37
Trichloroethene	ND	25	50	01/30/2017 20:37
Trichlorofluoromethane	ND	25	50	01/30/2017 20:37
1,2,3-Trichloropropane	ND	25	50	01/30/2017 20:37
1,2,4-Trimethylbenzene	ND	25	50	01/30/2017 20:37
1,3,5-Trimethylbenzene	ND	25	50	01/30/2017 20:37
Vinyl Chloride	ND	25	50	01/30/2017 20:37
Xylenes, Total	**37**	25	50	01/30/2017 20:37

(Cont.)

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Received:	1/27/17 15:10	**Extraction Method:**	SW5030B
Date Prepared:	1/27/17-1/30/17	**Analytical Method:**	SW8260B
Project:	281939; 3442 Adeline St, Oakland, California	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3	**1701C18-003B**	**Water**	**01/26/2017 11:50**	**GC18**	**133313**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	103	70-130		01/30/2017 20:37
Toluene-d8	98	70-130		01/30/2017 20:37
4-BFB	98	70-130		01/30/2017 20:37

Analyst(s): HK

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Received:	1/27/17 15:10	**Extraction Method:**	SW5030B
Date Prepared:	1/27/17-1/30/17	**Analytical Method:**	SW8260B
Project:	281939; 3442 Adeline St, Oakland, California	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-4	1701C18-004B	Water	01/26/2017 13:10	GC18	133313

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	01/27/2017 23:29
tert-Amyl methyl ether (TAME)	ND	0.50	1	01/27/2017 23:29
Benzene	ND	0.50	1	01/27/2017 23:29
Bromobenzene	ND	0.50	1	01/27/2017 23:29
Bromochloromethane	ND	0.50	1	01/27/2017 23:29
Bromodichloromethane	ND	0.50	1	01/27/2017 23:29
Bromoform	ND	0.50	1	01/27/2017 23:29
Bromomethane	ND	0.50	1	01/27/2017 23:29
2-Butanone (MEK)	ND	2.0	1	01/27/2017 23:29
t-Butyl alcohol (TBA)	ND	2.0	1	01/27/2017 23:29
n-Butyl benzene	ND	0.50	1	01/27/2017 23:29
sec-Butyl benzene	ND	0.50	1	01/27/2017 23:29
tert-Butyl benzene	ND	0.50	1	01/27/2017 23:29
Carbon Disulfide	ND	0.50	1	01/27/2017 23:29
Carbon Tetrachloride	ND	0.50	1	01/27/2017 23:29
Chlorobenzene	ND	0.50	1	01/27/2017 23:29
Chloroethane	ND	0.50	1	01/27/2017 23:29
Chloroform	**0.67**	0.50	1	01/27/2017 23:29
Chloromethane	ND	0.50	1	01/27/2017 23:29
2-Chlorotoluene	ND	0.50	1	01/27/2017 23:29
4-Chlorotoluene	ND	0.50	1	01/27/2017 23:29
Dibromochloromethane	ND	0.50	1	01/27/2017 23:29
1,2-Dibromo-3-chloropropane	ND	0.20	1	01/27/2017 23:29
1,2-Dibromoethane (EDB)	ND	0.50	1	01/27/2017 23:29
Dibromomethane	ND	0.50	1	01/27/2017 23:29
1,2-Dichlorobenzene	ND	0.50	1	01/27/2017 23:29
1,3-Dichlorobenzene	ND	0.50	1	01/27/2017 23:29
1,4-Dichlorobenzene	ND	0.50	1	01/27/2017 23:29
Dichlorodifluoromethane	ND	0.50	1	01/27/2017 23:29
1,1-Dichloroethane	ND	0.50	1	01/27/2017 23:29
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	01/27/2017 23:29
1,1-Dichloroethene	ND	0.50	1	01/27/2017 23:29
cis-1,2-Dichloroethene	ND	0.50	1	01/27/2017 23:29
trans-1,2-Dichloroethene	ND	0.50	1	01/27/2017 23:29
1,2-Dichloropropane	ND	0.50	1	01/27/2017 23:29
1,3-Dichloropropane	ND	0.50	1	01/27/2017 23:29
2,2-Dichloropropane	ND	0.50	1	01/27/2017 23:29

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Received:	1/27/17 15:10	**Extraction Method:**	SW5030B
Date Prepared:	1/27/17-1/30/17	**Analytical Method:**	SW8260B
Project:	281939; 3442 Adeline St, Oakland, California	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-4	1701C18-004B	Water	01/26/2017 13:10	GC18	133313

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	01/27/2017 23:29
cis-1,3-Dichloropropene	ND	0.50	1	01/27/2017 23:29
trans-1,3-Dichloropropene	ND	0.50	1	01/27/2017 23:29
Diisopropyl ether (DIPE)	ND	0.50	1	01/27/2017 23:29
Ethylbenzene	ND	0.50	1	01/27/2017 23:29
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	01/27/2017 23:29
Freon 113	ND	0.50	1	01/27/2017 23:29
Hexachlorobutadiene	ND	0.50	1	01/27/2017 23:29
Hexachloroethane	ND	0.50	1	01/27/2017 23:29
2-Hexanone	ND	0.50	1	01/27/2017 23:29
Isopropylbenzene	ND	0.50	1	01/27/2017 23:29
4-Isopropyl toluene	ND	0.50	1	01/27/2017 23:29
Methyl-t-butyl ether (MTBE)	ND	0.50	1	01/27/2017 23:29
Methylene chloride	ND	0.50	1	01/27/2017 23:29
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	01/27/2017 23:29
Naphthalene	ND	0.50	1	01/27/2017 23:29
n-Propyl benzene	ND	0.50	1	01/27/2017 23:29
Styrene	ND	0.50	1	01/27/2017 23:29
1,1,1,2-Tetrachloroethane	ND	0.50	1	01/27/2017 23:29
1,1,2,2-Tetrachloroethane	ND	0.50	1	01/27/2017 23:29
Tetrachloroethene	ND	0.50	1	01/27/2017 23:29
Toluene	ND	0.50	1	01/27/2017 23:29
1,2,3-Trichlorobenzene	ND	0.50	1	01/27/2017 23:29
1,2,4-Trichlorobenzene	ND	0.50	1	01/27/2017 23:29
1,1,1-Trichloroethane	ND	0.50	1	01/27/2017 23:29
1,1,2-Trichloroethane	ND	0.50	1	01/27/2017 23:29
Trichloroethene	ND	0.50	1	01/27/2017 23:29
Trichlorofluoromethane	ND	0.50	1	01/27/2017 23:29
1,2,3-Trichloropropane	ND	0.50	1	01/27/2017 23:29
1,2,4-Trimethylbenzene	ND	0.50	1	01/27/2017 23:29
1,3,5-Trimethylbenzene	ND	0.50	1	01/27/2017 23:29
Vinyl Chloride	ND	0.50	1	01/27/2017 23:29
Xylenes, Total	ND	0.50	1	01/27/2017 23:29

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Received:	1/27/17 15:10	**Extraction Method:**	SW5030B
Date Prepared:	1/27/17-1/30/17	**Analytical Method:**	SW8260B
Project:	281939; 3442 Adeline St, Oakland, California	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-4	**1701C18-004B**	**Water**	**01/26/2017 13:10**	**GC18**	**133313**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	105	70-130		01/27/2017 23:29
Toluene-d8	105	70-130		01/27/2017 23:29
4-BFB	98	70-130		01/27/2017 23:29

Analyst(s): HK

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Received:	1/27/17 15:10	**Extraction Method:**	SW5030B
Date Prepared:	1/27/17-1/30/17	**Analytical Method:**	SW8260B
Project:	281939; 3442 Adeline St, Oakland, California	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5	1701C18-005B	Water	01/26/2017 13:43	GC18	133313

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	01/28/2017 00:08
tert-Amyl methyl ether (TAME)	ND	0.50	1	01/28/2017 00:08
Benzene	ND	0.50	1	01/28/2017 00:08
Bromobenzene	ND	0.50	1	01/28/2017 00:08
Bromochloromethane	ND	0.50	1	01/28/2017 00:08
Bromodichloromethane	ND	0.50	1	01/28/2017 00:08
Bromoform	ND	0.50	1	01/28/2017 00:08
Bromomethane	ND	0.50	1	01/28/2017 00:08
2-Butanone (MEK)	ND	2.0	1	01/28/2017 00:08
t-Butyl alcohol (TBA)	**3.7**	2.0	1	01/28/2017 00:08
n-Butyl benzene	ND	0.50	1	01/28/2017 00:08
sec-Butyl benzene	ND	0.50	1	01/28/2017 00:08
tert-Butyl benzene	ND	0.50	1	01/28/2017 00:08
Carbon Disulfide	ND	0.50	1	01/28/2017 00:08
Carbon Tetrachloride	ND	0.50	1	01/28/2017 00:08
Chlorobenzene	ND	0.50	1	01/28/2017 00:08
Chloroethane	ND	0.50	1	01/28/2017 00:08
Chloroform	**0.72**	0.50	1	01/28/2017 00:08
Chloromethane	ND	0.50	1	01/28/2017 00:08
2-Chlorotoluene	ND	0.50	1	01/28/2017 00:08
4-Chlorotoluene	ND	0.50	1	01/28/2017 00:08
Dibromochloromethane	ND	0.50	1	01/28/2017 00:08
1,2-Dibromo-3-chloropropane	ND	0.20	1	01/28/2017 00:08
1,2-Dibromoethane (EDB)	ND	0.50	1	01/28/2017 00:08
Dibromomethane	ND	0.50	1	01/28/2017 00:08
1,2-Dichlorobenzene	ND	0.50	1	01/28/2017 00:08
1,3-Dichlorobenzene	ND	0.50	1	01/28/2017 00:08
1,4-Dichlorobenzene	ND	0.50	1	01/28/2017 00:08
Dichlorodifluoromethane	ND	0.50	1	01/28/2017 00:08
1,1-Dichloroethane	ND	0.50	1	01/28/2017 00:08
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	01/28/2017 00:08
1,1-Dichloroethene	ND	0.50	1	01/28/2017 00:08
cis-1,2-Dichloroethene	ND	0.50	1	01/28/2017 00:08
trans-1,2-Dichloroethene	ND	0.50	1	01/28/2017 00:08
1,2-Dichloropropane	ND	0.50	1	01/28/2017 00:08
1,3-Dichloropropane	ND	0.50	1	01/28/2017 00:08
2,2-Dichloropropane	ND	0.50	1	01/28/2017 00:08

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Received:	1/27/17 15:10	**Extraction Method:**	SW5030B
Date Prepared:	1/27/17-1/30/17	**Analytical Method:**	SW8260B
Project:	281939; 3442 Adeline St, Oakland, California	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5	1701C18-005B	Water	01/26/2017 13:43	GC18	133313

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	01/28/2017 00:08
cis-1,3-Dichloropropene	ND	0.50	1	01/28/2017 00:08
trans-1,3-Dichloropropene	ND	0.50	1	01/28/2017 00:08
Diisopropyl ether (DIPE)	ND	0.50	1	01/28/2017 00:08
Ethylbenzene	ND	0.50	1	01/28/2017 00:08
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	01/28/2017 00:08
Freon 113	ND	0.50	1	01/28/2017 00:08
Hexachlorobutadiene	ND	0.50	1	01/28/2017 00:08
Hexachloroethane	ND	0.50	1	01/28/2017 00:08
2-Hexanone	ND	0.50	1	01/28/2017 00:08
Isopropylbenzene	ND	0.50	1	01/28/2017 00:08
4-Isopropyl toluene	ND	0.50	1	01/28/2017 00:08
Methyl-t-butyl ether (MTBE)	ND	0.50	1	01/28/2017 00:08
Methylene chloride	ND	0.50	1	01/28/2017 00:08
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	01/28/2017 00:08
Naphthalene	ND	0.50	1	01/28/2017 00:08
n-Propyl benzene	ND	0.50	1	01/28/2017 00:08
Styrene	ND	0.50	1	01/28/2017 00:08
1,1,1,2-Tetrachloroethane	ND	0.50	1	01/28/2017 00:08
1,1,2,2-Tetrachloroethane	ND	0.50	1	01/28/2017 00:08
Tetrachloroethene	ND	0.50	1	01/28/2017 00:08
Toluene	ND	0.50	1	01/28/2017 00:08
1,2,3-Trichlorobenzene	ND	0.50	1	01/28/2017 00:08
1,2,4-Trichlorobenzene	ND	0.50	1	01/28/2017 00:08
1,1,1-Trichloroethane	ND	0.50	1	01/28/2017 00:08
1,1,2-Trichloroethane	ND	0.50	1	01/28/2017 00:08
Trichloroethene	ND	0.50	1	01/28/2017 00:08
Trichlorofluoromethane	ND	0.50	1	01/28/2017 00:08
1,2,3-Trichloropropane	ND	0.50	1	01/28/2017 00:08
1,2,4-Trimethylbenzene	ND	0.50	1	01/28/2017 00:08
1,3,5-Trimethylbenzene	ND	0.50	1	01/28/2017 00:08
Vinyl Chloride	ND	0.50	1	01/28/2017 00:08
Xylenes, Total	ND	0.50	1	01/28/2017 00:08

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Received:	1/27/17 15:10	**Extraction Method:**	SW5030B
Date Prepared:	1/27/17-1/30/17	**Analytical Method:**	SW8260B
Project:	281939; 3442 Adeline St, Oakland, California	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5	**1701C18-005B**	**Water**	**01/26/2017 13:43**	**GC18**	**133313**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	105	70-130		01/28/2017 00:08
Toluene-d8	103	70-130		01/28/2017 00:08
4-BFB	103	70-130		01/28/2017 00:08

Analyst(s): HK

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Received:	1/27/17 15:10	**Extraction Method:**	SW5030B
Date Prepared:	1/27/17-1/30/17	**Analytical Method:**	SW8260B
Project:	281939; 3442 Adeline St, Oakland, California	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-6	1701C18-006B	Water	01/26/2017 14:18	GC18	133313

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	01/28/2017 00:46
tert-Amyl methyl ether (TAME)	ND	0.50	1	01/28/2017 00:46
Benzene	ND	0.50	1	01/28/2017 00:46
Bromobenzene	ND	0.50	1	01/28/2017 00:46
Bromochloromethane	ND	0.50	1	01/28/2017 00:46
Bromodichloromethane	ND	0.50	1	01/28/2017 00:46
Bromoform	ND	0.50	1	01/28/2017 00:46
Bromomethane	ND	0.50	1	01/28/2017 00:46
2-Butanone (MEK)	ND	2.0	1	01/28/2017 00:46
t-Butyl alcohol (TBA)	ND	2.0	1	01/28/2017 00:46
n-Butyl benzene	ND	0.50	1	01/28/2017 00:46
sec-Butyl benzene	ND	0.50	1	01/28/2017 00:46
tert-Butyl benzene	ND	0.50	1	01/28/2017 00:46
Carbon Disulfide	ND	0.50	1	01/28/2017 00:46
Carbon Tetrachloride	ND	0.50	1	01/28/2017 00:46
Chlorobenzene	ND	0.50	1	01/28/2017 00:46
Chloroethane	ND	0.50	1	01/28/2017 00:46
Chloroform	ND	0.50	1	01/28/2017 00:46
Chloromethane	ND	0.50	1	01/28/2017 00:46
2-Chlorotoluene	ND	0.50	1	01/28/2017 00:46
4-Chlorotoluene	ND	0.50	1	01/28/2017 00:46
Dibromochloromethane	ND	0.50	1	01/28/2017 00:46
1,2-Dibromo-3-chloropropane	ND	0.20	1	01/28/2017 00:46
1,2-Dibromoethane (EDB)	ND	0.50	1	01/28/2017 00:46
Dibromomethane	ND	0.50	1	01/28/2017 00:46
1,2-Dichlorobenzene	ND	0.50	1	01/28/2017 00:46
1,3-Dichlorobenzene	ND	0.50	1	01/28/2017 00:46
1,4-Dichlorobenzene	ND	0.50	1	01/28/2017 00:46
Dichlorodifluoromethane	ND	0.50	1	01/28/2017 00:46
1,1-Dichloroethane	ND	0.50	1	01/28/2017 00:46
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	01/28/2017 00:46
1,1-Dichloroethene	ND	0.50	1	01/28/2017 00:46
cis-1,2-Dichloroethene	ND	0.50	1	01/28/2017 00:46
trans-1,2-Dichloroethene	ND	0.50	1	01/28/2017 00:46
1,2-Dichloropropane	ND	0.50	1	01/28/2017 00:46
1,3-Dichloropropane	ND	0.50	1	01/28/2017 00:46
2,2-Dichloropropane	ND	0.50	1	01/28/2017 00:46

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Received:	1/27/17 15:10	**Extraction Method:**	SW5030B
Date Prepared:	1/27/17-1/30/17	**Analytical Method:**	SW8260B
Project:	281939; 3442 Adeline St, Oakland, California	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-6	1701C18-006B	Water	01/26/2017 14:18	GC18	133313

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	01/28/2017 00:46
cis-1,3-Dichloropropene	ND	0.50	1	01/28/2017 00:46
trans-1,3-Dichloropropene	ND	0.50	1	01/28/2017 00:46
Diisopropyl ether (DIPE)	ND	0.50	1	01/28/2017 00:46
Ethylbenzene	ND	0.50	1	01/28/2017 00:46
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	01/28/2017 00:46
Freon 113	ND	0.50	1	01/28/2017 00:46
Hexachlorobutadiene	ND	0.50	1	01/28/2017 00:46
Hexachloroethane	ND	0.50	1	01/28/2017 00:46
2-Hexanone	ND	0.50	1	01/28/2017 00:46
Isopropylbenzene	ND	0.50	1	01/28/2017 00:46
4-Isopropyl toluene	ND	0.50	1	01/28/2017 00:46
Methyl-t-butyl ether (MTBE)	ND	0.50	1	01/28/2017 00:46
Methylene chloride	ND	0.50	1	01/28/2017 00:46
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	01/28/2017 00:46
Naphthalene	ND	0.50	1	01/28/2017 00:46
n-Propyl benzene	ND	0.50	1	01/28/2017 00:46
Styrene	ND	0.50	1	01/28/2017 00:46
1,1,1,2-Tetrachloroethane	ND	0.50	1	01/28/2017 00:46
1,1,2,2-Tetrachloroethane	ND	0.50	1	01/28/2017 00:46
Tetrachloroethene	ND	0.50	1	01/28/2017 00:46
Toluene	ND	0.50	1	01/28/2017 00:46
1,2,3-Trichlorobenzene	ND	0.50	1	01/28/2017 00:46
1,2,4-Trichlorobenzene	ND	0.50	1	01/28/2017 00:46
1,1,1-Trichloroethane	ND	0.50	1	01/28/2017 00:46
1,1,2-Trichloroethane	ND	0.50	1	01/28/2017 00:46
Trichloroethene	ND	0.50	1	01/28/2017 00:46
Trichlorofluoromethane	ND	0.50	1	01/28/2017 00:46
1,2,3-Trichloropropane	ND	0.50	1	01/28/2017 00:46
1,2,4-Trimethylbenzene	ND	0.50	1	01/28/2017 00:46
1,3,5-Trimethylbenzene	ND	0.50	1	01/28/2017 00:46
Vinyl Chloride	ND	0.50	1	01/28/2017 00:46
Xylenes, Total	ND	0.50	1	01/28/2017 00:46

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Received:	1/27/17 15:10	**Extraction Method:**	SW5030B
Date Prepared:	1/27/17-1/30/17	**Analytical Method:**	SW8260B
Project:	281939; 3442 Adeline St, Oakland, California	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-6	**1701C18-006B**	**Water**	**01/26/2017 14:18**	**GC18**	**133313**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	105	70-130		01/28/2017 00:46
Toluene-d8	104	70-130		01/28/2017 00:46
4-BFB	102	70-130		01/28/2017 00:46

Analyst(s): HK

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Received:	1/27/17 15:10	**Extraction Method:**	SW5030B
Date Prepared:	1/27/17-1/30/17	**Analytical Method:**	SW8260B
Project:	281939; 3442 Adeline St, Oakland, California	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-7	1701C18-007B	Water	01/26/2017 15:20	GC18	133313

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	100	10	01/28/2017 16:13
tert-Amyl methyl ether (TAME)	ND	5.0	10	01/28/2017 16:13
Benzene	**140**	5.0	10	01/28/2017 16:13
Bromobenzene	ND	5.0	10	01/28/2017 16:13
Bromochloromethane	ND	5.0	10	01/28/2017 16:13
Bromodichloromethane	ND	5.0	10	01/28/2017 16:13
Bromoform	ND	5.0	10	01/28/2017 16:13
Bromomethane	ND	5.0	10	01/28/2017 16:13
2-Butanone (MEK)	ND	20	10	01/28/2017 16:13
t-Butyl alcohol (TBA)	ND	20	10	01/28/2017 16:13
n-Butyl benzene	**8.5**	5.0	10	01/28/2017 16:13
sec-Butyl benzene	ND	5.0	10	01/28/2017 16:13
tert-Butyl benzene	ND	5.0	10	01/28/2017 16:13
Carbon Disulfide	ND	5.0	10	01/28/2017 16:13
Carbon Tetrachloride	ND	5.0	10	01/28/2017 16:13
Chlorobenzene	ND	5.0	10	01/28/2017 16:13
Chloroethane	ND	5.0	10	01/28/2017 16:13
Chloroform	ND	5.0	10	01/28/2017 16:13
Chloromethane	ND	5.0	10	01/28/2017 16:13
2-Chlorotoluene	ND	5.0	10	01/28/2017 16:13
4-Chlorotoluene	ND	5.0	10	01/28/2017 16:13
Dibromochloromethane	ND	5.0	10	01/28/2017 16:13
1,2-Dibromo-3-chloropropane	ND	2.0	10	01/28/2017 16:13
1,2-Dibromoethane (EDB)	ND	5.0	10	01/28/2017 16:13
Dibromomethane	ND	5.0	10	01/28/2017 16:13
1,2-Dichlorobenzene	ND	5.0	10	01/28/2017 16:13
1,3-Dichlorobenzene	ND	5.0	10	01/28/2017 16:13
1,4-Dichlorobenzene	ND	5.0	10	01/28/2017 16:13
Dichlorodifluoromethane	ND	5.0	10	01/28/2017 16:13
1,1-Dichloroethane	ND	5.0	10	01/28/2017 16:13
1,2-Dichloroethane (1,2-DCA)	ND	5.0	10	01/28/2017 16:13
1,1-Dichloroethene	ND	5.0	10	01/28/2017 16:13
cis-1,2-Dichloroethene	ND	5.0	10	01/28/2017 16:13
trans-1,2-Dichloroethene	ND	5.0	10	01/28/2017 16:13
1,2-Dichloropropane	ND	5.0	10	01/28/2017 16:13
1,3-Dichloropropane	ND	5.0	10	01/28/2017 16:13
2,2-Dichloropropane	ND	5.0	10	01/28/2017 16:13

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Received:	1/27/17 15:10	**Extraction Method:**	SW5030B
Date Prepared:	1/27/17-1/30/17	**Analytical Method:**	SW8260B
Project:	281939; 3442 Adeline St, Oakland, California	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-7	1701C18-007B	Water	01/26/2017 15:20	GC18	133313

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	5.0	10	01/28/2017 16:13
cis-1,3-Dichloropropene	ND	5.0	10	01/28/2017 16:13
trans-1,3-Dichloropropene	ND	5.0	10	01/28/2017 16:13
Diisopropyl ether (DIPE)	ND	5.0	10	01/28/2017 16:13
Ethylbenzene	**7.0**	5.0	10	01/28/2017 16:13
Ethyl tert-butyl ether (ETBE)	ND	5.0	10	01/28/2017 16:13
Freon 113	ND	5.0	10	01/28/2017 16:13
Hexachlorobutadiene	ND	5.0	10	01/28/2017 16:13
Hexachloroethane	ND	5.0	10	01/28/2017 16:13
2-Hexanone	ND	5.0	10	01/28/2017 16:13
Isopropylbenzene	**17**	5.0	10	01/28/2017 16:13
4-Isopropyl toluene	ND	5.0	10	01/28/2017 16:13
Methyl-t-butyl ether (MTBE)	ND	5.0	10	01/28/2017 16:13
Methylene chloride	ND	5.0	10	01/28/2017 16:13
4-Methyl-2-pentanone (MIBK)	ND	5.0	10	01/28/2017 16:13
Naphthalene	ND	5.0	10	01/28/2017 16:13
n-Propyl benzene	**26**	5.0	10	01/28/2017 16:13
Styrene	ND	5.0	10	01/28/2017 16:13
1,1,1,2-Tetrachloroethane	ND	5.0	10	01/28/2017 16:13
1,1,2,2-Tetrachloroethane	ND	5.0	10	01/28/2017 16:13
Tetrachloroethene	ND	5.0	10	01/28/2017 16:13
Toluene	**5.1**	5.0	10	01/28/2017 16:13
1,2,3-Trichlorobenzene	ND	5.0	10	01/28/2017 16:13
1,2,4-Trichlorobenzene	ND	5.0	10	01/28/2017 16:13
1,1,1-Trichloroethane	ND	5.0	10	01/28/2017 16:13
1,1,2-Trichloroethane	ND	5.0	10	01/28/2017 16:13
Trichloroethene	ND	5.0	10	01/28/2017 16:13
Trichlorofluoromethane	ND	5.0	10	01/28/2017 16:13
1,2,3-Trichloropropane	ND	5.0	10	01/28/2017 16:13
1,2,4-Trimethylbenzene	ND	5.0	10	01/28/2017 16:13
1,3,5-Trimethylbenzene	ND	5.0	10	01/28/2017 16:13
Vinyl Chloride	ND	5.0	10	01/28/2017 16:13
Xylenes, Total	**6.7**	5.0	10	01/28/2017 16:13

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Received:	1/27/17 15:10	**Extraction Method:**	SW5030B
Date Prepared:	1/27/17-1/30/17	**Analytical Method:**	SW8260B
Project:	281939; 3442 Adeline St, Oakland, California	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-7	**1701C18-007B**	**Water**	**01/26/2017 15:20**	**GC18**	**133313**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	104	70-130		01/28/2017 16:13
Toluene-d8	103	70-130		01/28/2017 16:13
4-BFB	102	70-130		01/28/2017 16:13

Analyst(s): HK

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Received:	1/27/17 15:10	**Extraction Method:**	SW5030B
Date Prepared:	1/27/17-1/30/17	**Analytical Method:**	SW8260B
Project:	281939; 3442 Adeline St, Oakland, California	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW-1	1701C18-008B	Water	01/26/2017 15:55	GC18	133313

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	01/28/2017 02:03
tert-Amyl methyl ether (TAME)	ND	0.50	1	01/28/2017 02:03
Benzene	ND	0.50	1	01/28/2017 02:03
Bromobenzene	ND	0.50	1	01/28/2017 02:03
Bromochloromethane	ND	0.50	1	01/28/2017 02:03
Bromodichloromethane	ND	0.50	1	01/28/2017 02:03
Bromoform	ND	0.50	1	01/28/2017 02:03
Bromomethane	ND	0.50	1	01/28/2017 02:03
2-Butanone (MEK)	ND	2.0	1	01/28/2017 02:03
t-Butyl alcohol (TBA)	ND	2.0	1	01/28/2017 02:03
n-Butyl benzene	ND	0.50	1	01/28/2017 02:03
sec-Butyl benzene	ND	0.50	1	01/28/2017 02:03
tert-Butyl benzene	ND	0.50	1	01/28/2017 02:03
Carbon Disulfide	ND	0.50	1	01/28/2017 02:03
Carbon Tetrachloride	ND	0.50	1	01/28/2017 02:03
Chlorobenzene	ND	0.50	1	01/28/2017 02:03
Chloroethane	ND	0.50	1	01/28/2017 02:03
Chloroform	ND	0.50	1	01/28/2017 02:03
Chloromethane	ND	0.50	1	01/28/2017 02:03
2-Chlorotoluene	ND	0.50	1	01/28/2017 02:03
4-Chlorotoluene	ND	0.50	1	01/28/2017 02:03
Dibromochloromethane	ND	0.50	1	01/28/2017 02:03
1,2-Dibromo-3-chloropropane	ND	0.20	1	01/28/2017 02:03
1,2-Dibromoethane (EDB)	ND	0.50	1	01/28/2017 02:03
Dibromomethane	ND	0.50	1	01/28/2017 02:03
1,2-Dichlorobenzene	ND	0.50	1	01/28/2017 02:03
1,3-Dichlorobenzene	ND	0.50	1	01/28/2017 02:03
1,4-Dichlorobenzene	ND	0.50	1	01/28/2017 02:03
Dichlorodifluoromethane	ND	0.50	1	01/28/2017 02:03
1,1-Dichloroethane	ND	0.50	1	01/28/2017 02:03
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	01/28/2017 02:03
1,1-Dichloroethene	ND	0.50	1	01/28/2017 02:03
cis-1,2-Dichloroethene	ND	0.50	1	01/28/2017 02:03
trans-1,2-Dichloroethene	ND	0.50	1	01/28/2017 02:03
1,2-Dichloropropane	ND	0.50	1	01/28/2017 02:03
1,3-Dichloropropane	ND	0.50	1	01/28/2017 02:03
2,2-Dichloropropane	ND	0.50	1	01/28/2017 02:03

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Received:	1/27/17 15:10	**Extraction Method:**	SW5030B
Date Prepared:	1/27/17-1/30/17	**Analytical Method:**	SW8260B
Project:	281939; 3442 Adeline St, Oakland, California	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW-1	1701C18-008B	Water	01/26/2017 15:55	GC18	133313

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	01/28/2017 02:03
cis-1,3-Dichloropropene	ND	0.50	1	01/28/2017 02:03
trans-1,3-Dichloropropene	ND	0.50	1	01/28/2017 02:03
Diisopropyl ether (DIPE)	ND	0.50	1	01/28/2017 02:03
Ethylbenzene	ND	0.50	1	01/28/2017 02:03
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	01/28/2017 02:03
Freon 113	ND	0.50	1	01/28/2017 02:03
Hexachlorobutadiene	ND	0.50	1	01/28/2017 02:03
Hexachloroethane	ND	0.50	1	01/28/2017 02:03
2-Hexanone	ND	0.50	1	01/28/2017 02:03
Isopropylbenzene	ND	0.50	1	01/28/2017 02:03
4-Isopropyl toluene	ND	0.50	1	01/28/2017 02:03
Methyl-t-butyl ether (MTBE)	ND	0.50	1	01/28/2017 02:03
Methylene chloride	ND	0.50	1	01/28/2017 02:03
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	01/28/2017 02:03
Naphthalene	ND	0.50	1	01/28/2017 02:03
n-Propyl benzene	ND	0.50	1	01/28/2017 02:03
Styrene	ND	0.50	1	01/28/2017 02:03
1,1,1,2-Tetrachloroethane	ND	0.50	1	01/28/2017 02:03
1,1,2,2-Tetrachloroethane	ND	0.50	1	01/28/2017 02:03
Tetrachloroethene	ND	0.50	1	01/28/2017 02:03
Toluene	ND	0.50	1	01/28/2017 02:03
1,2,3-Trichlorobenzene	ND	0.50	1	01/28/2017 02:03
1,2,4-Trichlorobenzene	ND	0.50	1	01/28/2017 02:03
1,1,1-Trichloroethane	ND	0.50	1	01/28/2017 02:03
1,1,2-Trichloroethane	ND	0.50	1	01/28/2017 02:03
Trichloroethene	ND	0.50	1	01/28/2017 02:03
Trichlorofluoromethane	ND	0.50	1	01/28/2017 02:03
1,2,3-Trichloropropane	ND	0.50	1	01/28/2017 02:03
1,2,4-Trimethylbenzene	ND	0.50	1	01/28/2017 02:03
1,3,5-Trimethylbenzene	ND	0.50	1	01/28/2017 02:03
Vinyl Chloride	ND	0.50	1	01/28/2017 02:03
Xylenes, Total	ND	0.50	1	01/28/2017 02:03

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Received:	1/27/17 15:10	**Extraction Method:**	SW5030B
Date Prepared:	1/27/17-1/30/17	**Analytical Method:**	SW8260B
Project:	281939; 3442 Adeline St, Oakland, California	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW-1	**1701C18-008B**	**Water**	**01/26/2017 15:55**	**GC18**	**133313**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	105	70-130		01/28/2017 02:03
Toluene-d8	104	70-130		01/28/2017 02:03
4-BFB	98	70-130		01/28/2017 02:03

Analyst(s): HK

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Received:	1/27/17 15:10	**Extraction Method:**	SW5030B
Date Prepared:	1/27/17-1/30/17	**Analytical Method:**	SW8260B
Project:	281939; 3442 Adeline St, Oakland, California	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BF-1	**1701C18-009B**	**Water**	**01/26/2017 10:09**	**GC18**	**133313**

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	01/28/2017 02:42
tert-Amyl methyl ether (TAME)	ND	0.50	1	01/28/2017 02:42
Benzene	ND	0.50	1	01/28/2017 02:42
Bromobenzene	ND	0.50	1	01/28/2017 02:42
Bromochloromethane	ND	0.50	1	01/28/2017 02:42
Bromodichloromethane	ND	0.50	1	01/28/2017 02:42
Bromoform	ND	0.50	1	01/28/2017 02:42
Bromomethane	ND	0.50	1	01/28/2017 02:42
2-Butanone (MEK)	ND	2.0	1	01/28/2017 02:42
t-Butyl alcohol (TBA)	ND	2.0	1	01/28/2017 02:42
n-Butyl benzene	ND	0.50	1	01/28/2017 02:42
sec-Butyl benzene	ND	0.50	1	01/28/2017 02:42
tert-Butyl benzene	ND	0.50	1	01/28/2017 02:42
Carbon Disulfide	ND	0.50	1	01/28/2017 02:42
Carbon Tetrachloride	ND	0.50	1	01/28/2017 02:42
Chlorobenzene	ND	0.50	1	01/28/2017 02:42
Chloroethane	ND	0.50	1	01/28/2017 02:42
Chloroform	ND	0.50	1	01/28/2017 02:42
Chloromethane	ND	0.50	1	01/28/2017 02:42
2-Chlorotoluene	ND	0.50	1	01/28/2017 02:42
4-Chlorotoluene	ND	0.50	1	01/28/2017 02:42
Dibromochloromethane	ND	0.50	1	01/28/2017 02:42
1,2-Dibromo-3-chloropropane	ND	0.20	1	01/28/2017 02:42
1,2-Dibromoethane (EDB)	ND	0.50	1	01/28/2017 02:42
Dibromomethane	ND	0.50	1	01/28/2017 02:42
1,2-Dichlorobenzene	ND	0.50	1	01/28/2017 02:42
1,3-Dichlorobenzene	ND	0.50	1	01/28/2017 02:42
1,4-Dichlorobenzene	ND	0.50	1	01/28/2017 02:42
Dichlorodifluoromethane	ND	0.50	1	01/28/2017 02:42
1,1-Dichloroethane	ND	0.50	1	01/28/2017 02:42
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	01/28/2017 02:42
1,1-Dichloroethene	ND	0.50	1	01/28/2017 02:42
cis-1,2-Dichloroethene	ND	0.50	1	01/28/2017 02:42
trans-1,2-Dichloroethene	ND	0.50	1	01/28/2017 02:42
1,2-Dichloropropane	ND	0.50	1	01/28/2017 02:42
1,3-Dichloropropane	ND	0.50	1	01/28/2017 02:42
2,2-Dichloropropane	ND	0.50	1	01/28/2017 02:42

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Received:	1/27/17 15:10	**Extraction Method:**	SW5030B
Date Prepared:	1/27/17-1/30/17	**Analytical Method:**	SW8260B
Project:	281939; 3442 Adeline St, Oakland, California	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BF-1	1701C18-009B	Water	01/26/2017 10:09	GC18	133313

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	01/28/2017 02:42
cis-1,3-Dichloropropene	ND	0.50	1	01/28/2017 02:42
trans-1,3-Dichloropropene	ND	0.50	1	01/28/2017 02:42
Diisopropyl ether (DIPE)	ND	0.50	1	01/28/2017 02:42
Ethylbenzene	ND	0.50	1	01/28/2017 02:42
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	01/28/2017 02:42
Freon 113	ND	0.50	1	01/28/2017 02:42
Hexachlorobutadiene	ND	0.50	1	01/28/2017 02:42
Hexachloroethane	ND	0.50	1	01/28/2017 02:42
2-Hexanone	ND	0.50	1	01/28/2017 02:42
Isopropylbenzene	ND	0.50	1	01/28/2017 02:42
4-Isopropyl toluene	ND	0.50	1	01/28/2017 02:42
Methyl-t-butyl ether (MTBE)	ND	0.50	1	01/28/2017 02:42
Methylene chloride	ND	0.50	1	01/28/2017 02:42
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	01/28/2017 02:42
Naphthalene	ND	0.50	1	01/28/2017 02:42
n-Propyl benzene	ND	0.50	1	01/28/2017 02:42
Styrene	ND	0.50	1	01/28/2017 02:42
1,1,1,2-Tetrachloroethane	ND	0.50	1	01/28/2017 02:42
1,1,2,2-Tetrachloroethane	ND	0.50	1	01/28/2017 02:42
Tetrachloroethene	ND	0.50	1	01/28/2017 02:42
Toluene	ND	0.50	1	01/28/2017 02:42
1,2,3-Trichlorobenzene	ND	0.50	1	01/28/2017 02:42
1,2,4-Trichlorobenzene	ND	0.50	1	01/28/2017 02:42
1,1,1-Trichloroethane	ND	0.50	1	01/28/2017 02:42
1,1,2-Trichloroethane	ND	0.50	1	01/28/2017 02:42
Trichloroethene	ND	0.50	1	01/28/2017 02:42
Trichlorofluoromethane	ND	0.50	1	01/28/2017 02:42
1,2,3-Trichloropropane	ND	0.50	1	01/28/2017 02:42
1,2,4-Trimethylbenzene	ND	0.50	1	01/28/2017 02:42
1,3,5-Trimethylbenzene	ND	0.50	1	01/28/2017 02:42
Vinyl Chloride	ND	0.50	1	01/28/2017 02:42
Xylenes, Total	ND	0.50	1	01/28/2017 02:42

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Received:	1/27/17 15:10	**Extraction Method:**	SW5030B
Date Prepared:	1/27/17-1/30/17	**Analytical Method:**	SW8260B
Project:	281939; 3442 Adeline St, Oakland, California	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BF-1	**1701C18-009B**	**Water**	**01/26/2017 10:09**	**GC18**	**133313**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	105	70-130		01/28/2017 02:42
Toluene-d8	102	70-130		01/28/2017 02:42
4-BFB	100	70-130		01/28/2017 02:42

Analyst(s): HK

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Received:	1/27/17 15:10	**Extraction Method:**	SW5030B
Date Prepared:	1/27/17-1/30/17	**Analytical Method:**	SW8260B
Project:	281939; 3442 Adeline St, Oakland, California	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BF-5	**1701C18-010B**	**Water**	**01/26/2017 09:34**	**GC18**	**133313**

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	01/28/2017 03:20
tert-Amyl methyl ether (TAME)	ND	0.50	1	01/28/2017 03:20
Benzene	ND	0.50	1	01/28/2017 03:20
Bromobenzene	ND	0.50	1	01/28/2017 03:20
Bromochloromethane	ND	0.50	1	01/28/2017 03:20
Bromodichloromethane	ND	0.50	1	01/28/2017 03:20
Bromoform	ND	0.50	1	01/28/2017 03:20
Bromomethane	ND	0.50	1	01/28/2017 03:20
2-Butanone (MEK)	ND	2.0	1	01/28/2017 03:20
t-Butyl alcohol (TBA)	ND	2.0	1	01/28/2017 03:20
n-Butyl benzene	ND	0.50	1	01/28/2017 03:20
sec-Butyl benzene	ND	0.50	1	01/28/2017 03:20
tert-Butyl benzene	ND	0.50	1	01/28/2017 03:20
Carbon Disulfide	ND	0.50	1	01/28/2017 03:20
Carbon Tetrachloride	ND	0.50	1	01/28/2017 03:20
Chlorobenzene	ND	0.50	1	01/28/2017 03:20
Chloroethane	ND	0.50	1	01/28/2017 03:20
Chloroform	ND	0.50	1	01/28/2017 03:20
Chloromethane	ND	0.50	1	01/28/2017 03:20
2-Chlorotoluene	ND	0.50	1	01/28/2017 03:20
4-Chlorotoluene	ND	0.50	1	01/28/2017 03:20
Dibromochloromethane	ND	0.50	1	01/28/2017 03:20
1,2-Dibromo-3-chloropropane	ND	0.20	1	01/28/2017 03:20
1,2-Dibromoethane (EDB)	ND	0.50	1	01/28/2017 03:20
Dibromomethane	ND	0.50	1	01/28/2017 03:20
1,2-Dichlorobenzene	ND	0.50	1	01/28/2017 03:20
1,3-Dichlorobenzene	ND	0.50	1	01/28/2017 03:20
1,4-Dichlorobenzene	ND	0.50	1	01/28/2017 03:20
Dichlorodifluoromethane	ND	0.50	1	01/28/2017 03:20
1,1-Dichloroethane	ND	0.50	1	01/28/2017 03:20
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	01/28/2017 03:20
1,1-Dichloroethene	ND	0.50	1	01/28/2017 03:20
cis-1,2-Dichloroethene	ND	0.50	1	01/28/2017 03:20
trans-1,2-Dichloroethene	ND	0.50	1	01/28/2017 03:20
1,2-Dichloropropane	ND	0.50	1	01/28/2017 03:20
1,3-Dichloropropane	ND	0.50	1	01/28/2017 03:20
2,2-Dichloropropane	ND	0.50	1	01/28/2017 03:20

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Received:	1/27/17 15:10	**Extraction Method:**	SW5030B
Date Prepared:	1/27/17-1/30/17	**Analytical Method:**	SW8260B
Project:	281939; 3442 Adeline St, Oakland, California	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BF-5	**1701C18-010B**	**Water**	**01/26/2017 09:34**	**GC18**	**133313**

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	01/28/2017 03:20
cis-1,3-Dichloropropene	ND	0.50	1	01/28/2017 03:20
trans-1,3-Dichloropropene	ND	0.50	1	01/28/2017 03:20
Diisopropyl ether (DIPE)	ND	0.50	1	01/28/2017 03:20
Ethylbenzene	ND	0.50	1	01/28/2017 03:20
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	01/28/2017 03:20
Freon 113	ND	0.50	1	01/28/2017 03:20
Hexachlorobutadiene	ND	0.50	1	01/28/2017 03:20
Hexachloroethane	ND	0.50	1	01/28/2017 03:20
2-Hexanone	ND	0.50	1	01/28/2017 03:20
Isopropylbenzene	ND	0.50	1	01/28/2017 03:20
4-Isopropyl toluene	ND	0.50	1	01/28/2017 03:20
Methyl-t-butyl ether (MTBE)	ND	0.50	1	01/28/2017 03:20
Methylene chloride	ND	0.50	1	01/28/2017 03:20
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	01/28/2017 03:20
Naphthalene	ND	0.50	1	01/28/2017 03:20
n-Propyl benzene	ND	0.50	1	01/28/2017 03:20
Styrene	ND	0.50	1	01/28/2017 03:20
1,1,1,2-Tetrachloroethane	ND	0.50	1	01/28/2017 03:20
1,1,2,2-Tetrachloroethane	ND	0.50	1	01/28/2017 03:20
Tetrachloroethene	ND	0.50	1	01/28/2017 03:20
Toluene	ND	0.50	1	01/28/2017 03:20
1,2,3-Trichlorobenzene	ND	0.50	1	01/28/2017 03:20
1,2,4-Trichlorobenzene	ND	0.50	1	01/28/2017 03:20
1,1,1-Trichloroethane	ND	0.50	1	01/28/2017 03:20
1,1,2-Trichloroethane	ND	0.50	1	01/28/2017 03:20
Trichloroethene	ND	0.50	1	01/28/2017 03:20
Trichlorofluoromethane	ND	0.50	1	01/28/2017 03:20
1,2,3-Trichloropropane	ND	0.50	1	01/28/2017 03:20
1,2,4-Trimethylbenzene	ND	0.50	1	01/28/2017 03:20
1,3,5-Trimethylbenzene	ND	0.50	1	01/28/2017 03:20
Vinyl Chloride	ND	0.50	1	01/28/2017 03:20
Xylenes, Total	ND	0.50	1	01/28/2017 03:20

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Received:	1/27/17 15:10	**Extraction Method:**	SW5030B
Date Prepared:	1/27/17-1/30/17	**Analytical Method:**	SW8260B
Project:	281939; 3442 Adeline St, Oakland, California	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BF-5	**1701C18-010B**	**Water**	**01/26/2017 09:34**	**GC18**	**133313**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	105	70-130		01/28/2017 03:20
Toluene-d8	104	70-130		01/28/2017 03:20
4-BFB	99	70-130		01/28/2017 03:20

Analyst(s): HK

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Received:	1/27/17 15:10	**Extraction Method:**	SW5030B
Date Prepared:	1/28/17-2/3/17	**Analytical Method:**	SW8021B/8015Bm
Project:	281939; 3442 Adeline St, Oakland, California	**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-1	**1701C18-001A**	**Water**	**01/26/2017 10:50**	**GC7**	**133308**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	01/28/2017 09:34
MTBE	ND	5.0	1	01/28/2017 09:34
Benzene	ND	0.50	1	01/28/2017 09:34
Toluene	ND	0.50	1	01/28/2017 09:34
Ethylbenzene	ND	0.50	1	01/28/2017 09:34
Xylenes	ND	1.5	1	01/28/2017 09:34

Surrogates	REC (%)	Limits	
aaa-TFT	108	89-115	01/28/2017 09:34

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2	**1701C18-002A**	**Water**	**01/26/2017 12:35**	**GC7**	**133308**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	01/29/2017 03:37
MTBE	ND	5.0	1	01/29/2017 03:37
Benzene	**1.4**	0.50	1	01/29/2017 03:37
Toluene	ND	0.50	1	01/29/2017 03:37
Ethylbenzene	**0.56**	0.50	1	01/29/2017 03:37
Xylenes	**1.6**	1.5	1	01/29/2017 03:37

Surrogates	REC (%)	Limits	
aaa-TFT	111	89-115	01/29/2017 03:37

Analyst(s): LT

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Received:	1/27/17 15:10	**Extraction Method:**	SW5030B
Date Prepared:	1/28/17-2/3/17	**Analytical Method:**	SW8021B/8015Bm
Project:	281939; 3442 Adeline St, Oakland, California	**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-3	**1701C18-003A**	**Water**	**01/26/2017 11:50**	**GC3**	**133325**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	**7300**	500	10	01/30/2017 19:40
MTBE	ND	200	10	01/30/2017 19:40
Benzene	**1900**	50	100	01/29/2017 15:32
Toluene	**17**	5.0	10	01/30/2017 19:40
Ethylbenzene	**99**	5.0	10	01/30/2017 19:40
Xylenes	**59**	15	10	01/30/2017 19:40

Surrogates	REC (%)	Qualifiers	Limits	
aaa-TFT	127	S	89-115	01/30/2017 19:40

Analyst(s): IA Analytical Comments: d1,d1,d17,c4

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-4	**1701C18-004A**	**Water**	**01/26/2017 13:10**	**GC3**	**133306**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	01/28/2017 09:05
MTBE	ND	5.0	1	01/28/2017 09:05
Benzene	ND	0.50	1	01/28/2017 09:05
Toluene	ND	0.50	1	01/28/2017 09:05
Ethylbenzene	ND	0.50	1	01/28/2017 09:05
Xylenes	ND	1.5	1	01/28/2017 09:05

Surrogates	REC (%)	Limits	
aaa-TFT	109	89-115	01/28/2017 09:05

Analyst(s): IA

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Received:	1/27/17 15:10	**Extraction Method:**	SW5030B
Date Prepared:	1/28/17-2/3/17	**Analytical Method:**	SW8021B/8015Bm
Project:	281939; 3442 Adeline St, Oakland, California	**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	**1701C18-005A**	**Water**	**01/26/2017 13:43**	**GC3**	**133306**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	01/29/2017 15:01
MTBE	ND	5.0	1	01/29/2017 15:01
Benzene	ND	0.50	1	01/29/2017 15:01
Toluene	ND	0.50	1	01/29/2017 15:01
Ethylbenzene	ND	0.50	1	01/29/2017 15:01
Xylenes	ND	1.5	1	01/29/2017 15:01

Surrogates	REC (%)	Limits	
aaa-TFT	102	89-115	01/29/2017 15:01

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-6	**1701C18-006A**	**Water**	**01/26/2017 14:18**	**GC7**	**133306**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	02/03/2017 12:53
MTBE	ND	5.0	1	02/03/2017 12:53
Benzene	ND	0.50	1	02/03/2017 12:53
Toluene	ND	0.50	1	02/03/2017 12:53
Ethylbenzene	ND	0.50	1	02/03/2017 12:53
Xylenes	ND	1.5	1	02/03/2017 12:53

Surrogates	REC (%)	Limits	
aaa-TFT	107	89-115	02/03/2017 12:53

Analyst(s): IA

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Received:	1/27/17 15:10	**Extraction Method:**	SW5030B
Date Prepared:	1/28/17-2/3/17	**Analytical Method:**	SW8021B/8015Bm
Project:	281939; 3442 Adeline St, Oakland, California	**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	**1701C18-007A**	**Water**	**01/26/2017 15:20**	**GC3**	**133306**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	**3200**	250	5	01/29/2017 16:02
MTBE	ND	150	5	01/29/2017 16:02
Benzene	**190**	2.5	5	01/29/2017 16:02
Toluene	**8.0**	2.5	5	01/29/2017 16:02
Ethylbenzene	**7.2**	2.5	5	01/29/2017 16:02
Xylenes	**11**	7.5	5	01/29/2017 16:02

Surrogates	REC (%)	Qualifiers	Limits	
aaa-TFT	165	S	89-115	01/29/2017 16:02

Analyst(s): IA Analytical Comments: d1,d17,c4

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW-1	**1701C18-008A**	**Water**	**01/26/2017 15:55**	**GC3**	**133306**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	01/28/2017 11:04
MTBE	ND	5.0	1	01/28/2017 11:04
Benzene	ND	0.50	1	01/28/2017 11:04
Toluene	ND	0.50	1	01/28/2017 11:04
Ethylbenzene	ND	0.50	1	01/28/2017 11:04
Xylenes	ND	1.5	1	01/28/2017 11:04

Surrogates	REC (%)	Limits	
aaa-TFT	109	89-115	01/28/2017 11:04

Analyst(s): IA

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Received:	1/27/17 15:10	**Extraction Method:**	SW5030B
Date Prepared:	1/28/17-2/3/17	**Analytical Method:**	SW8021B/8015Bm
Project:	281939; 3442 Adeline St, Oakland, California	**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
BF-1	**1701C18-009A**	**Water**	**01/26/2017 10:09**	**GC3**	**133306**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	01/28/2017 11:33
MTBE	ND	5.0	1	01/28/2017 11:33
Benzene	ND	0.50	1	01/28/2017 11:33
Toluene	ND	0.50	1	01/28/2017 11:33
Ethylbenzene	ND	0.50	1	01/28/2017 11:33
Xylenes	ND	1.5	1	01/28/2017 11:33

Surrogates	REC (%)	Limits	
aaa-TFT	106	89-115	01/28/2017 11:33

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BF-5	**1701C18-010A**	**Water**	**01/26/2017 09:34**	**GC3**	**133306**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	01/28/2017 12:03
MTBE	ND	5.0	1	01/28/2017 12:03
Benzene	ND	0.50	1	01/28/2017 12:03
Toluene	ND	0.50	1	01/28/2017 12:03
Ethylbenzene	ND	0.50	1	01/28/2017 12:03
Xylenes	ND	1.5	1	01/28/2017 12:03

Surrogates	REC (%)	Limits	
aaa-TFT	107	89-115	01/28/2017 12:03

Analyst(s): IA

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Prepared:	1/27/17	**BatchID:**	133313
Date Analyzed:	1/27/17	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	281939; 3442 Adeline St, Oakland, California	**Sample ID:**	MB/LCS-133313 1701B76-004AMS/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	8.90	0.50	10	-	89	54-140
Benzene	ND	9.14	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	28.9	2.0	40	-	72	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	9.55	0.50	10	-	96	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	9.07	0.50	10	-	91	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	9.07	0.50	10	-	91	66-125
1,1-Dichloroethene	ND	9.16	0.50	10	-	92	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	-	-	-	-

(Cont.)

NELAP 4033ORELAP

QA/QC Officer

McCampbell Analytical, Inc.
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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Prepared:	1/27/17	**BatchID:**	133313
Date Analyzed:	1/27/17	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	281939; 3442 Adeline St, Oakland, California	**Sample ID:**	MB/LCS-133313 1701B76-004AMS/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	8.73	0.50	10	-	87	57-136
Ethylbenzene	ND	-	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	8.73	0.50	10	-	87	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	8.46	0.50	10	-	85	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	9.47	0.50	10	-	95	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	9.56	0.50	10	-	96	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.)

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Prepared:	1/27/17	**BatchID:**	133313
Date Analyzed:	1/27/17	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	281939; 3442 Adeline St, Oakland, California	**Sample ID:**	MB/LCS-133313 1701B76-004AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
Dibromofluoromethane	25.54	25.3		25	102	101	70-130
Toluene-d8	25.91	27.4		25	104	110	70-130
4-BFB	2.716	2.40		2.5	109	96	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)	9.36	9.88	10	ND	94	99	69-139	5.43	20
Benzene	9.75	9.93	10	ND	97	98	69-141	1.79	20
t-Butyl alcohol (TBA)	33.4	34.1	40	ND	83	85	41-152	2.04	20
Chlorobenzene	10.2	10.2	10	ND	101	102	77-120	0.923	20
1,2-Dibromoethane (EDB)	9.90	9.98	10	ND	99	100	76-135	0.813	20
1,2-Dichloroethane (1,2-DCA)	10.1	10.2	10	ND	101	102	73-139	1.23	20
1,1-Dichloroethene	9.77	9.87	10	ND	98	99	59-140	1.02	20
Diisopropyl ether (DIPE)	9.23	9.43	10	ND	92	94	72-140	2.13	20
Ethyl tert-butyl ether (ETBE)	9.46	9.68	10	ND	95	97	71-140	2.32	20
Methyl-t-butyl ether (MTBE)	9.42	9.57	10	ND	94	96	73-139	1.53	20
Toluene	9.66	9.92	10	ND	97	99	71-128	2.64	20
Trichloroethene	10.3	10.5	10	ND	103	105	64-132	1.96	20
Surrogate Recovery									
Dibromofluoromethane	25.7	25.8	25		103	103	73-131	0	20
Toluene-d8	26.1	26.5	25		104	106	72-117	1.57	20
4-BFB	2.61	2.45	2.5		104	98	74-116	6.22	20

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Prepared:	1/28/17	**BatchID:**	133306
Date Analyzed:	1/28/17	**Extraction Method:**	SW5030B
Instrument:	GC3	**Analytical Method:**	SW8021B/8015Bm
Matrix:	Water	**Unit:**	µg/L
Project:	281939; 3442 Adeline St, Oakland, California	**Sample ID:**	MB/LCS-133306 1701C18-004AMS/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	60.4	40	60	-	101	85-112
MTBE	ND	9.27	5.0	10	-	93	74-127
Benzene	ND	10.2	0.50	10	-	102	81-124
Toluene	ND	10.5	0.50	10	-	105	79-131
Ethylbenzene	ND	10.8	0.50	10	-	109	86-127
Xylenes	ND	34.6	1.5	30	-	115	87-133
Surrogate Recovery							
aaa-TFT	10.62	10.6		10	106	106	87-117

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	58.2	57.8	60	ND	97	96	85-113	0.728	20
MTBE	8.22	8.32	10	ND	82	83	73-120	1.17	20
Benzene	10.5	10.3	10	ND	103	102	84-121	1.41	20
Toluene	10.8	10.6	10	ND	108	106	86-125	1.88	20
Ethylbenzene	11.0	11.0	10	ND	110	110	93-124	0	20
Xylenes	34.7	34.4	30	ND	116	115	93-130	0.774	20
Surrogate Recovery									
aaa-TFT	10.8	10.5	10		108	105	89-115	3.00	20

(Cont.)

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Prepared:	1/27/17	**BatchID:**	133308
Date Analyzed:	1/27/17	**Extraction Method:**	SW5030B
Instrument:	GC7	**Analytical Method:**	SW8021B/8015Bm
Matrix:	Water	**Unit:**	µg/L
Project:	281939; 3442 Adeline St, Oakland, California	**Sample ID:**	MB/LCS-133308 1701C17-001AMS/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	59.5	40	60	-	99	85-112
MTBE	ND	9.38	5.0	10	-	94	74-127
Benzene	ND	9.97	0.50	10	-	100	81-124
Toluene	ND	11.0	0.50	10	-	110	79-131
Ethylbenzene	ND	11.0	0.50	10	-	110	86-127
Xylenes	ND	34.2	1.5	30	-	114	87-133
Surrogate Recovery							
aaa-TFT	10.37	10.5		10	104	105	87-117

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	57.7	58.8	60	ND	96	98	85-113	1.78	20
MTBE	9.67	8.94	10	ND	97	89	73-120	7.94	20
Benzene	9.89	9.69	10	ND	99	97	84-121	1.97	20
Toluene	11.0	10.9	10	ND	110	109	86-125	1.13	20
Ethylbenzene	11.1	11.0	10	ND	111	110	93-124	0.701	20
Xylenes	34.4	34.2	30	ND	115	114	93-130	0.805	20
Surrogate Recovery									
aaa-TFT	10.6	10.7	10		106	107	89-115	0.692	20

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1701C18
Date Prepared:	1/29/17	**BatchID:**	133325
Date Analyzed:	1/29/17	**Extraction Method:**	SW5030B
Instrument:	GC3	**Analytical Method:**	SW8021B/8015Bm
Matrix:	Water	**Unit:**	µg/L
Project:	281939; 3442 Adeline St, Oakland, California	**Sample ID:**	MB/LCS-133325 1701C33-001BMS/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	56.7	40	60	-	95	85-112
MTBE	ND	8.72	5.0	10	-	87	74-127
Benzene	ND	10.3	0.50	10	-	103	81-124
Toluene	ND	10.5	0.50	10	-	105	79-131
Ethylbenzene	ND	10.8	0.50	10	-	108	86-127
Xylenes	ND	33.9	1.5	30	-	113	87-133
Surrogate Recovery							
aaa-TFT	10.16	10.1		10	102	101	87-117

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	NR	NR		83	NR	NR	-	NR	
MTBE	NR	NR		ND	NR	NR	-	NR	
Benzene	NR	NR		ND	NR	NR	-	NR	
Toluene	NR	NR		ND	NR	NR	-	NR	
Ethylbenzene	NR	NR		3	NR	NR	-	NR	
Xylenes	NR	NR		2.9	NR	NR	-	NR	
Surrogate Recovery									
aaa-TFT	NR	NR			NR	NR	-	NR	

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Pittsburg, CA 94565-1701
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CHAIN-OF-CUSTODY RECORD

WorkOrder: 1701C18 **ClientCode: AEL**

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

Report to:
Jonathan Sanders
AEI Consultants
2500 Camino Diablo, Ste.#200
Walnut Creek, CA 94597
(925) 283-6000 FAX: (925) 944-2895

Email: jsanders@aeiconsultants.com
cc/3rd Party: nbricker@aeiconsultants.com;
PO: 124632
ProjectNo: 281939; 3442 Adeline St, Oakland, California

Bill to:
Accounts Payable
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
AccountsPayable@AEIConsultants.com

Requested TAT: 5 days;

Date Received: **01/27/2017**
Date Logged: **01/27/2017**

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
1701C18-001	MW-1	Water	1/26/2017 10:50	☐	B	A	A									
1701C18-002	MW-2	Water	1/26/2017 12:35	☐	B	A										
1701C18-003	MW-3	Water	1/26/2017 11:50	☐	B	A										
1701C18-004	MW-4	Water	1/26/2017 13:10	☐	B	A										
1701C18-005	MW-5	Water	1/26/2017 13:43	☐	B	A										
1701C18-006	MW-6	Water	1/26/2017 14:18	☐	B	A										
1701C18-007	MW-7	Water	1/26/2017 15:20	☐	B	A										
1701C18-008	IW-1	Water	1/26/2017 15:55	☐	B	A										
1701C18-009	BF-1	Water	1/26/2017 10:09	☐	B	A										
1701C18-010	BF-5	Water	1/26/2017 09:34	☐	B	A										

Test Legend:

1	8260B_W	2	G-MBTEX_W	3	PREDF REPORT	4	
5		6		7		8	
9		10		11		12	

Prepared by: Briana Cutino

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: AEI CONSULTANTS
Client Contact: Jonathan Sanders
Contact's Email: jsanders@aeiconsultants.com

Project: 281939; 3442 Adeline St, Oakland, California
Comments:

Work Order: 1701C18
QC Level: LEVEL 2
Date Logged: 1/27/2017

☐ 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
1701C18-001A	MW-1	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	☐	1/26/2017 10:50	5 days	None	☐	
1701C18-001B	MW-1	Water	SW8260B (VOCs)	1	VOA w/ HCl	☐	1/26/2017 10:50	5 days	None	☐	
1701C18-002A	MW-2	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	☐	1/26/2017 12:35	5 days	None	☐	
1701C18-002B	MW-2	Water	SW8260B (VOCs)	1	VOA w/ HCl	☐	1/26/2017 12:35	5 days	None	☐	
1701C18-003A	MW-3	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	☐	1/26/2017 11:50	5 days	Trace	☐	
1701C18-003B	MW-3	Water	SW8260B (VOCs)	1	VOA w/ HCl	☐	1/26/2017 11:50	5 days	Trace	☐	
1701C18-004A	MW-4	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	☐	1/26/2017 13:10	5 days	Trace	☐	
1701C18-004B	MW-4	Water	SW8260B (VOCs)	1	VOA w/ HCl	☐	1/26/2017 13:10	5 days	Trace	☐	
1701C18-005A	MW-5	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	☐	1/26/2017 13:43	5 days	Present	☐	
1701C18-005B	MW-5	Water	SW8260B (VOCs)	1	VOA w/ HCl	☐	1/26/2017 13:43	5 days	Present	☐	
1701C18-006A	MW-6	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	☐	1/26/2017 14:18	5 days	Present	☐	
1701C18-006B	MW-6	Water	SW8260B (VOCs)	1	VOA w/ HCl	☐	1/26/2017 14:18	5 days	Present	☐	
1701C18-007A	MW-7	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	☐	1/26/2017 15:20	5 days	Present	☐	
1701C18-007B	MW-7	Water	SW8260B (VOCs)	1	VOA w/ HCl	☐	1/26/2017 15:20	5 days	Present	☐	
1701C18-008A	IW-1	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	☐	1/26/2017 15:55	5 days	Present	☐	
1701C18-008B	IW-1	Water	SW8260B (VOCs)	1	VOA w/ HCl	☐	1/26/2017 15:55	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.

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WORK ORDER SUMMARY

Client Name: AEI CONSULTANTS
Client Contact: Jonathan Sanders
Contact's Email: jsanders@aeiconsultants.com

Project: 281939; 3442 Adeline St, Oakland, California
Comments:

Work Order: 1701C18
QC Level: LEVEL 2
Date Logged: 1/27/2017

☐ 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
1701C18-009A	BF-1	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	☐	1/26/2017 10:09	5 days	Trace	☐	
1701C18-009B	BF-1	Water	SW8260B (VOCs)	1	VOA w/ HCl	☐	1/26/2017 10:09	5 days	Trace	☐	
1701C18-010A	BF-5	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	☐	1/26/2017 9:34	5 days	Trace	☐	
1701C18-010B	BF-5	Water	SW8260B (VOCs)	1	VOA w/ HCl	☐	1/26/2017 9:34	5 days	Trace	☐	

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.

General COC

MAI Work Order # 1701C18

5

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CHAIN OF CUSTODY RECORD

Turn Around Time: 1 Day Rush | 2 Day Rush | 3 Day Rush | STD ● | Quote #
J-Flag / MDL | ESL | Cleanup Approved | Bottle Order #
Delivery Format: GeoTracker EDF ● | PDF | EDD | Write On (DW) | EQuIS

Report To: Jonathan Sanders Bill To: AEI
Company: AEI
Email: jsanders@aeiconsultants.com
Alt Email: nbricker@aeiconsultants.com Tele: 707-484-6223
Project Name/#: 281939
Project Location: 3442 Adeline St, Oakland, California PO # 124632
Sampler Signature:

SAMPLE ID Location / Field Point	Sampling Date	Sampling Time	#Containers	Matrix	Preservative	BTEX & TPH as Gas (8021/ 8015) MTBE	TPH as Diesel (8015) + Motor Oil Without Silica Gel	TPH as Diesel (8015) + Motor Oil With Silica Gel	Total Oil & Grease (1664 / 9071) Without Silica Gel	Total Petroleum Hydrocarbons - Oil & Grease (1664 / 9071) With Silica Gel	Total Petroleum Hydrocarbons (418.1) With Silica Gel	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ; Aroclors only	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020)*	Metals (200.8 / 6020)	Baylands Requirements	Lab to filter sample for dissolved metals analysis				
MW-1	1/26/17	1050	3	GW	2	●								●										
MW-2	1/26/17	1235	3	GW	2	●								●										
MW-3	1/26/17	1150	3	GW	2	●								●										
MW-4	1/26/17	1310	3	GW	2	●								●										
MW-5	1/26/17	1343	3	GW	2	●								●										
MW-6	1/26/17	1418	3	GW	2	●								●										
MW-7	1/26/17	1520	3	GW	2	●								●										
IW-1	1/26/17	1555	3	GW	2	●								●										
BF-1	1/26/17	1009	3	GW	2	●								●										
BF-5	1/26/17	0934	3	GW	2	●								●										

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

* If metals are requested for water samples and the water type (Matrix) is not specified on the chain of custody, MAI will default to metals by E200.8.

Please provide an adequate volume of sample. If the volume is not sufficient for a MS/MSD a LCS/LCSD will be prepared in its place and noted in the report.

Comments / Instructions

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
	1/27	830		1-27-17	830
	1-27	1510		1/27/17	1510

Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SW=Seawater, S=Soil, SL=Sludge, A=Air, WP=Wipe, O=Other

Preservative Code: 1=4°C 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=ZnOAc/NaOH 7=None

Temp _____ °C Initials _____

Page 1 of 1

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Sample Receipt Checklist

Client Name:	**AEI Consultants**	Date and Time Received	**1/27/2017 15:10**
Project Name:	**281939; 3442 Adeline St, Oakland, California**	Date Logged:	**1/27/2017**
		Received by:	Maria Venegas
WorkOrder №:	**1701C18** Matrix: Water	Logged by:	Briana Cutino
Carrier:	David Shaver (MAI Courier)		

Chain of Custody (COC) Information

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

Sample Receipt Information

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

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes	☑	No	☐	NA ☐
Sample/Temp Blank temperature	Temp: 3.6°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:

McCampbell Analytical, Inc.
"When Quality Counts"

Analytical Report

WorkOrder: 1706675

Report Created for: AEI Consultants

2500 Camino Diablo, Ste.#200
Walnut Creek, CA 94597

Project Contact: Jonathan Sanders
Project P.O.: 134736
Project Name: 281939; Zimmerman, 3442 Adeline St. Oakland, CA

Project Received: 06/14/2017

Analytical Report reviewed & approved for release on 06/21/2017 by:

Angela Rydelius,
Laboratory Manager

McCampbell Analytical, Inc.
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Glossary of Terms & Qualifier Definitions

Client: AEI Consultants
Project: 281939; Zimmerman, 3442 Adeline St. Oakland, CA
WorkOrder: 1706675

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
ERS	External reference sample. Second source calibration verification.
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)

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Glossary of Terms & Qualifier Definitions

Client: AEI Consultants
Project: 281939; Zimmerman, 3442 Adeline St. Oakland, CA
WorkOrder: 1706675

Analytical Qualifiers

S	Surrogate spike recovery outside accepted recovery limits
c4	Surrogate recovery outside of the control limits due to coelution with another peak(s) / cluttered chromatogram.
d1	Weakly modified or unmodified gasoline is significant

Quality Control Qualifiers

F1	MS/MSD recovery and/or RPD is out of acceptance criteria; LCS validates the prep batch.

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Received:	6/14/17 15:20	**Extraction Method:**	SW5030B
Date Prepared:	6/15/17-6/21/17	**Analytical Method:**	SW8260B
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1	**1706675-001B**	**Water**	**06/13/2017 13:57**	**GC18**	**140572**

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	06/15/2017 14:39
tert-Amyl methyl ether (TAME)	ND	0.50	1	06/15/2017 14:39
Benzene	ND	0.50	1	06/15/2017 14:39
Bromobenzene	ND	0.50	1	06/15/2017 14:39
Bromochloromethane	ND	0.50	1	06/15/2017 14:39
Bromodichloromethane	ND	0.50	1	06/15/2017 14:39
Bromoform	ND	0.50	1	06/15/2017 14:39
Bromomethane	ND	0.50	1	06/15/2017 14:39
2-Butanone (MEK)	ND	2.0	1	06/15/2017 14:39
t-Butyl alcohol (TBA)	ND	2.0	1	06/15/2017 14:39
n-Butyl benzene	ND	0.50	1	06/15/2017 14:39
sec-Butyl benzene	ND	0.50	1	06/15/2017 14:39
tert-Butyl benzene	ND	0.50	1	06/15/2017 14:39
Carbon Disulfide	ND	0.50	1	06/15/2017 14:39
Carbon Tetrachloride	ND	0.50	1	06/15/2017 14:39
Chlorobenzene	ND	0.50	1	06/15/2017 14:39
Chloroethane	ND	0.50	1	06/15/2017 14:39
Chloroform	**0.98**	0.50	1	06/15/2017 14:39
Chloromethane	ND	0.50	1	06/15/2017 14:39
2-Chlorotoluene	ND	0.50	1	06/15/2017 14:39
4-Chlorotoluene	ND	0.50	1	06/15/2017 14:39
Dibromochloromethane	ND	0.50	1	06/15/2017 14:39
1,2-Dibromo-3-chloropropane	ND	0.20	1	06/15/2017 14:39
1,2-Dibromoethane (EDB)	ND	0.50	1	06/15/2017 14:39
Dibromomethane	ND	0.50	1	06/15/2017 14:39
1,2-Dichlorobenzene	ND	0.50	1	06/15/2017 14:39
1,3-Dichlorobenzene	ND	0.50	1	06/15/2017 14:39
1,4-Dichlorobenzene	ND	0.50	1	06/15/2017 14:39
Dichlorodifluoromethane	ND	0.50	1	06/15/2017 14:39
1,1-Dichloroethane	ND	0.50	1	06/15/2017 14:39
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	06/15/2017 14:39
1,1-Dichloroethene	ND	0.50	1	06/15/2017 14:39
cis-1,2-Dichloroethene	ND	0.50	1	06/15/2017 14:39
trans-1,2-Dichloroethene	ND	0.50	1	06/15/2017 14:39
1,2-Dichloropropane	ND	0.50	1	06/15/2017 14:39
1,3-Dichloropropane	ND	0.50	1	06/15/2017 14:39
2,2-Dichloropropane	ND	0.50	1	06/15/2017 14:39

(Cont.)

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Received:	6/14/17 15:20	**Extraction Method:**	SW5030B
Date Prepared:	6/15/17-6/21/17	**Analytical Method:**	SW8260B
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1	1706675-001B	Water	06/13/2017 13:57	GC18	140572

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	06/15/2017 14:39
cis-1,3-Dichloropropene	ND	0.50	1	06/15/2017 14:39
trans-1,3-Dichloropropene	ND	0.50	1	06/15/2017 14:39
Diisopropyl ether (DIPE)	ND	0.50	1	06/15/2017 14:39
Ethylbenzene	ND	0.50	1	06/15/2017 14:39
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	06/15/2017 14:39
Freon 113	ND	0.50	1	06/15/2017 14:39
Hexachlorobutadiene	ND	0.50	1	06/15/2017 14:39
Hexachloroethane	ND	0.50	1	06/15/2017 14:39
2-Hexanone	ND	0.50	1	06/15/2017 14:39
Isopropylbenzene	ND	0.50	1	06/15/2017 14:39
4-Isopropyl toluene	ND	0.50	1	06/15/2017 14:39
Methyl-t-butyl ether (MTBE)	ND	0.50	1	06/15/2017 14:39
Methylene chloride	ND	0.50	1	06/15/2017 14:39
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	06/15/2017 14:39
Naphthalene	ND	0.50	1	06/15/2017 14:39
n-Propyl benzene	ND	0.50	1	06/15/2017 14:39
Styrene	ND	0.50	1	06/15/2017 14:39
1,1,1,2-Tetrachloroethane	ND	0.50	1	06/15/2017 14:39
1,1,2,2-Tetrachloroethane	ND	0.50	1	06/15/2017 14:39
Tetrachloroethene	ND	0.50	1	06/15/2017 14:39
Toluene	ND	0.50	1	06/15/2017 14:39
1,2,3-Trichlorobenzene	ND	0.50	1	06/15/2017 14:39
1,2,4-Trichlorobenzene	ND	0.50	1	06/15/2017 14:39
1,1,1-Trichloroethane	ND	0.50	1	06/15/2017 14:39
1,1,2-Trichloroethane	ND	0.50	1	06/15/2017 14:39
Trichloroethene	ND	0.50	1	06/15/2017 14:39
Trichlorofluoromethane	ND	0.50	1	06/15/2017 14:39
1,2,3-Trichloropropane	ND	0.50	1	06/15/2017 14:39
1,2,4-Trimethylbenzene	ND	0.50	1	06/15/2017 14:39
1,3,5-Trimethylbenzene	ND	0.50	1	06/15/2017 14:39
Vinyl Chloride	ND	0.50	1	06/15/2017 14:39
Xylenes, Total	ND	0.50	1	06/15/2017 14:39

(Cont.)

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Received:	6/14/17 15:20	**Extraction Method:**	SW5030B
Date Prepared:	6/15/17-6/21/17	**Analytical Method:**	SW8260B
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1	**1706675-001B**	**Water**	**06/13/2017 13:57**	**GC18**	**140572**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	117	70-130		06/15/2017 14:39
Toluene-d8	99	70-130		06/15/2017 14:39
4-BFB	105	70-130		06/15/2017 14:39

Analyst(s): KF

(Cont.)

CDPH ELAP 1644 • NELAP 4033ORELAP

Angela Rydelius, Lab Manager

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Received:	6/14/17 15:20	**Extraction Method:**	SW5030B
Date Prepared:	6/15/17-6/21/17	**Analytical Method:**	SW8260B
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2	1706675-002B	Water	06/13/2017 12:37	GC18	140572

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	06/15/2017 15:19
tert-Amyl methyl ether (TAME)	ND	0.50	1	06/15/2017 15:19
Benzene	ND	0.50	1	06/15/2017 15:19
Bromobenzene	ND	0.50	1	06/15/2017 15:19
Bromochloromethane	ND	0.50	1	06/15/2017 15:19
Bromodichloromethane	ND	0.50	1	06/15/2017 15:19
Bromoform	ND	0.50	1	06/15/2017 15:19
Bromomethane	ND	0.50	1	06/15/2017 15:19
2-Butanone (MEK)	ND	2.0	1	06/15/2017 15:19
t-Butyl alcohol (TBA)	**6.6**	2.0	1	06/15/2017 15:19
n-Butyl benzene	ND	0.50	1	06/15/2017 15:19
sec-Butyl benzene	ND	0.50	1	06/15/2017 15:19
tert-Butyl benzene	ND	0.50	1	06/15/2017 15:19
Carbon Disulfide	ND	0.50	1	06/15/2017 15:19
Carbon Tetrachloride	ND	0.50	1	06/15/2017 15:19
Chlorobenzene	ND	0.50	1	06/15/2017 15:19
Chloroethane	ND	0.50	1	06/15/2017 15:19
Chloroform	**0.56**	0.50	1	06/15/2017 15:19
Chloromethane	ND	0.50	1	06/15/2017 15:19
2-Chlorotoluene	ND	0.50	1	06/15/2017 15:19
4-Chlorotoluene	ND	0.50	1	06/15/2017 15:19
Dibromochloromethane	ND	0.50	1	06/15/2017 15:19
1,2-Dibromo-3-chloropropane	ND	0.20	1	06/15/2017 15:19
1,2-Dibromoethane (EDB)	ND	0.50	1	06/15/2017 15:19
Dibromomethane	ND	0.50	1	06/15/2017 15:19
1,2-Dichlorobenzene	ND	0.50	1	06/15/2017 15:19
1,3-Dichlorobenzene	ND	0.50	1	06/15/2017 15:19
1,4-Dichlorobenzene	ND	0.50	1	06/15/2017 15:19
Dichlorodifluoromethane	ND	0.50	1	06/15/2017 15:19
1,1-Dichloroethane	ND	0.50	1	06/15/2017 15:19
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	06/15/2017 15:19
1,1-Dichloroethene	ND	0.50	1	06/15/2017 15:19
cis-1,2-Dichloroethene	ND	0.50	1	06/15/2017 15:19
trans-1,2-Dichloroethene	ND	0.50	1	06/15/2017 15:19
1,2-Dichloropropane	ND	0.50	1	06/15/2017 15:19
1,3-Dichloropropane	ND	0.50	1	06/15/2017 15:19
2,2-Dichloropropane	ND	0.50	1	06/15/2017 15:19

(Cont.)

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Received:	6/14/17 15:20	**Extraction Method:**	SW5030B
Date Prepared:	6/15/17-6/21/17	**Analytical Method:**	SW8260B
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2	1706675-002B	Water	06/13/2017 12:37	GC18	140572

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	06/15/2017 15:19
cis-1,3-Dichloropropene	ND	0.50	1	06/15/2017 15:19
trans-1,3-Dichloropropene	ND	0.50	1	06/15/2017 15:19
Diisopropyl ether (DIPE)	ND	0.50	1	06/15/2017 15:19
Ethylbenzene	ND	0.50	1	06/15/2017 15:19
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	06/15/2017 15:19
Freon 113	ND	0.50	1	06/15/2017 15:19
Hexachlorobutadiene	ND	0.50	1	06/15/2017 15:19
Hexachloroethane	ND	0.50	1	06/15/2017 15:19
2-Hexanone	ND	0.50	1	06/15/2017 15:19
Isopropylbenzene	ND	0.50	1	06/15/2017 15:19
4-Isopropyl toluene	ND	0.50	1	06/15/2017 15:19
Methyl-t-butyl ether (MTBE)	ND	0.50	1	06/15/2017 15:19
Methylene chloride	ND	0.50	1	06/15/2017 15:19
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	06/15/2017 15:19
Naphthalene	ND	0.50	1	06/15/2017 15:19
n-Propyl benzene	ND	0.50	1	06/15/2017 15:19
Styrene	ND	0.50	1	06/15/2017 15:19
1,1,1,2-Tetrachloroethane	ND	0.50	1	06/15/2017 15:19
1,1,2,2-Tetrachloroethane	ND	0.50	1	06/15/2017 15:19
Tetrachloroethene	ND	0.50	1	06/15/2017 15:19
Toluene	ND	0.50	1	06/15/2017 15:19
1,2,3-Trichlorobenzene	ND	0.50	1	06/15/2017 15:19
1,2,4-Trichlorobenzene	ND	0.50	1	06/15/2017 15:19
1,1,1-Trichloroethane	ND	0.50	1	06/15/2017 15:19
1,1,2-Trichloroethane	ND	0.50	1	06/15/2017 15:19
Trichloroethene	ND	0.50	1	06/15/2017 15:19
Trichlorofluoromethane	ND	0.50	1	06/15/2017 15:19
1,2,3-Trichloropropane	ND	0.50	1	06/15/2017 15:19
1,2,4-Trimethylbenzene	ND	0.50	1	06/15/2017 15:19
1,3,5-Trimethylbenzene	ND	0.50	1	06/15/2017 15:19
Vinyl Chloride	ND	0.50	1	06/15/2017 15:19
Xylenes, Total	ND	0.50	1	06/15/2017 15:19

(Cont.)

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Received:	6/14/17 15:20	**Extraction Method:**	SW5030B
Date Prepared:	6/15/17-6/21/17	**Analytical Method:**	SW8260B
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2	**1706675-002B**	**Water**	**06/13/2017 12:37**	**GC18**	**140572**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	117	70-130		06/15/2017 15:19
Toluene-d8	100	70-130		06/15/2017 15:19
4-BFB	105	70-130		06/15/2017 15:19

Analyst(s): KF

(Cont.)

CDPH ELAP 1644 • NELAP 4033ORELAP

Angela Rydelius, Lab Manager

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Received:	6/14/17 15:20	**Extraction Method:**	SW5030B
Date Prepared:	6/15/17-6/21/17	**Analytical Method:**	SW8260B
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3	1706675-003B	Water	06/13/2017 12:01	GC18	140572

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	1000	100	06/17/2017 02:15
tert-Amyl methyl ether (TAME)	ND	50	100	06/17/2017 02:15
Benzene	**2200**	50	100	06/17/2017 02:15
Bromobenzene	ND	50	100	06/17/2017 02:15
Bromochloromethane	ND	50	100	06/17/2017 02:15
Bromodichloromethane	ND	50	100	06/17/2017 02:15
Bromoform	ND	50	100	06/17/2017 02:15
Bromomethane	ND	50	100	06/17/2017 02:15
2-Butanone (MEK)	ND	200	100	06/17/2017 02:15
t-Butyl alcohol (TBA)	ND	200	100	06/17/2017 02:15
n-Butyl benzene	ND	50	100	06/17/2017 02:15
sec-Butyl benzene	ND	50	100	06/17/2017 02:15
tert-Butyl benzene	ND	50	100	06/17/2017 02:15
Carbon Disulfide	ND	50	100	06/17/2017 02:15
Carbon Tetrachloride	ND	50	100	06/17/2017 02:15
Chlorobenzene	ND	50	100	06/17/2017 02:15
Chloroethane	ND	50	100	06/17/2017 02:15
Chloroform	ND	50	100	06/17/2017 02:15
Chloromethane	ND	50	100	06/17/2017 02:15
2-Chlorotoluene	ND	50	100	06/17/2017 02:15
4-Chlorotoluene	ND	50	100	06/17/2017 02:15
Dibromochloromethane	ND	50	100	06/17/2017 02:15
1,2-Dibromo-3-chloropropane	ND	20	100	06/17/2017 02:15
1,2-Dibromoethane (EDB)	ND	50	100	06/17/2017 02:15
Dibromomethane	ND	50	100	06/17/2017 02:15
1,2-Dichlorobenzene	ND	50	100	06/17/2017 02:15
1,3-Dichlorobenzene	ND	50	100	06/17/2017 02:15
1,4-Dichlorobenzene	ND	50	100	06/17/2017 02:15
Dichlorodifluoromethane	ND	50	100	06/17/2017 02:15
1,1-Dichloroethane	ND	50	100	06/17/2017 02:15
1,2-Dichloroethane (1,2-DCA)	ND	50	100	06/17/2017 02:15
1,1-Dichloroethene	ND	50	100	06/17/2017 02:15
cis-1,2-Dichloroethene	ND	50	100	06/17/2017 02:15
trans-1,2-Dichloroethene	ND	50	100	06/17/2017 02:15
1,2-Dichloropropane	ND	50	100	06/17/2017 02:15
1,3-Dichloropropane	ND	50	100	06/17/2017 02:15
2,2-Dichloropropane	ND	50	100	06/17/2017 02:15

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Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3	1706675-003B	Water	06/13/2017 12:01	GC18	140572

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	50	100	06/17/2017 02:15
cis-1,3-Dichloropropene	ND	50	100	06/17/2017 02:15
trans-1,3-Dichloropropene	ND	50	100	06/17/2017 02:15
Diisopropyl ether (DIPE)	ND	50	100	06/17/2017 02:15
Ethylbenzene	**96**	50	100	06/17/2017 02:15
Ethyl tert-butyl ether (ETBE)	ND	50	100	06/17/2017 02:15
Freon 113	ND	50	100	06/17/2017 02:15
Hexachlorobutadiene	ND	50	100	06/17/2017 02:15
Hexachloroethane	ND	50	100	06/17/2017 02:15
2-Hexanone	ND	50	100	06/17/2017 02:15
Isopropylbenzene	ND	50	100	06/17/2017 02:15
4-Isopropyl toluene	ND	50	100	06/17/2017 02:15
Methyl-t-butyl ether (MTBE)	ND	50	100	06/17/2017 02:15
Methylene chloride	ND	50	100	06/17/2017 02:15
4-Methyl-2-pentanone (MIBK)	ND	50	100	06/17/2017 02:15
Naphthalene	**56**	50	100	06/17/2017 02:15
n-Propyl benzene	ND	50	100	06/17/2017 02:15
Styrene	ND	50	100	06/17/2017 02:15
1,1,1,2-Tetrachloroethane	ND	50	100	06/17/2017 02:15
1,1,2,2-Tetrachloroethane	ND	50	100	06/17/2017 02:15
Tetrachloroethene	ND	50	100	06/17/2017 02:15
Toluene	ND	50	100	06/17/2017 02:15
1,2,3-Trichlorobenzene	ND	50	100	06/17/2017 02:15
1,2,4-Trichlorobenzene	ND	50	100	06/17/2017 02:15
1,1,1-Trichloroethane	ND	50	100	06/17/2017 02:15
1,1,2-Trichloroethane	ND	50	100	06/17/2017 02:15
Trichloroethene	ND	50	100	06/17/2017 02:15
Trichlorofluoromethane	ND	50	100	06/17/2017 02:15
1,2,3-Trichloropropane	ND	50	100	06/17/2017 02:15
1,2,4-Trimethylbenzene	ND	50	100	06/17/2017 02:15
1,3,5-Trimethylbenzene	ND	50	100	06/17/2017 02:15
Vinyl Chloride	ND	50	100	06/17/2017 02:15
Xylenes, Total	ND	50	100	06/17/2017 02:15

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Received:	6/14/17 15:20	**Extraction Method:**	SW5030B
Date Prepared:	6/15/17-6/21/17	**Analytical Method:**	SW8260B
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3	**1706675-003B**	**Water**	**06/13/2017 12:01**	**GC18**	**140572**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	117	70-130		06/17/2017 02:15
Toluene-d8	102	70-130		06/17/2017 02:15
4-BFB	107	70-130		06/17/2017 02:15

Analyst(s): AK

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Angela Rydelius, Lab Manager

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Date Received:	6/14/17 15:20	**Extraction Method:**	SW5030B
Date Prepared:	6/15/17-6/21/17	**Analytical Method:**	SW8260B
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-4	**1706675-004B**	**Water**	**06/13/2017 10:51**	**GC18**	**140633**

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	06/16/2017 14:43
tert-Amyl methyl ether (TAME)	ND	0.50	1	06/16/2017 14:43
Benzene	ND	0.50	1	06/16/2017 14:43
Bromobenzene	ND	0.50	1	06/16/2017 14:43
Bromochloromethane	ND	0.50	1	06/16/2017 14:43
Bromodichloromethane	ND	0.50	1	06/16/2017 14:43
Bromoform	ND	0.50	1	06/16/2017 14:43
Bromomethane	ND	0.50	1	06/16/2017 14:43
2-Butanone (MEK)	ND	2.0	1	06/16/2017 14:43
t-Butyl alcohol (TBA)	ND	2.0	1	06/16/2017 14:43
n-Butyl benzene	ND	0.50	1	06/16/2017 14:43
sec-Butyl benzene	ND	0.50	1	06/16/2017 14:43
tert-Butyl benzene	ND	0.50	1	06/16/2017 14:43
Carbon Disulfide	ND	0.50	1	06/16/2017 14:43
Carbon Tetrachloride	ND	0.50	1	06/16/2017 14:43
Chlorobenzene	ND	0.50	1	06/16/2017 14:43
Chloroethane	ND	0.50	1	06/16/2017 14:43
Chloroform	**1.3**	0.50	1	06/16/2017 14:43
Chloromethane	ND	0.50	1	06/16/2017 14:43
2-Chlorotoluene	ND	0.50	1	06/16/2017 14:43
4-Chlorotoluene	ND	0.50	1	06/16/2017 14:43
Dibromochloromethane	ND	0.50	1	06/16/2017 14:43
1,2-Dibromo-3-chloropropane	ND	0.20	1	06/16/2017 14:43
1,2-Dibromoethane (EDB)	ND	0.50	1	06/16/2017 14:43
Dibromomethane	ND	0.50	1	06/16/2017 14:43
1,2-Dichlorobenzene	ND	0.50	1	06/16/2017 14:43
1,3-Dichlorobenzene	ND	0.50	1	06/16/2017 14:43
1,4-Dichlorobenzene	ND	0.50	1	06/16/2017 14:43
Dichlorodifluoromethane	ND	0.50	1	06/16/2017 14:43
1,1-Dichloroethane	ND	0.50	1	06/16/2017 14:43
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	06/16/2017 14:43
1,1-Dichloroethene	ND	0.50	1	06/16/2017 14:43
cis-1,2-Dichloroethene	ND	0.50	1	06/16/2017 14:43
trans-1,2-Dichloroethene	ND	0.50	1	06/16/2017 14:43
1,2-Dichloropropane	ND	0.50	1	06/16/2017 14:43
1,3-Dichloropropane	ND	0.50	1	06/16/2017 14:43
2,2-Dichloropropane	ND	0.50	1	06/16/2017 14:43

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Date Prepared:	6/15/17-6/21/17	**Analytical Method:**	SW8260B
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-4	1706675-004B	Water	06/13/2017 10:51	GC18	140633

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	06/16/2017 14:43
cis-1,3-Dichloropropene	ND	0.50	1	06/16/2017 14:43
trans-1,3-Dichloropropene	ND	0.50	1	06/16/2017 14:43
Diisopropyl ether (DIPE)	ND	0.50	1	06/16/2017 14:43
Ethylbenzene	ND	0.50	1	06/16/2017 14:43
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	06/16/2017 14:43
Freon 113	ND	0.50	1	06/16/2017 14:43
Hexachlorobutadiene	ND	0.50	1	06/16/2017 14:43
Hexachloroethane	ND	0.50	1	06/16/2017 14:43
2-Hexanone	ND	0.50	1	06/16/2017 14:43
Isopropylbenzene	ND	0.50	1	06/16/2017 14:43
4-Isopropyl toluene	ND	0.50	1	06/16/2017 14:43
Methyl-t-butyl ether (MTBE)	ND	0.50	1	06/16/2017 14:43
Methylene chloride	ND	0.50	1	06/16/2017 14:43
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	06/16/2017 14:43
Naphthalene	ND	0.50	1	06/16/2017 14:43
n-Propyl benzene	ND	0.50	1	06/16/2017 14:43
Styrene	ND	0.50	1	06/16/2017 14:43
1,1,1,2-Tetrachloroethane	ND	0.50	1	06/16/2017 14:43
1,1,2,2-Tetrachloroethane	ND	0.50	1	06/16/2017 14:43
Tetrachloroethene	ND	0.50	1	06/16/2017 14:43
Toluene	ND	0.50	1	06/16/2017 14:43
1,2,3-Trichlorobenzene	ND	0.50	1	06/16/2017 14:43
1,2,4-Trichlorobenzene	ND	0.50	1	06/16/2017 14:43
1,1,1-Trichloroethane	ND	0.50	1	06/16/2017 14:43
1,1,2-Trichloroethane	ND	0.50	1	06/16/2017 14:43
Trichloroethene	ND	0.50	1	06/16/2017 14:43
Trichlorofluoromethane	ND	0.50	1	06/16/2017 14:43
1,2,3-Trichloropropane	ND	0.50	1	06/16/2017 14:43
1,2,4-Trimethylbenzene	ND	0.50	1	06/16/2017 14:43
1,3,5-Trimethylbenzene	ND	0.50	1	06/16/2017 14:43
Vinyl Chloride	ND	0.50	1	06/16/2017 14:43
Xylenes, Total	ND	0.50	1	06/16/2017 14:43

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Date Prepared:	6/15/17-6/21/17	**Analytical Method:**	SW8260B
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-4	**1706675-004B**	**Water**	**06/13/2017 10:51**	**GC18**	**140633**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	124	70-130		06/16/2017 14:43
Toluene-d8	100	70-130		06/16/2017 14:43
4-BFB	116	70-130		06/16/2017 14:43

Analyst(s): AK

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Date Prepared:	6/15/17-6/21/17	**Analytical Method:**	SW8260B
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5	1706675-005B	Water	06/13/2017 14:40	GC28	140575

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	06/21/2017 12:51
tert-Amyl methyl ether (TAME)	ND	0.50	1	06/21/2017 12:51
Benzene	ND	0.50	1	06/21/2017 12:51
Bromobenzene	ND	0.50	1	06/21/2017 12:51
Bromochloromethane	ND	0.50	1	06/21/2017 12:51
Bromodichloromethane	ND	0.50	1	06/21/2017 12:51
Bromoform	ND	0.50	1	06/21/2017 12:51
Bromomethane	ND	0.50	1	06/21/2017 12:51
2-Butanone (MEK)	ND	2.0	1	06/21/2017 12:51
t-Butyl alcohol (TBA)	ND	2.0	1	06/21/2017 12:51
n-Butyl benzene	ND	0.50	1	06/21/2017 12:51
sec-Butyl benzene	ND	0.50	1	06/21/2017 12:51
tert-Butyl benzene	ND	0.50	1	06/21/2017 12:51
Carbon Disulfide	ND	0.50	1	06/21/2017 12:51
Carbon Tetrachloride	ND	0.50	1	06/21/2017 12:51
Chlorobenzene	ND	0.50	1	06/21/2017 12:51
Chloroethane	ND	0.50	1	06/21/2017 12:51
Chloroform	ND	0.50	1	06/21/2017 12:51
Chloromethane	ND	0.50	1	06/21/2017 12:51
2-Chlorotoluene	ND	0.50	1	06/21/2017 12:51
4-Chlorotoluene	ND	0.50	1	06/21/2017 12:51
Dibromochloromethane	ND	0.50	1	06/21/2017 12:51
1,2-Dibromo-3-chloropropane	ND	0.20	1	06/21/2017 12:51
1,2-Dibromoethane (EDB)	ND	0.50	1	06/21/2017 12:51
Dibromomethane	ND	0.50	1	06/21/2017 12:51
1,2-Dichlorobenzene	ND	0.50	1	06/21/2017 12:51
1,3-Dichlorobenzene	ND	0.50	1	06/21/2017 12:51
1,4-Dichlorobenzene	ND	0.50	1	06/21/2017 12:51
Dichlorodifluoromethane	ND	0.50	1	06/21/2017 12:51
1,1-Dichloroethane	ND	0.50	1	06/21/2017 12:51
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	06/21/2017 12:51
1,1-Dichloroethene	ND	0.50	1	06/21/2017 12:51
cis-1,2-Dichloroethene	ND	0.50	1	06/21/2017 12:51
trans-1,2-Dichloroethene	ND	0.50	1	06/21/2017 12:51
1,2-Dichloropropane	ND	0.50	1	06/21/2017 12:51
1,3-Dichloropropane	ND	0.50	1	06/21/2017 12:51
2,2-Dichloropropane	ND	0.50	1	06/21/2017 12:51

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Date Prepared:	6/15/17-6/21/17	**Analytical Method:**	SW8260B
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5	1706675-005B	Water	06/13/2017 14:40	GC28	140575

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	06/21/2017 12:51
cis-1,3-Dichloropropene	ND	0.50	1	06/21/2017 12:51
trans-1,3-Dichloropropene	ND	0.50	1	06/21/2017 12:51
Diisopropyl ether (DIPE)	ND	0.50	1	06/21/2017 12:51
Ethylbenzene	ND	0.50	1	06/21/2017 12:51
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	06/21/2017 12:51
Freon 113	ND	0.50	1	06/21/2017 12:51
Hexachlorobutadiene	ND	0.50	1	06/21/2017 12:51
Hexachloroethane	ND	0.50	1	06/21/2017 12:51
2-Hexanone	ND	0.50	1	06/21/2017 12:51
Isopropylbenzene	ND	0.50	1	06/21/2017 12:51
4-Isopropyl toluene	ND	0.50	1	06/21/2017 12:51
Methyl-t-butyl ether (MTBE)	ND	0.50	1	06/21/2017 12:51
Methylene chloride	ND	0.50	1	06/21/2017 12:51
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	06/21/2017 12:51
Naphthalene	ND	0.50	1	06/21/2017 12:51
n-Propyl benzene	ND	0.50	1	06/21/2017 12:51
Styrene	ND	0.50	1	06/21/2017 12:51
1,1,1,2-Tetrachloroethane	ND	0.50	1	06/21/2017 12:51
1,1,2,2-Tetrachloroethane	ND	0.50	1	06/21/2017 12:51
Tetrachloroethene	ND	0.50	1	06/21/2017 12:51
Toluene	ND	0.50	1	06/21/2017 12:51
1,2,3-Trichlorobenzene	ND	0.50	1	06/21/2017 12:51
1,2,4-Trichlorobenzene	ND	0.50	1	06/21/2017 12:51
1,1,1-Trichloroethane	ND	0.50	1	06/21/2017 12:51
1,1,2-Trichloroethane	ND	0.50	1	06/21/2017 12:51
Trichloroethene	ND	0.50	1	06/21/2017 12:51
Trichlorofluoromethane	ND	0.50	1	06/21/2017 12:51
1,2,3-Trichloropropane	ND	0.50	1	06/21/2017 12:51
1,2,4-Trimethylbenzene	ND	0.50	1	06/21/2017 12:51
1,3,5-Trimethylbenzene	ND	0.50	1	06/21/2017 12:51
Vinyl Chloride	ND	0.50	1	06/21/2017 12:51
Xylenes, Total	ND	0.50	1	06/21/2017 12:51

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Received:	6/14/17 15:20	**Extraction Method:**	SW5030B
Date Prepared:	6/15/17-6/21/17	**Analytical Method:**	SW8260B
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5	**1706675-005B**	**Water**	**06/13/2017 14:40**	**GC28**	**140575**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	106	70-130		06/21/2017 12:51
Toluene-d8	104	70-130		06/21/2017 12:51
4-BFB	84	70-130		06/21/2017 12:51

Analyst(s): KF

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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

Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Received:	6/14/17 15:20	**Extraction Method:**	SW5030B
Date Prepared:	6/15/17-6/21/17	**Analytical Method:**	SW8260B
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-6	1706675-006B	Water	06/13/2017 10:05	GC28	140575

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	06/21/2017 13:28
tert-Amyl methyl ether (TAME)	ND	0.50	1	06/21/2017 13:28
Benzene	**0.87**	0.50	1	06/21/2017 13:28
Bromobenzene	ND	0.50	1	06/21/2017 13:28
Bromochloromethane	ND	0.50	1	06/21/2017 13:28
Bromodichloromethane	ND	0.50	1	06/21/2017 13:28
Bromoform	ND	0.50	1	06/21/2017 13:28
Bromomethane	ND	0.50	1	06/21/2017 13:28
2-Butanone (MEK)	ND	2.0	1	06/21/2017 13:28
t-Butyl alcohol (TBA)	ND	2.0	1	06/21/2017 13:28
n-Butyl benzene	**0.70**	0.50	1	06/21/2017 13:28
sec-Butyl benzene	ND	0.50	1	06/21/2017 13:28
tert-Butyl benzene	ND	0.50	1	06/21/2017 13:28
Carbon Disulfide	ND	0.50	1	06/21/2017 13:28
Carbon Tetrachloride	ND	0.50	1	06/21/2017 13:28
Chlorobenzene	ND	0.50	1	06/21/2017 13:28
Chloroethane	ND	0.50	1	06/21/2017 13:28
Chloroform	ND	0.50	1	06/21/2017 13:28
Chloromethane	ND	0.50	1	06/21/2017 13:28
2-Chlorotoluene	ND	0.50	1	06/21/2017 13:28
4-Chlorotoluene	ND	0.50	1	06/21/2017 13:28
Dibromochloromethane	ND	0.50	1	06/21/2017 13:28
1,2-Dibromo-3-chloropropane	ND	0.20	1	06/21/2017 13:28
1,2-Dibromoethane (EDB)	ND	0.50	1	06/21/2017 13:28
Dibromomethane	ND	0.50	1	06/21/2017 13:28
1,2-Dichlorobenzene	ND	0.50	1	06/21/2017 13:28
1,3-Dichlorobenzene	ND	0.50	1	06/21/2017 13:28
1,4-Dichlorobenzene	ND	0.50	1	06/21/2017 13:28
Dichlorodifluoromethane	ND	0.50	1	06/21/2017 13:28
1,1-Dichloroethane	ND	0.50	1	06/21/2017 13:28
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	06/21/2017 13:28
1,1-Dichloroethene	ND	0.50	1	06/21/2017 13:28
cis-1,2-Dichloroethene	ND	0.50	1	06/21/2017 13:28
trans-1,2-Dichloroethene	ND	0.50	1	06/21/2017 13:28
1,2-Dichloropropane	ND	0.50	1	06/21/2017 13:28
1,3-Dichloropropane	ND	0.50	1	06/21/2017 13:28
2,2-Dichloropropane	ND	0.50	1	06/21/2017 13:28

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Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-6	1706675-006B	Water	06/13/2017 10:05	GC28	140575

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	06/21/2017 13:28
cis-1,3-Dichloropropene	ND	0.50	1	06/21/2017 13:28
trans-1,3-Dichloropropene	ND	0.50	1	06/21/2017 13:28
Diisopropyl ether (DIPE)	ND	0.50	1	06/21/2017 13:28
Ethylbenzene	**2.2**	0.50	1	06/21/2017 13:28
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	06/21/2017 13:28
Freon 113	ND	0.50	1	06/21/2017 13:28
Hexachlorobutadiene	ND	0.50	1	06/21/2017 13:28
Hexachloroethane	ND	0.50	1	06/21/2017 13:28
2-Hexanone	ND	0.50	1	06/21/2017 13:28
Isopropylbenzene	**3.4**	0.50	1	06/21/2017 13:28
4-Isopropyl toluene	ND	0.50	1	06/21/2017 13:28
Methyl-t-butyl ether (MTBE)	ND	0.50	1	06/21/2017 13:28
Methylene chloride	ND	0.50	1	06/21/2017 13:28
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	06/21/2017 13:28
Naphthalene	**0.86**	0.50	1	06/21/2017 13:28
n-Propyl benzene	**7.6**	0.50	1	06/21/2017 13:28
Styrene	ND	0.50	1	06/21/2017 13:28
1,1,1,2-Tetrachloroethane	ND	0.50	1	06/21/2017 13:28
1,1,2,2-Tetrachloroethane	ND	0.50	1	06/21/2017 13:28
Tetrachloroethene	ND	0.50	1	06/21/2017 13:28
Toluene	ND	0.50	1	06/21/2017 13:28
1,2,3-Trichlorobenzene	ND	0.50	1	06/21/2017 13:28
1,2,4-Trichlorobenzene	ND	0.50	1	06/21/2017 13:28
1,1,1-Trichloroethane	ND	0.50	1	06/21/2017 13:28
1,1,2-Trichloroethane	ND	0.50	1	06/21/2017 13:28
Trichloroethene	ND	0.50	1	06/21/2017 13:28
Trichlorofluoromethane	ND	0.50	1	06/21/2017 13:28
1,2,3-Trichloropropane	ND	0.50	1	06/21/2017 13:28
1,2,4-Trimethylbenzene	ND	0.50	1	06/21/2017 13:28
1,3,5-Trimethylbenzene	ND	0.50	1	06/21/2017 13:28
Vinyl Chloride	ND	0.50	1	06/21/2017 13:28
Xylenes, Total	ND	0.50	1	06/21/2017 13:28

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Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-6	**1706675-006B**	**Water**	**06/13/2017 10:05**	**GC28**	**140575**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	107	70-130		06/21/2017 13:28
Toluene-d8	103	70-130		06/21/2017 13:28
4-BFB	87	70-130		06/21/2017 13:28

Analyst(s): KF

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Date Prepared:	6/15/17-6/21/17	**Analytical Method:**	SW8260B
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-7	1706675-007B	Water	06/13/2017 16:21	GC16	140575

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	500	50	06/16/2017 00:23
tert-Amyl methyl ether (TAME)	ND	25	50	06/16/2017 00:23
Benzene	**1800**	25	50	06/16/2017 00:23
Bromobenzene	ND	25	50	06/16/2017 00:23
Bromochloromethane	ND	25	50	06/16/2017 00:23
Bromodichloromethane	ND	25	50	06/16/2017 00:23
Bromoform	ND	25	50	06/16/2017 00:23
Bromomethane	ND	25	50	06/16/2017 00:23
2-Butanone (MEK)	ND	100	50	06/16/2017 00:23
t-Butyl alcohol (TBA)	ND	100	50	06/16/2017 00:23
n-Butyl benzene	ND	25	50	06/16/2017 00:23
sec-Butyl benzene	ND	25	50	06/16/2017 00:23
tert-Butyl benzene	ND	25	50	06/16/2017 00:23
Carbon Disulfide	ND	25	50	06/16/2017 00:23
Carbon Tetrachloride	ND	25	50	06/16/2017 00:23
Chlorobenzene	ND	25	50	06/16/2017 00:23
Chloroethane	ND	25	50	06/16/2017 00:23
Chloroform	ND	25	50	06/16/2017 00:23
Chloromethane	ND	25	50	06/16/2017 00:23
2-Chlorotoluene	ND	25	50	06/16/2017 00:23
4-Chlorotoluene	ND	25	50	06/16/2017 00:23
Dibromochloromethane	ND	25	50	06/16/2017 00:23
1,2-Dibromo-3-chloropropane	ND	10	50	06/16/2017 00:23
1,2-Dibromoethane (EDB)	ND	25	50	06/16/2017 00:23
Dibromomethane	ND	25	50	06/16/2017 00:23
1,2-Dichlorobenzene	ND	25	50	06/16/2017 00:23
1,3-Dichlorobenzene	ND	25	50	06/16/2017 00:23
1,4-Dichlorobenzene	ND	25	50	06/16/2017 00:23
Dichlorodifluoromethane	ND	25	50	06/16/2017 00:23
1,1-Dichloroethane	ND	25	50	06/16/2017 00:23
1,2-Dichloroethane (1,2-DCA)	ND	25	50	06/16/2017 00:23
1,1-Dichloroethene	ND	25	50	06/16/2017 00:23
cis-1,2-Dichloroethene	ND	25	50	06/16/2017 00:23
trans-1,2-Dichloroethene	ND	25	50	06/16/2017 00:23
1,2-Dichloropropane	ND	25	50	06/16/2017 00:23
1,3-Dichloropropane	ND	25	50	06/16/2017 00:23
2,2-Dichloropropane	ND	25	50	06/16/2017 00:23

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Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-7	1706675-007B	Water	06/13/2017 16:21	GC16	140575

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	25	50	06/16/2017 00:23
cis-1,3-Dichloropropene	ND	25	50	06/16/2017 00:23
trans-1,3-Dichloropropene	ND	25	50	06/16/2017 00:23
Diisopropyl ether (DIPE)	ND	25	50	06/16/2017 00:23
Ethylbenzene	**120**	25	50	06/16/2017 00:23
Ethyl tert-butyl ether (ETBE)	ND	25	50	06/16/2017 00:23
Freon 113	ND	25	50	06/16/2017 00:23
Hexachlorobutadiene	ND	25	50	06/16/2017 00:23
Hexachloroethane	ND	25	50	06/16/2017 00:23
2-Hexanone	ND	25	50	06/16/2017 00:23
Isopropylbenzene	**56**	25	50	06/16/2017 00:23
4-Isopropyl toluene	ND	25	50	06/16/2017 00:23
Methyl-t-butyl ether (MTBE)	ND	25	50	06/16/2017 00:23
Methylene chloride	ND	25	50	06/16/2017 00:23
4-Methyl-2-pentanone (MIBK)	ND	25	50	06/16/2017 00:23
Naphthalene	**34**	25	50	06/16/2017 00:23
n-Propyl benzene	**100**	25	50	06/16/2017 00:23
Styrene	ND	25	50	06/16/2017 00:23
1,1,1,2-Tetrachloroethane	ND	25	50	06/16/2017 00:23
1,1,2,2-Tetrachloroethane	ND	25	50	06/16/2017 00:23
Tetrachloroethene	ND	25	50	06/16/2017 00:23
Toluene	ND	25	50	06/16/2017 00:23
1,2,3-Trichlorobenzene	ND	25	50	06/16/2017 00:23
1,2,4-Trichlorobenzene	ND	25	50	06/16/2017 00:23
1,1,1-Trichloroethane	ND	25	50	06/16/2017 00:23
1,1,2-Trichloroethane	ND	25	50	06/16/2017 00:23
Trichloroethene	ND	25	50	06/16/2017 00:23
Trichlorofluoromethane	ND	25	50	06/16/2017 00:23
1,2,3-Trichloropropane	ND	25	50	06/16/2017 00:23
1,2,4-Trimethylbenzene	ND	25	50	06/16/2017 00:23
1,3,5-Trimethylbenzene	ND	25	50	06/16/2017 00:23
Vinyl Chloride	ND	25	50	06/16/2017 00:23
Xylenes, Total	**52**	25	50	06/16/2017 00:23

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Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-7	**1706675-007B**	**Water**	**06/13/2017 16:21**	**GC16**	**140575**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	122	70-130		06/16/2017 00:23
Toluene-d8	113	70-130		06/16/2017 00:23
4-BFB	96	70-130		06/16/2017 00:23

Analyst(s): KF

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Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW-1	**1706675-008B**	**Water**	**06/13/2017 15:37**	**GC18**	**140633**

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	06/16/2017 16:50
tert-Amyl methyl ether (TAME)	ND	0.50	1	06/16/2017 16:50
Benzene	ND	0.50	1	06/16/2017 16:50
Bromobenzene	ND	0.50	1	06/16/2017 16:50
Bromochloromethane	ND	0.50	1	06/16/2017 16:50
Bromodichloromethane	ND	0.50	1	06/16/2017 16:50
Bromoform	ND	0.50	1	06/16/2017 16:50
Bromomethane	ND	0.50	1	06/16/2017 16:50
2-Butanone (MEK)	ND	2.0	1	06/16/2017 16:50
t-Butyl alcohol (TBA)	**3.7**	2.0	1	06/16/2017 16:50
n-Butyl benzene	ND	0.50	1	06/16/2017 16:50
sec-Butyl benzene	ND	0.50	1	06/16/2017 16:50
tert-Butyl benzene	ND	0.50	1	06/16/2017 16:50
Carbon Disulfide	ND	0.50	1	06/16/2017 16:50
Carbon Tetrachloride	ND	0.50	1	06/16/2017 16:50
Chlorobenzene	ND	0.50	1	06/16/2017 16:50
Chloroethane	ND	0.50	1	06/16/2017 16:50
Chloroform	ND	0.50	1	06/16/2017 16:50
Chloromethane	ND	0.50	1	06/16/2017 16:50
2-Chlorotoluene	ND	0.50	1	06/16/2017 16:50
4-Chlorotoluene	ND	0.50	1	06/16/2017 16:50
Dibromochloromethane	ND	0.50	1	06/16/2017 16:50
1,2-Dibromo-3-chloropropane	ND	0.20	1	06/16/2017 16:50
1,2-Dibromoethane (EDB)	ND	0.50	1	06/16/2017 16:50
Dibromomethane	ND	0.50	1	06/16/2017 16:50
1,2-Dichlorobenzene	ND	0.50	1	06/16/2017 16:50
1,3-Dichlorobenzene	ND	0.50	1	06/16/2017 16:50
1,4-Dichlorobenzene	ND	0.50	1	06/16/2017 16:50
Dichlorodifluoromethane	ND	0.50	1	06/16/2017 16:50
1,1-Dichloroethane	ND	0.50	1	06/16/2017 16:50
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	06/16/2017 16:50
1,1-Dichloroethene	ND	0.50	1	06/16/2017 16:50
cis-1,2-Dichloroethene	ND	0.50	1	06/16/2017 16:50
trans-1,2-Dichloroethene	ND	0.50	1	06/16/2017 16:50
1,2-Dichloropropane	ND	0.50	1	06/16/2017 16:50
1,3-Dichloropropane	ND	0.50	1	06/16/2017 16:50
2,2-Dichloropropane	ND	0.50	1	06/16/2017 16:50

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Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW-1	**1706675-008B**	**Water**	**06/13/2017 15:37**	**GC18**	**140633**

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	06/16/2017 16:50
cis-1,3-Dichloropropene	ND	0.50	1	06/16/2017 16:50
trans-1,3-Dichloropropene	ND	0.50	1	06/16/2017 16:50
Diisopropyl ether (DIPE)	ND	0.50	1	06/16/2017 16:50
Ethylbenzene	ND	0.50	1	06/16/2017 16:50
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	06/16/2017 16:50
Freon 113	ND	0.50	1	06/16/2017 16:50
Hexachlorobutadiene	ND	0.50	1	06/16/2017 16:50
Hexachloroethane	ND	0.50	1	06/16/2017 16:50
2-Hexanone	ND	0.50	1	06/16/2017 16:50
Isopropylbenzene	ND	0.50	1	06/16/2017 16:50
4-Isopropyl toluene	ND	0.50	1	06/16/2017 16:50
Methyl-t-butyl ether (MTBE)	ND	0.50	1	06/16/2017 16:50
Methylene chloride	ND	0.50	1	06/16/2017 16:50
4-Methyl-2-pentanone (MIBK)	**0.63**	0.50	1	06/16/2017 16:50
Naphthalene	ND	0.50	1	06/16/2017 16:50
n-Propyl benzene	ND	0.50	1	06/16/2017 16:50
Styrene	ND	0.50	1	06/16/2017 16:50
1,1,1,2-Tetrachloroethane	ND	0.50	1	06/16/2017 16:50
1,1,2,2-Tetrachloroethane	ND	0.50	1	06/16/2017 16:50
Tetrachloroethene	ND	0.50	1	06/16/2017 16:50
Toluene	ND	0.50	1	06/16/2017 16:50
1,2,3-Trichlorobenzene	ND	0.50	1	06/16/2017 16:50
1,2,4-Trichlorobenzene	ND	0.50	1	06/16/2017 16:50
1,1,1-Trichloroethane	ND	0.50	1	06/16/2017 16:50
1,1,2-Trichloroethane	ND	0.50	1	06/16/2017 16:50
Trichloroethene	ND	0.50	1	06/16/2017 16:50
Trichlorofluoromethane	ND	0.50	1	06/16/2017 16:50
1,2,3-Trichloropropane	ND	0.50	1	06/16/2017 16:50
1,2,4-Trimethylbenzene	ND	0.50	1	06/16/2017 16:50
1,3,5-Trimethylbenzene	ND	0.50	1	06/16/2017 16:50
Vinyl Chloride	ND	0.50	1	06/16/2017 16:50
Xylenes, Total	ND	0.50	1	06/16/2017 16:50

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Date Prepared:	6/15/17-6/21/17	**Analytical Method:**	SW8260B
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW-1	**1706675-008B**	**Water**	**06/13/2017 15:37**	**GC18**	**140633**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	119	70-130		06/16/2017 16:50
Toluene-d8	101	70-130		06/16/2017 16:50
4-BFB	110	70-130		06/16/2017 16:50

Analyst(s): AK

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Received:	6/14/17 15:20	**Extraction Method:**	SW5030B
Date Prepared:	6/15/17-6/21/17	**Analytical Method:**	SW8260B
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BF-1	**1706675-009B**	**Water**	**06/13/2017 13:29**	**GC18**	**140633**

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	06/16/2017 17:31
tert-Amyl methyl ether (TAME)	ND	0.50	1	06/16/2017 17:31
Benzene	ND	0.50	1	06/16/2017 17:31
Bromobenzene	ND	0.50	1	06/16/2017 17:31
Bromochloromethane	ND	0.50	1	06/16/2017 17:31
Bromodichloromethane	ND	0.50	1	06/16/2017 17:31
Bromoform	ND	0.50	1	06/16/2017 17:31
Bromomethane	ND	0.50	1	06/16/2017 17:31
2-Butanone (MEK)	ND	2.0	1	06/16/2017 17:31
t-Butyl alcohol (TBA)	ND	2.0	1	06/16/2017 17:31
n-Butyl benzene	ND	0.50	1	06/16/2017 17:31
sec-Butyl benzene	ND	0.50	1	06/16/2017 17:31
tert-Butyl benzene	ND	0.50	1	06/16/2017 17:31
Carbon Disulfide	ND	0.50	1	06/16/2017 17:31
Carbon Tetrachloride	ND	0.50	1	06/16/2017 17:31
Chlorobenzene	ND	0.50	1	06/16/2017 17:31
Chloroethane	ND	0.50	1	06/16/2017 17:31
Chloroform	ND	0.50	1	06/16/2017 17:31
Chloromethane	ND	0.50	1	06/16/2017 17:31
2-Chlorotoluene	ND	0.50	1	06/16/2017 17:31
4-Chlorotoluene	ND	0.50	1	06/16/2017 17:31
Dibromochloromethane	ND	0.50	1	06/16/2017 17:31
1,2-Dibromo-3-chloropropane	ND	0.20	1	06/16/2017 17:31
1,2-Dibromoethane (EDB)	ND	0.50	1	06/16/2017 17:31
Dibromomethane	ND	0.50	1	06/16/2017 17:31
1,2-Dichlorobenzene	ND	0.50	1	06/16/2017 17:31
1,3-Dichlorobenzene	ND	0.50	1	06/16/2017 17:31
1,4-Dichlorobenzene	ND	0.50	1	06/16/2017 17:31
Dichlorodifluoromethane	ND	0.50	1	06/16/2017 17:31
1,1-Dichloroethane	ND	0.50	1	06/16/2017 17:31
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	06/16/2017 17:31
1,1-Dichloroethene	ND	0.50	1	06/16/2017 17:31
cis-1,2-Dichloroethene	ND	0.50	1	06/16/2017 17:31
trans-1,2-Dichloroethene	ND	0.50	1	06/16/2017 17:31
1,2-Dichloropropane	ND	0.50	1	06/16/2017 17:31
1,3-Dichloropropane	ND	0.50	1	06/16/2017 17:31
2,2-Dichloropropane	ND	0.50	1	06/16/2017 17:31

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Received:	6/14/17 15:20	**Extraction Method:**	SW5030B
Date Prepared:	6/15/17-6/21/17	**Analytical Method:**	SW8260B
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BF-1	**1706675-009B**	**Water**	**06/13/2017 13:29**	**GC18**	**140633**

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	06/16/2017 17:31
cis-1,3-Dichloropropene	ND	0.50	1	06/16/2017 17:31
trans-1,3-Dichloropropene	ND	0.50	1	06/16/2017 17:31
Diisopropyl ether (DIPE)	ND	0.50	1	06/16/2017 17:31
Ethylbenzene	ND	0.50	1	06/16/2017 17:31
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	06/16/2017 17:31
Freon 113	ND	0.50	1	06/16/2017 17:31
Hexachlorobutadiene	ND	0.50	1	06/16/2017 17:31
Hexachloroethane	ND	0.50	1	06/16/2017 17:31
2-Hexanone	ND	0.50	1	06/16/2017 17:31
Isopropylbenzene	ND	0.50	1	06/16/2017 17:31
4-Isopropyl toluene	ND	0.50	1	06/16/2017 17:31
Methyl-t-butyl ether (MTBE)	ND	0.50	1	06/16/2017 17:31
Methylene chloride	ND	0.50	1	06/16/2017 17:31
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	06/16/2017 17:31
Naphthalene	ND	0.50	1	06/16/2017 17:31
n-Propyl benzene	ND	0.50	1	06/16/2017 17:31
Styrene	ND	0.50	1	06/16/2017 17:31
1,1,1,2-Tetrachloroethane	ND	0.50	1	06/16/2017 17:31
1,1,2,2-Tetrachloroethane	ND	0.50	1	06/16/2017 17:31
Tetrachloroethene	ND	0.50	1	06/16/2017 17:31
Toluene	ND	0.50	1	06/16/2017 17:31
1,2,3-Trichlorobenzene	ND	0.50	1	06/16/2017 17:31
1,2,4-Trichlorobenzene	ND	0.50	1	06/16/2017 17:31
1,1,1-Trichloroethane	ND	0.50	1	06/16/2017 17:31
1,1,2-Trichloroethane	ND	0.50	1	06/16/2017 17:31
Trichloroethene	ND	0.50	1	06/16/2017 17:31
Trichlorofluoromethane	ND	0.50	1	06/16/2017 17:31
1,2,3-Trichloropropane	ND	0.50	1	06/16/2017 17:31
1,2,4-Trimethylbenzene	ND	0.50	1	06/16/2017 17:31
1,3,5-Trimethylbenzene	ND	0.50	1	06/16/2017 17:31
Vinyl Chloride	ND	0.50	1	06/16/2017 17:31
Xylenes, Total	ND	0.50	1	06/16/2017 17:31

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Received:	6/14/17 15:20	**Extraction Method:**	SW5030B
Date Prepared:	6/15/17-6/21/17	**Analytical Method:**	SW8260B
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BF-1	**1706675-009B**	**Water**	**06/13/2017 13:29**	**GC18**	**140633**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	119	70-130		06/16/2017 17:31
Toluene-d8	101	70-130		06/16/2017 17:31
4-BFB	104	70-130		06/16/2017 17:31

Analyst(s): AK

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Received:	6/14/17 15:20	**Extraction Method:**	SW5030B
Date Prepared:	6/15/17-6/21/17	**Analytical Method:**	SW8260B
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BF-5	1706675-010B	Water	06/13/2017 11:28	GC18	140633

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	06/16/2017 18:12
tert-Amyl methyl ether (TAME)	ND	0.50	1	06/16/2017 18:12
Benzene	ND	0.50	1	06/16/2017 18:12
Bromobenzene	ND	0.50	1	06/16/2017 18:12
Bromochloromethane	ND	0.50	1	06/16/2017 18:12
Bromodichloromethane	ND	0.50	1	06/16/2017 18:12
Bromoform	ND	0.50	1	06/16/2017 18:12
Bromomethane	ND	0.50	1	06/16/2017 18:12
2-Butanone (MEK)	ND	2.0	1	06/16/2017 18:12
t-Butyl alcohol (TBA)	ND	2.0	1	06/16/2017 18:12
n-Butyl benzene	ND	0.50	1	06/16/2017 18:12
sec-Butyl benzene	ND	0.50	1	06/16/2017 18:12
tert-Butyl benzene	ND	0.50	1	06/16/2017 18:12
Carbon Disulfide	ND	0.50	1	06/16/2017 18:12
Carbon Tetrachloride	ND	0.50	1	06/16/2017 18:12
Chlorobenzene	ND	0.50	1	06/16/2017 18:12
Chloroethane	ND	0.50	1	06/16/2017 18:12
Chloroform	ND	0.50	1	06/16/2017 18:12
Chloromethane	ND	0.50	1	06/16/2017 18:12
2-Chlorotoluene	ND	0.50	1	06/16/2017 18:12
4-Chlorotoluene	ND	0.50	1	06/16/2017 18:12
Dibromochloromethane	ND	0.50	1	06/16/2017 18:12
1,2-Dibromo-3-chloropropane	ND	0.20	1	06/16/2017 18:12
1,2-Dibromoethane (EDB)	ND	0.50	1	06/16/2017 18:12
Dibromomethane	ND	0.50	1	06/16/2017 18:12
1,2-Dichlorobenzene	ND	0.50	1	06/16/2017 18:12
1,3-Dichlorobenzene	ND	0.50	1	06/16/2017 18:12
1,4-Dichlorobenzene	ND	0.50	1	06/16/2017 18:12
Dichlorodifluoromethane	ND	0.50	1	06/16/2017 18:12
1,1-Dichloroethane	ND	0.50	1	06/16/2017 18:12
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	06/16/2017 18:12
1,1-Dichloroethene	ND	0.50	1	06/16/2017 18:12
cis-1,2-Dichloroethene	ND	0.50	1	06/16/2017 18:12
trans-1,2-Dichloroethene	ND	0.50	1	06/16/2017 18:12
1,2-Dichloropropane	ND	0.50	1	06/16/2017 18:12
1,3-Dichloropropane	ND	0.50	1	06/16/2017 18:12
2,2-Dichloropropane	ND	0.50	1	06/16/2017 18:12

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Received:	6/14/17 15:20	**Extraction Method:**	SW5030B
Date Prepared:	6/15/17-6/21/17	**Analytical Method:**	SW8260B
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BF-5	1706675-010B	Water	06/13/2017 11:28	GC18	140633

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	06/16/2017 18:12
cis-1,3-Dichloropropene	ND	0.50	1	06/16/2017 18:12
trans-1,3-Dichloropropene	ND	0.50	1	06/16/2017 18:12
Diisopropyl ether (DIPE)	ND	0.50	1	06/16/2017 18:12
Ethylbenzene	ND	0.50	1	06/16/2017 18:12
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	06/16/2017 18:12
Freon 113	ND	0.50	1	06/16/2017 18:12
Hexachlorobutadiene	ND	0.50	1	06/16/2017 18:12
Hexachloroethane	ND	0.50	1	06/16/2017 18:12
2-Hexanone	ND	0.50	1	06/16/2017 18:12
Isopropylbenzene	ND	0.50	1	06/16/2017 18:12
4-Isopropyl toluene	ND	0.50	1	06/16/2017 18:12
Methyl-t-butyl ether (MTBE)	ND	0.50	1	06/16/2017 18:12
Methylene chloride	ND	0.50	1	06/16/2017 18:12
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	06/16/2017 18:12
Naphthalene	ND	0.50	1	06/16/2017 18:12
n-Propyl benzene	ND	0.50	1	06/16/2017 18:12
Styrene	ND	0.50	1	06/16/2017 18:12
1,1,1,2-Tetrachloroethane	ND	0.50	1	06/16/2017 18:12
1,1,2,2-Tetrachloroethane	ND	0.50	1	06/16/2017 18:12
Tetrachloroethene	ND	0.50	1	06/16/2017 18:12
Toluene	ND	0.50	1	06/16/2017 18:12
1,2,3-Trichlorobenzene	ND	0.50	1	06/16/2017 18:12
1,2,4-Trichlorobenzene	ND	0.50	1	06/16/2017 18:12
1,1,1-Trichloroethane	ND	0.50	1	06/16/2017 18:12
1,1,2-Trichloroethane	ND	0.50	1	06/16/2017 18:12
Trichloroethene	ND	0.50	1	06/16/2017 18:12
Trichlorofluoromethane	ND	0.50	1	06/16/2017 18:12
1,2,3-Trichloropropane	ND	0.50	1	06/16/2017 18:12
1,2,4-Trimethylbenzene	ND	0.50	1	06/16/2017 18:12
1,3,5-Trimethylbenzene	ND	0.50	1	06/16/2017 18:12
Vinyl Chloride	ND	0.50	1	06/16/2017 18:12
Xylenes, Total	ND	0.50	1	06/16/2017 18:12

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Received:	6/14/17 15:20	**Extraction Method:**	SW5030B
Date Prepared:	6/15/17-6/21/17	**Analytical Method:**	SW8260B
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BF-5	**1706675-010B**	**Water**	**06/13/2017 11:28**	**GC18**	**140633**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	119	70-130		06/16/2017 18:12
Toluene-d8	100	70-130		06/16/2017 18:12
4-BFB	111	70-130		06/16/2017 18:12

Analyst(s): AK

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Received:	6/14/17 15:20	**Extraction Method:**	SW5030B
Date Prepared:	6/15/17-6/19/17	**Analytical Method:**	SW8021B/8015Bm
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**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-1	**1706675-001A**	**Water**	**06/13/2017 13:57**	**GC3**	**140583**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	06/15/2017 23:28
MTBE	ND	5.0	1	06/15/2017 23:28
Benzene	ND	0.50	1	06/15/2017 23:28
Toluene	ND	0.50	1	06/15/2017 23:28
Ethylbenzene	ND	0.50	1	06/15/2017 23:28
Xylenes	ND	1.5	1	06/15/2017 23:28

Surrogates	REC (%)	Limits	
aaa-TFT	102	89-115	06/15/2017 23:28

Analyst(s): HD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2	**1706675-002A**	**Water**	**06/13/2017 12:37**	**GC3**	**140583**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	06/16/2017 00:00
MTBE	ND	5.0	1	06/16/2017 00:00
Benzene	ND	0.50	1	06/16/2017 00:00
Toluene	ND	0.50	1	06/16/2017 00:00
Ethylbenzene	ND	0.50	1	06/16/2017 00:00
Xylenes	ND	1.5	1	06/16/2017 00:00

Surrogates	REC (%)	Limits	
aaa-TFT	103	89-115	06/16/2017 00:00

Analyst(s): HD

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NELAP 4033ORELAP

Angela Rydelius, Lab Manager

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Received:	6/14/17 15:20	**Extraction Method:**	SW5030B
Date Prepared:	6/15/17-6/19/17	**Analytical Method:**	SW8021B/8015Bm
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**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-3	**1706675-003A**	**Water**	**06/13/2017 12:01**	**GC3**	**140583**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	**11,000**	2500	50	06/16/2017 16:12
MTBE	ND	250	50	06/16/2017 16:12
Benzene	**2300**	25	50	06/16/2017 16:12
Toluene	ND	25	50	06/16/2017 16:12
Ethylbenzene	**110**	25	50	06/16/2017 16:12
Xylenes	ND	75	50	06/16/2017 16:12

Surrogates	REC (%)	Limits	
aaa-TFT	95	89-115	06/16/2017 16:12

Analyst(s): HD Analytical Comments: d1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-4	**1706675-004A**	**Water**	**06/13/2017 10:51**	**GC3**	**140583**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	06/16/2017 01:33
MTBE	ND	5.0	1	06/16/2017 01:33
Benzene	ND	0.50	1	06/16/2017 01:33
Toluene	ND	0.50	1	06/16/2017 01:33
Ethylbenzene	ND	0.50	1	06/16/2017 01:33
Xylenes	ND	1.5	1	06/16/2017 01:33

Surrogates	REC (%)	Limits	
aaa-TFT	103	89-115	06/16/2017 01:33

Analyst(s): HD

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Received:	6/14/17 15:20	**Extraction Method:**	SW5030B
Date Prepared:	6/15/17-6/19/17	**Analytical Method:**	SW8021B/8015Bm
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**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	**1706675-005A**	**Water**	**06/13/2017 14:40**	**GC3**	**140583**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	06/19/2017 22:54
MTBE	ND	5.0	1	06/19/2017 22:54
Benzene	ND	0.50	1	06/19/2017 22:54
Toluene	ND	0.50	1	06/19/2017 22:54
Ethylbenzene	ND	0.50	1	06/19/2017 22:54
Xylenes	ND	1.5	1	06/19/2017 22:54

Surrogates	REC (%)	Limits	
aaa-TFT	96	89-115	06/19/2017 22:54

Analyst(s): HD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-6	**1706675-006A**	**Water**	**06/13/2017 10:05**	**GC3**	**140583**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	**330**	50	1	06/19/2017 23:27
MTBE	ND	5.0	1	06/19/2017 23:27
Benzene	**1.4**	0.50	1	06/19/2017 23:27
Toluene	ND	0.50	1	06/19/2017 23:27
Ethylbenzene	**2.3**	0.50	1	06/19/2017 23:27
Xylenes	ND	1.5	1	06/19/2017 23:27

Surrogates	REC (%)	Qualifiers	Limits	
aaa-TFT	117	S	89-115	06/19/2017 23:27

Analyst(s): HD Analytical Comments: d1,c4

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Received:	6/14/17 15:20	**Extraction Method:**	SW5030B
Date Prepared:	6/15/17-6/19/17	**Analytical Method:**	SW8021B/8015Bm
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**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	**1706675-007A**	**Water**	**06/13/2017 16:21**	**GC3**	**140583**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	**10,000**	2500	50	06/16/2017 17:55
MTBE	ND	250	50	06/16/2017 17:55
Benzene	**1900**	25	50	06/16/2017 17:55
Toluene	**46**	25	50	06/16/2017 17:55
Ethylbenzene	**180**	25	50	06/16/2017 17:55
Xylenes	**85**	75	50	06/16/2017 17:55

Surrogates	REC (%)	Limits	
aaa-TFT	105	89-115	06/16/2017 17:55

Analyst(s): HD Analytical Comments: d1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW-1	**1706675-008A**	**Water**	**06/13/2017 15:37**	**GC3**	**140583**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	06/19/2017 19:12
MTBE	ND	5.0	1	06/19/2017 19:12
Benzene	ND	0.50	1	06/19/2017 19:12
Toluene	ND	0.50	1	06/19/2017 19:12
Ethylbenzene	ND	0.50	1	06/19/2017 19:12
Xylenes	ND	1.5	1	06/19/2017 19:12

Surrogates	REC (%)	Limits	
aaa-TFT	101	89-115	06/19/2017 19:12

Analyst(s): HD

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Angela Rydelius, Lab Manager

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Received:	6/14/17 15:20	**Extraction Method:**	SW5030B
Date Prepared:	6/15/17-6/19/17	**Analytical Method:**	SW8021B/8015Bm
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**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
BF-1	**1706675-009A**	**Water**	**06/13/2017 13:29**	**GC7**	**140725**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	06/19/2017 21:10
MTBE	ND	5.0	1	06/19/2017 21:10
Benzene	ND	0.50	1	06/19/2017 21:10
Toluene	ND	0.50	1	06/19/2017 21:10
Ethylbenzene	ND	0.50	1	06/19/2017 21:10
Xylenes	ND	1.5	1	06/19/2017 21:10

Surrogates	REC (%)	Limits	
aaa-TFT	95	89-115	06/19/2017 21:10

Analyst(s): HD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BF-5	**1706675-010A**	**Water**	**06/13/2017 11:28**	**GC3**	**140583**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	06/19/2017 23:59
MTBE	ND	5.0	1	06/19/2017 23:59
Benzene	ND	0.50	1	06/19/2017 23:59
Toluene	ND	0.50	1	06/19/2017 23:59
Ethylbenzene	ND	0.50	1	06/19/2017 23:59
Xylenes	ND	1.5	1	06/19/2017 23:59

Surrogates	REC (%)	Limits	
aaa-TFT	97	89-115	06/19/2017 23:59

Analyst(s): HD

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Prepared:	6/15/17	**BatchID:**	140572
Date Analyzed:	6/15/17	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Sample ID:**	MB/LCS-140572 1706674-001AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	168	10	200	-	84	46-155
tert-Amyl methyl ether (TAME)	ND	8.61	0.50	10	-	86	54-140
Benzene	ND	9.91	0.50	10	-	99	47-158
Bromobenzene	ND	9.11	0.50	10	-	91	50-155
Bromochloromethane	ND	9.97	0.50	10	-	100	48-160
Bromodichloromethane	ND	9.17	0.50	10	-	92	60-156
Bromoform	ND	7.87	0.50	10	-	79	43-149
Bromomethane	ND	8.72	0.50	10	-	87	61-159
2-Butanone (MEK)	ND	33.8	2.0	40	-	85	61-124
t-Butyl alcohol (TBA)	ND	29.1	2.0	40	-	73	42-140
n-Butyl benzene	ND	9.46	0.50	10	-	95	74-138
sec-Butyl benzene	ND	9.57	0.50	10	-	96	72-142
tert-Butyl benzene	ND	9.06	0.50	10	-	91	74-140
Carbon Disulfide	ND	9.58	0.50	10	-	96	64-127
Carbon Tetrachloride	ND	10.1	0.50	10	-	101	61-158
Chlorobenzene	ND	9.52	0.50	10	-	95	43-157
Chloroethane	ND	9.16	0.50	10	-	92	50-127
Chloroform	ND	9.94	0.50	10	-	99	56-154
Chloromethane	ND	8.33	0.50	10	-	83	41-132
2-Chlorotoluene	ND	9.16	0.50	10	-	92	50-155
4-Chlorotoluene	ND	9.15	0.50	10	-	92	53-153
Dibromochloromethane	ND	8.57	0.50	10	-	86	49-156
1,2-Dibromo-3-chloropropane	ND	3.01	0.20	4	-	75	46-149
1,2-Dibromoethane (EDB)	ND	9.00	0.50	10	-	90	44-155
Dibromomethane	ND	9.39	0.50	10	-	94	50-157
1,2-Dichlorobenzene	ND	9.45	0.50	10	-	94	48-156
1,3-Dichlorobenzene	ND	9.56	0.50	10	-	96	49-159
1,4-Dichlorobenzene	ND	9.44	0.50	10	-	94	51-151
Dichlorodifluoromethane	ND	8.57	0.50	10	-	86	61-117
1,1-Dichloroethane	ND	9.91	0.50	10	-	99	53-153
1,2-Dichloroethane (1,2-DCA)	ND	9.65	0.50	10	-	97	66-125
1,1-Dichloroethene	ND	9.74	0.50	10	-	97	47-149
cis-1,2-Dichloroethene	ND	10.2	0.50	10	-	102	54-155
trans-1,2-Dichloroethene	ND	10.0	0.50	10	-	100	46-151
1,2-Dichloropropane	ND	9.65	0.50	10	-	97	54-153
1,3-Dichloropropane	ND	8.95	0.50	10	-	89	49-150
2,2-Dichloropropane	ND	9.77	0.50	10	-	98	74-147

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Prepared:	6/15/17	**BatchID:**	140572
Date Analyzed:	6/15/17	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Sample ID:**	MB/LCS-140572 1706674-001AMS/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	10.0	0.50	10	-	100	54-150
cis-1,3-Dichloropropene	ND	8.90	0.50	10	-	89	55-159
trans-1,3-Dichloropropene	ND	8.69	0.50	10	-	87	74-131
Diisopropyl ether (DIPE)	ND	9.42	0.50	10	-	94	57-136
Ethylbenzene	ND	9.56	0.50	10	-	96	60-152
Ethyl tert-butyl ether (ETBE)	ND	9.14	0.50	10	-	91	55-137
Freon 113	ND	10.4	0.50	10	-	104	47-138
Hexachlorobutadiene	ND	9.84	0.50	10	-	98	66-160
Hexachloroethane	ND	8.30	0.50	10	-	83	75-130
2-Hexanone	ND	7.67	0.50	10	-	77	70-115
Isopropylbenzene	ND	9.33	0.50	10	-	93	59-156
4-Isopropyl toluene	ND	9.31	0.50	10	-	93	75-138
Methyl-t-butyl ether (MTBE)	ND	8.96	0.50	10	-	90	53-139
Methylene chloride	ND	10.0	0.50	10	-	100	66-127
4-Methyl-2-pentanone (MIBK)	ND	7.90	0.50	10	-	79	42-153
Naphthalene	ND	7.82	0.50	10	-	78	66-127
n-Propyl benzene	ND	9.51	0.50	10	-	95	54-155
Styrene	ND	8.87	0.50	10	-	89	51-152
1,1,1,2-Tetrachloroethane	ND	9.27	0.50	10	-	93	58-159
1,1,2,2-Tetrachloroethane	ND	7.93	0.50	10	-	79	51-150
Tetrachloroethene	ND	9.97	0.50	10	-	100	55-145
Toluene	ND	9.14	0.50	10	-	91	52-137
1,2,3-Trichlorobenzene	ND	9.40	0.50	10	-	94	70-136
1,2,4-Trichlorobenzene	ND	9.17	0.50	10	-	92	74-137
1,1,1-Trichloroethane	ND	10.1	0.50	10	-	101	57-156
1,1,2-Trichloroethane	ND	8.80	0.50	10	-	88	51-150
Trichloroethene	ND	10.2	0.50	10	-	102	43-157
Trichlorofluoromethane	ND	10.4	0.50	10	-	104	50-147
1,2,3-Trichloropropane	ND	8.54	0.50	10	-	85	41-152
1,2,4-Trimethylbenzene	ND	9.09	0.50	10	-	91	57-157
1,3,5-Trimethylbenzene	ND	9.12	0.50	10	-	91	56-159
Vinyl Chloride	ND	9.13	0.50	10	-	91	42-137
Xylenes, Total	ND	27.4	0.50	30	-	91	70-130

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Prepared:	6/15/17	**BatchID:**	140572
Date Analyzed:	6/15/17	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Sample ID:**	MB/LCS-140572 1706674-001AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
Dibromofluoromethane	28.15	28.2		25	113	113	70-130
Toluene-d8	25.65	25.7		25	103	103	70-130
4-BFB	2.455	2.67		2.5	98	107	70-130

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Prepared:	6/15/17	**BatchID:**	140572
Date Analyzed:	6/15/17	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Sample ID:**	MB/LCS-140572 1706674-001AMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Acetone	218	215	200	ND	109	107	66-158	1.69	20
tert-Amyl methyl ether (TAME)	10.6	10.9	10	ND	106	109	69-139	3.31	20
Benzene	10.4	10.4	10	ND	105	104	69-141	0.712	20
Bromobenzene	9.90	9.92	10	ND	99	99	70-127	0	20
Bromochloromethane	11.1	11.0	10	ND	111	110	72-142	0.896	20
Bromodichloromethane	10.4	10.4	10	ND	103	104	75-141	0.181	20
Bromoform	9.58	9.72	10	ND	96	97	72-126	1.44	20
Bromomethane	6.96	7.64	10	ND	70	76	50-160	9.31	20
2-Butanone (MEK)	45.4	44.7	40	ND	113	112	69-154	1.44	20
t-Butyl alcohol (TBA)	42.2	42.3	40	ND	105	106	41-152	0.405	20
n-Butyl benzene	9.51	9.35	10	ND	95	94	70-134	1.65	20
sec-Butyl benzene	9.49	9.61	10	ND	95	96	73-131	1.30	20
tert-Butyl benzene	9.14	9.29	10	ND	91	93	71-125	1.54	20
Carbon Disulfide	9.71	9.60	10	ND	97	96	63-158	1.12	20
Carbon Tetrachloride	10.4	10.3	10	ND	104	103	72-143	0.387	20
Chlorobenzene	10.0	9.89	10	ND	100	99	77-120	1.22	20
Chloroethane	8.49	8.39	10	ND	85	84	54-131	1.13	20
Chloroform	10.8	10.8	10	ND	106	106	75-139	0	20
Chloromethane	6.42	6.44	10	ND	64	64	40-130	0	20
2-Chlorotoluene	9.37	9.58	10	ND	94	96	70-122	2.22	20
4-Chlorotoluene	9.35	9.58	10	ND	93	96	71-123	2.45	20
Dibromochloromethane	9.86	9.91	10	ND	99	99	78-132	0	20
1,2-Dibromo-3-chloropropane	3.59	3.55	4	ND	90	89	59-143	0.951	20
1,2-Dibromoethane (EDB)	10.4	10.4	10	ND	104	104	76-135	0	20
Dibromomethane	11.0	10.9	10	ND	110	109	78-135	0.574	20
1,2-Dichlorobenzene	10.3	10.1	10	ND	103	101	68-133	2.23	20
1,3-Dichlorobenzene	9.94	9.88	10	ND	99	99	78-122	0	20
1,4-Dichlorobenzene	10.0	9.89	10	ND	100	99	80-117	1.53	20
Dichlorodifluoromethane	7.56	7.44	10	ND	76	74	38-125	1.66	20
1,1-Dichloroethane	10.4	10.3	10	ND	104	103	65-152	0.766	20
1,2-Dichloroethane (1,2-DCA)	11.1	11.1	10	ND	111	111	73-139	0	20
1,1-Dichloroethene	9.81	9.69	10	ND	98	97	59-140	1.28	20
cis-1,2-Dichloroethene	10.8	10.6	10	ND	107	106	50-154	1.34	20
trans-1,2-Dichloroethene	10.4	10.3	10	ND	104	103	69-136	0.491	20
1,2-Dichloropropane	10.7	10.6	10	ND	107	106	78-132	0.332	20
1,3-Dichloropropane	10.2	10.0	10	ND	102	100	77-131	1.76	20
2,2-Dichloropropane	10.1	9.91	10	ND	101	99	61-160	2.14	20

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Prepared:	6/15/17	**BatchID:**	140572
Date Analyzed:	6/15/17	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Sample ID:**	MB/LCS-140572 1706674-001AMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
1,1-Dichloropropene	10.3	10.2	10	ND	103	102	70-137	1.23	20
cis-1,3-Dichloropropene	9.64	9.58	10	ND	96	96	78-135	0	20
trans-1,3-Dichloropropene	9.72	9.67	10	ND	97	97	78-131	0	20
Diisopropyl ether (DIPE)	10.9	10.9	10	ND	109	109	72-140	0	20
Ethylbenzene	9.77	9.66	10	ND	98	97	73-128	1.10	20
Ethyl tert-butyl ether (ETBE)	10.9	10.9	10	ND	109	109	71-140	0	20
Freon 113	10.6	10.6	10	ND	106	106	60-136	0	20
Hexachlorobutadiene	9.84	9.49	10	ND	98	95	56-132	3.54	20
Hexachloroethane	8.64	8.64	10	ND	86	86	61-129	0	20
2-Hexanone	10.1	10.0	10	ND	101	100	57-149	1.02	20
Isopropylbenzene	9.30	9.22	10	ND	93	92	69-130	0.786	20
4-Isopropyl toluene	9.34	9.33	10	ND	93	93	75-124	0	20
Methyl-t-butyl ether (MTBE)	11.0	11.1	10	ND	110	111	73-139	0.667	20
Methylene chloride	10.9	10.8	10	ND	109	108	74-128	0.556	20
4-Methyl-2-pentanone (MIBK)	10.2	10.0	10	ND	102	100	61-145	1.60	20
Naphthalene	10.8	10.6	10	ND	108	106	54-148	1.24	20
n-Propyl benzene	9.41	9.64	10	ND	94	96	71-121	2.42	20
Styrene	9.57	9.68	10	ND	96	97	56-140	1.04	20
1,1,1,2-Tetrachloroethane	10.1	10.1	10	ND	101	101	74-127	0	20
1,1,2,2-Tetrachloroethane	9.52	9.34	10	ND	95	93	63-142	1.90	20
Tetrachloroethene	9.89	9.80	10	ND	99	98	71-125	0.886	20
Toluene	9.31	9.16	10	ND	93	92	71-128	1.61	20
1,2,3-Trichlorobenzene	13.0	12.8	10	ND	130	128	59-135	2.01	20
1,2,4-Trichlorobenzene	10.8	10.7	10	ND	108	107	60-132	1.44	20
1,1,1-Trichloroethane	10.4	10.4	10	ND	104	103	75-138	1.00	20
1,1,2-Trichloroethane	10.1	10.1	10	ND	101	101	78-129	0	20
Trichloroethene	10.6	10.6	10	ND	106	105	64-132	0.641	20
Trichlorofluoromethane	10.3	10.2	10	ND	103	102	53-159	1.32	20
1,2,3-Trichloropropane	10.2	10.2	10	ND	102	102	68-130	0	20
1,2,4-Trimethylbenzene	9.39	9.35	10	ND	94	94	76-124	0	20
1,3,5-Trimethylbenzene	9.22	9.28	10	ND	92	93	77-124	0.636	20
Vinyl Chloride	7.96	7.85	10	ND	80	79	43-142	1.41	20
Xylenes, Total	28.7	28.9	30	ND	96	96	70-130	0	20

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Prepared:	6/15/17	**BatchID:**	140572
Date Analyzed:	6/15/17	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Sample ID:**	MB/LCS-140572 1706674-001AMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Surrogate Recovery									
Dibromofluoromethane	29.5	29.7	25		118	119	73-131	0.767	20
Toluene-d8	25.0	24.7	25		100	99	72-117	1.05	20
4-BFB	2.78	2.83	2.5		111	113	74-116	1.75	20

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Prepared:	6/15/17	**BatchID:**	140575
Date Analyzed:	6/15/17	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Sample ID:**	MB/LCS-140575

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	202	10	200	-	101	46-155
tert-Amyl methyl ether (TAME)	ND	10.5	0.50	10	-	105	54-140
Benzene	ND	10.6	0.50	10	-	106	47-158
Bromobenzene	ND	7.08	0.50	10	-	71	50-155
Bromochloromethane	ND	10.4	0.50	10	-	104	48-160
Bromodichloromethane	ND	10.2	0.50	10	-	102	60-156
Bromoform	ND	9.25	0.50	10	-	93	43-149
Bromomethane	ND	11.2	0.50	10	-	112	61-159
2-Butanone (MEK)	ND	42.0	2.0	40	-	105	61-124
t-Butyl alcohol (TBA)	ND	36.1	2.0	40	-	90	42-140
n-Butyl benzene	ND	9.54	0.50	10	-	95	74-138
sec-Butyl benzene	ND	8.95	0.50	10	-	90	72-142
tert-Butyl benzene	ND	7.69	0.50	10	-	77	74-140
Carbon Disulfide	ND	9.54	0.50	10	-	95	64-127
Carbon Tetrachloride	ND	10.5	0.50	10	-	105	61-158
Chlorobenzene	ND	9.02	0.50	10	-	90	43-157
Chloroethane	ND	11.5	0.50	10	-	115	50-127
Chloroform	ND	11.2	0.50	10	-	112	56-154
Chloromethane	ND	11.0	0.50	10	-	111	41-132
2-Chlorotoluene	ND	8.20	0.50	10	-	82	50-155
4-Chlorotoluene	ND	7.77	0.50	10	-	78	53-153
Dibromochloromethane	ND	9.44	0.50	10	-	94	49-156
1,2-Dibromo-3-chloropropane	ND	2.82	0.20	4	-	70	46-149
1,2-Dibromoethane (EDB)	ND	9.61	0.50	10	-	96	44-155
Dibromomethane	ND	10.3	0.50	10	-	103	50-157
1,2-Dichlorobenzene	ND	8.71	0.50	10	-	87	48-156
1,3-Dichlorobenzene	ND	9.28	0.50	10	-	93	49-159
1,4-Dichlorobenzene	ND	8.56	0.50	10	-	86	51-151
Dichlorodifluoromethane	ND	7.65	0.50	10	-	77	61-117
1,1-Dichloroethane	ND	10.6	0.50	10	-	106	53-153
1,2-Dichloroethane (1,2-DCA)	ND	11.1	0.50	10	-	111	66-125
1,1-Dichloroethene	ND	9.92	0.50	10	-	99	47-149
cis-1,2-Dichloroethene	ND	10.4	0.50	10	-	104	54-155
trans-1,2-Dichloroethene	ND	10.4	0.50	10	-	104	46-151
1,2-Dichloropropane	ND	10.4	0.50	10	-	104	54-153
1,3-Dichloropropane	ND	10.0	0.50	10	-	100	49-150
2,2-Dichloropropane	ND	10.7	0.50	10	-	107	74-147

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Prepared:	6/15/17	**BatchID:**	140575
Date Analyzed:	6/15/17	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Sample ID:**	MB/LCS-140575

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
1,1-Dichloropropene	ND	10.7	0.50	10	-	107	54-150
cis-1,3-Dichloropropene	ND	9.91	0.50	10	-	99	55-159
trans-1,3-Dichloropropene	ND	10.6	0.50	10	-	106	74-131
Diisopropyl ether (DIPE)	ND	11.0	0.50	10	-	110	57-136
Ethylbenzene	ND	10.6	0.50	10	-	106	60-152
Ethyl tert-butyl ether (ETBE)	ND	11.3	0.50	10	-	113	55-137
Freon 113	ND	10.2	0.50	10	-	102	47-138
Hexachlorobutadiene	ND	8.06	0.50	10	-	81	66-160
Hexachloroethane	ND	8.28	0.50	10	-	83	75-130
2-Hexanone	ND	9.25	0.50	10	-	93	70-115
Isopropylbenzene	ND	9.32	0.50	10	-	93	59-156
4-Isopropyl toluene	ND	8.82	0.50	10	-	88	75-138
Methyl-t-butyl ether (MTBE)	ND	11.0	0.50	10	-	110	53-139
Methylene chloride	ND	9.34	0.50	10	-	93	66-127
4-Methyl-2-pentanone (MIBK)	ND	9.25	0.50	10	-	93	42-153
Naphthalene	ND	7.36	0.50	10	-	74	66-127
n-Propyl benzene	ND	8.33	0.50	10	-	83	54-155
Styrene	ND	9.02	0.50	10	-	90	51-152
1,1,1,2-Tetrachloroethane	ND	9.37	0.50	10	-	94	58-159
1,1,2,2-Tetrachloroethane	ND	8.15	0.50	10	-	82	51-150
Tetrachloroethene	ND	9.06	0.50	10	-	91	55-145
Toluene	ND	9.76	0.50	10	-	98	52-137
1,2,3-Trichlorobenzene	ND	7.98	0.50	10	-	80	70-136
1,2,4-Trichlorobenzene	ND	8.15	0.50	10	-	82	74-137
1,1,1-Trichloroethane	ND	10.5	0.50	10	-	105	57-156
1,1,2-Trichloroethane	ND	9.60	0.50	10	-	96	51-150
Trichloroethene	ND	9.63	0.50	10	-	96	43-157
Trichlorofluoromethane	ND	10.3	0.50	10	-	103	50-147
1,2,3-Trichloropropane	ND	8.43	0.50	10	-	84	41-152
1,2,4-Trimethylbenzene	ND	8.91	0.50	10	-	89	57-157
1,3,5-Trimethylbenzene	ND	8.69	0.50	10	-	87	56-159
Vinyl Chloride	ND	10.9	0.50	10	-	109	42-137
Xylenes, Total	ND	27.4	0.50	30	-	91	70-130

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Prepared:	6/15/17	**BatchID:**	140575
Date Analyzed:	6/15/17	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Sample ID:**	MB/LCS-140575

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
Dibromofluoromethane	29.33	30.7		25	117	123	70-130
Toluene-d8	28.77	28.6		25	115	114	70-130
4-BFB	2.185	2.19		2.5	87	88	70-130

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Prepared:	6/16/17	**BatchID:**	140633
Date Analyzed:	6/16/17	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Sample ID:**	MB/LCS-140633 1706675-010BMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	159	10	200	-	80	46-155
tert-Amyl methyl ether (TAME)	ND	9.23	0.50	10	-	92	54-140
Benzene	ND	10.2	0.50	10	-	102	47-158
Bromobenzene	ND	9.75	0.50	10	-	98	50-155
Bromochloromethane	ND	10.5	0.50	10	-	105	48-160
Bromodichloromethane	ND	10.0	0.50	10	-	100	60-156
Bromoform	ND	8.84	0.50	10	-	88	43-149
Bromomethane	ND	9.12	0.50	10	-	91	61-159
2-Butanone (MEK)	ND	33.0	2.0	40	-	83	61-124
t-Butyl alcohol (TBA)	ND	31.0	2.0	40	-	77	42-140
n-Butyl benzene	ND	9.49	0.50	10	-	95	74-138
sec-Butyl benzene	ND	9.84	0.50	10	-	98	72-142
tert-Butyl benzene	ND	9.87	0.50	10	-	99	74-140
Carbon Disulfide	ND	9.80	0.50	10	-	98	64-127
Carbon Tetrachloride	ND	10.9	0.50	10	-	109	61-158
Chlorobenzene	ND	10.2	0.50	10	-	102	43-157
Chloroethane	ND	9.89	0.50	10	-	99	50-127
Chloroform	ND	10.3	0.50	10	-	103	56-154
Chloromethane	ND	8.76	0.50	10	-	88	41-132
2-Chlorotoluene	ND	9.92	0.50	10	-	99	50-155
4-Chlorotoluene	ND	9.72	0.50	10	-	97	53-153
Dibromochloromethane	ND	9.56	0.50	10	-	96	49-156
1,2-Dibromo-3-chloropropane	ND	3.03	0.20	4	-	76	46-149
1,2-Dibromoethane (EDB)	ND	9.16	0.50	10	-	92	44-155
Dibromomethane	ND	9.75	0.50	10	-	97	50-157
1,2-Dichlorobenzene	ND	9.66	0.50	10	-	97	48-156
1,3-Dichlorobenzene	ND	9.87	0.50	10	-	99	49-159
1,4-Dichlorobenzene	ND	9.71	0.50	10	-	97	51-151
Dichlorodifluoromethane	ND	8.44	0.50	10	-	84	61-117
1,1-Dichloroethane	ND	10.5	0.50	10	-	105	53-153
1,2-Dichloroethane (1,2-DCA)	ND	10.2	0.50	10	-	102	66-125
1,1-Dichloroethene	ND	9.97	0.50	10	-	100	47-149
cis-1,2-Dichloroethene	ND	10.3	0.50	10	-	103	54-155
trans-1,2-Dichloroethene	ND	10.3	0.50	10	-	103	46-151
1,2-Dichloropropane	ND	10.4	0.50	10	-	104	54-153
1,3-Dichloropropane	ND	9.35	0.50	10	-	94	49-150
2,2-Dichloropropane	ND	10.6	0.50	10	-	107	74-147

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Prepared:	6/16/17	**BatchID:**	140633
Date Analyzed:	6/16/17	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Sample ID:**	MB/LCS-140633 1706675-010BMS/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	10.6	0.50	10	-	106	54-150
cis-1,3-Dichloropropene	ND	9.81	0.50	10	-	98	55-159
trans-1,3-Dichloropropene	ND	9.48	0.50	10	-	95	74-131
Diisopropyl ether (DIPE)	ND	9.95	0.50	10	-	99	57-136
Ethylbenzene	ND	9.81	0.50	10	-	98	60-152
Ethyl tert-butyl ether (ETBE)	ND	9.68	0.50	10	-	97	55-137
Freon 113	ND	10.6	0.50	10	-	106	47-138
Hexachlorobutadiene	ND	10.2	0.50	10	-	102	66-160
Hexachloroethane	ND	9.39	0.50	10	-	94	75-130
2-Hexanone	ND	7.65	0.50	10	-	77	70-115
Isopropylbenzene	ND	9.72	0.50	10	-	97	59-156
4-Isopropyl toluene	ND	9.61	0.50	10	-	96	75-138
Methyl-t-butyl ether (MTBE)	ND	9.16	0.50	10	-	92	53-139
Methylene chloride	ND	10.3	0.50	10	-	103	66-127
4-Methyl-2-pentanone (MIBK)	ND	7.94	0.50	10	-	79	42-153
Naphthalene	ND	7.89	0.50	10	-	79	66-127
n-Propyl benzene	ND	10.4	0.50	10	-	104	54-155
Styrene	ND	9.56	0.50	10	-	96	51-152
1,1,1,2-Tetrachloroethane	ND	10.3	0.50	10	-	103	58-159
1,1,2,2-Tetrachloroethane	ND	7.70	0.50	10	-	77	51-150
Tetrachloroethene	ND	10.3	0.50	10	-	103	55-145
Toluene	ND	9.54	0.50	10	-	95	52-137
1,2,3-Trichlorobenzene	ND	10.0	0.50	10	-	100	70-136
1,2,4-Trichlorobenzene	ND	9.70	0.50	10	-	97	74-137
1,1,1-Trichloroethane	ND	10.4	0.50	10	-	104	57-156
1,1,2-Trichloroethane	ND	8.98	0.50	10	-	90	51-150
Trichloroethene	ND	10.8	0.50	10	-	109	43-157
Trichlorofluoromethane	ND	10.6	0.50	10	-	106	50-147
1,2,3-Trichloropropane	ND	8.21	0.50	10	-	82	41-152
1,2,4-Trimethylbenzene	ND	9.52	0.50	10	-	95	57-157
1,3,5-Trimethylbenzene	ND	9.53	0.50	10	-	95	56-159
Vinyl Chloride	ND	10.0	0.50	10	-	101	42-137
Xylenes, Total	ND	29.6	0.50	30	-	99	70-130

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Prepared:	6/16/17	**BatchID:**	140633
Date Analyzed:	6/16/17	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Sample ID:**	MB/LCS-140633 1706675-010BMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
Dibromofluoromethane	29.15	28.8		25	117	115	70-130
Toluene-d8	25.53	25.8		25	102	103	70-130
4-BFB	2.738	2.89		2.5	110	116	70-130

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Prepared:	6/16/17	**BatchID:**	140633
Date Analyzed:	6/16/17	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Sample ID:**	MB/LCS-140633 1706675-010BMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Acetone	201	209	200	ND	99	102	66-158	3.70	20
tert-Amyl methyl ether (TAME)	9.46	10.9	10	ND	95	109	69-139	14.5	20
Benzene	8.80	10.3	10	ND	88	103	69-141	15.7	20
Bromobenzene	8.76	9.97	10	ND	88	100	70-127	13.0	20
Bromochloromethane	9.78	11.0	10	ND	98	110	72-142	11.9	20
Bromodichloromethane	9.04	10.4	10	ND	90	104	75-141	13.6	20
Bromoform	9.49	10.3	10	ND	95	103	72-126	8.28	20
Bromomethane	6.82	8.40	10	ND	68	84	50-160	20.8,F1	20
2-Butanone (MEK)	42.3	44.7	40	ND	106	112	69-154	5.57	20
t-Butyl alcohol (TBA)	38.5	42.4	40	ND	96	106	41-152	9.84	20
n-Butyl benzene	8.07	9.43	10	ND	81	94	70-134	15.6	20
sec-Butyl benzene	8.12	9.54	10	ND	81	95	73-131	16.2	20
tert-Butyl benzene	8.10	9.53	10	ND	81	95	71-125	16.2	20
Carbon Disulfide	8.13	9.65	10	ND	81	96	63-158	17.1	20
Carbon Tetrachloride	8.73	10.5	10	ND	87	105	72-143	18.4	20
Chlorobenzene	9.10	10.4	10	ND	91	104	77-120	13.5	20
Chloroethane	7.61	9.04	10	ND	76	90	54-131	17.2	20
Chloroform	9.09	10.5	10	ND	89	103	75-139	14.3	20
Chloromethane	6.08	7.32	10	ND	61	73	40-130	18.6	20
2-Chlorotoluene	8.48	9.74	10	ND	85	97	70-122	13.8	20
4-Chlorotoluene	8.48	9.76	10	ND	85	98	71-123	14.1	20
Dibromochloromethane	9.41	10.5	10	ND	94	105	78-132	11.1	20
1,2-Dibromo-3-chloropropane	3.62	3.92	4	ND	90	98	59-143	8.01	20
1,2-Dibromoethane (EDB)	9.89	10.8	10	ND	99	108	76-135	8.70	20
Dibromomethane	9.77	10.9	10	ND	98	109	78-135	11.2	20
1,2-Dichlorobenzene	9.00	10.3	10	ND	90	103	68-133	13.5	20
1,3-Dichlorobenzene	8.82	10.1	10	ND	88	101	78-122	13.5	20
1,4-Dichlorobenzene	8.83	10.1	10	ND	88	101	80-117	13.4	20
Dichlorodifluoromethane	6.22	7.35	10	ND	62	73	38-125	16.7	20
1,1-Dichloroethane	9.08	10.6	10	ND	91	106	65-152	15.4	20
1,2-Dichloroethane (1,2-DCA)	10.1	11.3	10	ND	101	113	73-139	11.1	20
1,1-Dichloroethene	8.18	9.78	10	ND	82	98	59-140	17.8	20
cis-1,2-Dichloroethene	9.13	10.6	10	ND	91	106	50-154	14.8	20
trans-1,2-Dichloroethene	8.64	10.2	10	ND	86	102	69-136	16.8	20
1,2-Dichloropropane	9.41	10.8	10	ND	94	108	78-132	14.1	20
1,3-Dichloropropane	9.74	10.8	10	ND	97	108	77-131	10.5	20
2,2-Dichloropropane	8.84	10.3	10	ND	88	103	61-160	15.4	20

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Prepared:	6/16/17	**BatchID:**	140633
Date Analyzed:	6/16/17	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Sample ID:**	MB/LCS-140633 1706675-010BMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
1,1-Dichloropropene	8.74	10.4	10	ND	87	104	70-137	17.7	20
cis-1,3-Dichloropropene	9.20	10.4	10	ND	92	104	78-135	12.4	20
trans-1,3-Dichloropropene	9.44	10.5	10	ND	94	105	78-131	10.3	20
Diisopropyl ether (DIPE)	9.56	10.8	10	ND	96	108	72-140	12.4	20
Ethylbenzene	8.49	9.83	10	ND	85	98	73-128	14.6	20
Ethyl tert-butyl ether (ETBE)	9.66	10.8	10	ND	97	108	71-140	11.1	20
Freon 113	8.83	10.6	10	ND	88	106	60-136	17.8	20
Hexachlorobutadiene	8.41	10.2	10	ND	84	102	56-132	19.2	20
Hexachloroethane	7.51	9.06	10	ND	75	91	61-129	18.7	20
2-Hexanone	10.2	10.8	10	ND	102	108	57-149	5.62	20
Isopropylbenzene	7.93	9.22	10	ND	79	92	69-130	15.1	20
4-Isopropyl toluene	8.12	9.50	10	ND	81	95	75-124	15.7	20
Methyl-t-butyl ether (MTBE)	9.84	10.8	10	ND	98	109	73-139	9.76	20
Methylene chloride	9.29	10.7	10	ND	93	107	74-128	14.1	20
4-Methyl-2-pentanone (MIBK)	10.2	10.8	10	ND	102	108	61-145	6.14	20
Naphthalene	9.63	10.5	10	ND	96	105	54-148	8.49	20
n-Propyl benzene	8.34	9.85	10	ND	83	99	71-121	16.6	20
Styrene	8.62	9.80	10	ND	86	98	56-140	12.8	20
1,1,1,2-Tetrachloroethane	9.31	10.6	10	ND	93	106	74-127	13.0	20
1,1,2,2-Tetrachloroethane	8.86	9.70	10	ND	89	97	63-142	9.04	20
Tetrachloroethene	8.72	10.4	10	ND	87	104	71-125	17.8	20
Toluene	8.24	9.64	10	ND	82	96	71-128	15.6	20
1,2,3-Trichlorobenzene	11.1	12.5	10	ND	111	125	59-135	11.3	20
1,2,4-Trichlorobenzene	9.50	11.0	10	ND	95	110	60-132	14.4	20
1,1,1-Trichloroethane	8.64	10.4	10	ND	86	103	75-138	18.0	20
1,1,2-Trichloroethane	9.41	10.4	10	ND	94	104	78-129	10.0	20
Trichloroethene	9.00	10.7	10	ND	90	107	64-132	17.4	20
Trichlorofluoromethane	8.67	10.4	10	ND	87	104	53-159	17.8	20
1,2,3-Trichloropropane	9.66	10.2	10	ND	97	102	68-130	5.70	20
1,2,4-Trimethylbenzene	8.12	9.45	10	ND	81	95	76-124	15.1	20
1,3,5-Trimethylbenzene	8.07	9.32	10	ND	81	93	77-124	14.4	20
Vinyl Chloride	7.28	8.77	10	ND	73	88	43-142	18.6	20
Xylenes, Total	25.6	29.3	30	ND	85	98	70-130	13.8	20

(Cont.)

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Prepared:	6/16/17	**BatchID:**	140633
Date Analyzed:	6/16/17	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Sample ID:**	MB/LCS-140633 1706675-010BMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Surrogate Recovery									
Dibromofluoromethane	28.7	28.8	25		115	115	73-131	0	20
Toluene-d8	25.5	25.5	25		102	102	72-117	0	20
4-BFB	2.82	2.78	2.5		113	111	74-116	1.52	20

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Prepared:	6/15/17	**BatchID:**	140583
Date Analyzed:	6/15/17	**Extraction Method:**	SW5030B
Instrument:	GC3	**Analytical Method:**	SW8021B/8015Bm
Matrix:	Water	**Unit:**	µg/L
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Sample ID:**	MB/LCS-140583 1706663-010AMS/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	46.8	40	60	-	78	78-116
MTBE	ND	10.7	5.0	10	-	107	72-122
Benzene	ND	9.16	0.50	10	-	92	81-123
Toluene	ND	9.75	0.50	10	-	97	83-129
Ethylbenzene	ND	10.2	0.50	10	-	102	88-126
Xylenes	ND	32.2	1.5	30	-	107	87-131
Surrogate Recovery							
aaa-TFT	9.968	9.79		10	100	98	89-116

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	48.9	49.8	60	ND	81	83	63-133	1.96	20
MTBE	11.3	10.7	10	ND	113	107	69-122	5.90	20
Benzene	9.64	9.14	10	ND	95	90	84-125	5.36	20
Toluene	9.96	9.39	10	ND	100	94	87-131	5.82	20
Ethylbenzene	10.6	10.1	10	ND	106	101	92-126	4.72	20
Xylenes	33.4	31.7	30	ND	111	106	88-132	5.22	20
Surrogate Recovery									
aaa-TFT	9.72	9.49	10		97	95	90-117	2.39	20

(Cont.)

NELAP 4033ORELAP

QA/QC Officer

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1706675
Date Prepared:	6/19/17	**BatchID:**	140725
Date Analyzed:	6/19/17	**Extraction Method:**	SW5030B
Instrument:	GC7	**Analytical Method:**	SW8021B/8015Bm
Matrix:	Water	**Unit:**	µg/L
Project:	281939; Zimmerman, 3442 Adeline St. Oakland, CA	**Sample ID:**	MB/LCS-140725 1706640-026AMS/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	50.3	40	60	-	84	78-116
MTBE	ND	11.1	5.0	10	-	111	72-122
Benzene	ND	9.67	0.50	10	-	97	81-123
Toluene	ND	11.2	0.50	10	-	112	83-129
Ethylbenzene	ND	10.8	0.50	10	-	108	88-126
Xylenes	ND	33.3	1.5	30	-	111	87-131
Surrogate Recovery							
aaa-TFT	9.442	9.98		10	94	100	89-116

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	53.2	52.7	60	ND	89	88	63-133	1.03	20
MTBE	12.2	11.5	10	ND	122	115	69-122	5.76	20
Benzene	10.7	10.2	10	ND	106	101	84-125	4.96	20
Toluene	12.4	11.8	10	ND	124	118	87-131	5.70	20
Ethylbenzene	11.4	10.8	10	ND	113	108	92-126	5.03	20
Xylenes	31.7	30.4	30	ND	106	101	88-132	4.01	20
Surrogate Recovery									
aaa-TFT	10.8	10.6	10		108	106	90-117	2.68	20

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(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1706675 **ClientCode: AEL**

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

Report to:
Jonathan Sanders
AEI Consultants
2500 Camino Diablo, Ste.#200
Walnut Creek, CA 94597
(925) 283-6000 FAX: (925) 944-2895

Email: jsanders@aeiconsultants.com
cc/3rd Party:
PO: 134736
ProjectNo: 281939; Zimmerman; 3442 Adeline St. Oakland, CA

Bill to:
Accounts Payable
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
AccountsPayable@AEIConsultants.com

Requested TAT: 5 days;

Date Received: **06/14/2017**
Date Logged: **06/14/2017**

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
1706675-001	MW-1	Water	6/13/2017 13:57	☐	B	A	A									
1706675-002	MW-2	Water	6/13/2017 12:37	☐	B	A										
1706675-003	MW-3	Water	6/13/2017 12:01	☐	B	A										
1706675-004	MW-4	Water	6/13/2017 10:51	☐	B	A										
1706675-005	MW-5	Water	6/13/2017 14:40	☐	B	A										
1706675-006	MW-6	Water	6/13/2017 10:05	☐	B	A										
1706675-007	MW-7	Water	6/13/2017 16:21	☐	B	A										
1706675-008	IW-1	Water	6/13/2017 15:37	☐	B	A										
1706675-009	BF-1	Water	6/13/2017 13:29	☐	B	A										
1706675-010	BF-5	Water	6/13/2017 11:28	☐	B	A										

Test Legend:

1	8260B_W	2	G-MBTEX_W	3	PREDF REPORT	4	
5		6		7		8	
9		10		11		12	

Prepared by: Kena Ponce

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: AEI CONSULTANTS
Client Contact: Jonathan Sanders
Contact's Email: jsanders@aeiconsultants.com

Project: 281939; Zimmerman; 3442 Adeline St. Oakland, CA
Comments:

Work Order: 1706675
QC Level: LEVEL 2
Date Logged: 6/14/2017

☐ 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
1706675-001A	MW-1	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	☐	6/13/2017 13:57	5 days	Trace	☐	
1706675-001B	MW-1	Water	SW8260B (VOCs)	2	VOA w/ HCl	☐	6/13/2017 13:57	5 days	Trace	☐	
1706675-002A	MW-2	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	☐	6/13/2017 12:37	5 days	Trace	☐	
1706675-002B	MW-2	Water	SW8260B (VOCs)	2	VOA w/ HCl	☐	6/13/2017 12:37	5 days	Trace	☐	
1706675-003A	MW-3	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	☐	6/13/2017 12:01	5 days	Trace	☐	
1706675-003B	MW-3	Water	SW8260B (VOCs)	2	VOA w/ HCl	☐	6/13/2017 12:01	5 days	Trace	☐	
1706675-004A	MW-4	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	☐	6/13/2017 10:51	5 days	Trace	☐	
1706675-004B	MW-4	Water	SW8260B (VOCs)	2	VOA w/ HCl	☐	6/13/2017 10:51	5 days	Trace	☐	
1706675-005A	MW-5	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	☐	6/13/2017 14:40	5 days	Trace	☐	
1706675-005B	MW-5	Water	SW8260B (VOCs)	2	VOA w/ HCl	☐	6/13/2017 14:40	5 days	Trace	☐	
1706675-006A	MW-6	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	☐	6/13/2017 10:05	5 days	Trace	☐	
1706675-006B	MW-6	Water	SW8260B (VOCs)	2	VOA w/ HCl	☐	6/13/2017 10:05	5 days	Trace	☐	
1706675-007A	MW-7	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	☐	6/13/2017 16:21	5 days	Trace	☐	
1706675-007B	MW-7	Water	SW8260B (VOCs)	2	VOA w/ HCl	☐	6/13/2017 16:21	5 days	Trace	☐	
1706675-008A	IW-1	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	☐	6/13/2017 15:37	5 days	Trace	☐	
1706675-008B	IW-1	Water	SW8260B (VOCs)	2	VOA w/ HCl	☐	6/13/2017 15:37	5 days	Trace	☐	

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.

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WORK ORDER SUMMARY

Client Name: AEI CONSULTANTS
Client Contact: Jonathan Sanders
Contact's Email: jsanders@aeiconsultants.com

Project: 281939; Zimmerman; 3442 Adeline St. Oakland, CA
Comments:

Work Order: 1706675
QC Level: LEVEL 2
Date Logged: 6/14/2017

☐ 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
1706675-009A	BF-1	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	☐	6/13/2017 13:29	5 days	Trace	☐	
1706675-009B	BF-1	Water	SW8260B (VOCs)	2	VOA w/ HCl	☐	6/13/2017 13:29	5 days	Trace	☐	
1706675-010A	BF-5	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	☐	6/13/2017 11:28	5 days	Trace	☐	
1706675-010B	BF-5	Water	SW8260B (VOCs)	2	VOA w/ HCl	☐	6/13/2017 11:28	5 days	Trace	☐	

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.

General COC

MAI Work Order # 1706675

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CHAIN OF CUSTODY RECORD

Turn Around Time: 1 Day Rush | 2 Day Rush | 3 Day Rush | STD ● | Quote #
J-Flag / MDL | ESL | Cleanup Approved | Bottle Order #
Delivery Format: PDF | GeoTracker EDF ● | EDD | Write On (DW) | EQuIS

Report To: Jonathan Sanders Bill To: AEI
Company: AEI
Email: jsanders@aeiconsultants.com
Alt Email: nbricker@aeiconsultants.com Tele: 707-484-6223
Project Name: Zimmerman Project #281939
Project Location: 3442 Adeline Street, Oakland, California PO # 134736
Sampler Signature:

Analysis Requested

SAMPLE ID Location / Field Point	Sampling Date	Sampling Time	#Containers	Matrix	Preservative	BTEX & TPH as Gas (8021/ 8015) MTBE	TPH as Diesel (8015) + Motor Oil Without Silica Gel	TPH as Diesel (8015) + Motor Oil With Silica Gel	Total Oil & Grease (1664 / 9071) Without Silica Gel	Total Petroleum Hydrocarbons - Oil & Grease (1664 / 9071) With Silica Gel	Total Petroleum Hydrocarbons (418.1) With Silica Gel	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ; Aroclors only	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020)*	Metals (200.8 / 6020)	Baylands Requirements	Lab to filter sample for dissolved metals analysis				
MW-1	6/13/17	1357	4	GW	HCl	●								●										
MW-2	6/13/17	1237	4	GW	HCl	●								●										
MW-3	6/13/17	1201	4	GW	HCl	●								●										
MW-4	6/13/17	1051	4	GW	HCl	●								●										
MW-5	6/13/17	1237 (1440)	4	GW	HCl	●								●										
MW-6	6/13/17	1005	4	GW	HCl	●								●										
MW-7	6/13/17	1621	4	GW	HCl	●								●										
IW-1	6/13/17	1537	4	GW	HCl	●								●										
BF-1	6/13/17	1324	4	GW	HCl	●								●										
BF-5	6/13/17	1128		GW		●								●										

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

* If metals are requested for water samples and the water type (Matrix) is not specified on the chain of custody, MAI will default to metals by E200.8.

Please provide an adequate volume of sample. If the volume is not sufficient for a MS/MSD a LCS/LCSD will be prepared in its place and noted in the report.

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
	6/13/17	1848		6/13	1848
	6/14	1520		6/14/17	1520

Comments / Instructions
* Sample was labled Mw6-GW But Time/location/DATE MATCH

Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SW=Seawater, S=Soil, SL=Sludge, A=Air, WP=Wipe, O=Other
Preservative Code: 1=4°C 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=ZnOAc/NaOH 7=None

Temp 5.4 °C Initials TP

Page 1 of 1

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Sample Receipt Checklist

Client Name:	**AEI Consultants**	Date and Time Received	**6/14/2017 15:20**
Project Name:	**281939; Zimmerman; 3442 Adeline St. Oakland, CA**	Date Logged:	**6/14/2017**
		Received by:	Maria Venegas
WorkOrder №:	**1706675** Matrix: Water	Logged by:	Kena Ponce
Carrier:	Client Drop-In		

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	☐	NA ☐
Sample/Temp Blank temperature	Temp: 5.4°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)				

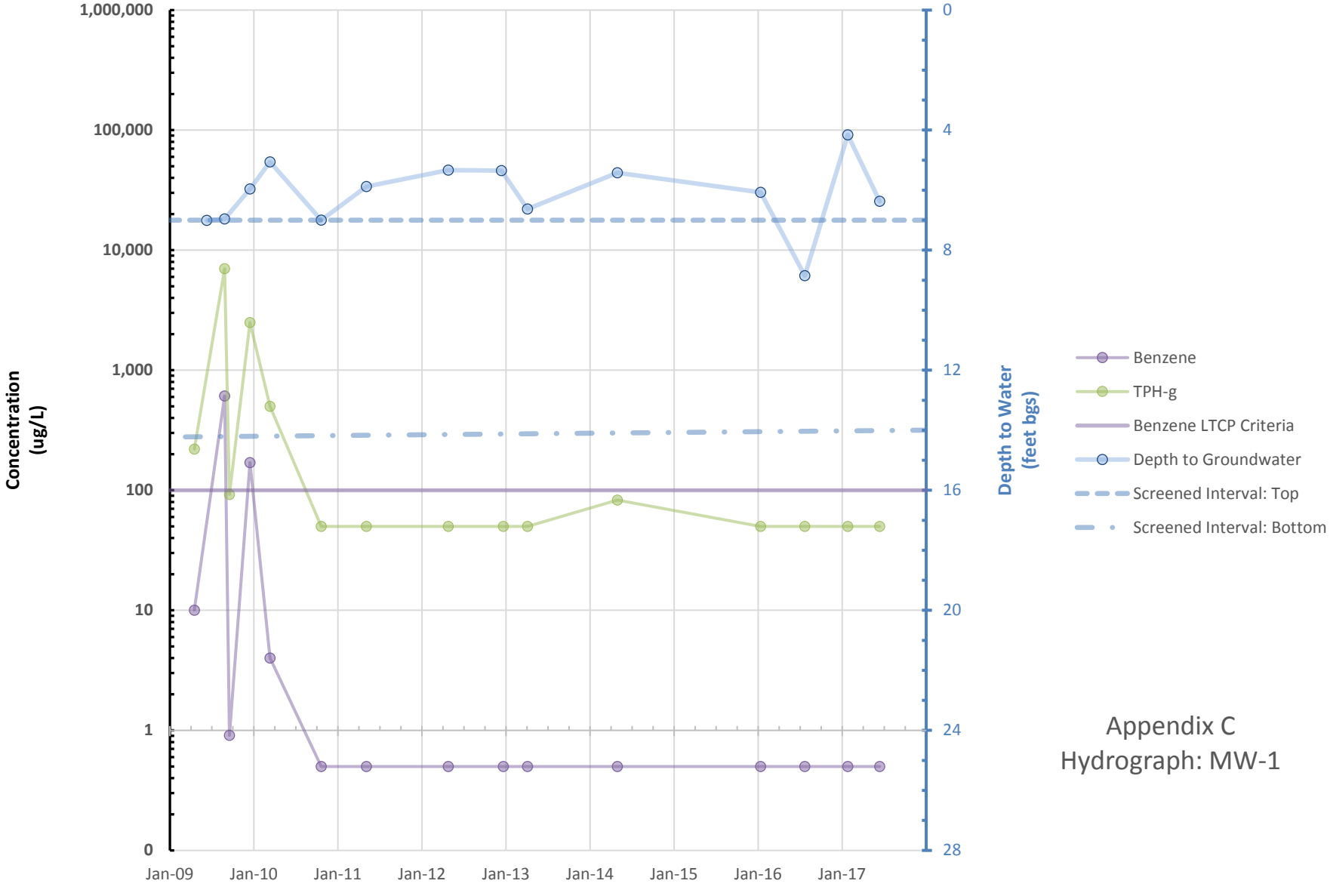
UCMR3 Samples:

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 ☑

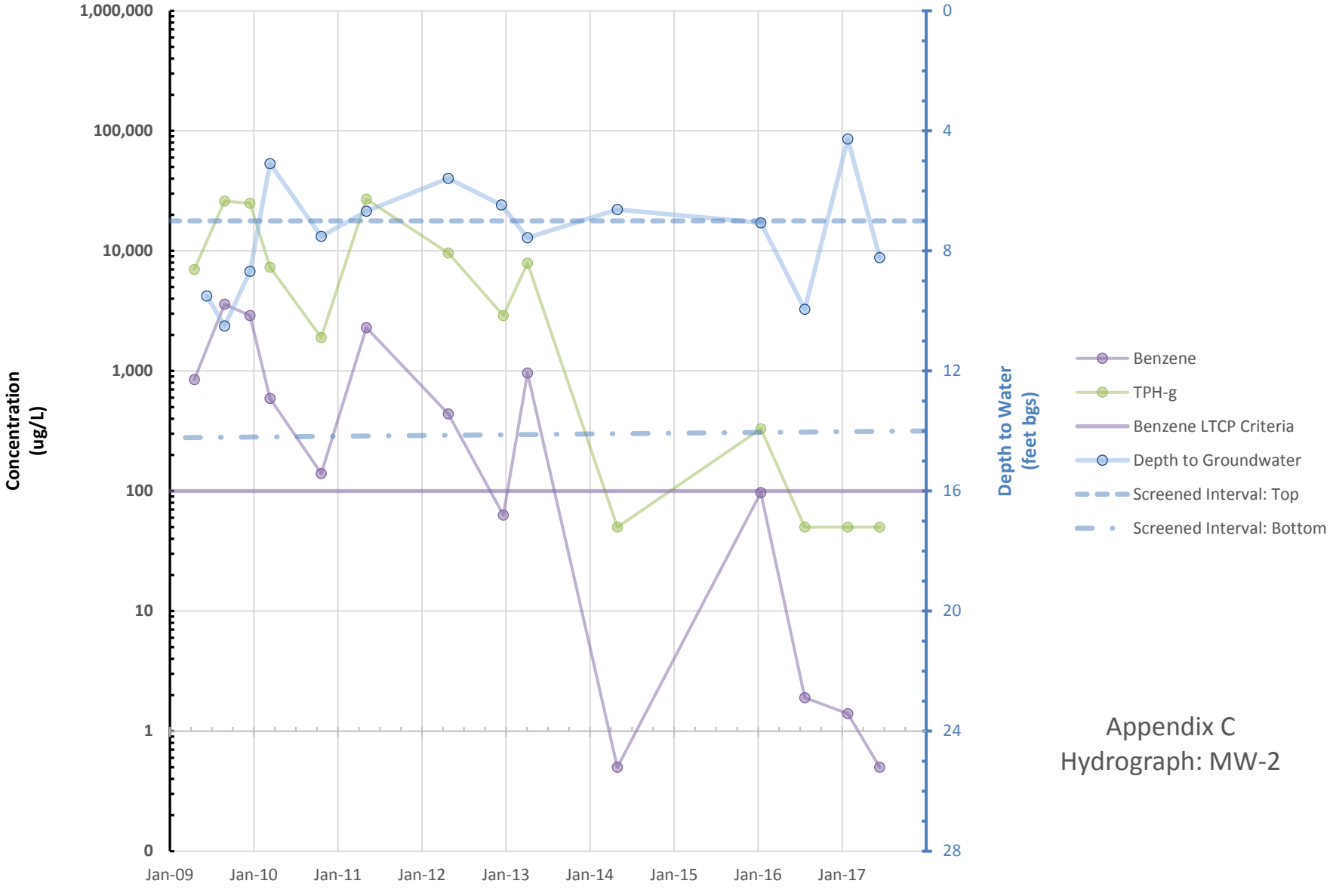
Comments:

APPENDIX C

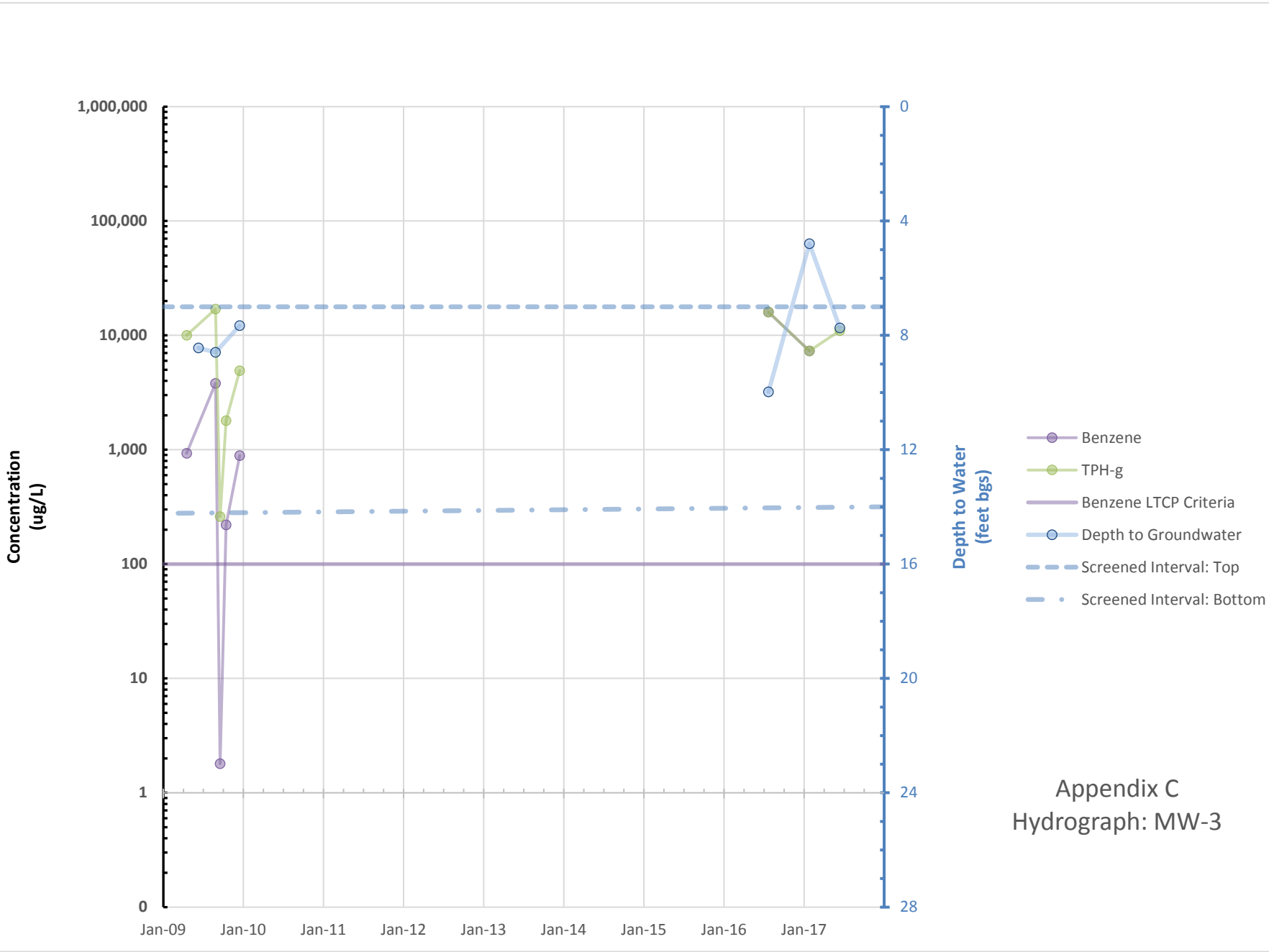
HYDROGRAPHS



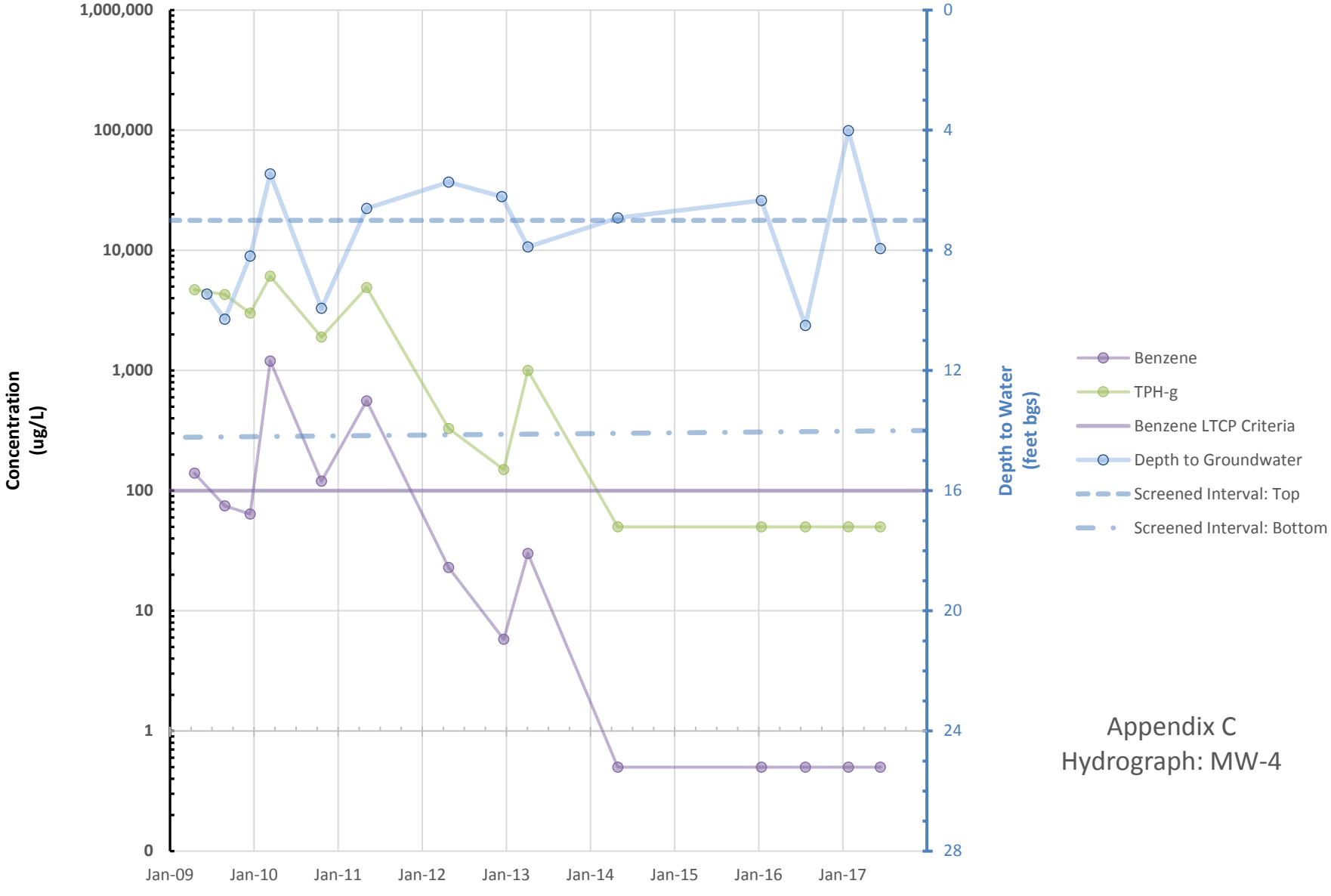
Appendix C
Hydrograph: MW-1



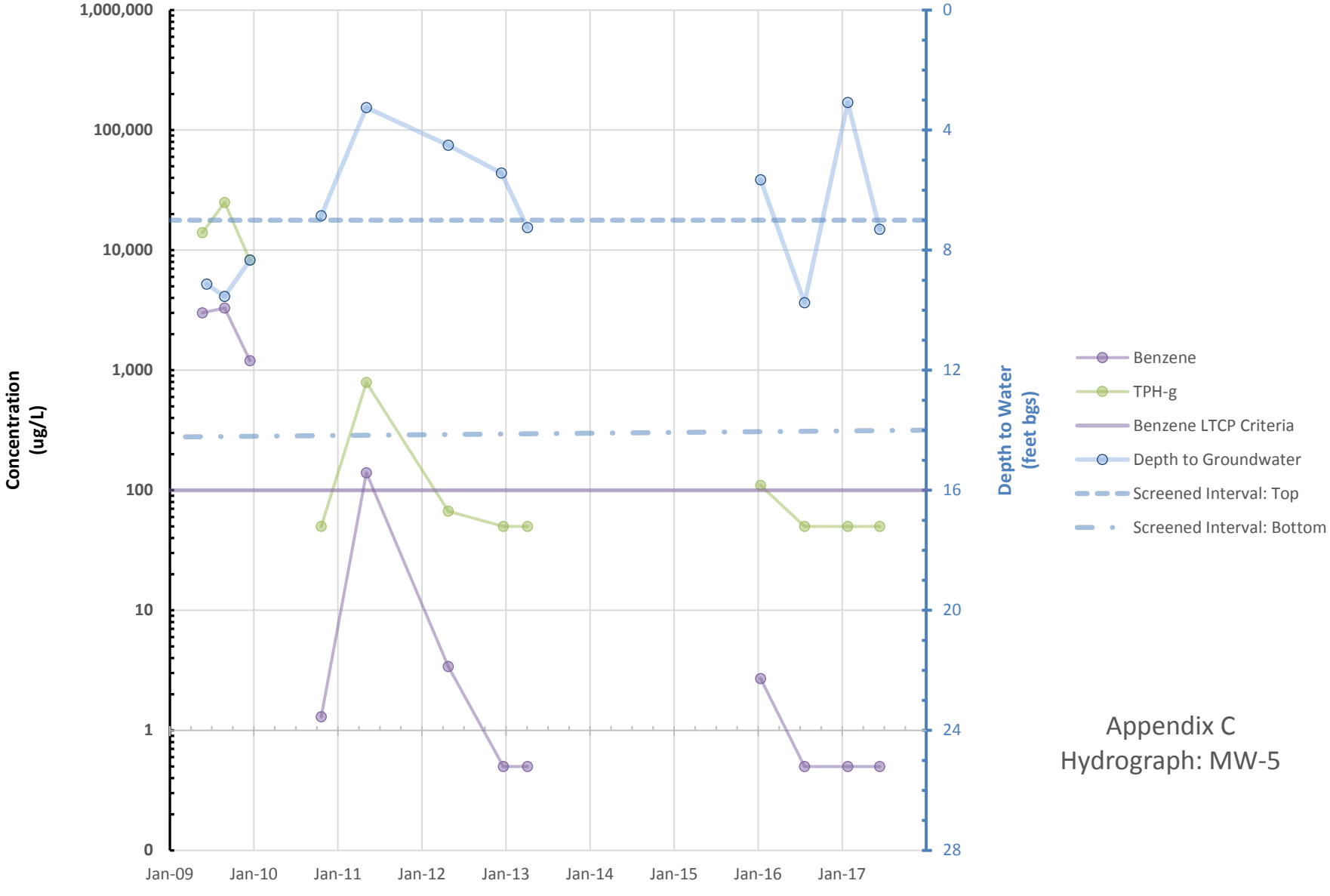
Appendix C
Hydrograph: MW-2



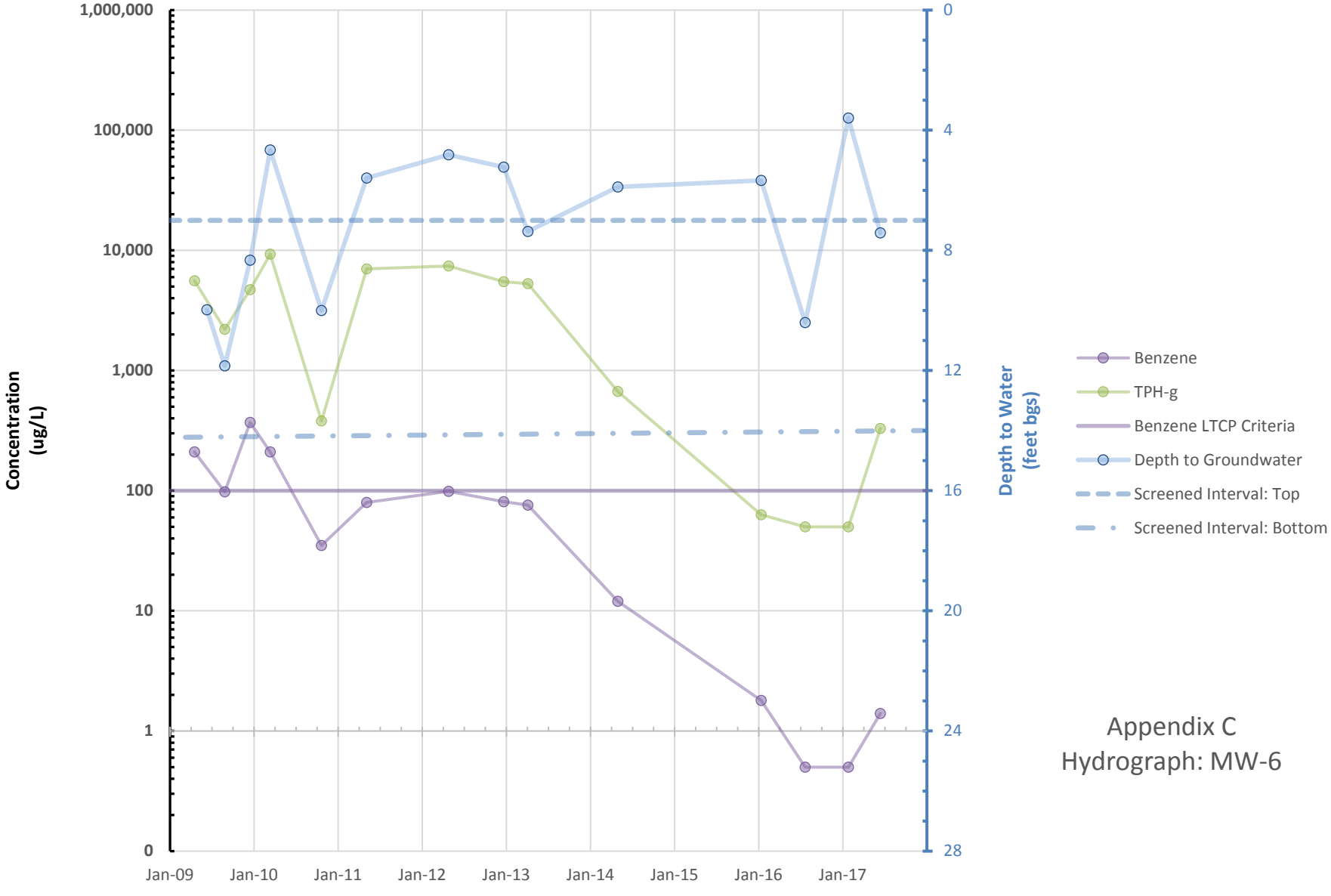
Appendix C
Hydrograph: MW-3



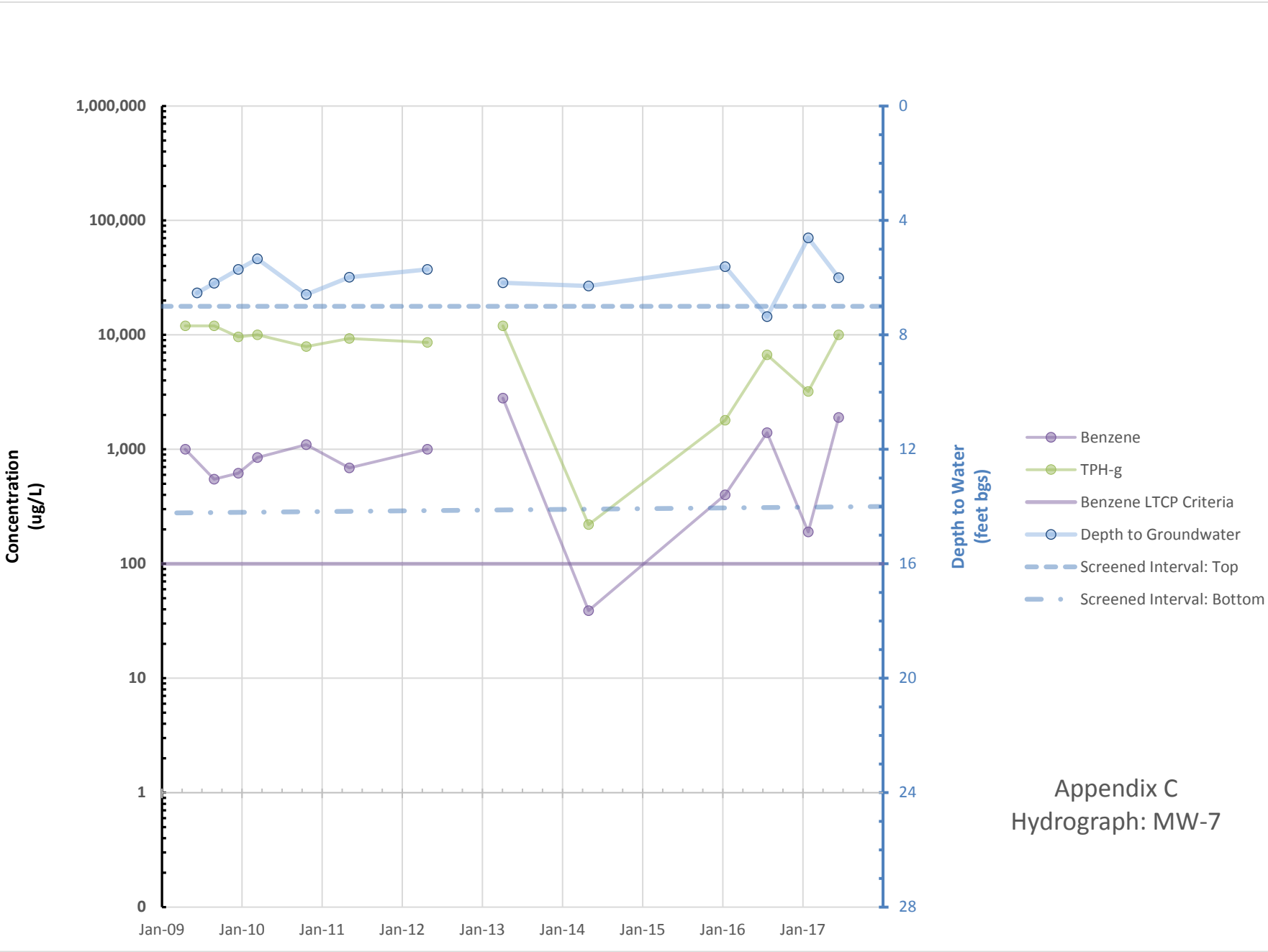
Appendix C
Hydrograph: MW-4



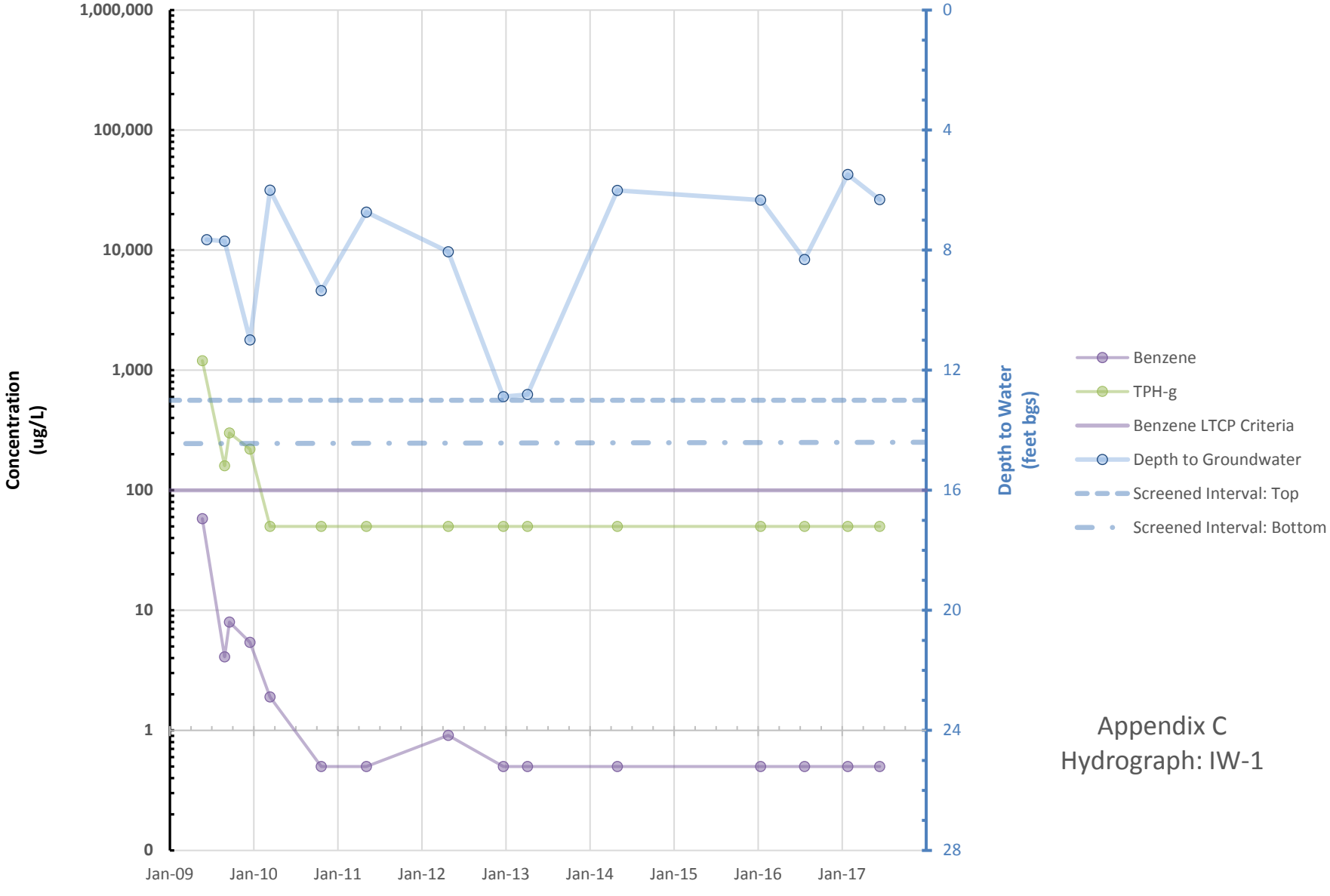
Appendix C
Hydrograph: MW-5



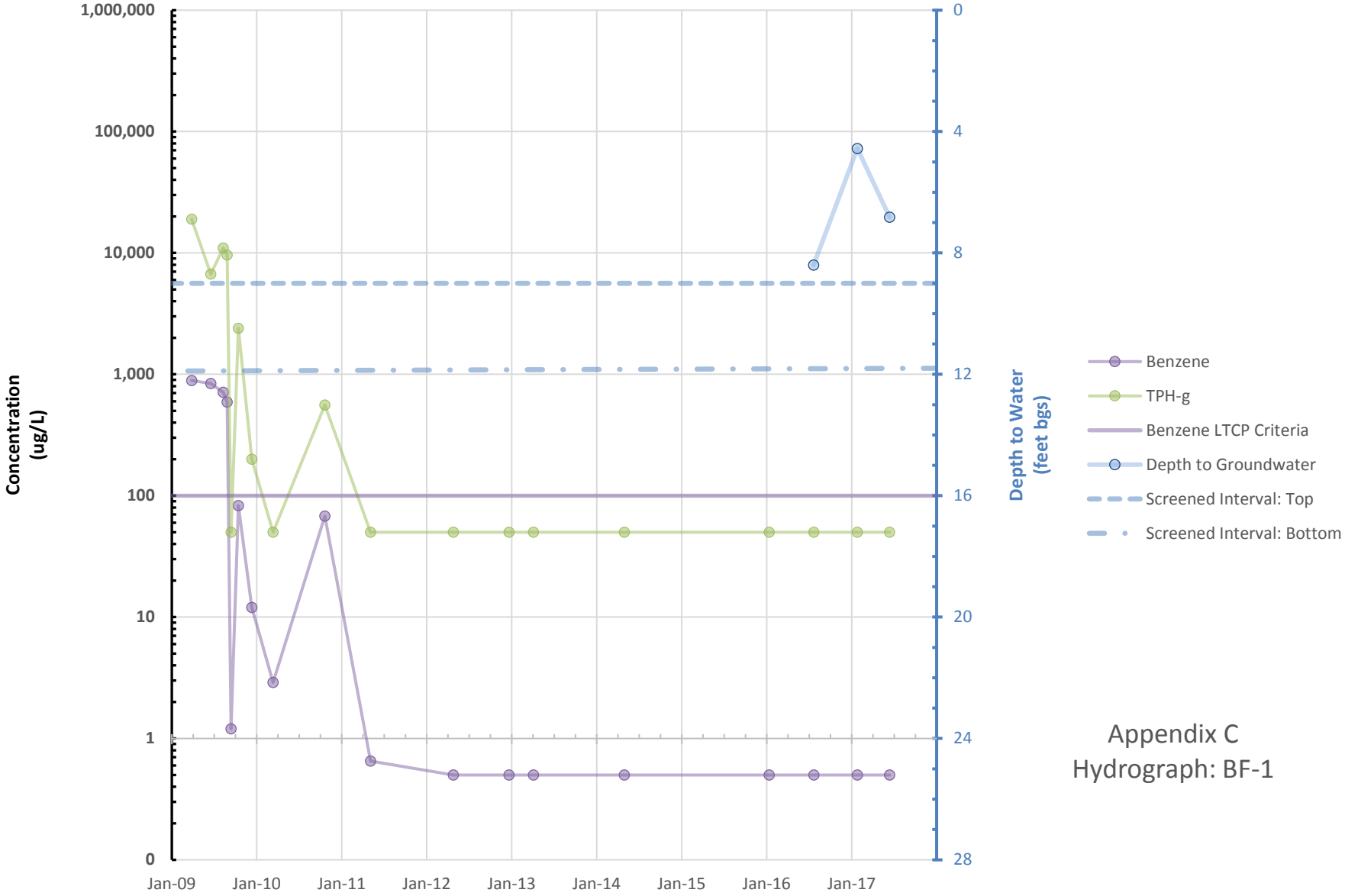
Appendix C
Hydrograph: MW-6



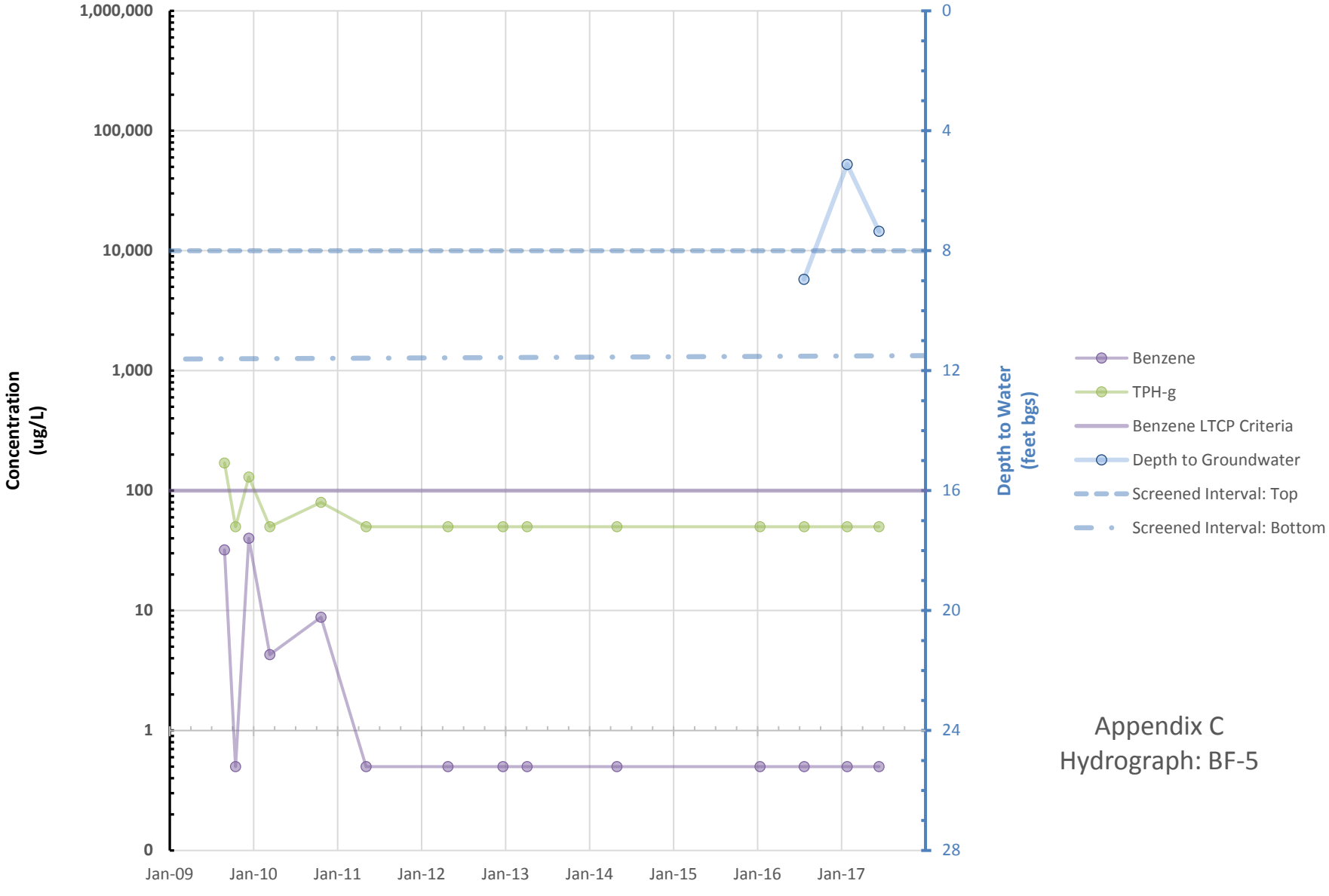
Appendix C
Hydrograph: MW-7



Appendix C
Hydrograph: IW-1



Appendix C
Hydrograph: BF-1



Appendix C
Hydrograph: BF-5