James P. Kiernan, P.E.
Project Manager

Chevron Environmental Management Company
6001 Bollinger Canyon Road
Room C2102
San Ramon, CA 94583
Tel (925) 842-3220
jkiernan@chevron.com

October 20, 2017

RECEIVED
By Alameda County Environmental Health 5:25 pm, Oct 20, 2017

Alameda County Health Care Services Agency
Environmental Health Services
Environmental Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: Unocal No. 6129 (351639)
Conceptual Site Model Update
3420 35th Avenue, Oakland, California
Fuel Leak Case No.: RO0000058
GeoTracker Global ID #T0600101465

I have read and acknowledge the content, recommendations and/or conclusions contained in the attached document or report submitted on my behalf to ACDEH's FTP server and the SWRCB's GeoTracker website.

The information in this report is accurate to the best of my knowledge. This report was prepared by Arcadis, upon whose assistance and advice I have relied.

Sincerely,

James P. Kiernan, P.E.
Project Manager

Attachment: Conceptual Site Model Update by Arcadis

Arcadis U.S., Inc.
1100 Olive Way
Suite 800
Seattle
WA 98101
Tel 206-726-4720
Fax 206-325-8218
www.arcadis-us.com

ENVIRONMENT

Mr. Keith Nowell
Alameda County Department of Environmental Health (ACDEH)
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Subject:
Conceptual Site Model Update
Unocal #6129
3420 35th Avenue
Oakland, CA
ACDEH Case No. RO0000058

Date:
October 20, 2017

Contact:
Samuel Miles

Phone:
206.726.4720

Email:
Samuel.Miles@arcadis.com

Our ref:
B0035135.1639

Dear Mr. Nowell,

On behalf of Chevron Environmental Management Company's (CEMC's) affiliate, Union Oil Company of California (Union Oil), Arcadis has prepared the attached 2017 *Conceptual Site Model Update* (CSM Update) for the above-referenced site. During a meeting held on July 14, 2017 between CEMC, Arcadis, and ACDEH to discuss the site, and as specified in the follow-up ACDEH letter dated August 22, 2017, this CSM Update incorporates the findings of the previous groundwater study (*Groundwater Plume Evaluation*) dated September 28, 2015 and prepared by AECOM. As requested, this CSM Update is presented in a tabular format and highlights the major CSM elements and associated data gaps from the previous CSM, which needed to be addressed to progress the site to case closure under the Low Threat Closure Policy (LTCP). This CSM Update incorporates data from the nearby former Valero #3832 facility (former Exxon #70234) (3450 35th Avenue; Case #RO0002515) and the former BP/ARCO #11132 facility (current Energy Gas) (3201 35th Avenue; Case #RO0000014) to aid in the determination of the extent and stability of the groundwater impacts.

Please note that in the July 14, 2017 meeting, it was discussed that this CSM Update could also include a low-threat closure request. However, it was determined that it would be best to submit a request under separate cover.

Additionally, just to document a discussion point during the meeting as it was a previously identified data gap, it was determined that no further investigation pertaining to the potential presence of an irrigation well on Arkansas Street approximately 600 feet west of the site was required by CEMC. This would be further investigated by the responsible party for the BP #11132 facility.

If you have any questions, please do not hesitate to contact me.

Sincerely,

Arcadis U.S., Inc.

Samuel Miles
Project Manager

Katherine Brandt, P.G.
Principal Geologist

Enclosures:

Conceptual Site Model Update

Figure 1 – Site Location Map
Figure 2 – Site Plan
Figure 3 – I-580 De-Watering Detail
Figure 4 – Groundwater Elevation Contours April and March 2017
Figure 5 – Groundwater Elevation Contours June and September 2016
Figure 6 – Cross Section Showing High Water Conditions
Figure 7 – Cross Section Showing Low Water Conditions
Figure 8 – High Water Conditions: Flow Net (Approximate)
Figure 9 – Groundwater Elevation Map - March 1, 2017
Figure 10 - Groundwater Elevation Map – August 2, 2017
Figure 11 – MTBE Concentration vs Time – Exxon and Site (prepared by others)
Figure 12 – TPH-G Concentration vs Time – Exxon and Site (prepared by others)

Table 1 – Summary of Statistical Analysis of Groundwater Analytical Data

Appendix A – Linear Regression Analyses
Appendix B - Report of Groundwater Monitoring, Fourth Quarter 2016, Former Exxon RAS #70234, 3450 35th Avenue, Oakland, California (Text and Selected Tables and Figures) (prepared by others)

Appendix C - Third Quarter 2017 Groundwater Monitoring Report, Former Atlantic Richfield Company Station #11132, 3201 35th Avenue, Oakland, CA, 94619 (Text and Selected Tables and Figures) (prepared by others)

Appendix D –August 22, 2017 ACDEH Directive Letter

Copies:

Geotracker Database

Mr. James Kiernan, CEMC (electronic)

Mr. Ed Ralston, Phillips 66 (electronic)

Son Nguyen & Le Pham, Nguyen/Pham Family Trust, property owner (paper copy)

Site Conceptual Model Update
RO058, Unocal No. 6129 (351639)
3420 35th Avenue, Oakland, California

Scope

In a Directive Letter [1] Alameda County Department of Environmental Health (ACDEH) requested that the site conceptual model (SCM) for the above referenced site be updated to integrate data from two nearby sites: the former Exxon service station at 3450 35th Ave (ACDEH Case RO0002515), and the former BP service station at 3201 35th Avenue (ACDEH Case RO0000014). The following deliverables were requested:

I. Preparation of cross sections incorporating data from the three cases referenced above
II. An evaluation of potential effects of varying well screen intervals on groundwater data
III. Incorporation of the findings from a 2015 AECOM groundwater study [2], taking into account the potential influence of flow by the sunken section of Interstate Highway 580

The ultimate goal of the SCM update is to determine the extent and stability of the petroleum hydrocarbon impacted groundwater at the site.

Definitions		
	Former Unocal Station No. 6129, 3420 35th Avenue, Oakland, CA: "The Site"	Figure 1, Figure 2
	Former Valero* Service Station at 3450 35th Avenue, Oakland, CA: "Up-Gradient Property"	*Note: also referenced as "Former Exxon Service Station"
	Former ARCO** Service Station at 3201 35th Avenue, Oakland, CA: "Down-Gradient Property."	**Note: "Former BP Service Station" prior to 2013
	COCs: Compounds of Concern - Petroleum Hydrocarbons and MTBE additive from motor fuels released from leaking Underground Storage Tanks (USTs) and other automobile service station equipment.	

CSM Element	CSM Sub-Element	Description	Data Gaps	Work to Address Data Gaps	Data Tables / Graphics
Geology and Hydrogeology	Regional	Shallow groundwater flow in the region is generally controlled by topography, and is very consistently directed to the Southwest at the Site and Up-Gradient Property. The 2015 AECOM study [2] predicted that a petroleum hydrocarbon plume originating from the Site and Up-Gradient Property could reach the Down-Gradient Property following a very direct pathway. The Site and Up-Gradient Property are separated from the Down-Gradient Property by a sunken section of Interstate Highway I-580.	The 2015 AECOM study [2] groundwater elevation map did not include the effects of the I-580 de-watering system. Groundwater flow conditions are not constant down-gradient of the Site. The direction and magnitude of groundwater gradient fluctuates seasonally South of I-580 [5] (see also Fig.9, Fig.10)	The original 'As Built' plans for the I-580 drainage system (taken from [3]) were incorporated into the local area map. New groundwater elevation maps were constructed treating the I-580 under-drain as a gaining stream. Groundwater elevations were taken from historical data in [4], [5] and [6]; data was selected to represent summer (low-water) and winter (high-water) conditions. (ACDEH Requests I and III). During low-water periods, the Northern end of the I-580 dewatering system is above the water table, while the Southern end remains submerged. This is reflected in the change in convergence of groundwater contours between Figure 4 and Figure 5.	Figure 3 Figure 4 Figure 5
		From a generalized cross section, the 2015 AECOM study [3] predicts that groundwater flows unimpeded underneath the sunken section of I-580.	The cross section in the 2015 AECOM study [2] did include seasonal variability, but not the effects of the I-580 de-watering system.	New cross sections were constructed to include the de-watering system detail. (ACDEH Request I). Both low-water and high-water conditions are represented. The effect of the de-watering system should be persistent year round, but much stronger during the periods of high water.	Figure 6 Figure 7

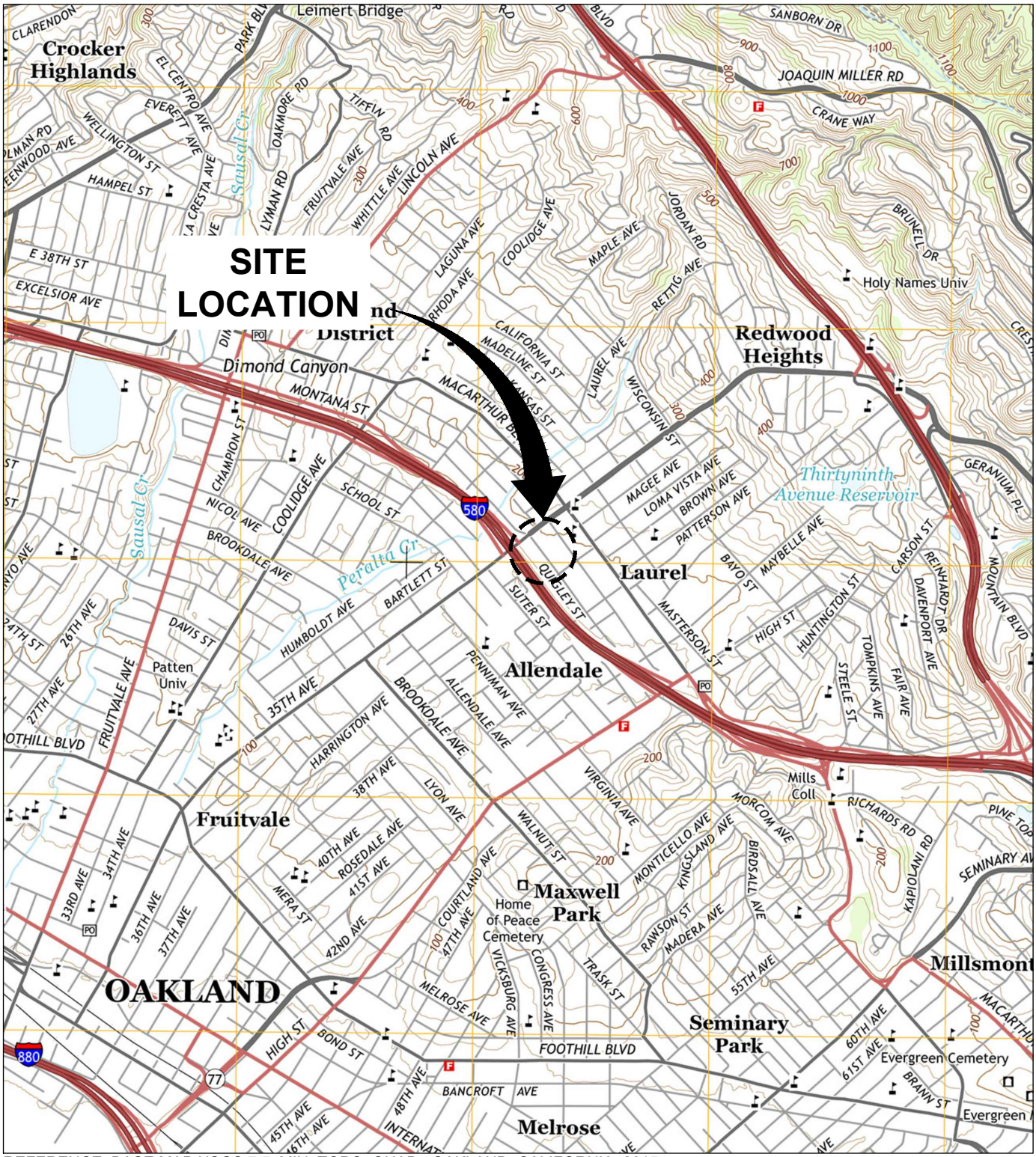
		Based on the new analysis presented here, groundwater flow in the region is likely much more strongly influenced by the I-580 de-watering system than previously indicated. Historical groundwater elevations are consistent with this interpretation. The strongest line of supporting evidence is the seasonal fluctuations of groundwater gradients. At all three locations, periods of high water are marked by strong increases in gradient, and in the case of the Down-Gradient property, a moderate shift in gradient in the direction of the freeway (see figures 11 and 12). This is most likely caused by increased capture from the de-watering system as pumping is increased at the lift station.	Capture from the de-watering system extends below the water table. This effect is not characterized by the groundwater elevation maps.	A flow net was calculated for the cross section under high-water conditions. Strong groundwater capture effects are predicted for the Site and Up-Gradient Property. Weak effects are predicted for the Down-Gradient property.	Figure 8 Figure 9 Figure 10 Figure 11
Geology and Hydrogeology	Site	Groundwater gradients at the Site and Up-Gradient Property are consistently towards the Southwest (see rose diagram in figure 11). During the historically heavy rains in December 2016, the groundwater gradient reached a high value of 0.038 ft/ft. As there is little topographic relief at or near the site, this is most likely the influence of the I-580 de-watering system	Variability in the screened interval of monitoring wells may affect data interpretation.	All three wells at the Site have the same screened interval: approximately 22-44 feet BGS. The groundwater interpretation (flow net; Figure 8) indicates a downward vertical gradient (change in head < 6 inches) over that interval. The effect would be apparent with shorter screened wells at variable depth. However, long-screened wells will only indicate an average. The long screens will obscure observation of vertical gradients, but this does not affect the validity or interpretation of data from these wells (ACDEH Request II).	Figure 4-5 Figure 8 Figure 11

Nearby Wells		Previous studies identify an irrigation well at 3397 Arkansas Street.	The 2015 AECOM study [3] reported that the owner of the irrigation well was consistently unresponsive. It is unknown whether or not the well is in use.	The issue is still unresolved for the area offsite and downgradient of the Site and the I-580 de-watering system. However, this groundwater study does not indicate any significant draw-down associated with an irrigation well located on Arkansas street.	
Distribution of Petroleum Hydrocarbons	Groundwater	Based on inferred groundwater flow, it is likely that any impacted groundwater from the Up-Gradient Property will form a co-mingled plume with impacted groundwater from the Site.	This was conceptualized but not verified; plume stability at the Site not previously characterized.	Linear regression analyses was performed for multiple petroleum hydrocarbon compounds. No systematic behavior for increasing or decreasing trends was found. Based on the Sen's Slope Trend results, none of the wells at the Site show statistically significant trends for MTBE or TPHg in the time range 2010-2017. However, comparison with nearest wells at the Up-Gradient Property indicates some evidence for potential co-variance and a co-mingled plume. This compliments previous studies suggesting that the Up-Gradient Property is a likely source for MTBE observed at the Site [3].	Figure 11 Figure 12 Table 1 Appendix A
		In previous studies ([2],[3]), extrapolation was used to predict that COCs originating from the Site and Up-Gradient Property would reaching the Down-Gradient Property, forming a further co-mingled plume.	The extrapolation in [2] and [3] did not take into account the effects of the I-580 de-watering system and assumed that groundwater would pass under the sunken section unimpeded. [3] only used the groundwater gradient observed at the Site to predict down-gradient flow.	The new analysis presented here predicts a much more disruptive effect from the sunken section of I-580. Any COCs originating from the Up-Gradient Property / Site co-mingled plume will be captured by the I-580 de-watering system and will not reach the Down-Gradient Property. Even neglecting this effect, the fate and transport prediction from [3] is invalid as it extrapolates a great distance from a single point without considering down-gradient changes in flow. Further investigation of Down-Gradient Property wells should be separate from the Site and Up-Gradient Property.	Figures 3-8

References

[1] ACDEH. Request for a Site Conceptual Model Update; Fuel Leak Case No. RO0000058 and Geotracker Global ID T0600101465, Unocal #6129, 3420 35th Ave, Oakland CA. August 22, 2017
[2] AECOM. Focused Site Conceptual Model, Unocal No. 6125 (351639) 3420 35th Avenue, Oakland, CA. ACEH Fuel Leak Case No. RO0000058. Geotracker Global ID T0600101465. April 9, 2015
[3] AECOM. Groundwater Plume Evaluation, Unocal No. 6129 (351639) 3420 35th Avenue, Oakland, CA. ACEH Fuel Leak Case No. RO0000058. Geotracker Global ID T0600101465. September 28, 2015
[4] Arcadis. Semi-Annual Status Report, Second Quarter 2017, Unocal Station No. 6129, RO0000058, 3240 35th Avenue, Oakland, CA. July 3, 2017
[5] Arcadis. Third Quarter 2017 Groundwater Monitoring Report, Former Atlantic Richfield Company Station #11132, 3201 35th Avenue, Oakland, CA, 94619. October 3, 2017
[6] ETIC. Report of Groundwater Monitoring, Fourth Quarter 2016. Former Exxon Service Station 70234, 3450 35th Avenue, Oakland, CA. February 2, 2017.

Figures



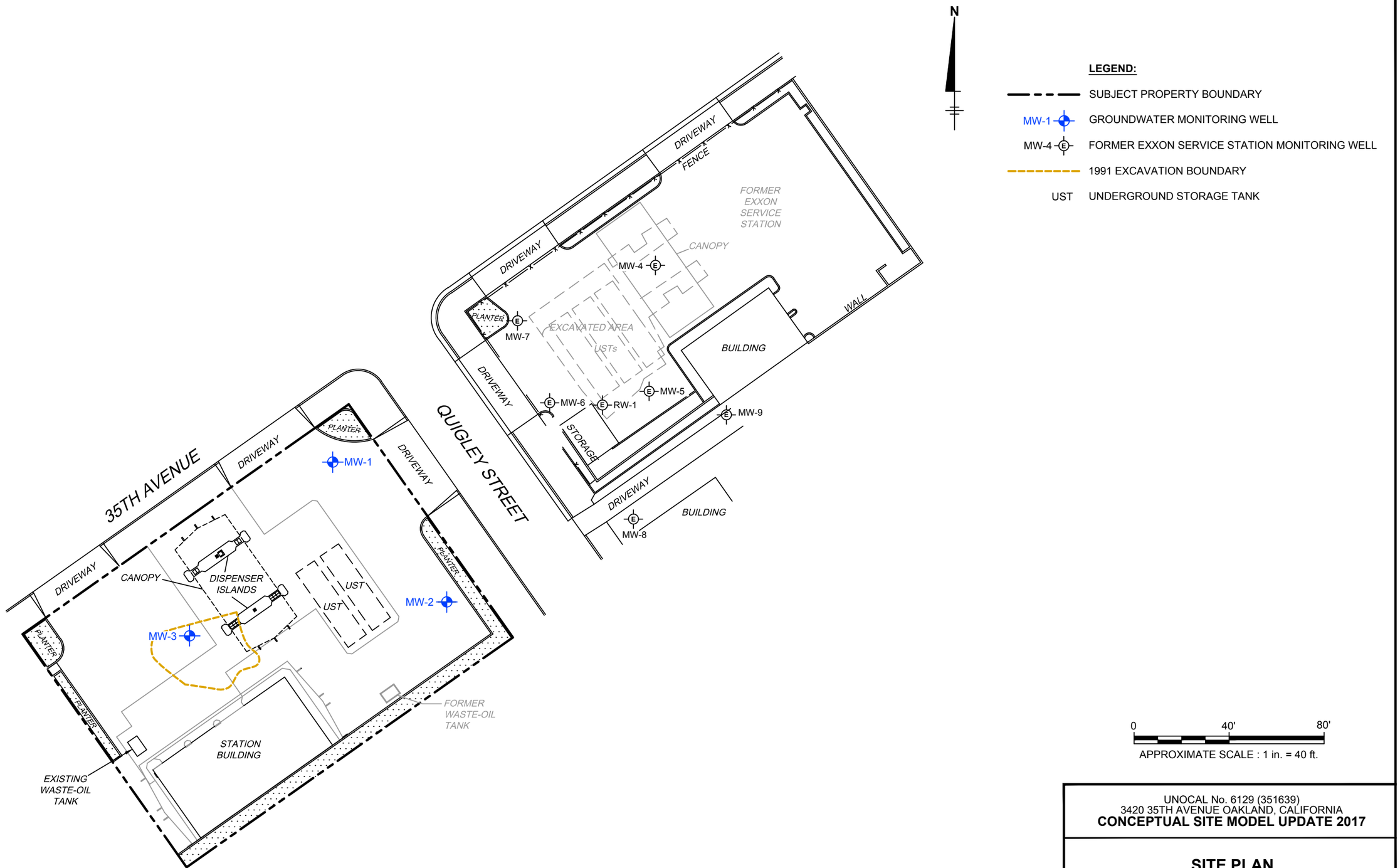
REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., OAKLAND, CALIFORNIA, 2015

UNOCAL No. 6129 (351639)
3420 35TH AVENUE OAKLAND, CALIFORNIA
CONCEPTUAL SITE MODEL UPDATE 2017

SITE LOCATION MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE
1



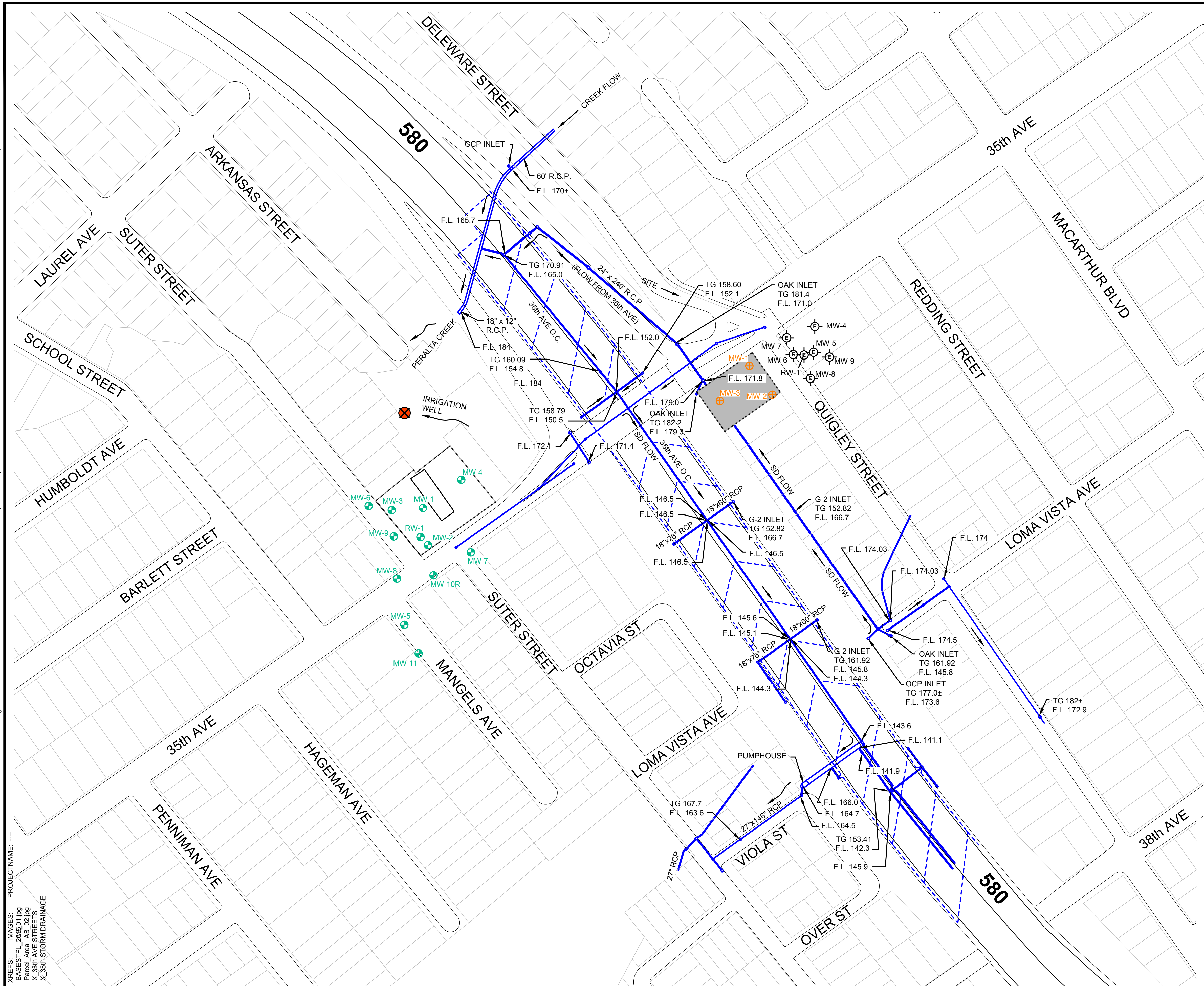
UNOCAL No. 6129 (351639)
3420 35TH AVENUE OAKLAND, CALIFORNIA
CONCEPTUAL SITE MODEL UPDATE 2017

SITE PLAN

ARCADIS Design & Consultancy for natural and built assets

FIGURE
2

CITY:EMERYVILLE, CA DIV/GROUP:ENVCAD DB:A.REYES
P:\Environment - Arcadis\ARCADIS-USA_PROJECTS\13. CHEVRON 76\Chevron 76PP-1Q2017\NoCal sites\351639\E-Drawings\351639_Figure2.dwg LAYOUT: 2 SAVED: 5/22/2017 4:20 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 5/25/2017 12:20 PM
BY: DEVESH KAMBLE
XREFS: IMAGES: PROJECTNAME: ----
X-351639-Sitebase



LEGEND

- MW-4 MONITORING WELL
- MW-1 MONITORING WELL
- MW-4 MONITORING WELL
- IRRIGATION WELL
- STORM DRAIN
- DE-WATERING UNDER-DRAIN
- SITE - 3420 35th AVE

DE-WATERING SYSTEM DETAIL RE-DRAWN FROM AS-BUILT PLANS PRESENTED IN AECOM "FOCUSED SITE CONCEPTUAL MODEL," APRIL 2015

N

0 200' 400'

Approximate Scale: 1 in. = 200 ft.

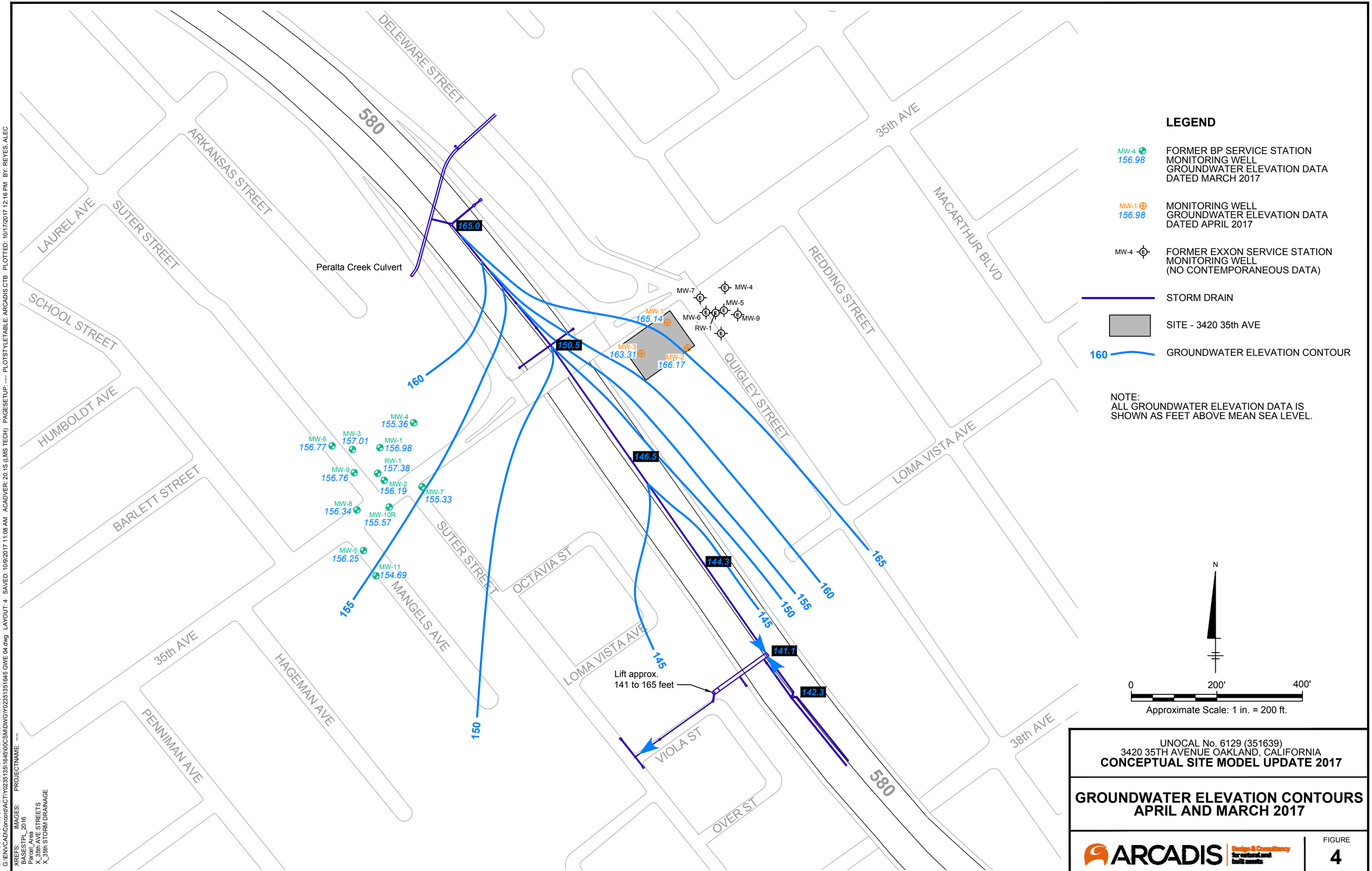
UNOCAL No. 6129 (351639)
3420 35TH AVENUE OAKLAND, CALIFORNIA
CONCEPTUAL SITE MODEL UPDATE 2017

I-580 De-Watering Detail

ARCADIS Design & Consultancy for natural and built assets

FIGURE
3

CITY: CONCORD, CA DIV/GROUP: ENVCAD DB: A.REYES
PLOTTED: 10/17/2017 12:18 PM BY: REYES, ALEC



LEGEND

- MW-4 156.98 — FORMER BP SERVICE STATION MONITORING WELL GROUNDWATER ELEVATION DATA DATED MARCH 2017
- MW-1 156.98 — MONITORING WELL GROUNDWATER ELEVATION DATA DATED APRIL 2017
- MW-4 — FORMER EXXON SERVICE STATION MONITORING WELL (NO CONTEMPORANEOUS DATA)
- STORM DRAIN
- SITE - 3420 35th AVE
- 160 — GROUNDWATER ELEVATION CONTOUR

NOTE:
ALL GROUNDWATER ELEVATION DATA IS SHOWN AS FEET ABOVE MEAN SEA LEVEL.

UNOCAL No. 6129 (351639)
3420 35TH AVENUE OAKLAND, CALIFORNIA

CONCEPTUAL SITE MODEL UPDATE 2017

GROUNDWATER ELEVATION CONTOURS APRIL AND MARCH 2017

ARCADIS Design & Consultancy for natural and built assets

FIGURE 4

CITY: CONCORD, CA DIVGROUP: ENVCAD DB: A.REYES
G:\ENVCAD\Concord\ACTIVITY\2351351645\00CSM\DWG\Y02351351645 GWE 04.dwg LAYOUT: 4 SAVED: 10/9/2017 11:08 AM ACADVER: 20.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 10/17/2017 12:16 PM BY: REYES, ALEC
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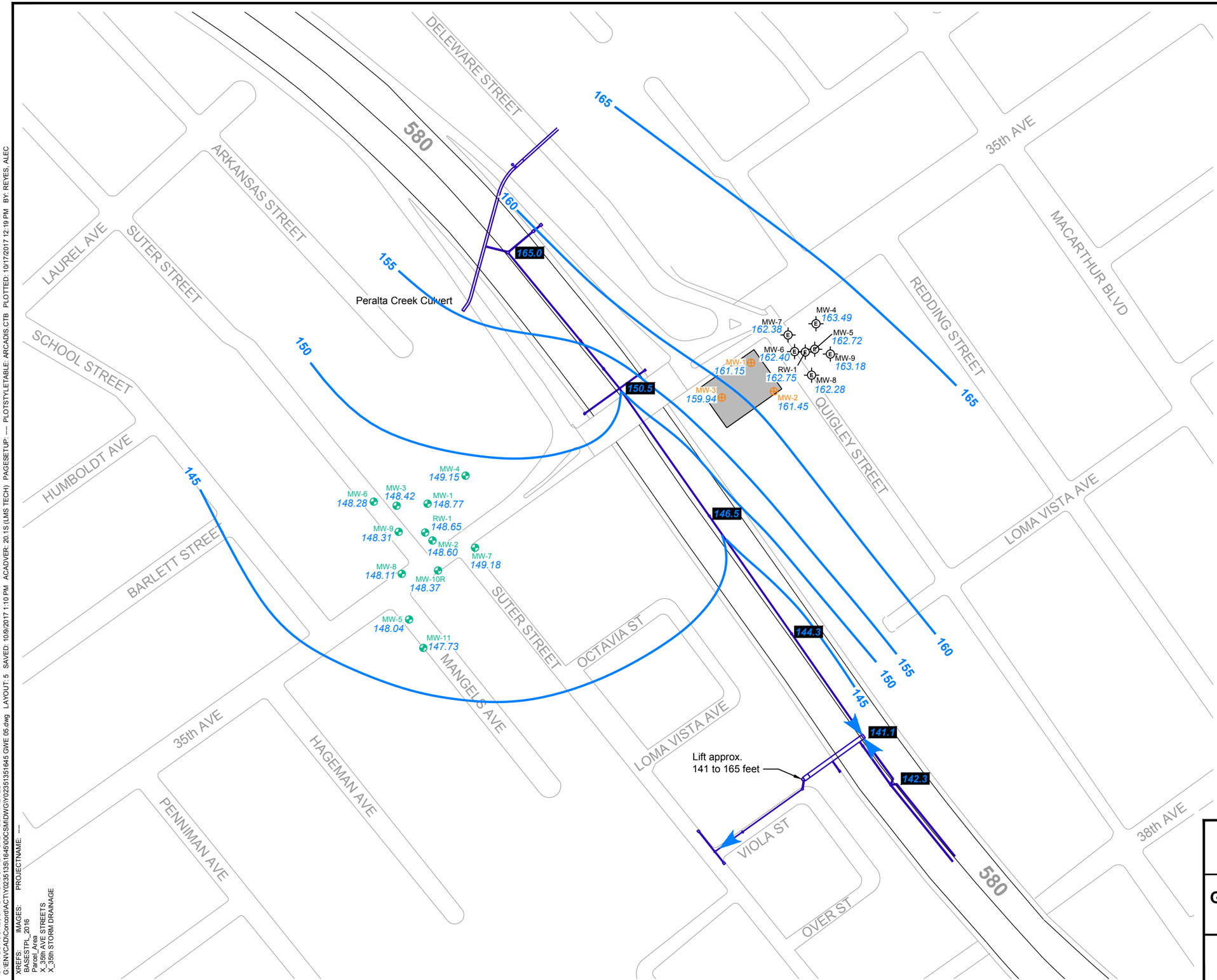
BASESTPL_2016
Parcel_Area
X_35th AVE STREETS
X_35th STORM DRAINAGE



UNOCAL No. 6129 (351639)
3420 35TH AVENUE OAKLAND, CALIFORNIA
CONCEPTUAL SITE MODEL UPDATE 2017

GROUNDWATER ELEVATION CONTOURS JUNE AND SEPTEMBER 2016

ARCADIS Design & Consultancy for natural and built assets

FIGURE 5

CITY: CONCORD, CA DIV/GROUP: ENVCAD DB: A.REYES
G:\ENVCAD\Concord\ACTIVITY\2235135\164500\CSM\DWG\Y02351351645 GWE 05.dwg LAYOUT: 5 SAVED: 10/9/2017 1:10 PM ACADVER: 20.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 10/17/2017 12:19 PM BY: REYES, ALEC
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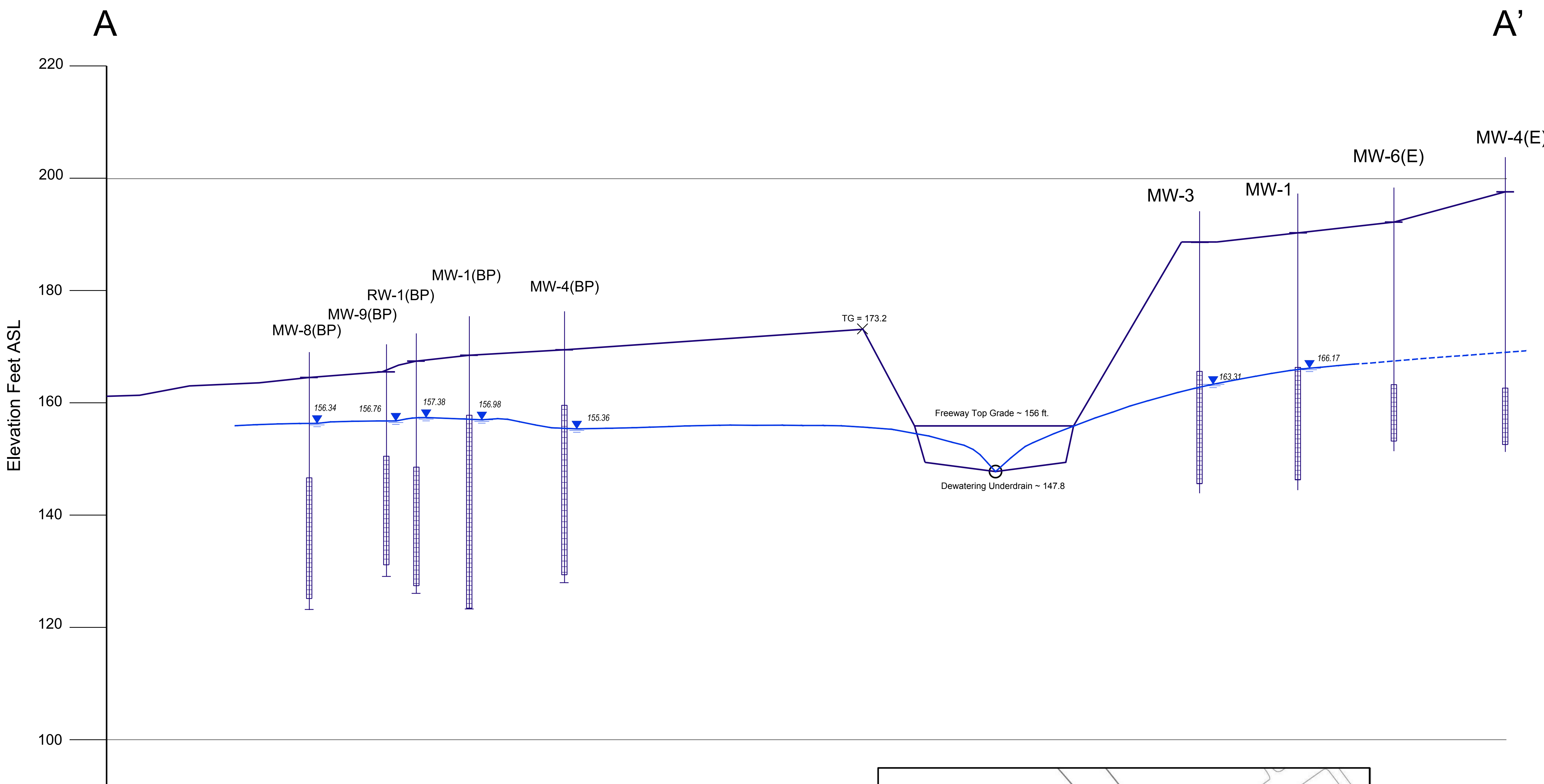
BASESTPL_2016
Parcel_Area
X_35th AVE STREETS
X_35th STORM DRAINAGE



LEGEND

MW-8(BP)	BORING IDENTIFICATION
	GROUND SURFACE
156.34	GROUNDWATER ELEVATION
	SCREENED INTERVAL
	BOTTOM OF BORING

MW-8(E) - FORMER EXXON SERVICE STATION MONITORING WELL (UP-GRADIENT PROPERTY)

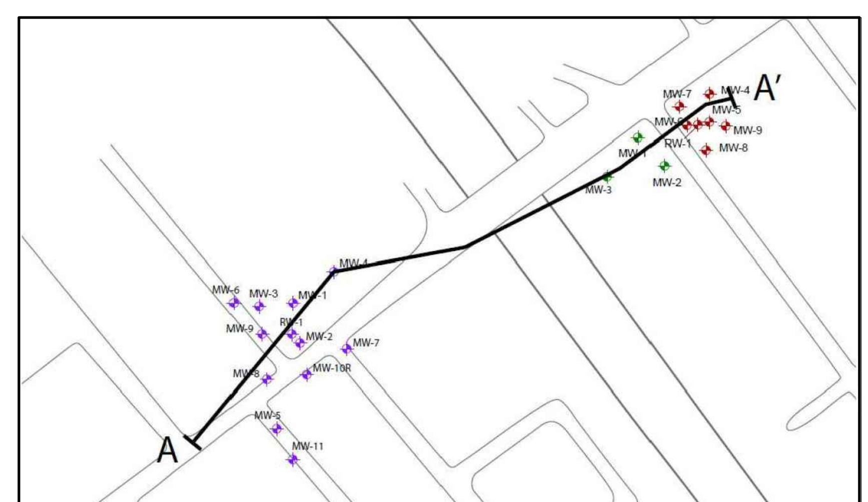
MW-8(BP) - FORMER BP SERVICE STATION MONITORING WELL (DOWN-GRADIENT PROPERTY)

MW-8 - ON-SITE MONITORING WELL

0 100' 200'
Horizontal Scale: 1 in. = 100 ft.

0 20' 40'
Vertical Scale: 1 in. = 20 ft.

Vertical Exaggeration = 5:1



UNOCAL No. 6129 (351639)
3420 35TH AVENUE OAKLAND, CALIFORNIA
CONCEPTUAL SITE MODEL UPDATE 2017

CROSS-SECTION SHOWING HIGH WATER CONDITIONS

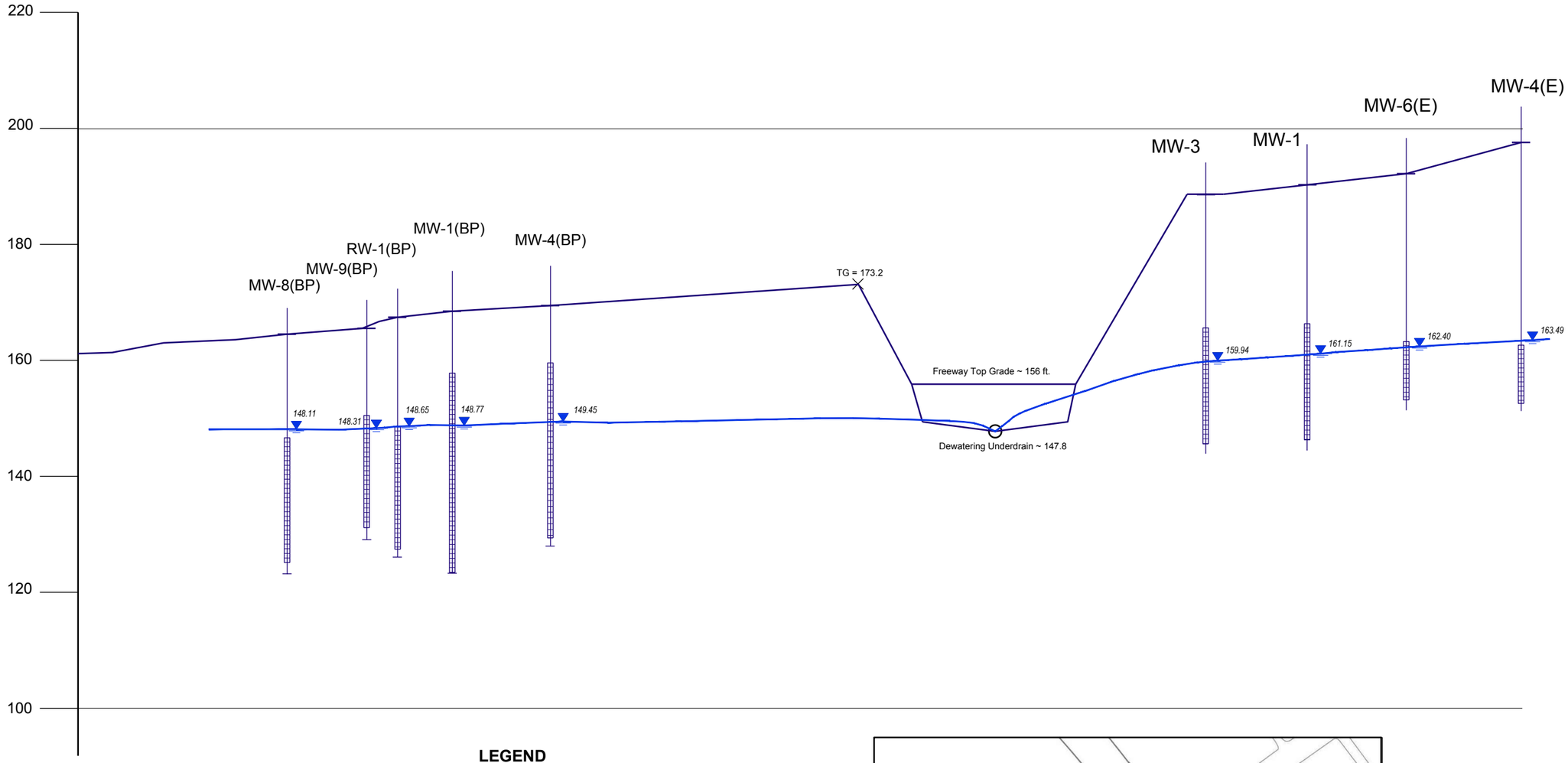
ARCADIS Design & Consultancy for natural and built assets

FIGURE
6

CITY: CONCORD, CA DIV/GROUP: ENVCAD DB: A.REYES
G:\ENVCAD\Concord\ACT\Y0235135\1645\00CSM\DWG\RO058_A_Ap High.dwg LAYOUT: 6 SAVED: 10/10/2017 7:28 AM ACADVER: 20.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 10/17/2017 12:23 PM BY: REYES, ALEC
IMAGES:
RO058_A_Ap-Layout1.jpg

A

A’



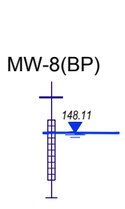
0 100' 200'

Horizontal Scale: 1 in. = 100 ft.

0 20' 40'

Vertical Scale: 1 in. = 20 ft.

Vertical Exaggeration = 5:1



LEGEND

BORING IDENTIFICATION

GROUND SURFACE

GROUNDWATER ELEVATION

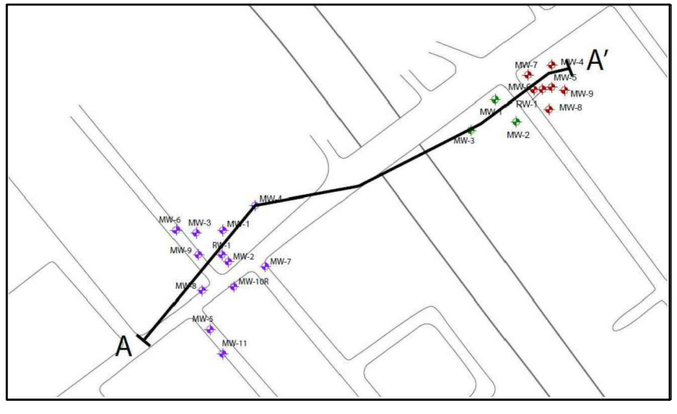
SCREENED INTERVAL

BOTTOM OF BORING

MW-8(E) - FORMER EXXON SERVICE STATION MONITORING WELL (UP-GRADIENT PROPERTY)

MW-8(BP) - FORMER BP SERVICE STATION MONITORING WELL (DOWN-GRADIENT PROPERTY)

MW-8 - ON-SITE MONITORING WELL



UNOCAL No. 6129 (351639)
3420 35TH AVENUE OAKLAND, CALIFORNIA

CONCEPTUAL SITE MODEL UPDATE 2017

CROSS-SECTION SHOWING LOW WATER CONDITIONS

ARCADIS Design & Consultancy for natural and built assets

FIGURE
7

A

A’

Elevation Feet ASL

220
200
180
160
140
120
100

MW-8(BP)
MW-9(BP)
RW-1(BP)
MW-1(BP)
MW-4(BP)
MW-3
MW-1
MW-6(E)
MW-4(E)

156.34
156.76
157.38
156.98
155.36
163.31
166.17

TG = 173.2

Freeway Top Grade ~ 156 ft.

Dewatering Underdrain ~ 147.8

156
158
160
162
164
166
168

0 100' 200'
Horizontal Scale: 1 in. = 100 ft.

0 20' 40'
Vertical Scale: 1 in. = 20 ft.

Vertical Exaggeration = 5:1

LEGEND

MW-8(BP) 156.34 — BORING IDENTIFICATION

GROUND SURFACE

GROUNDWATER ELEVATION

SCREENED INTERVAL

BOTTOM OF BORING

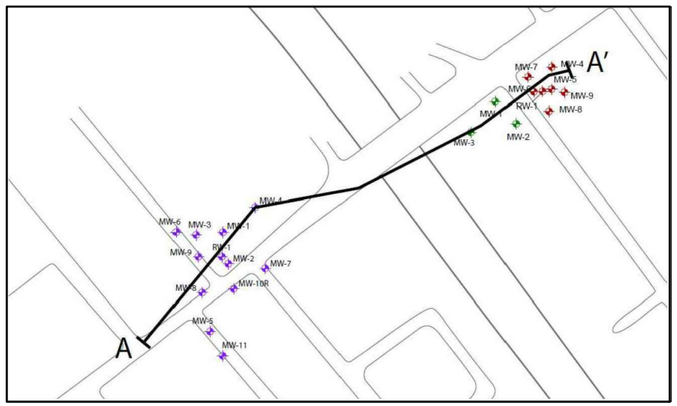
MW-8(E) - FORMER EXXON SERVICE STATION MONITORING WELL (UP-GRADIENT PROPERTY)

MW-8(BP) - FORMER BP SERVICE STATION MONITORING WELL (DOWN-GRADIENT PROPERTY)

MW-8 - ON-SITE MONITORING WELL

FLOW LINES

156 — CONSTANT HEAD CONTOURS (FEET ASL)



UNOCAL No. 6129 (351639)
3420 35TH AVENUE OAKLAND, CALIFORNIA
CONCEPTUAL SITE MODEL UPDATE 2017

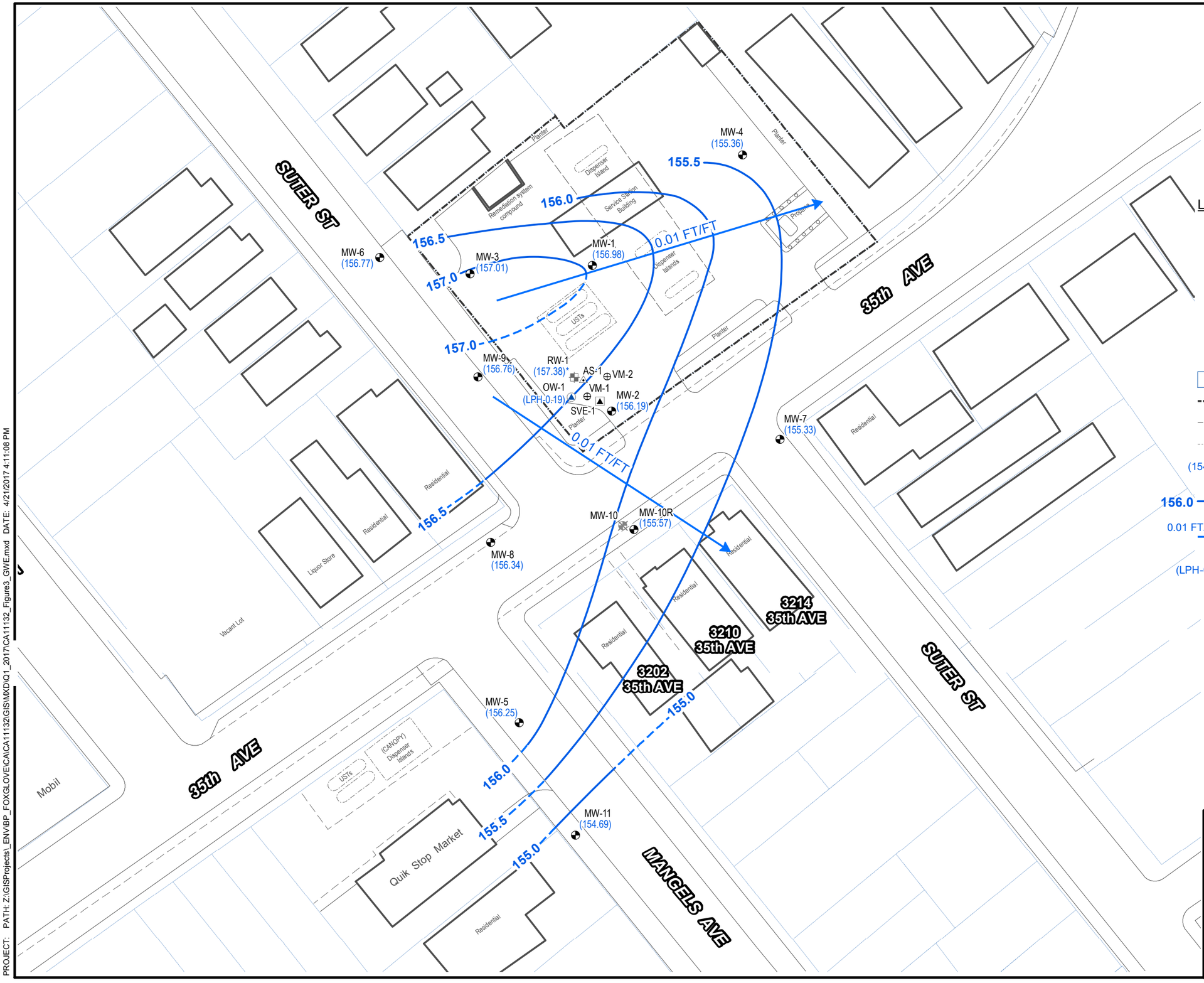
HIGH WATER CONDITIONS: FLOW NET (APPROXIMATE)

ARCADIS Design & Consultancy for natural and built assets

FIGURE
8

Groundwater Flow at Down-Gradient Property, High-Water Conditions

From Arcadis, "Fourth Quarter 2016 and First Quarter 2017 Groundwater Monitoring Report," April 2017



LEGEND:

- GROUNDWATER MONITORING WELL
- GROUNDWATER RECOVERY WELL
- OBSERVATION WELL
- SOIL VAPOR EXTRACTION WELL
- SOIL VAPOR MONITORING WELL
- AIR SPARGE WELL
- ABANDONED MONITORING WELL
- PROPERTY BOUNDARIES
- PROPERTY BOUNDARY
- CANOPY
- UNDERGROUND STORAGE TANKS
- (154.69) GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)
- 156.0 GROUNDWATER ELEVATION CONTOUR LINE (DASHED WHERE INFERRED)
- 0.01 FT/FT GROUNDWATER FLOW DIRECTION (FOOT PER FOOT)
- (LPH-0.19) LIQUID PHASE HYDROCARBONS - THICKNESS IN FEET
- * NOT USED IN CONTOURING

NOTES:
1. PARCEL DATA BOUNDARIES FROM ALAMEDA COUNTY WEBB SERVER https://www.acgov.org/government/geospatial.htm

0 50 100

SCALE IN FEET

FORMER BP SERVICE STATION #11132
3201 35TH AVENUE
OAKLAND, CALIFORNIA

GROUNDWATER ELEVATION MAP MARCH 1, 2017

ARCADIS Design & Consultancy for natural and built assets

FIGURE 9

CITY: SAN FRANCISCO DIV/GROUP: ENV/IM DB: MAI00749 LD: PIC: PM: TM:
PROJECT: PATH: Z:\GIS\Projects_ENV\BP_FOXGLOVE\CA\CA11132\GIS\MXD\Q1_2017\CA11132_Figure3_GWE.mxd DATE: 4/21/2017 4:11:08 PM

Groundwater Flow at Down-Gradient Property, Low-Water Conditions

From Arcadis, "Third Quarter 2017 Groundwater Monitoring Report," October 2017

SUTTER ST

35th AVE

MANGELS AVE

MW-6 (148.00)
MW-3 (148.43)
MW-1 (148.81)
MW-4 (149.03)
MW-9 (NG)
RW-1 (148.88)*
AS-1
VM-2
OW-1 (SPH-0.07)
VM-1
MW-2 (146.11)*
SVE-1
MW-7 (148.79)
MW-10
MW-10R (148.60)
MW-8 (148.04)
MW-5 (148.21)
MW-11 (149.30)

148.00
148.25
148.50
148.75
149.00
0.004FT/FT

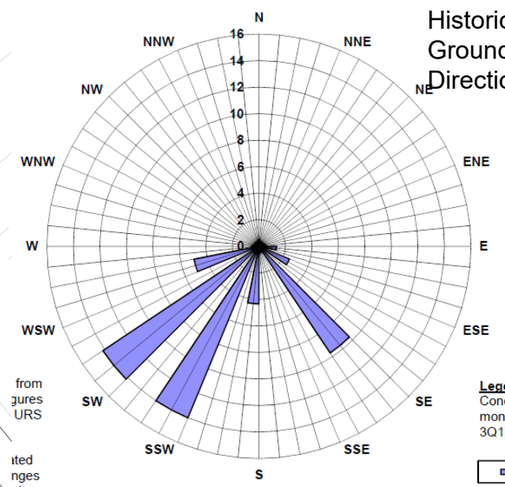
Planter
Dispenser Island
Service Station Building
Propane
Station system compound
USTs
Dispenser Islands
(CANOPY)
Residential
Liquor Store
Vacant Lot
Mobil
Quik Stop Market
3214 35th AVE
3210 35th AVE
3202 35th AVE

LEGEND:

- GROUNDWATER MONITORING WELL
- GROUNDWATER RECOVERY WELL
- OBSERVATION WELL
- SOIL VAPOR EXTRACTION WELL
- SOIL VAPOR MONITORING WELL
- AIR SPARGE WELL
- ABANDONED MONITORING WELL
- PROPERTY BOUNDARIES
- PROPERTY BOUNDARY
- CANOPY
- UNDERGROUND STORAGE TANKS
- (149.03) GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)
- 149.00 GROUNDWATER ELEVATION CONTOUR LINE (DASHED WHERE INFERRED)
- 0.004 FT/FT GROUNDWATER FLOW DIRECTION (FOOT PER FOOT)
- (SPH-0.07) SEPARATE PHASE HYDROCARBONS - THICKNESS IN FEET
- (NG) NOT GAUGED
- * NOT USED IN CONTOURING

NOTES:
1. PARCEL DATA BOUNDARIES FROM ALAMEDA COUNTY WEBB SERVER https://www.acgov.org/government/geospatial.htm

Historical Groundwater Flow Directions



Legend
Concentric circles represent 52 monitoring events from 4Q00 to 3Q17.

Groundwater Flow Direction

0 50 100

SCALE IN FEET

FORMER BP SERVICE STATION #11132
3201 35TH AVENUE
OAKLAND, CALIFORNIA

GROUNDWATER ELEVATION MAP AUGUST 02, 2017

ARCADIS Design & Consultancy for natural and built assets

FIGURE 10

CITY: SAN FRANCISCO DIV/GROUP: ENV/IM DB: msi01059 LD: PIC: PM: TM:
PROJECT: PATH: Z:\GISProjects_ENVBP_FOXGLOVE\CA\CA11132\GIS\MXD\Q3_2017\CA11132_Figure3_GWE.mxd DATE: 9/15/2017 5:35:19 PM

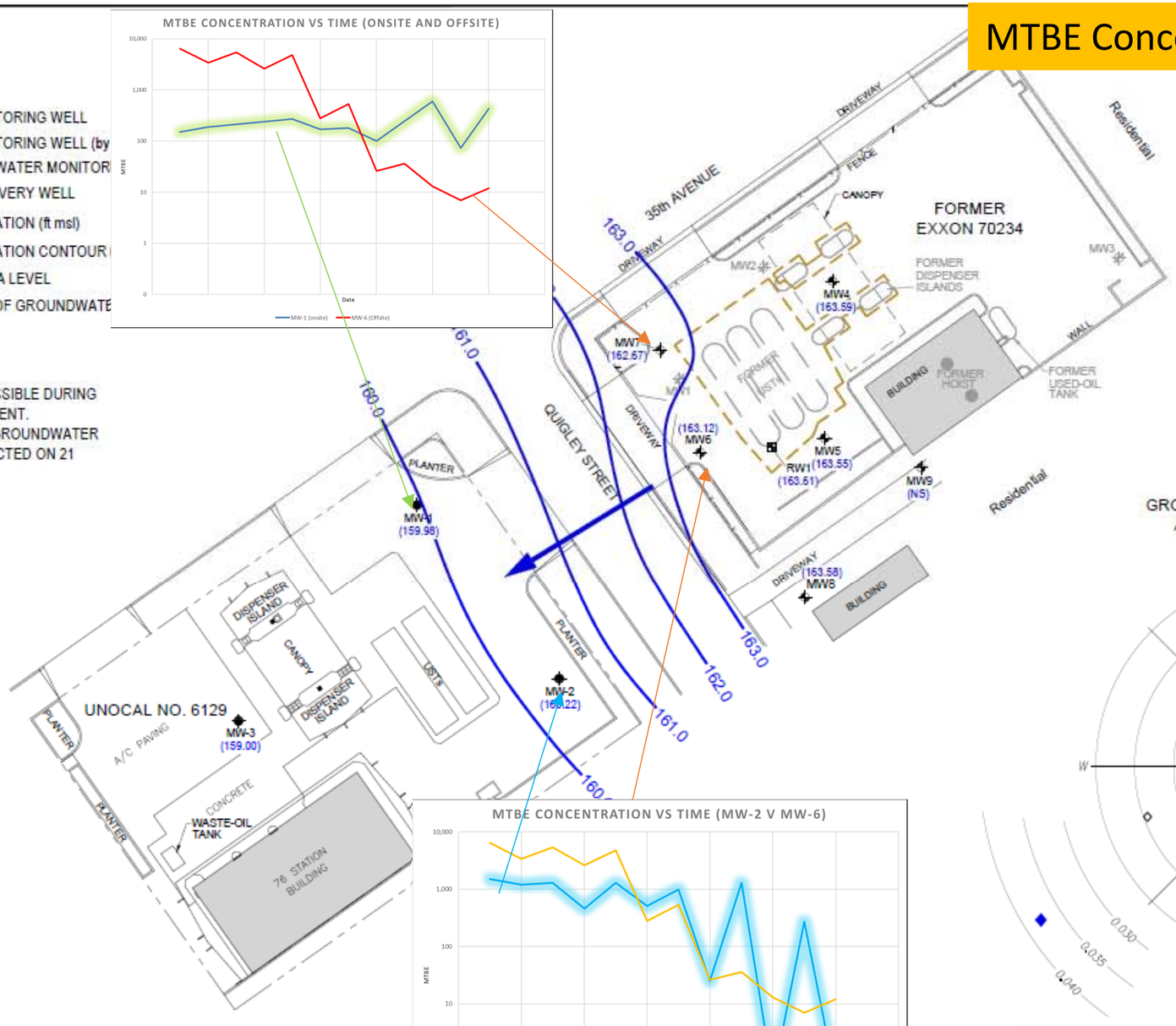
MTBE Concentration V Time

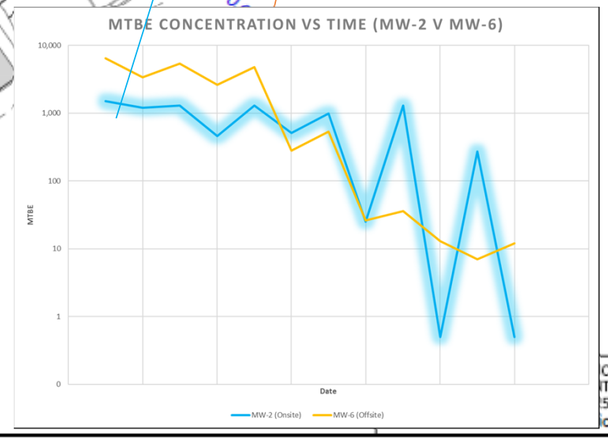
LEGEND:

- EXCAVATED AREA
- GROUNDWATER MONITORING WELL
- GROUNDWATER MONITORING WELL (by
- DESTROYED GROUNDWATER MONITOR
- GROUNDWATER RECOVERY WELL
- (163.59) GROUNDWATER ELEVATION (ft msl)
- 164.0 GROUNDWATER ELEVATION CONTOUR
- ft msl FEET ABOVE MEAN SEA LEVEL
- GENERAL DIRECTION OF GROUNDWATE
- NS NOT SAMPLED

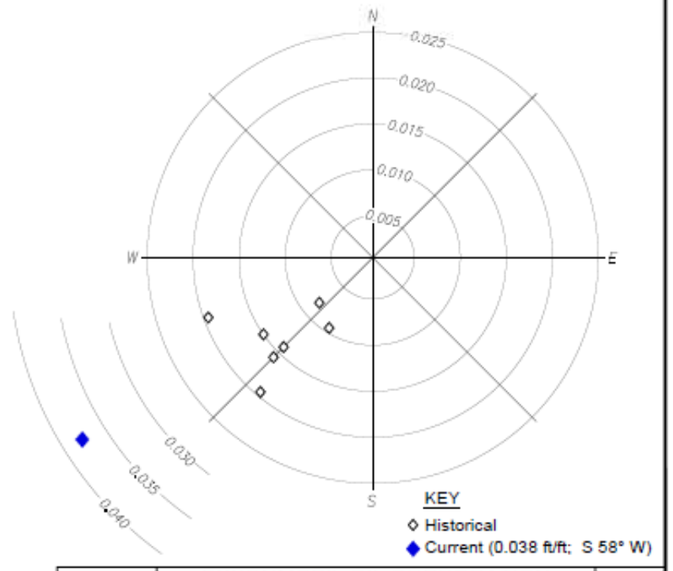
NOTES:

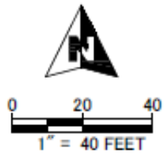
1. MW9 WAS INACCESSIBLE DURING THIS SAMPLING EVENT.
2. UNOCAL No. 6129 GROUNDWATER SAMPLING CONDUCTED ON 21 NOVEMBER 2016.





GROUNDWATER FLOW DIRECTION AND HYDRAULIC GRADIENT





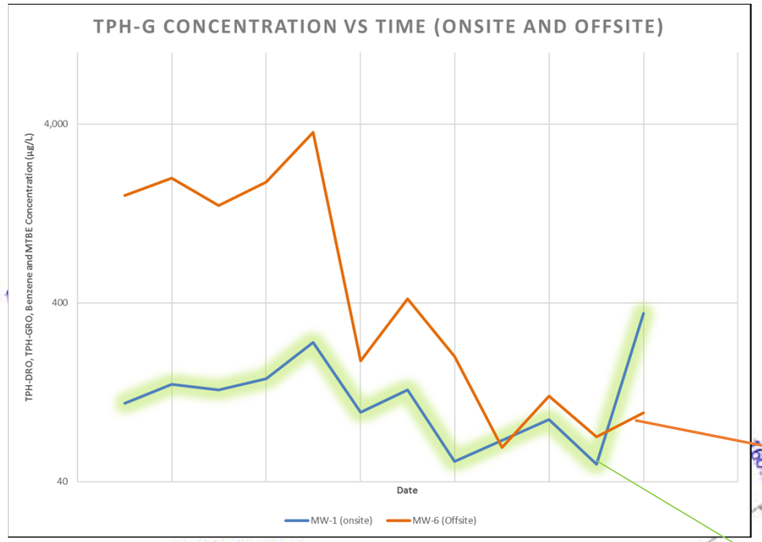
Basemap from ETIC, "Report of Groundwater Monitoring, Fourth Quarter 2016," December 2016

16-070234-UP	EXXONMOBIL OIL CORPORATION	
	GROUNDWATER ELEVATION CONTOUR MAP	
DR: AF	20 DECEMBER 2016	
DR: AJW	FORMER EXXON SERVICE STATION 70234	FIGURE: 11
CK:	3450 35th AVENUE	
PR:	OAKLAND, CALIFORNIA	

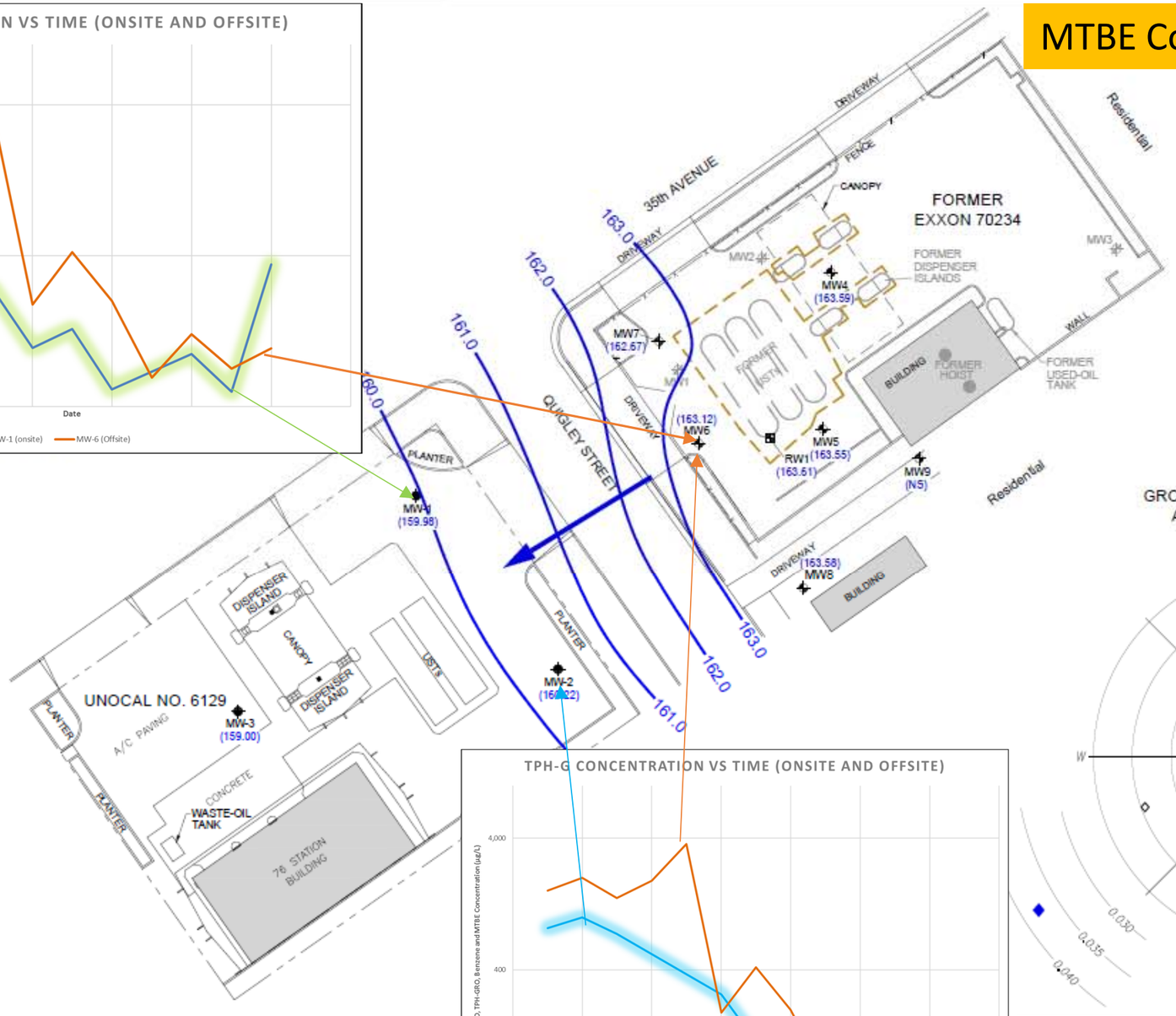
ORELLO AVENUE
T HILL, CA 94523
5) 602-4710
iceng.com

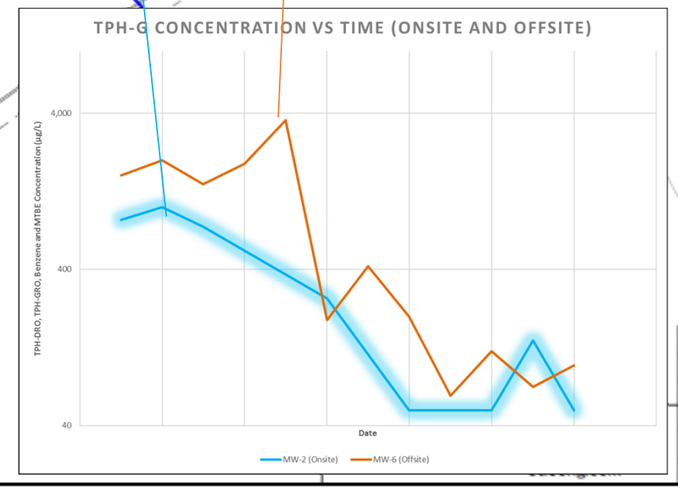
01/30/2017, 16:27, G:\Graphics\16\070234\QMR-4Q16.dwg, Tab: F3

MTBE Concentration V Time

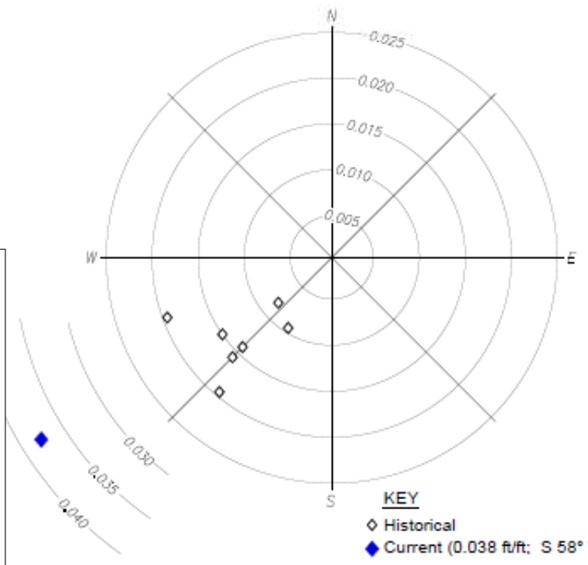


NOVEMBER 2016.





GROUNDWATER FLOW DIRECTION AND HYDRAULIC GRADIENT



0 20 40
1" = 40 FEET

Basemap from ETIC, "Report of Groundwater Monitoring, Fourth Quarter 2016," December 2016

16-070234-UP	EXXONMOBIL OIL CORPORATION
	GROUNDWATER ELEVATION CONTOUR MAP
DR: AF	20 DECEMBER 2016
DR: AJW	FORMER EXXON SERVICE STATION 70234
CK:	3450 35th AVENUE
PR:	OAKLAND, CALIFORNIA

FIGURE: 12

01/30/2017, 16:27, G:\Graphics\16\070234\QMR-4Q16.dwg, Tab: F3

Tables

Table 1
Summary of Statistical Analysis of Groundwater Analytical Data

Union Oil Company of California
Unocal No. 6129 (351639)
3420 35th Avenue, Oakland, California

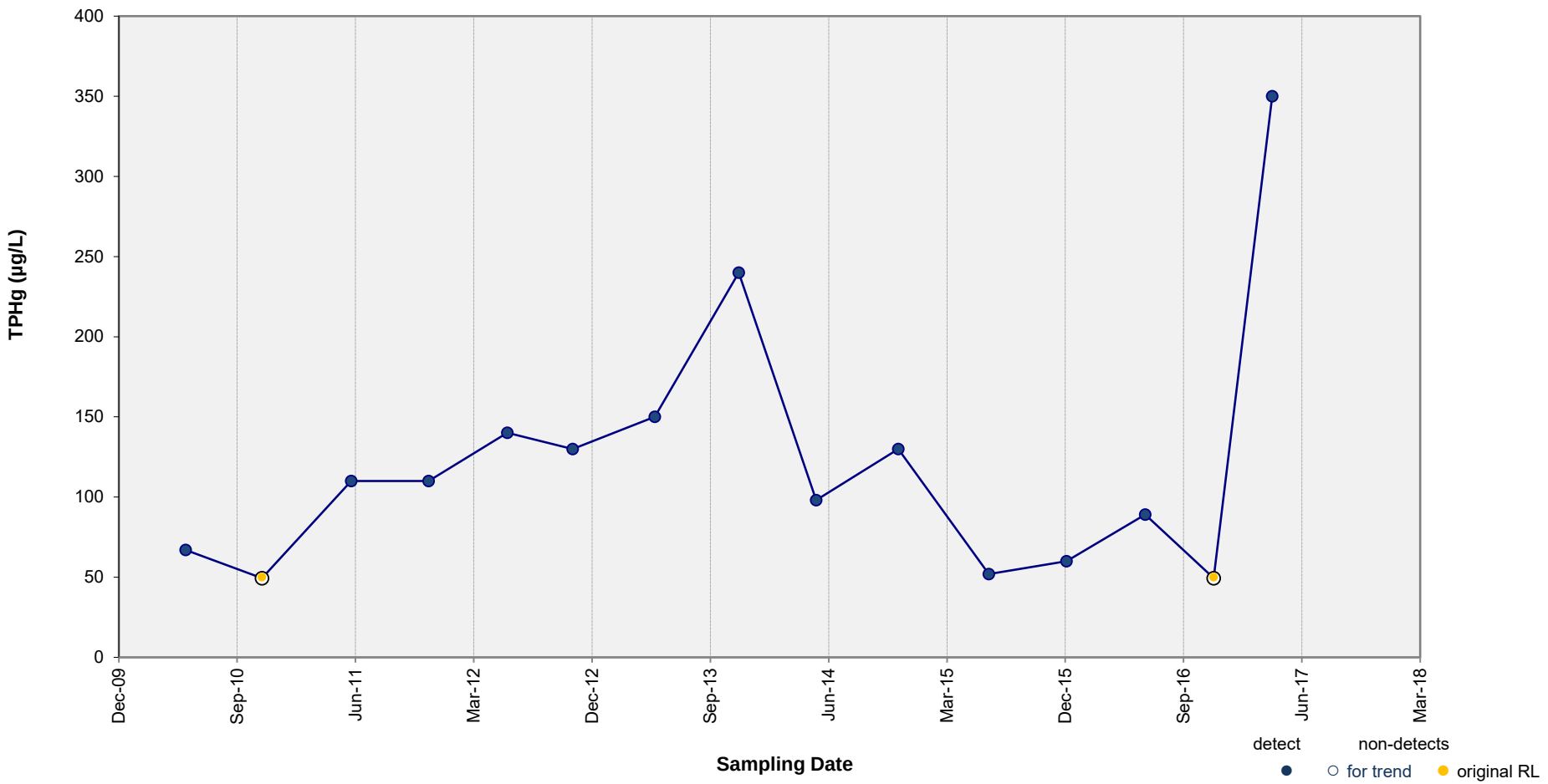
Monitoring Well	Constituent	Screening Level (µg/L) [1]	Data Range							Mann-Kendall Trend Analysis			Sen's Slope Trend Analysis		Figures
			Start Date	End Date	Number of Observations (n)	Minimum Concentration (µg/L)	Maximum Concentration (µg/L)	Concentration Measured Most Recently (µg/L)	% of Data Above Laboratory Reporting Limit	Sum of Trend (S-statistic)	p-value [2]	Trend Direction	Median Slope	Result	
MW-1	TPHg	100	5/7/2010	4/6/2017	15	< 50	350	350	87	4	4.41E-01	No Significant Trend	0.0015	No Significant Trend	Figure A1
			1/5/1990	4/6/2017	43	< 30	350	350	33	329	1.76E-05	Increasing	< 0.001	No trend	Figure A2
	MTBE	5	11/13/2003	4/6/2017	37	< 0.05	600	430	86	402	7.48E-08	Increasing	0.034	Increasing	Figure A3
			5/7/2010	4/6/2017	15	48	600	430	100	16	2.29E-01	No Significant Trend	0.053	No Significant Trend	Figure A4
MW-2	TPHg	100	1/5/1990	4/6/2017	43	< 30	2000	< 50	63	296	7.50E-04	Increasing	0.050	No trend	Figure A5
			5/7/2010	4/6/2017	15	< 50	1,200	133	20	-37	3.66E-02	Decreasing	-0.185	No trend	Figure A6
	MTBE	5	11/13/2003	4/6/2017	37	< 0.5	2,100	< 0.5	95	21	3.97E-01	No Significant trend	0.019	No Significant trend	Figure A7
			5/27/2011	4/6/2017	13	< 0.5	1,500	< 0.5	85	-38	1.10E-02	Decreasing	-0.560	Decreasing	Figure A7A
			5/7/2010	4/6/2017	15	< 0.5	1,500	< 0.5	87	-37	3.66E-02	Decreasing	-0.363	No trend	Figure A8
MW-3	TPHg	100	1/5/1990	4/6/2017	42	< 30	2,600	370	100	132	7.50E-02	No Significant trend	0.004	No trend	Figure A9
			5/7/2010	4/6/2017	14	98	660	370	100	1	5.00E-01	No Significant Trend	0.000	No Significant Trend	Figure A10
	MTBE	5	11/13/2003	4/6/2017	36	< 0.5	3,700	460	100	-427	3.16E-09	Decreasing	-0.34	Decreasing	Figure A11
			5/7/2010	4/6/2017	14	< 0.5	660	460	93	-27	7.73E-02	Probably Decreasing [3]	-0.162	No Significant Trend	Figure A12

Notes:
[1] San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESL)
[2] Statistically significant trend defined as having p-value ≤ 0.05 except where noted.
[3] Confidence in trend ≥ 90% but ≤ 95% = Probably Decreasing.

Acronyms and Abbreviations:
MTBE = methyl tert-butyl ether
TPHg = total petroleum hydrocarbons as gasoline
µg/L = micrograms per liter
< = less than

APPENDIX A

LINEAR REGRESSION ANALYSES



Results of Mann-Kendall Test for Trend: **No Significant Trend**

p value = 0.441 Note: p value < 0.05 indicates a statistically significant trend (95% confidence level).

Results of Sen's Estimator of Slope: **No Significant Trend**

Median Slope Estimate = 1.5E-03 ug/L Per Day

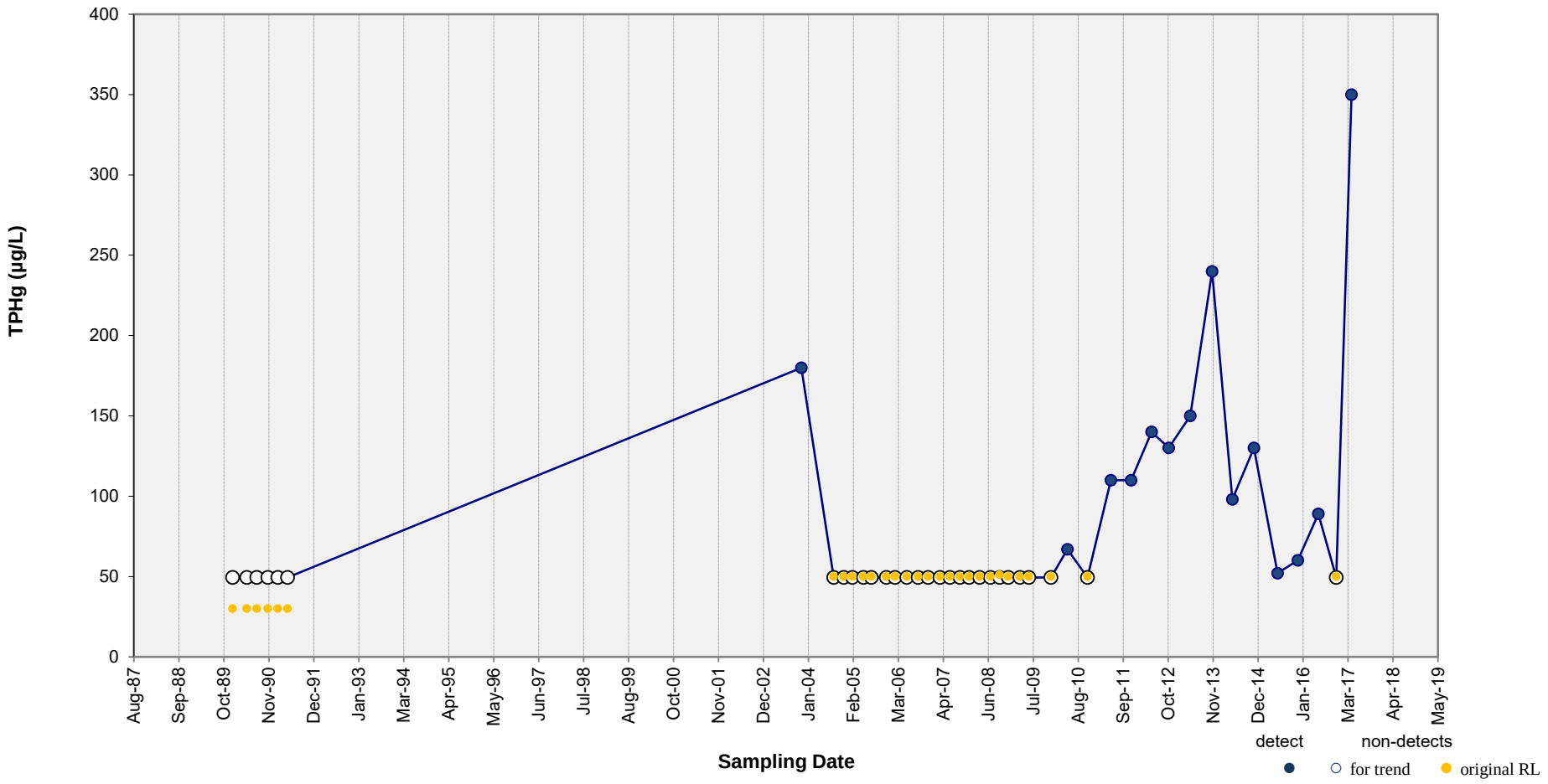
95% Confidence Interval = -3.5E-02 to 8.4E-02 ug/L Per Day

ARCADIS

Concentration vs. Time Plot – TPHg at MW-1 (2010-2017)

Unocal No. 6129 (351639), Oakland, California

Figure A1



Results of Mann-Kendall Test for Trend: **INCREASING TREND**

p value = <0.001 Note: p value < 0.05 indicates a statistically significant trend (95% confidence level).

Results of Sen's Estimator of Slope: **No trend**

Median Slope Estimate = 0.0E+00 ug/L Per Day

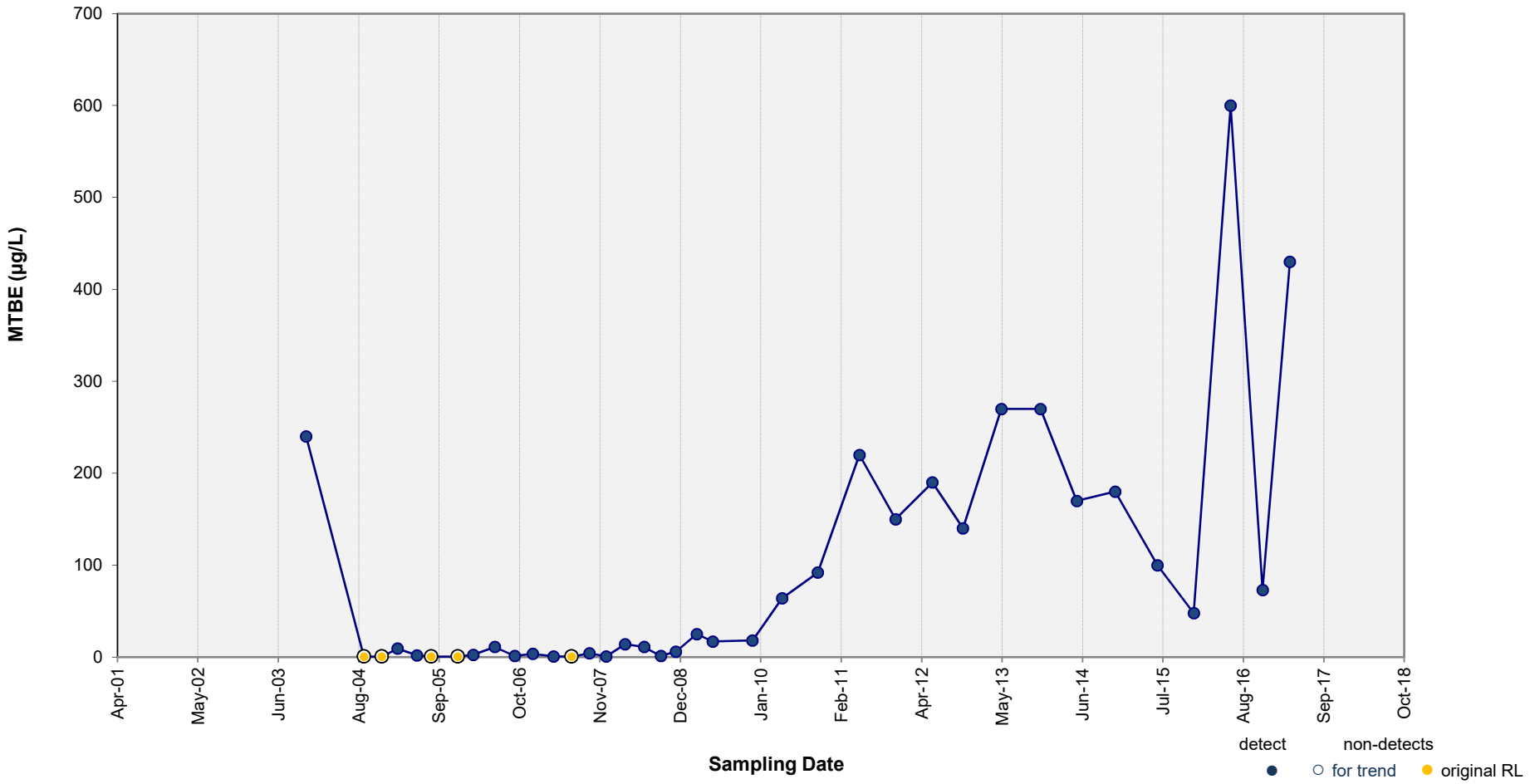
95% Confidence Interval = 0.0E+00 to 2.5E-03 ug/L Per Day

ARCADIS

Concentration vs. Time Plot – TPHg at MW-1 (1990-2017)

Unocal No. 6129 (351639), Oakland, California

Figure A2



Results of Mann-Kendall Test for Trend: **INCREASING TREND**

p value = <0.001 Note: p value < 0.05 indicates a statistically significant trend (95% confidence level).

Results of Sen's Estimator of Slope: **INCREASING TREND**

Median Slope Estimate = 3.4E-02 ug/L Per Day

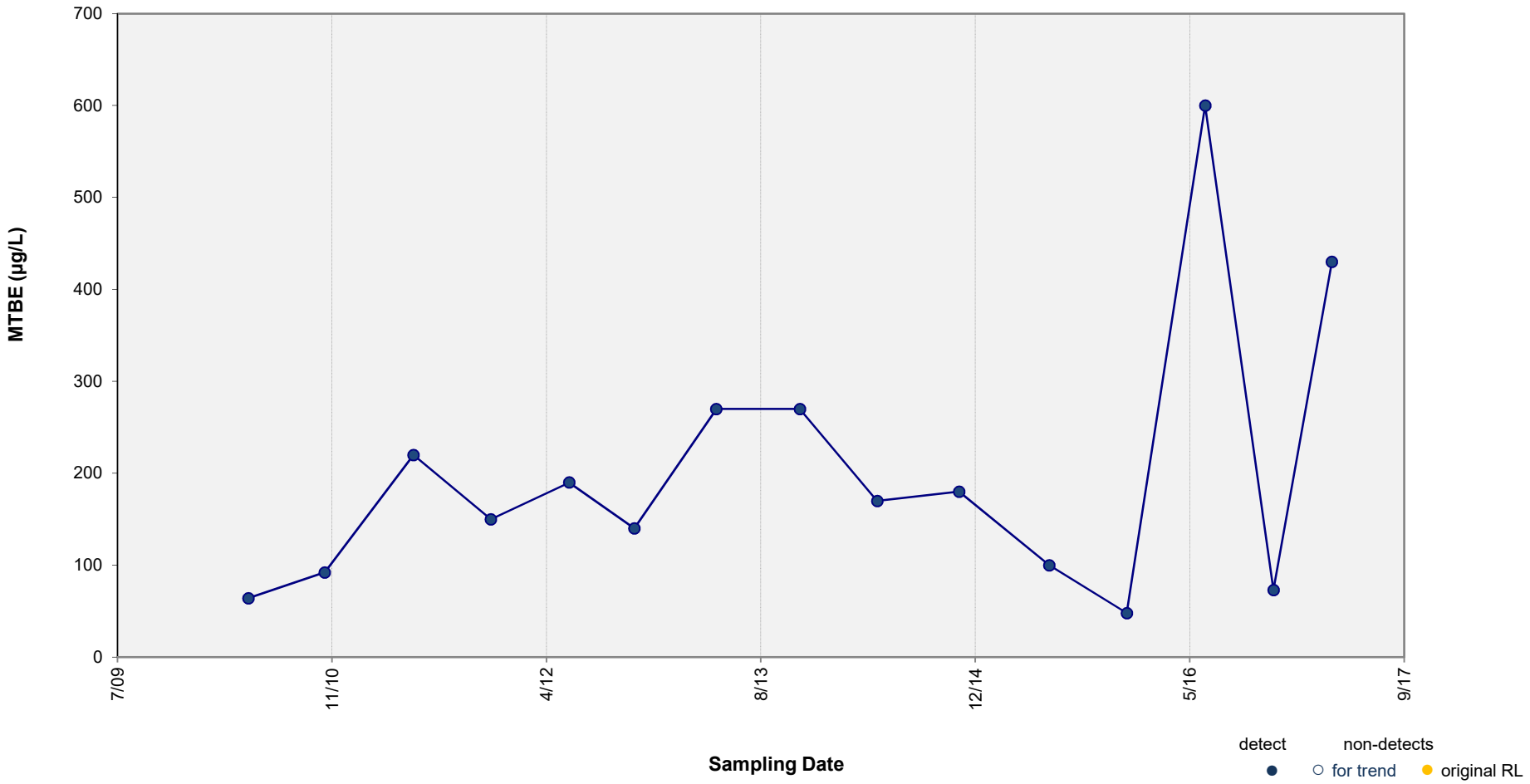
95% Confidence Interval = 1.6E-02 to 6.1E-02 ug/L Per Day

ARCADIS Design & Consultancy for natural and built assets

Concentration vs. Time Plot – MTBE at MW-1 (2003-2017)

Unocal No. 6129 (351639), Oakland, California

Figure A3



Results of Mann-Kendall Test for Trend: **No Significant Trend**

p value = 0.229 Note: p value < 0.05 indicates a statistically significant trend (95% confidence level).

Results of Sen's Estimator of Slope: **No Significant Trend**

Median Slope Estimate = 5.3E-02 ug/L Per Day

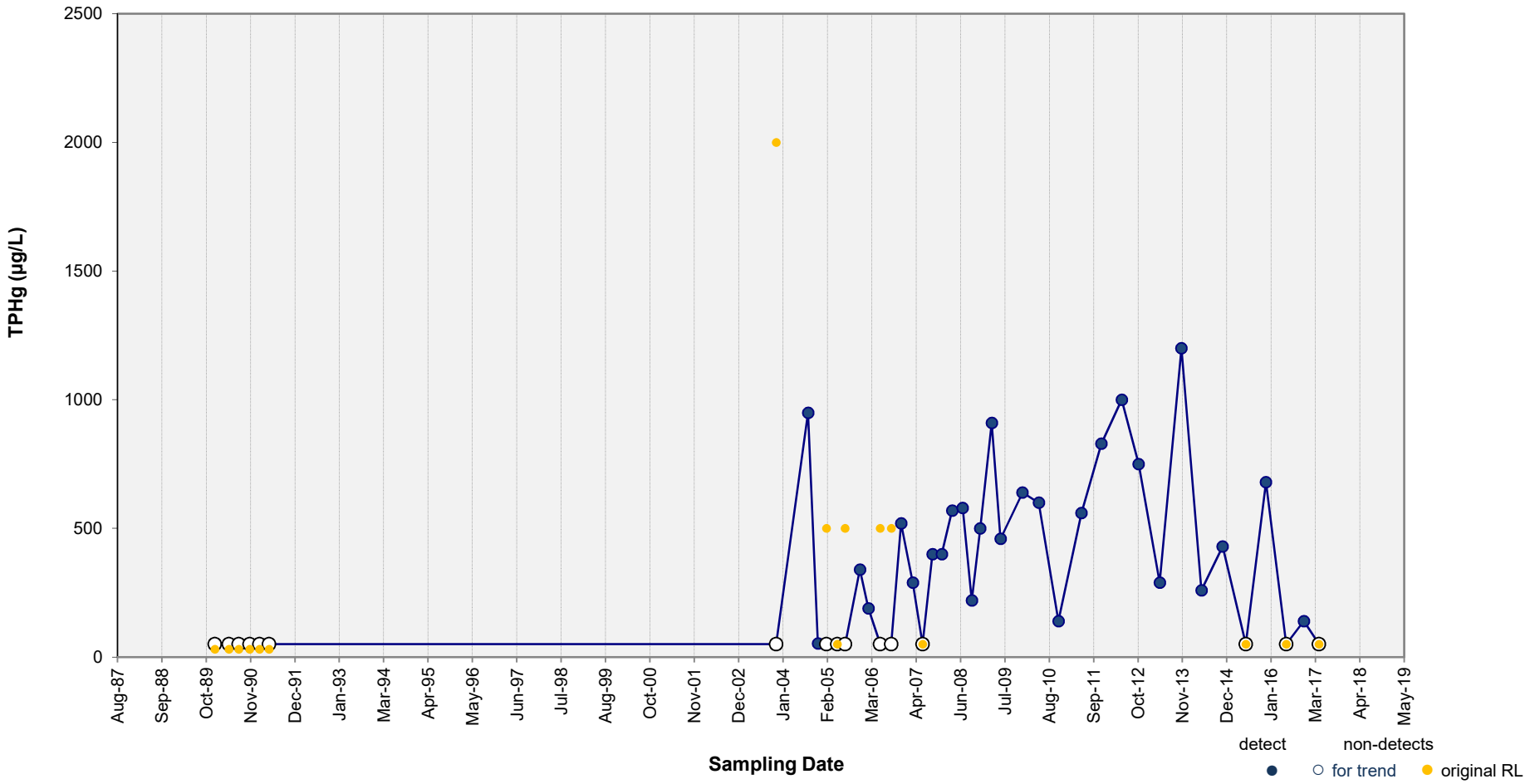
95% Confidence Interval = -4.8E-02 to 1.5E-01 ug/L Per Day

ARCADIS Design & Consultancy for natural and built assets

Concentration vs. Time Plot – MTBE at MW-1 (2010-2017)

Unocal No. 6129 (351639), Oakland, California

Figure A4



Results of Mann-Kendall Test for Trend: **INCREASING TREND**

p value = <0.001 Note: p value < 0.05 indicates a statistically significant trend (95% confidence level).

Results of Sen's Estimator of Slope: **No trend**

Median Slope Estimate = 5.0E-02 ug/L Per Day

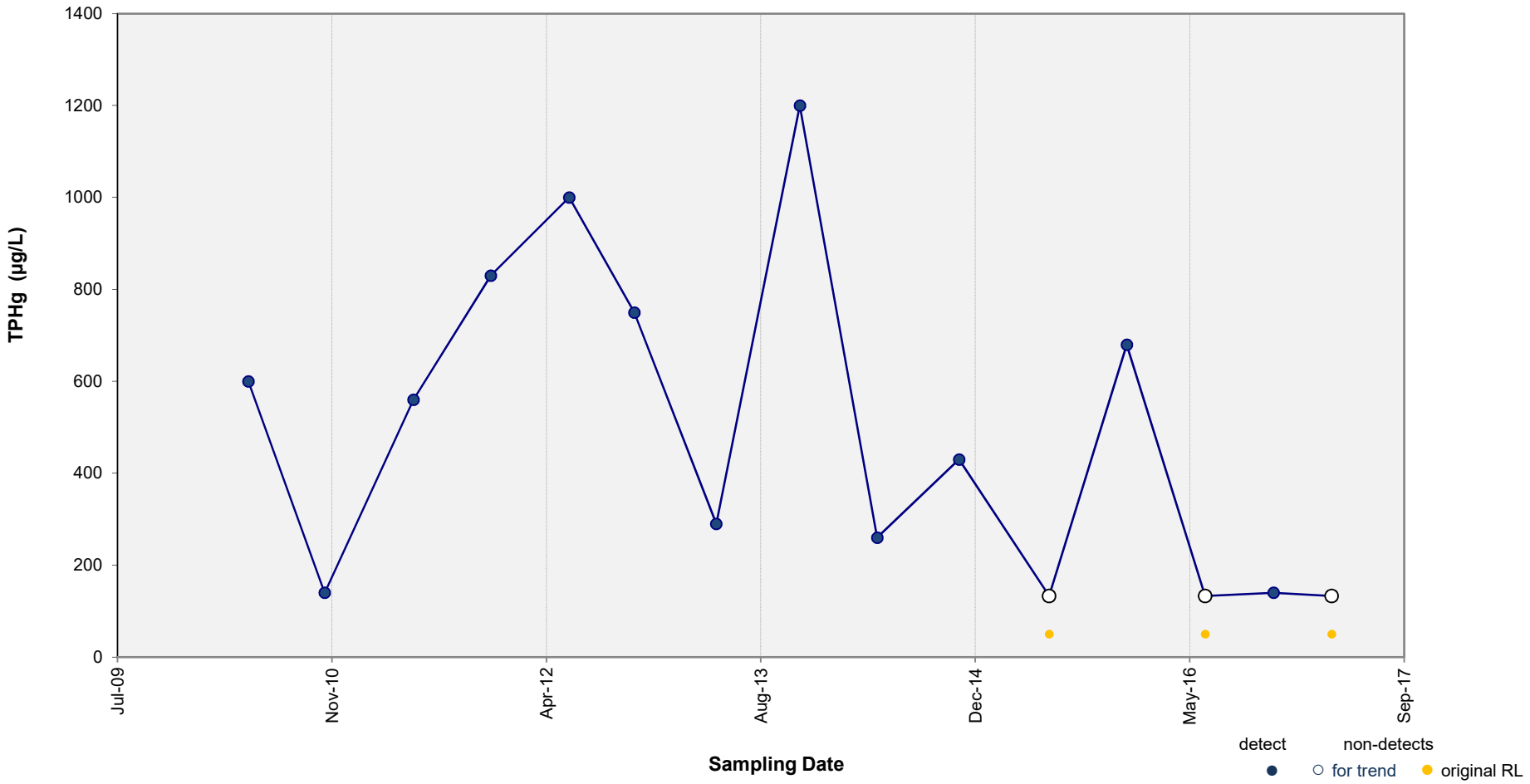
95% Confidence Interval = 0.0E+00 to 8.4E-02 ug/L Per Day

ARCADIS Design & Consultancy for natural and built assets

Concentration vs. Time Plot – TPHg at MW-2 (1990-2017)

Unocal No. 6129 (351639), Oakland, California

Figure A5



Results of Mann-Kendall Test for Trend: **DECREASING TREND**

p value = 0.037 Note: p value < 0.05 indicates a statistically significant trend (95% confidence level).

Results of Sen's Estimator of Slope: **No trend**

Median Slope Estimate = -1.8E-01 ug/L Per Day

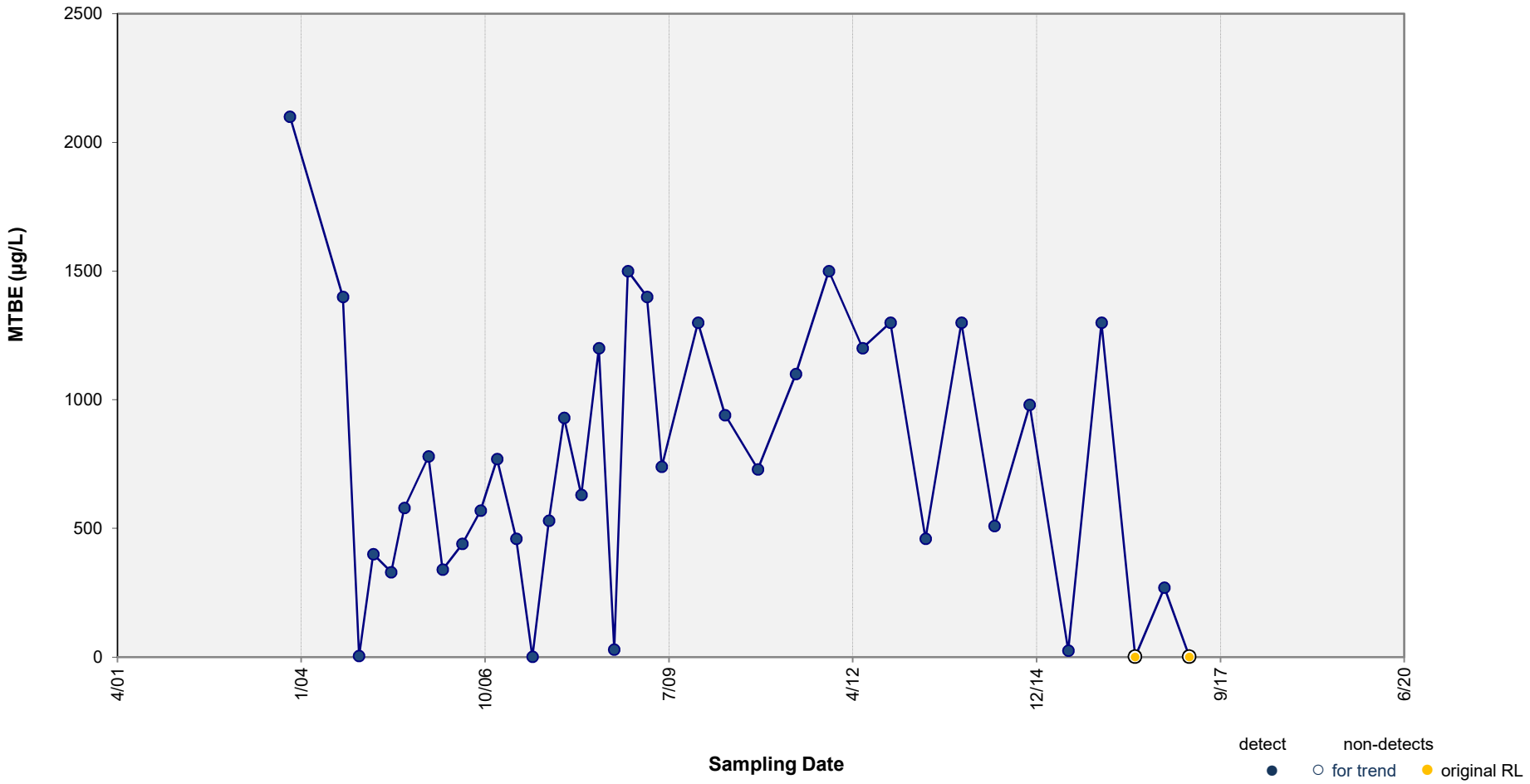
95% Confidence Interval = -3.8E-01 to 0.0E+00 ug/L Per Day

ARCADIS Design & Consultancy for natural and built assets

Concentration vs. Time Plot – TPHg at MW-2 (2010-2017)

Unocal No. 6129 (351639), Oakland, California

Figure A6



Results of Mann-Kendall Test for Trend: **No Significant Trend**

p value = 0.397 Note: p value < 0.05 indicates a statistically significant trend (95% confidence level).

Results of Sen's Estimator of Slope: **No Significant Trend**

Median Slope Estimate = 1.9E-02 ug/L Per Day

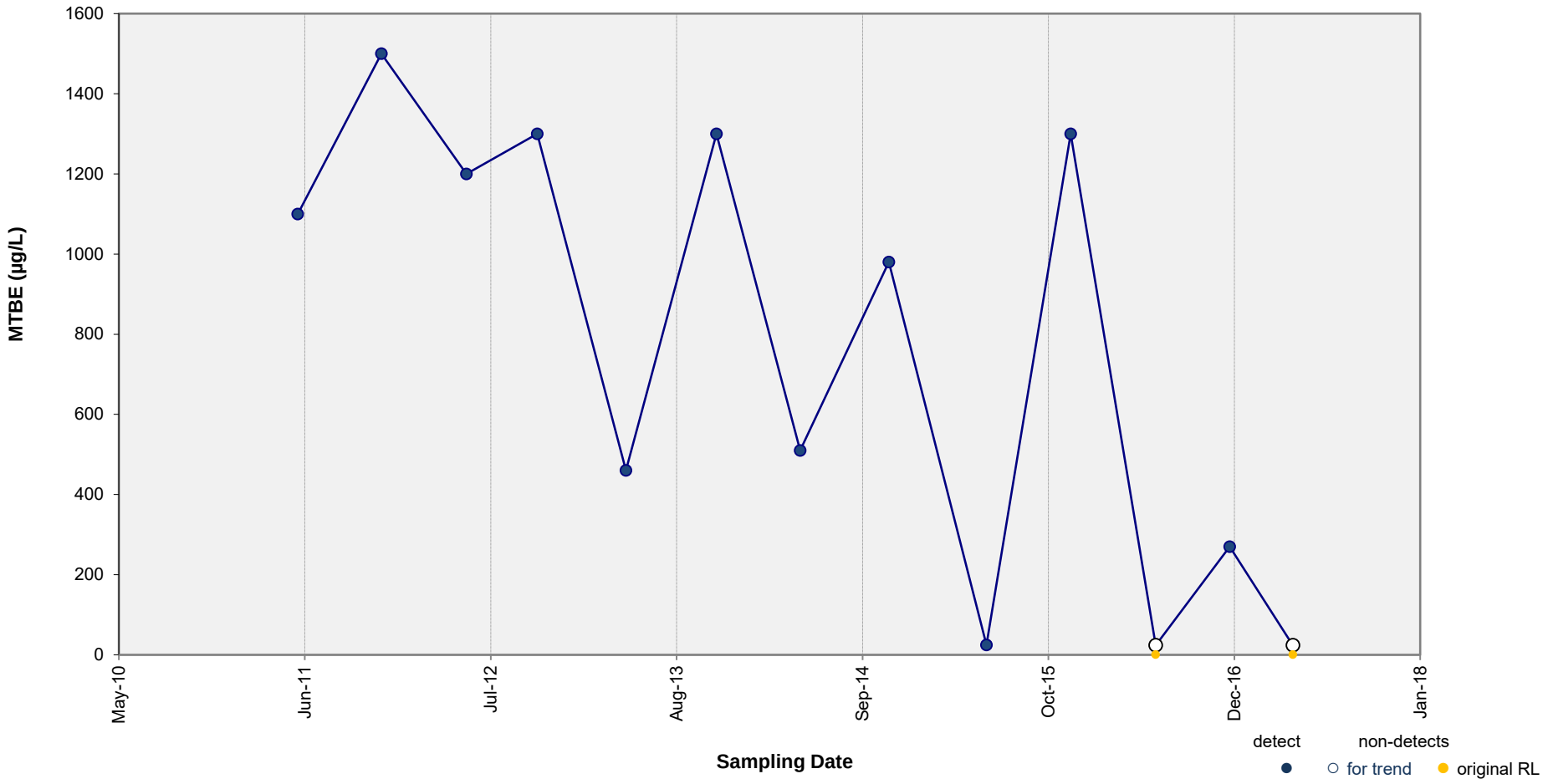
95% Confidence Interval = -1.1E-01 to 2.0E-01 ug/L Per Day

ARCADIS Design & Consultancy for natural and built assets

Concentration vs. Time Plot – MTBE at MW-2 (2003-2017)

Unocal No. 6129 (351639), Oakland, California

Figure A7



Results of Mann-Kendall Test for Trend: **DECREASING TREND**

p value = 0.011 Note: p value < 0.05 indicates a statistically significant trend (95% confidence level).

Results of Sen's Estimator of Slope: **DECREASING TREND**

Median Slope Estimate = -5.6E-01 ug/L Per Day

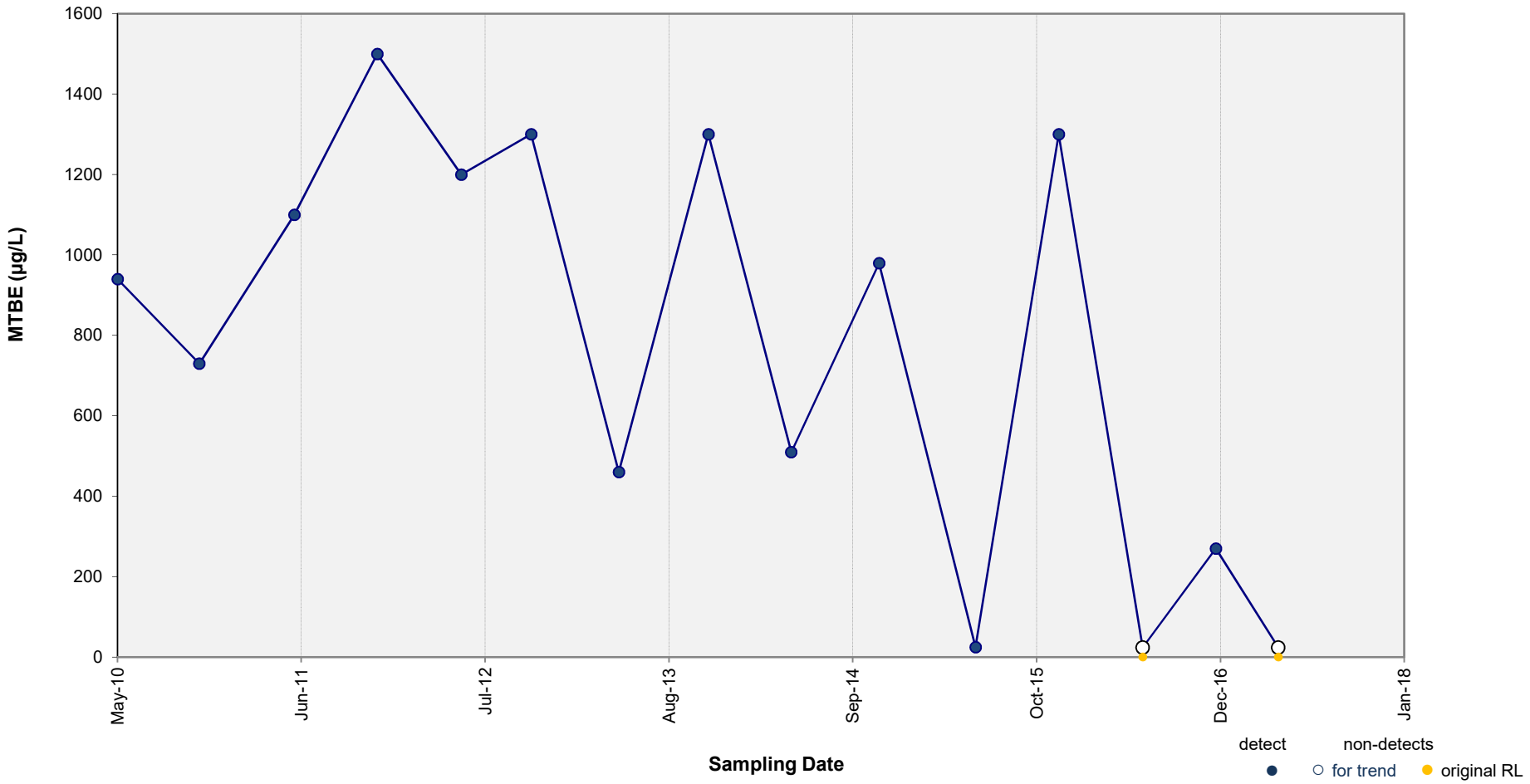
95% Confidence Interval = -9.6E-01 to -1.0E-02 ug/L Per Day

ARCADIS

Concentration vs. Time Plot – MTBE at MW-2 (2011-2017)

Unocal No. 6129 (351639), Oakland, California

Figure A7A



Results of Mann-Kendall Test for Trend: **DECREASING TREND**

p value = 0.037 Note: p value < 0.05 indicates a statistically significant trend (95% confidence level).

Results of Sen's Estimator of Slope: **No trend**

Median Slope Estimate = -3.6E-01 ug/L Per Day

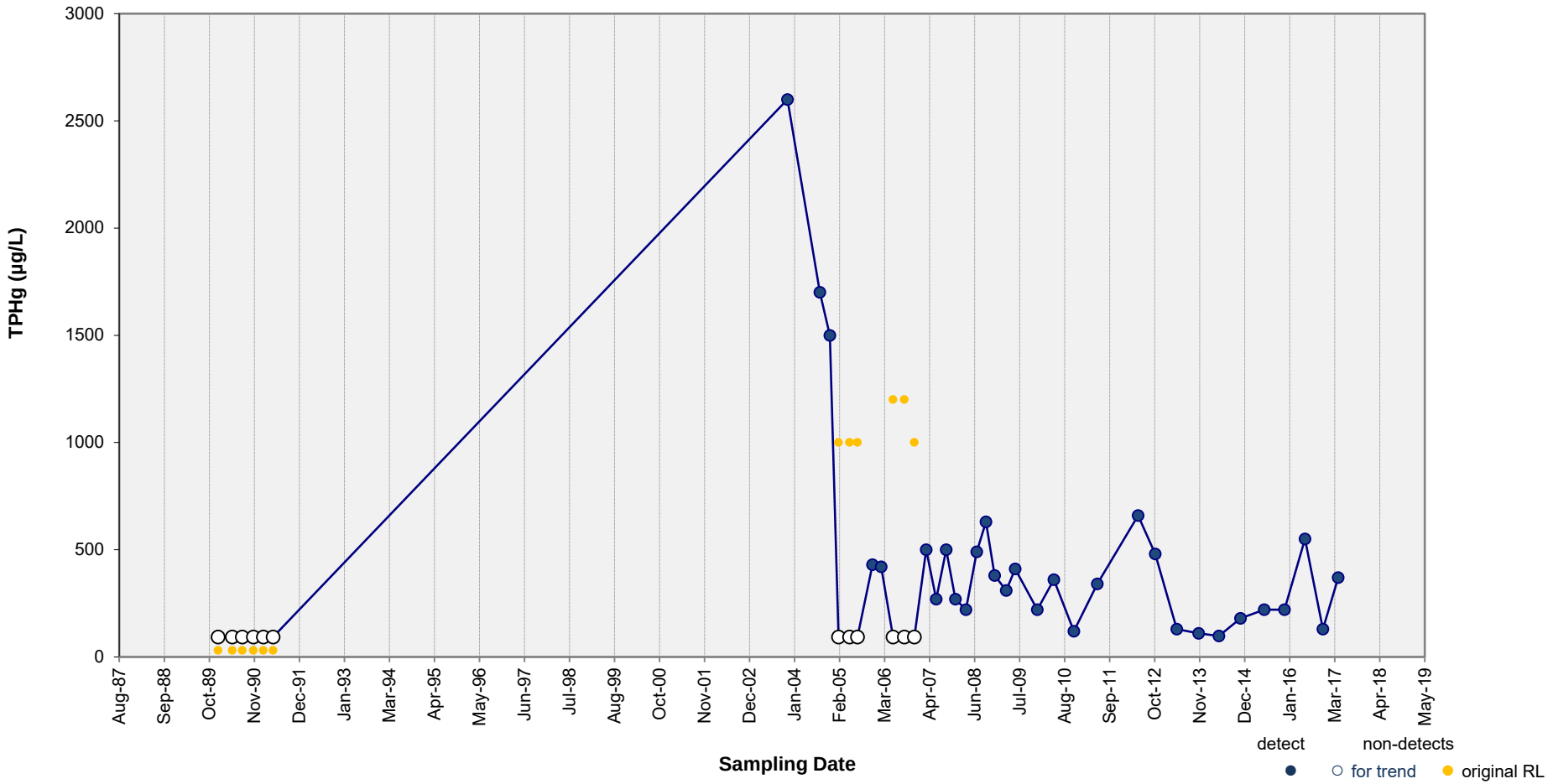
95% Confidence Interval = -7.3E-01 to 0.0E+00 ug/L Per Day

ARCADIS Design & Consultancy for natural and built assets

Concentration vs. Time Plot – MTBE at MW-2 (2010-2017)

Unocal No. 6129 (351639), Oakland, California

Figure A8



Results of Mann-Kendall Test for Trend: **No Significant Trend**

p value = 0.075 Note: p value < 0.05 indicates a statistically significant trend (95% confidence level).

Results of Sen's Estimator of Slope: **No trend**

Median Slope Estimate = 3.9E-03 ug/L Per Day

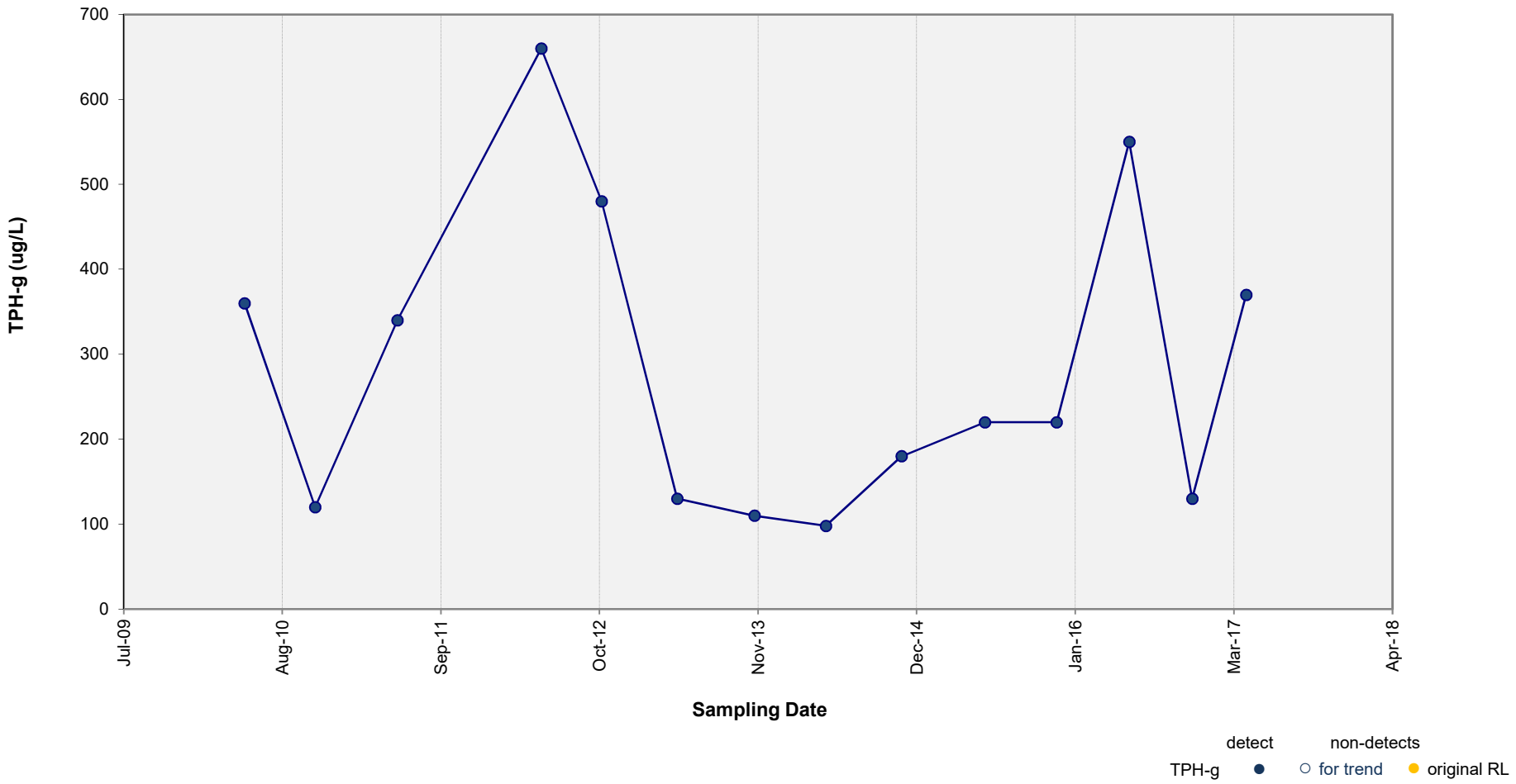
95% Confidence Interval = 0.0E+00 to 2.9E-02 ug/L Per Day

ARCADIS

Concentration vs. Time Plot – TPHg at MW-3 (1990-2017)

Unocal No. 6129 (351639), Oakland, California

Figure A9



Results of Mann-Kendall Test for Trend: **No Significant Trend**

p value = 0.500 Note: p value < 0.05 indicates a statistically significant trend (95% confidence level).

Results of Sen's Estimator of Slope: **No Significant Trend**

Median Slope Estimate = 0.0E+00 ug/L Per Day

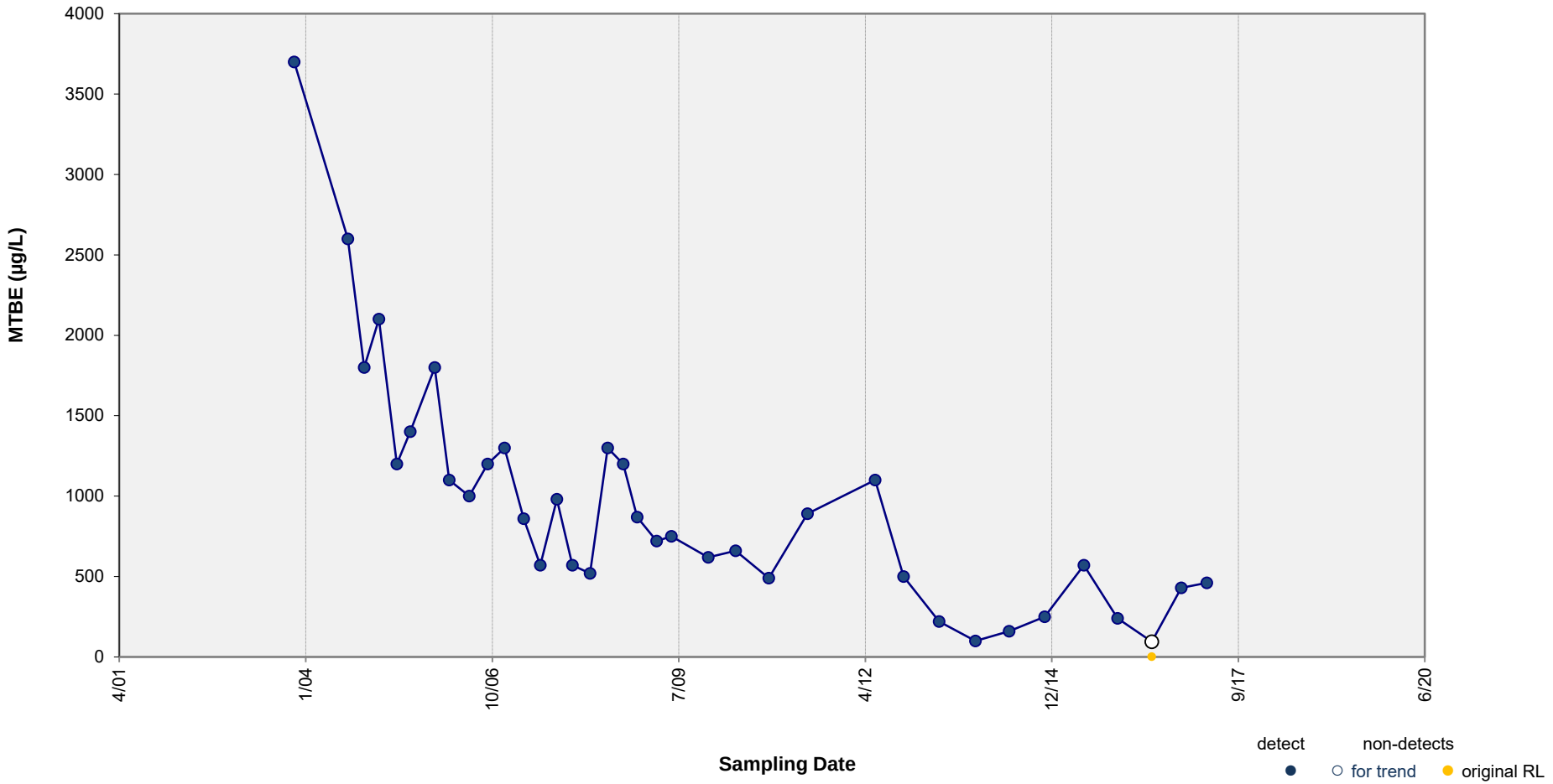
90% Confidence Interval = -1.4E-01 to 1.2E-01 ug/L Per Day

ARCADIS

Concentration vs. Time Plot – TPH-g in MW-3 (2010-2017)

Unocal No. 6129, Oakland, CA

Figure A10



Results of Mann-Kendall Test for Trend: **DECREASING TREND**

p value = <0.001 Note: p value < 0.05 indicates a statistically significant trend (95% confidence level).

Results of Sen's Estimator of Slope: **DECREASING TREND**

Median Slope Estimate = -3.4E-01 ug/L Per Day

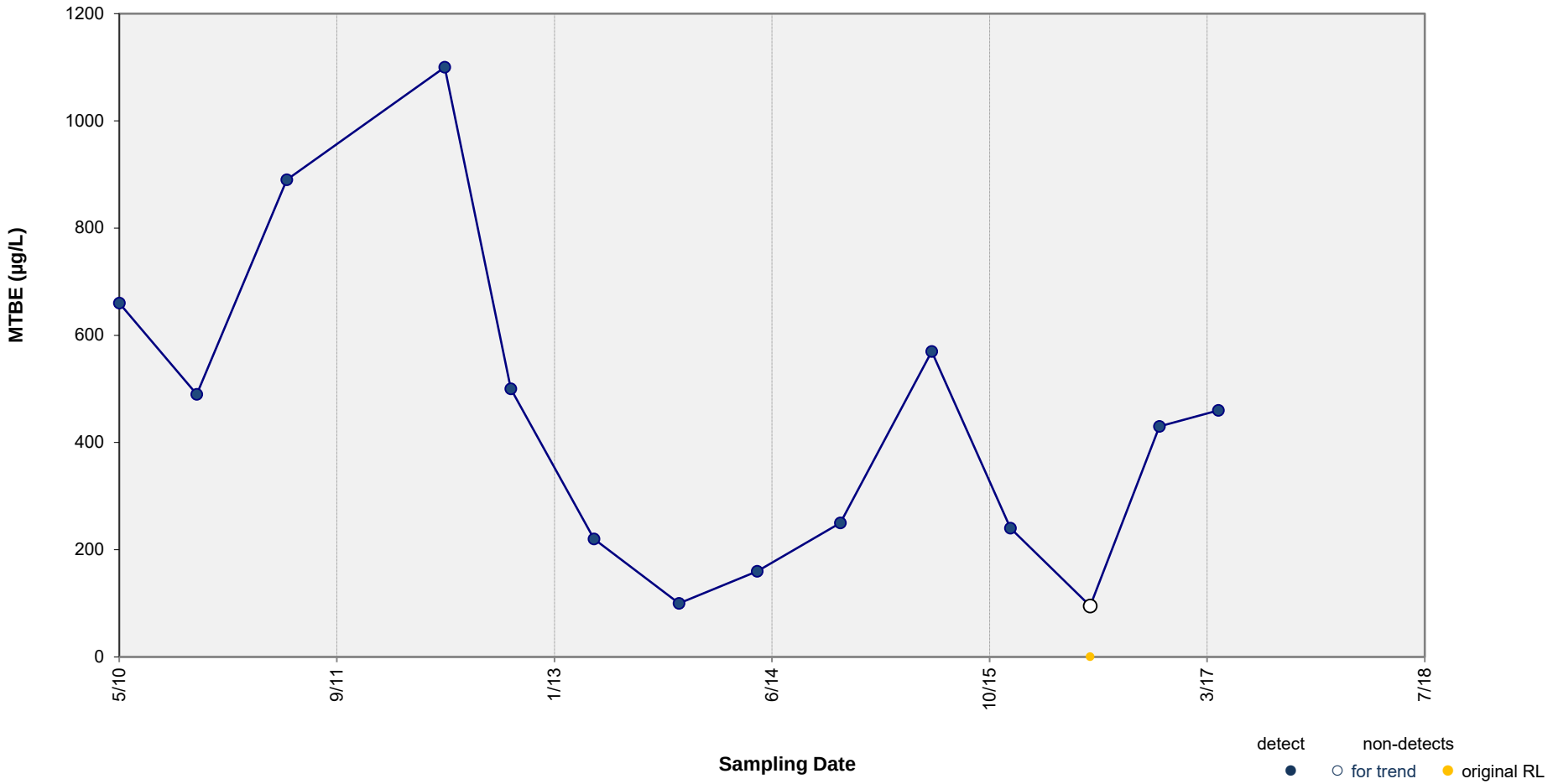
95% Confidence Interval = -4.5E-01 to -2.5E-01 ug/L Per Day

ARCADIS

Concentration vs. Time Plot – MTBE at MW-3 (2003-2017)

Unocal No. 6129 (351639), Oakland, California

Figure A11



Results of Mann-Kendall Test for Trend: **DECREASING TREND**

p value = 0.077 Note: p value < 0.1 indicates a statistically significant trend (90% confidence level).

Results of Sen's Estimator of Slope: **No Significant Trend**

Median Slope Estimate = -1.6E-01 ug/L Per Day

90% Confidence Interval = -3.2E-01 to 1.8E-02 ug/L Per Day

ARCADIS

Concentration vs. Time Plot – MTBE at MW-3 (2010-2017)

Unocal No. 6129 (351639), Oakland, California

Figure A12

APPENDIX B

Report of Groundwater Monitoring, Fourth Quarter 2016, Former Exxon RAS #70234, 3450 35th Avenue, Oakland, California

(Text and Selected Tables and Figures)

ExxonMobil

February 2, 2017

Mr. Keith Nowell
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Subject: **Report of Groundwater Monitoring, Fourth Quarter 2016**
Former Exxon RAS #70234
3450 35th Avenue, Oakland, California
ACHCSA File No. RO0002515

Dear Mr. Nowell:

Attached for your review and comment is a copy of the *Report of Groundwater Monitoring, Fourth Quarter 2016* for the above-referenced site. The document, prepared by ETIC Engineering, Inc. of Pasadena, California, details the results of the December 2016 sampling event.

Upon information and belief, I declare, under penalty of perjury, that the information contained in the attached document is true and correct.

If you have any questions or comments, please contact me at (510) 547-8196.

Sincerely,

Jennifer C. Sedlachek
Project Manager

Attachment: ETIC's Fourth Quarter 2016 Groundwater Monitoring Report

c: w/ attachment:
Mr. Zack Spencer, FWS Highland LLC, 99 South Hill Drive, Brisbane, CA 94005
Mr. Shay Wideman, The Valero Companies, Environ. Liability Mgt., P.O. Box 696000, San Antonio, TX 78269

c: w/o attachment:
Ms. Kate Lamb, ETIC Engineering, Inc.

Report of Groundwater Monitoring

Fourth Quarter 2016

Former Exxon Service Station 70234
3450 35th Avenue
Oakland, California

Prepared for

ExxonMobil Oil Corporation

Prepared by

ETIC Engineering, Inc.
898 North Fair Oaks Avenue, Suite A
Pasadena, California 91103
(626) 432-5999

2/2/17

Kate Lamb
Senior Project Manager
Date

Ryan Haughy, P.G. #7851
Program Manager

PROFESSIONAL GEOLOGIST
RYAN R. HAUGHY
No. 7851
exp 7/31/17
STATE OF CALIFORNIA

2/2/17
Date

February 2017

INTRODUCTION

ETIC Engineering, Inc. (ETIC) has prepared this semiannual groundwater monitoring report for ExxonMobil Environmental Services Company on behalf of ExxonMobil Oil Corporation (ExxonMobil) for Former Exxon Service Station 70234. This report presents the results for the most recent groundwater monitoring conducted at the site and summarizes recent site activities. This report covers site activities conducted between 16 June 2016, the date of the previous monitoring event, and 20 December 2016, the date of the most recent monitoring event. Groundwater monitoring results, well construction details, and a groundwater monitoring plan are provided in the attached figures and tables. Groundwater monitoring protocols, field data, and analytical results are provided in the attached appendixes, including groundwater data for Unocal No. 6129, located across Quigley Street southwest of site 70234.

GENERAL SITE INFORMATION

Site name:	Former Exxon Service Station 70234
Site address:	3450 35th Avenue, Oakland, California
Current property owner:	Mr. Zack Spencer
Current site use:	Vacant
Current phase of project:	Groundwater monitoring
Number of groundwater monitoring wells:	7

GROUNDWATER MONITORING SUMMARY

Gauging and sampling date:	20 December 2016
Wells gauged and sampled:	MW4, MW5, MW6, MW7, MW8, and RW1
Wells gauged only:	None
Wells inaccessible:	MW9 due to a locked gate
Groundwater flow direction:	Southwest
Hydraulic gradient:	0.038
Well screens submerged:	MW4 and MW8
Well screens not submerged:	MW5, MW6, MW7, and RW1
Liquid-phase hydrocarbons:	Not observed or detected
Laboratory:	Eurofins Calscience Environmental Laboratories, Inc., Garden Grove, California
Concurrently sampled:	Unocal No. 6129, 3420 35th Avenue
Unocal Data provided by:	Arcadis, Seattle, Washington

Analyses performed:

- Total Petroleum Hydrocarbons as gasoline by EPA Method 8015B (M)
- Benzene, toluene, ethylbenzene, and xylenes by EPA Method 8260B
- Methyl tertiary butyl ether, tertiary butyl alcohol, diisopropyl ether, ethyl tertiary butyl ether, tertiary amyl methyl ether, 1,2-dibromoethane, and 1,2-dichloroethane by EPA Method 8260B

Waste disposal:

- 40.5 gallons of purge water was stored in a 55-gallon drum and was then delivered to Instrat, Inc. of Rio Vista, California on 20 December 2016.

ADDITIONAL ACTIVITIES PERFORMED

None.

WORK PROPOSED FOR NEXT QUARTER

In accordance with ACHCSA directives, groundwater monitoring will not be conducted in the first quarter of 2017. The next semiannual groundwater monitoring event will be conducted in the second quarter of 2017.

Attachments:

Figure 1: Site Location and Topographic Map
Figure 2: Site Map
Figure 3: Groundwater Elevation Contour Map
Figure 4: Groundwater Analytical Data

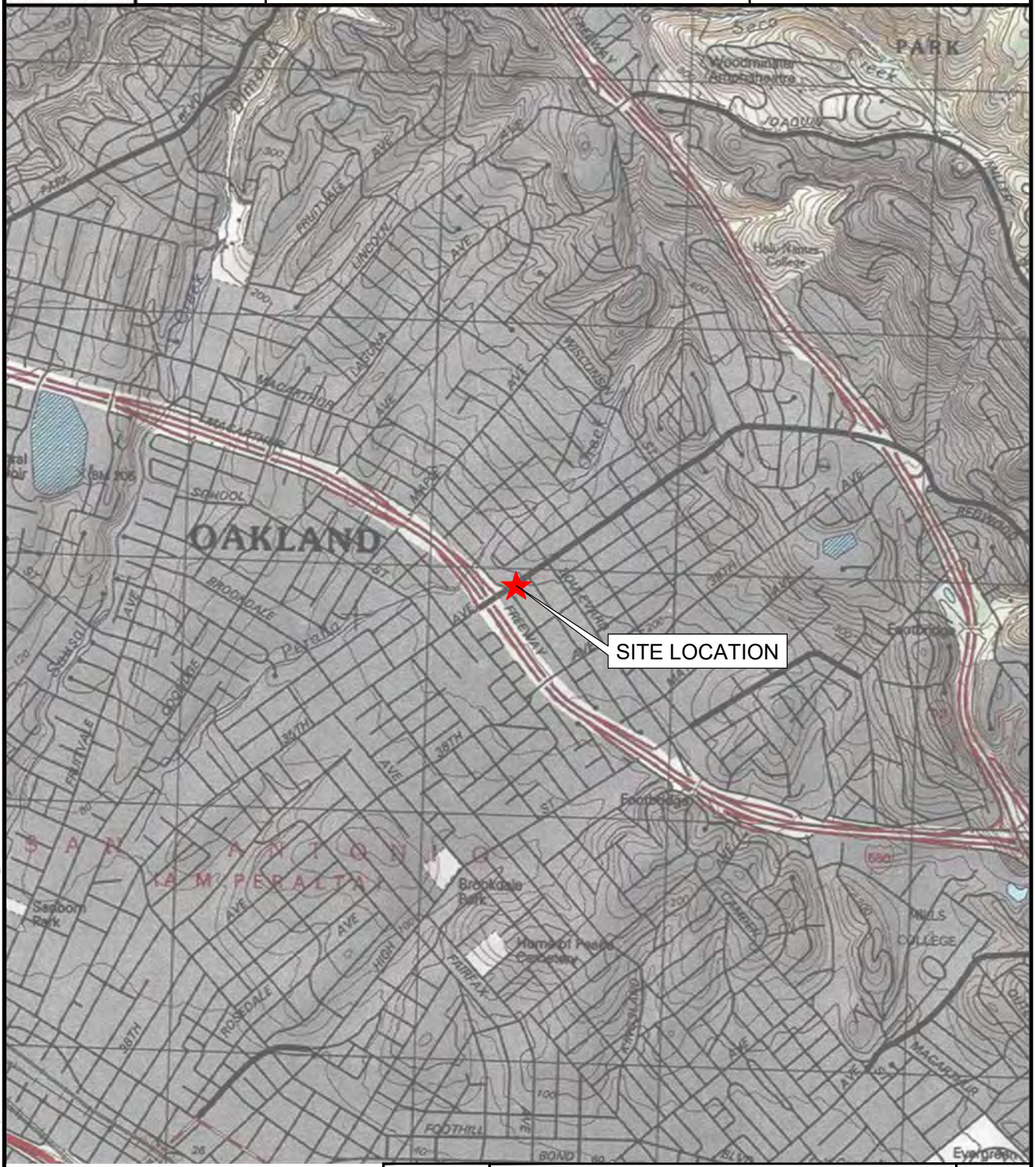
Table 1: Well Construction Details
Table 2: Current Groundwater Monitoring Data
Table 3: Historical Groundwater Monitoring Data
Table 4: Groundwater Analytical Results for Detected VOCs
Table 5: Natural Attenuation Parameter Analytical Results
Table 5: Groundwater Monitoring Plan

Appendix A: Field Protocols
Appendix B: Field Documents
Appendix C: Waste Manifest
Appendix D: Laboratory Analytical Reports and Chain-of-Custody Documentation
Appendix E: Groundwater Monitoring and Sampling Data for Unocal No. 6129

SITE CONTACTS

Site Name:	Former Exxon Service Station 70234
Site Address:	3450 35th Avenue Oakland, California
ExxonMobil Project Manager:	Jennifer C. Sedlachek ExxonMobil Environmental Services Company 4096 Piedmont Avenue #194 Oakland, California 94611 (510) 547-8196
Consultant to ExxonMobil:	ETIC Engineering, Inc. 898 North Fair Oaks Avenue, Suite A Pasadena, California 91103 (626) 432-5999
ETIC Project Manager:	Kate Lamb
Regulatory Oversight:	Keith Nowell Alameda County Health Care Services Agency 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502-6577 (510) 567-6764

Figures



COORDINATE SYSTEM: NAD 1983 HARN CALIFORNIA TEALE ALBERS
PROJECTION: ALBERS
DATUM: NORTH AMERICAN 1983 HARN
FALSE EASTING: 0.0000
FALSE NORTHING: -4,000,000.0000
CENTRAL MERIDIAN: -120.0000
STANDARD PARALLEL 1: 34.0000
STANDARD PARALLEL 2: 40.5000
LATITUDE OF ORIGIN: 0.0000
UNITS: METER

16-070234-UP	EXXONMOBIL OIL CORPORATION
OR: AF	SITE LOCATION AND TOPOGRAPHIC MAP FORMER EXXON SERVICE STATION 70234 3450 35th AVENUE
DR: AJW	
CK:	
FR:	OAKLAND, CALIFORNIA

FIGURE: 1

ETIC ENGINEERING
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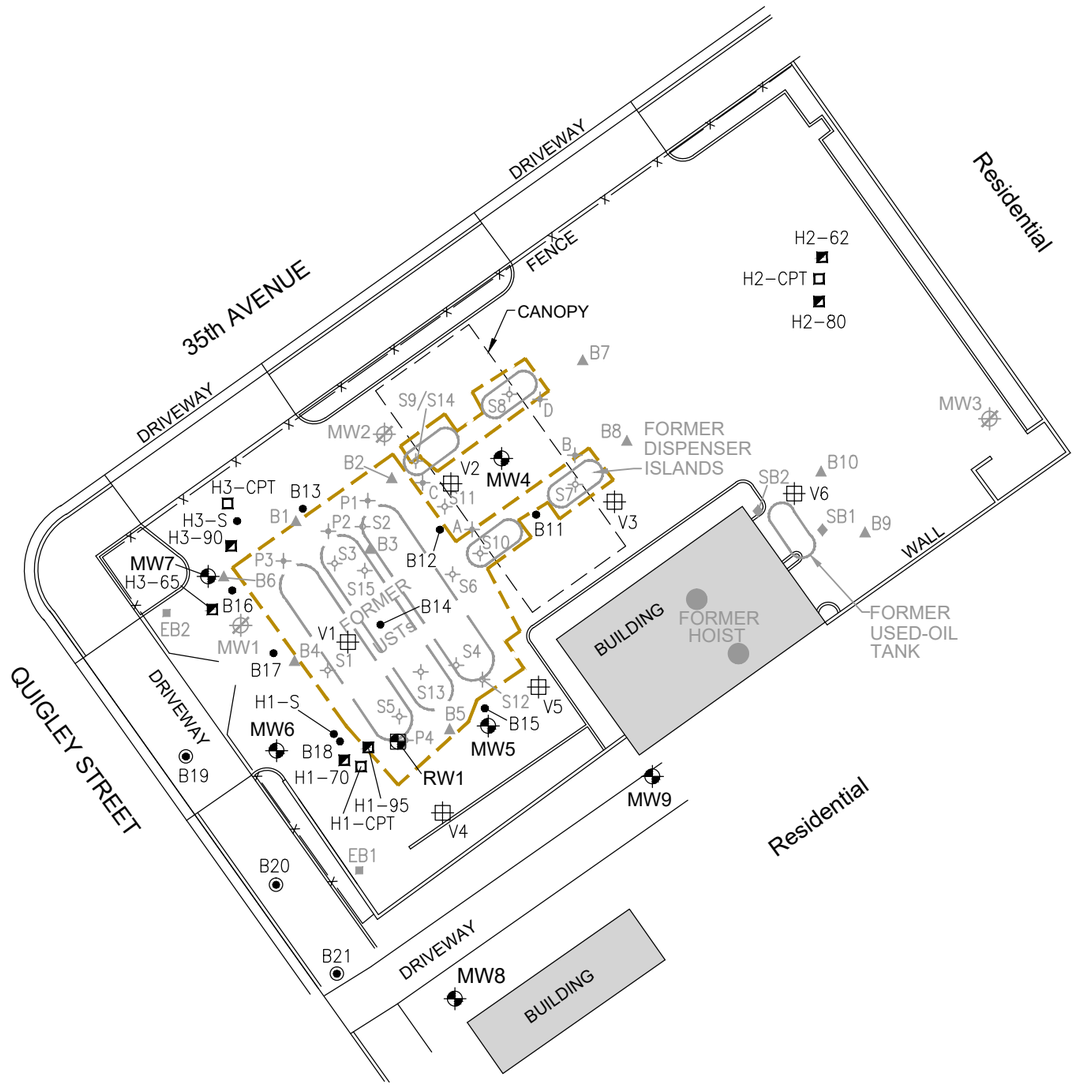

LEGEND:

- EXCAVATED AREA
- GROUNDWATER MONITORING WELL
- GROUNDWATER MONITORING WELL (by others)
- DESTROYED GROUNDWATER MONITORING WELL
- GROUNDWATER RECOVERY WELL
- V1 SOIL VAPOR MONITORING WELL
- H3-CPT CONE PENETROMETER TESTING BORING
- H3-65 HYDROPUNCH GROUNDWATER SAMPLING LOCATION (WITH DEPTH BELOW GROUND SURFACE NOTED)
- H3-S SOIL BORING
- SOIL BORING (GTI, 1986)
- SOIL BORING (HLA, 1988)
- SOIL BORING (Alton, 1991)
- SOIL SAMPLE (Alton, 1991)
- SOIL SAMPLE (TRC, 2002)
- SOIL BORING (ERI, 2007)
- SOIL BORING (ERI, 2009)

N

0 15 30

1″ = 30 FEET

01/30/2017, 16:27, G:\Graphics\16\070234\QMR-4Q16.dwg, Tab: F2

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16-070234-UP	
OR:	AF
DR:	AJW
CK:	
FR:	

EXXONMOBIL OIL CORPORATION

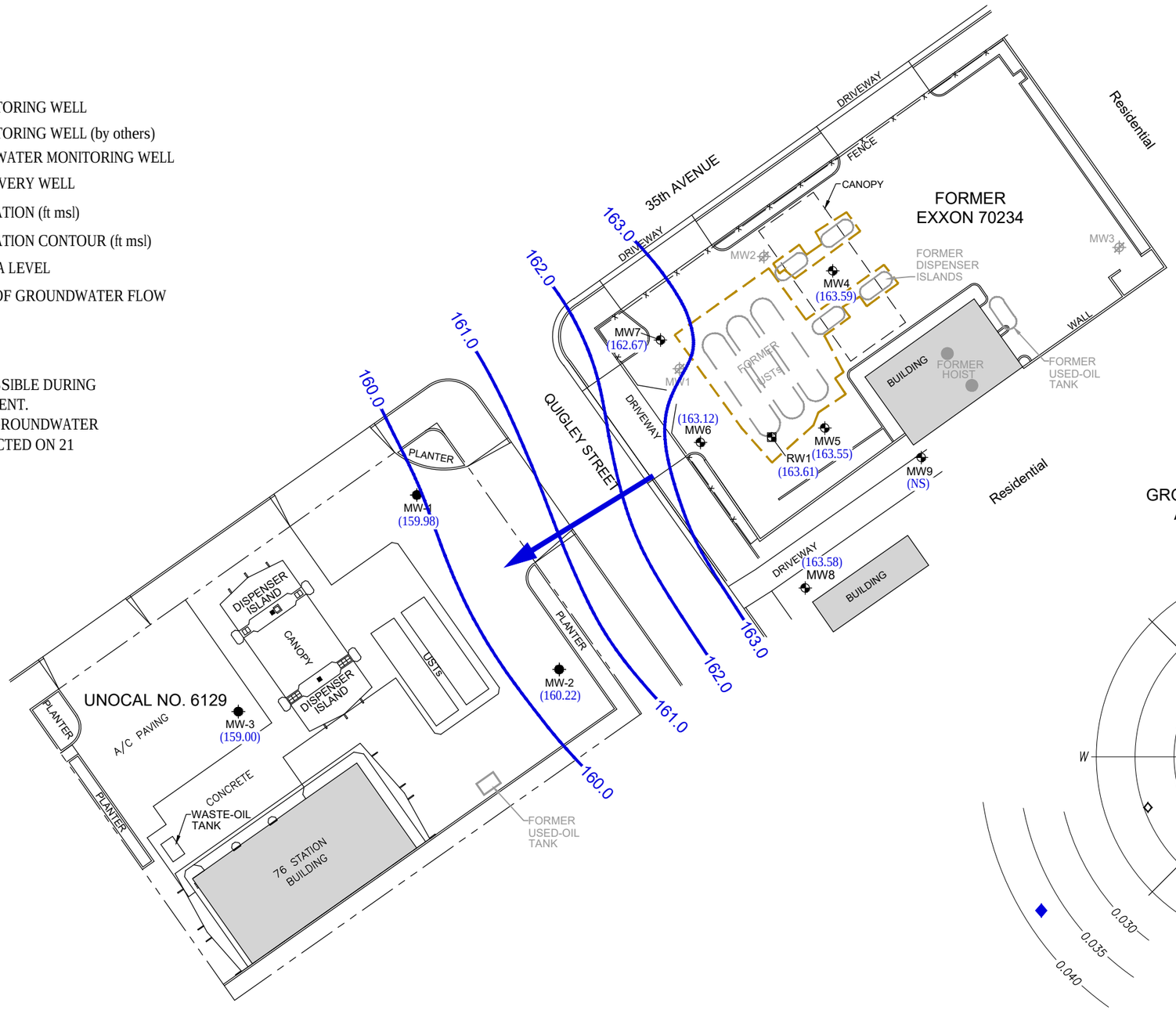
SITE MAP
FORMER EXXON SERVICE STATION 70234
3450 35th AVENUE
OAKLAND, CALIFORNIA

FIGURE: 2

LEGEND:

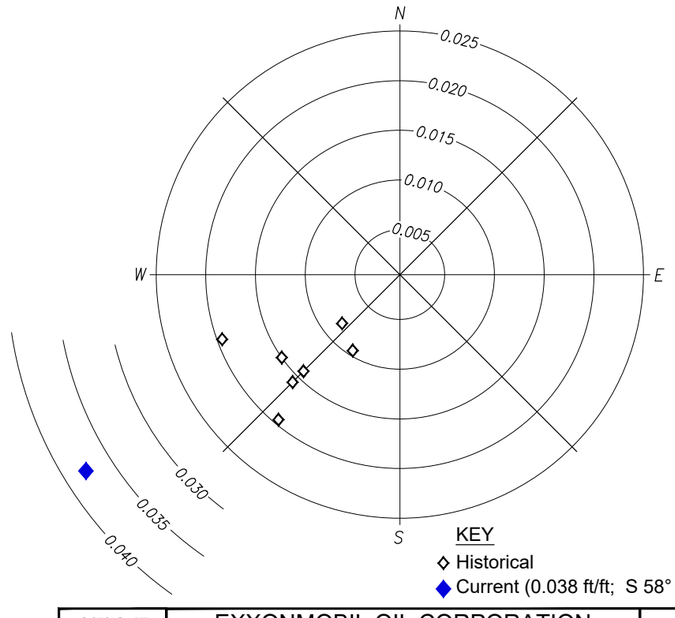
- EXCAVATED AREA
- GROUNDWATER MONITORING WELL
- GROUNDWATER MONITORING WELL (by others)
- DESTROYED GROUNDWATER MONITORING WELL
- GROUNDWATER RECOVERY WELL
- (163.59) GROUNDWATER ELEVATION (ft msl)
- 164.0 GROUNDWATER ELEVATION CONTOUR (ft msl)
- ft msl FEET ABOVE MEAN SEA LEVEL
- GENERAL DIRECTION OF GROUNDWATER FLOW
- NS NOT SAMPLED

NOTES:
1. MW9 WAS INACCESSIBLE DURING THIS SAMPLING EVENT.
2. UNOCAL No. 6129 GROUNDWATER SAMPLING CONDUCTED ON 21 NOVEMBER 2016.



0 20 40
1″ = 40 FEET

GROUNDWATER FLOW DIRECTION AND HYDRAULIC GRADIENT



KEY
- ◇ Historical
- ◆ Current (0.038 ft/ft; S 58° W)

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16-070234-UP	EXXONMOBIL OIL CORPORATION
OR: AF	GROUNDWATER ELEVATION CONTOUR MAP
DR: AJW	20 DECEMBER 2016
CK:	FORMER EXXON SERVICE STATION 70234
FR:	3450 35th AVENUE
	OAKLAND, CALIFORNIA
	FIGURE: 3

LEGEND:

EXCAVATED AREA

GROUNDWATER MONITORING WELL

GROUNDWATER MONITORING WELL (by others)

DESTROYED GROUNDWATER MONITORING WELL

GROUNDWATER RECOVERY WELL

TPH-g TOTAL PETROLEUM HYDROCARBONS AS GASOLINE

MTBE METHYL TERTIARY BUTYL ETHER

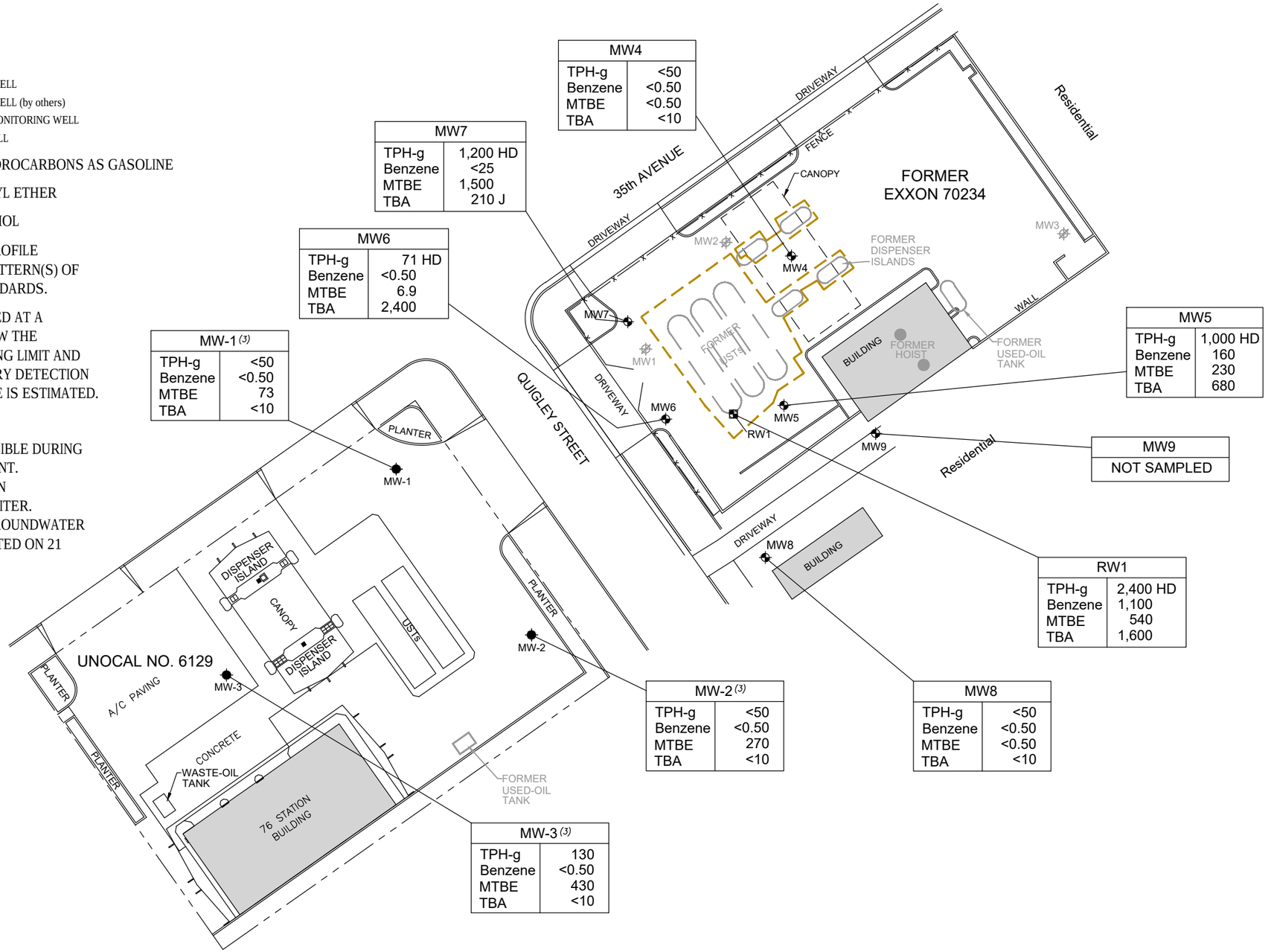
TBA TERTIARY BUTYL ALCOHOL

HD CHROMATOGRAPHIC PROFILE INCONSISTENT WITH PATTERN(S) OF REFERENCE FUEL STANDARDS.

J ANALYTE WAS DETECTED AT A CONCENTRATION BELOW THE LABORATORY REPORTING LIMIT AND ABOVE THE LABORATORY DETECTION LIMIT. REPORTED VALUE IS ESTIMATED.

NOTES:

1. MW9 WAS INACCESSIBLE DURING THIS SAMPLING EVENT.
2. CONCENTRATIONS IN MICROGRAMS PER LITER.
3. UNOCAL No. 6129 GROUNDWATER SAMPLING CONDUCTED ON 21 NOVEMBER 2016.



16-070234-UP	EXXONMOBIL OIL CORPORATION
	GROUNDWATER ANALYTICAL DATA
OR: AF	20 DECEMBER 2016
DR: AJW	FORMER EXXON SERVICE STATION 70234
CK:	3450 35th AVENUE
FR:	OAKLAND, CALIFORNIA
	FIGURE: 4

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Tables

TABLE 1 WELL CONSTRUCTION DETAILS,
FORMER EXXON SERVICE STATION 70234,
3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date Installed	Date Destroyed	Elevation TOC (feet)	Borehole Diameter (inches)	Total Depth of Boring (feet bgs)	Well Depth (feet bgs)	Casing Diameter (inches)	Casing Material	Screened Interval (feet bgs)	Slot Size (inches)	Filter Pack Interval (feet bgs)	Filter Pack Material
MW1	07/15/92	06/00	192.00	11	45	45	4	Sch. 40 PVC	25-45	0.010	23-45	2/12 Lonestar Sand
MW2	07/15/92	06/00	194.85	11	45	45	4	Sch. 40 PVC	25-45	0.010	23-45	2/12 Lonestar Sand
MW3	07/15/92	06/00	196.90	11	45	45	4	Sch. 40 PVC	25-45	0.010	23-45	2/12 Lonestar Sand
MW4	03/02/09	---	197.62	8	45	45	2	Sch. 40 PVC	35-45	0.020	33-45	#3 Sand
MW5	03/06/09	---	196.35	8	40	40	2	Sch. 40 PVC	30-40	0.020	28-40	#3 Sand
MW6	03/09/09	---	192.41	8	40	39	2	Sch. 40 PVC	29-39	0.020	27-39	#3 Sand
MW7	03/09/09	---	194.34	8	40	40	2	Sch. 40 PVC	30-40	0.020	28-40	#3 Sand
MW8	03/04/09	---	192.96	8	40	40	2	Sch. 40 PVC	30-40	0.020	28-40	#3 Sand
MW9	03/05/09	---	195.16	8	40	40	2	Sch. 40 PVC	30-40	0.020	28-40	#3 Sand
RW1	12/22/11	---	195.15	10	40	40	4	Stainless Steel	25-39.5	0.020	23-40	#2/12 Sand

TOC Top of well casing elevation; datum is mean sea level.
PVC Polyvinyl chloride.
feet bgs Feet below ground surface.
--- Not applicable.

Notes: Data prior to 2013 provided by Cardno ERI.

TABLE 3 HISTORICAL GROUNDWATER MONITORING DATA,
FORMER EXXON SERVICE STATION 70234,
3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date	Elevation TOC (feet)	Depth to Water (feet below TOC)	Groundwater Elevation (feet)	LPH Thickness (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8260B (µg/L)	Total Pb (µg/L)	Organic Pb (mg/L)
MW1	SCREEN INTERVAL (feet bgs) 25-45												
MW1	07/15/92	---	Well installed.										
MW1	07/17/92	192.00	33.02	158.98	0.00	67	6.6	6.9	2.0	4.5	---	17	---
MW1	10/22/92	192.00	34.07	157.93	0.00	<50	2.9	<0.5	<0.5	<0.5	---	16	---
MW1	02/04/93	192.00	29.43	162.57	0.00	<50	0.8	<0.5	<0.5	<0.5	---	4	---
MW1	05/03/93	192.00	29.72	162.28	0.00	71	2.8	7.2	2.2	22	---	40	---
MW1	07/30/93	192.00	32.95	159.05	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	5	---
MW1	10/19/93	192.00	34.34	157.66	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	12	---
MW1	02/23/94	192.00	31.72	160.28	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	4	---
MW1	06/06/94	192.00	31.77	160.23	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	<3	---
MW1	08/18/94	192.00	33.76	158.24	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	130	---
MW1	11/15/94	192.00	34.08	157.92	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	<3.0	<100
MW1	02/06/95	192.00	28.50	163.50	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
MW1	05/10/95	192.00	29.30	162.70	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
MW1	09/20/99	192.00	33.30	158.70	0.00	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<75	<50
MW1	Well destroyed in June 2000.												
MW2	SCREEN INTERVAL (feet bgs) 25-45												
MW2	07/15/92	---	Well installed.										
MW2	07/17/92	194.85	34.65	160.20	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	<3	---
MW2	10/22/92	194.85	35.64	159.21	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	--	---
MW2	02/04/93	194.85	31.13	163.72	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	<3	---
MW2	05/03/93	194.85	31.08	163.77	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	3	---
MW2	07/30/93	194.85	34.34	160.51	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	14	---
MW2	10/19/93	194.85	36.00	158.85	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	<3	---
MW2	02/23/94	194.85	33.92	160.93	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	<3	---
MW2	06/06/94	194.85	33.50	161.35	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	<3	---
MW2	08/18/94	194.85	35.38	159.47	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	<3.0	---
MW2	11/15/94	194.85	35.93	158.92	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	<3.0	<100
MW2	02/06/95	194.85	30.38	164.47	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
MW2	05/10/95	194.85	30.77	164.08	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
MW2	09/20/99	194.85	35.15	159.70	0.00	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<75	<0.5
MW2	Well destroyed in June 2000.												
MW3	SCREEN INTERVAL (feet bgs) 25-45												
MW3	07/15/92	---	Well installed.										
MW3	07/17/92	196.90	37.24	159.66	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	50	---
MW3	10/22/92	196.90	35.95	160.95	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	9	---
MW3	02/04/93	196.90	29.85	167.05	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	<3	---
MW3	05/03/93	196.90	29.87	167.03	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	3	---
MW3	07/30/93	196.90	33.85	163.05	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	22	---
MW3	10/19/93	196.90	35.89	161.01	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	12	---
MW3	02/23/94	196.90	32.88	164.02	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	25	---

TABLE 3 HISTORICAL GROUNDWATER MONITORING DATA,
FORMER EXXON SERVICE STATION 70234,
3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date		Elevation TOC (feet)	Depth to Water (feet below TOC)	Groundwater Elevation (feet)	LPH Thickness (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8260B (µg/L)	Total Pb (µg/L)	Organic Pb (mg/L)
MW3	06/06/94		196.90	32.40	164.50	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	<3	---
MW3	08/18/94		196.90	35.07	161.83	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	<3.0	---
MW3	11/15/94		196.90	35.97	160.93	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	<3.0	<100
MW3	02/06/95		196.90	28.39	168.51	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
MW3	05/10/95		196.90	28.90	168.00	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
MW3	09/20/99		196.90	34.68	162.22	0.00	75.0	<0.5	11.5	1.8	18.0	1.87	<75	<0.5
MW3	Well destroyed in June 2000.													
MW4	SCREEN INTERVAL (feet bgs) 35-45													
MW4	03/02/09		---	Well installed.										
MW4	03/30/09		197.62	30.94	166.68	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW4	04/02/09		197.62	Well surveyed.										
MW4	05/28/09		197.62	32.00	165.62	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW4	08/31/09		197.62	35.43	162.19	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW4	12/11/09		197.62	35.01	162.61	0.00	<50	<0.50	0.83	<0.50	1.1	<0.50	---	---
MW4	05/07/10		197.62	29.11	168.51	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	---	---
MW4	11/01/10		197.62	34.95	162.67	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	---	---
MW4	05/27/11	a	197.62	30.65	166.97	0.00	---	---	---	---	---	---	---	---
MW4	11/23/11		197.62	33.49	164.13	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	---	---
MW4	05/24/12		197.62	30.02	167.60	0.00	58	0.84	4.4	0.64c	3.5	<0.50	---	---
MW4	10/31/12		197.62	35.14	162.48	0.00	110	5.3	45	4.2	21	<0.50	---	---
MW4	05/02/13	e	197.62	32.03	165.59	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW4	11/09/13		197.62	36.53	161.09	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW4	05/12/14	a	197.62	33.51	164.11	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW4	11/19/14	a	197.62	36.96	160.66	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW4	05/13/15	a	197.62	34.01	163.61	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW4	12/16/15	a	197.62	37.31	160.31	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW4	06/15/16	a	197.62	34.13	163.49	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW4	**12/20/16**	**a**	**197.62**	**34.03**	**163.59**	**0.00**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**---**	**---**
MW5	SCREEN INTERVAL (feet bgs) 30-40													
MW5	03/06/09		---	Well installed.										
MW5	03/30/09		196.35	30.05	166.30	0.00	4,200	540	140	<12	310	1,900		
MW5	04/02/09		196.35	Well surveyed.									---	---
MW5	05/28/09		196.35	31.45	164.90	0.00	5,300	890	150	<25	140	3,600	---	---
MW5	08/31/09		196.35	34.70	161.65	0.00	5,800	550	<100	<100	<100	3,500	---	---
MW5	12/11/09		196.35	34.52	161.83	0.00	4,000b	230	<100	<100	<100	3,800	---	---
MW5	05/07/10		196.35	30.84	165.51	0.00	2,700b	73	5.3	3.6	6.5	1,700	---	---
MW5	11/01/10		196.35	33.93	162.42	0.00	2,400b	320	71	21	40	3,400	---	---
MW5	05/27/11	a	196.35	31.65	164.70	0.00	---	---	---	---	---	---	---	---
MW5	11/23/11		196.35	32.58	163.77	0.00	1,900b	72	2.7	3.1	8.1	3,200	---	---
MW5	05/24/12		196.35	30.26	166.09	0.00	2,900b	54	31	5.2	17	1,700	---	---
MW5	10/31/12		196.35	33.94	162.41	0.00	2,200b	220	72	8.7	47	2,700	---	---

TABLE 3 HISTORICAL GROUNDWATER MONITORING DATA,
FORMER EXXON SERVICE STATION 70234,
3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date		Elevation TOC (feet)	Depth to Water (feet below TOC)	Groundwater Elevation (feet)	LPH Thickness (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8260B (µg/L)	Total Pb (µg/L)	Organic Pb (mg/L)
MW5	05/02/13	c	196.35	31.33	165.02	0.00	2,200b	61	<0.50	3.8	7.9	1,300	---	---
MW5	11/09/13		196.35	35.69	160.66	0.00	1,300b	120	<5.0	<5.0	8.8	370	---	---
MW5	05/12/14	a	196.35	32.64	163.71	0.00	1,200	120	<5.0	<5.0	<5.0	490	---	---
MW5	11/19/14	a	196.35	36.05	160.30	0.00	1,400 HD	140	2.0 J	<2.5	4.7	120	---	---
MW5	05/13/15	a	196.35	33.31	163.04	0.00	1,100 HD	74	<2.5	<2.5	2.7	310	---	---
MW5	12/16/15	a	196.35	36.34	160.01	0.00	760	150	2.0 J	1.8 J	4.6	94	---	---
MW5	06/15/16	a	196.35	33.63	162.72	0.00	840 HD	150	1.4 J	1.8 J	4.1	300	---	---
MW5	**12/20/16**	**a**	**196.35**	**32.8**	**163.55**	**0.00**	**1,000 HD**	**160**	**<5.0**	**<5.0**	**<5.0**	**230**	---	---
MW6	SCREEN INTERVAL (feet bgs) 29-39													
MW6	03/09/09		---	Well installed.										
MW6	03/30/09		192.41	26.94	165.47	0.00	2,800	0.91	<0.50	<0.50	<0.50	4,800	---	---
MW6	04/02/09		192.41	Well surveyed.									---	---
MW6	05/28/09		192.41	28.04	164.37	0.00	2,800	<100	<100	<100	<100	6,000	---	---
MW6	08/31/09		192.41	30.57	161.84	0.00	4,900	<100	<100	<100	<100	6,600	---	---
MW6	12/11/09		192.41	30.78	161.63	0.00	4,900b	<100	<100	<100	<100	6,200	---	---
MW6	05/07/10		192.41	25.42	166.99	0.00	2,900b	2.7	<0.50	0.74c	<1.0	3,700	---	---
MW6	11/01/10		192.41	30.68	161.73	0.00	850b	2.1	<0.50	<0.50	<1.0	6,100	---	---
MW6	05/27/11	a	192.41	27.07	165.34	0.00	---	---	---	---	---	---	---	---
MW6	11/23/11		192.41	29.25	163.16	0.00	1,600b	<0.50	<0.50	<0.50	<1.0	6,400	---	---
MW6	05/24/12		192.41	26.36	166.05	0.00	2,000b	1.3c	9.7	0.97c	5.5	3,400	---	---
MW6	10/31/12		192.41	30.74	161.67	0.00	1,400b	3.8	28	2.2	11	5,400	---	---
MW6	05/02/13		192.41	27.91	164.50	0.00	1,900b	<0.50	<0.50	<0.50	<0.50	2,600	---	---
MW6	11/09/13		192.41	32.15	160.26	0.00	3,600b	<40	<40	<40	<40	4,800	---	---
MW6	05/12/14	a	192.41	29.28	163.13	0.00	190 HD	<5.0	<5.0	<5.0	<5.0	280	---	---
MW6	11/19/14	a	192.41	32.49	159.92	0.00	420 HD	<10	<10	<10	<10	530	---	---
MW6	05/13/15	a	192.41	29.81	162.60	0.00	200 HD	<10	<10	<10	<10	26	---	---
MW6	12/16/15	a	192.41	32.76	159.65	0.00	62 HD	<2.5	<2.5	<2.5	<2.5	36	---	---
MW6	06/15/16	a	192.41	30.01	162.40	0.00	120 HD	<0.50	<0.50	<0.50	<0.50	13	---	---
MW6	**12/20/16**	**a**	**192.41**	**29.29**	**163.12**	**0.00**	**71 HD**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**7**	---	---
MW7	SCREEN INTERVAL (feet bgs) 30-40													
MW7	03/09/09		---	Well installed.									---	---
MW7	03/30/09		194.34	29.15	165.19	0.00	55	<0.50	<0.50	<0.50	<0.50	66	---	---
MW7	04/02/09		194.34	Well surveyed.										
MW7	05/28/09		194.34	30.16	164.18	0.00	50	<1.0	<1.0	<1.0	<1.0	67	---	---
MW7	08/31/09		194.34	33.31	161.03	0.00	<50	<0.50	0.60	<0.50	<0.50	12	---	---
MW7	12/11/09		194.34	32.71	161.63	0.00	<50	0.78	1.7	0.62	2.4	31	---	---
MW7	05/07/10		194.34	27.54	166.80	0.00	510b	<0.50	<0.50	<0.50	<1.0	700	---	---
MW7	11/01/10		194.34	32.82	161.52	0.00	68b	<0.50	<0.50	<0.50	<1.0	140	---	---
MW7	05/27/11	a	194.34	28.85	165.49	0.00	---	---	---	---	---	---	---	---
MW7	11/23/11		194.34	31.39	162.95	0.00	190b	<0.50	<0.50	<0.50	<1.0	300	---	---
MW7	05/24/12	a	194.34	28.31	166.03	0.00	---	---	---	---	---	---	---	---

TABLE 3 HISTORICAL GROUNDWATER MONITORING DATA,
FORMER EXXON SERVICE STATION 70234,
3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date		Elevation TOC (feet)	Depth to Water (feet below TOC)	Groundwater Elevation (feet)	LPH Thickness (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8260B (µg/L)	Total Pb (µg/L)	Organic Pb (mg/L)
MW7	10/31/12		194.34	32.86	161.48	0.00	230b	2.9	21	1.8	9.2	290	---	---
MW7	05/02/13		194.34	29.93	164.41	0.00	570b	<0.50	<0.50	<0.50	<0.50	790	---	---
MW7	11/09/13		194.34	34.23	160.11	0.00	370b	<10	<10	<10	<10	460	---	---
MW7	05/12/14	a	194.34	31.33	163.01	0.00	310 HD	<10	<10	<10	<10	980	---	---
MW7	11/19/14	a	194.34	34.31	160.03	0.00	400 HD	<12	<12	<12	<12	660	---	---
MW7	05/13/15	a	194.34	31.65	162.69	0.00	660 HD	<20	<20	<20	<20	870	---	---
MW7	12/16/15	a	194.34	34.62	159.72	0.00	110 HD	<4.0	<4.0	<4.0	<4.0	220	---	---
MW7	06/15/16	a	194.34	31.96	162.38	0.00	740 HD	<4.0	<4.0	<4.0	<4.0	1,200	---	---
MW7	**12/20/16**	**a**	**194.34**	**31.67**	**162.67**	**0.00**	**1,200 HD**	**<25**	**<25**	**<25**	**<25**	**1,500**	**---**	**---**
MW8	SCREEN INTERVAL (feet bgs) 30-40													
MW8	03/04/09		---	Well installed.										
MW8	03/30/09		192.96	27.35	165.61	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW8	04/02/09		192.96	Well surveyed.									---	---
MW8	05/28/09		192.96	28.72	164.24	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW8	08/31/09		192.96	31.93	161.03	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW8	12/11/09		192.96	31.24	161.72	0.00	<50	0.74	1.6	0.59	2.3	<0.50	---	---
MW8	05/07/10		192.96	25.68	167.28	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	---	---
MW8	11/01/10		192.96	31.18	161.78	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	---	---
MW8	05/27/11		192.96	27.55	165.41	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	---	---
MW8	11/23/11		192.96	29.74	163.22	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	---	---
MW8	05/24/12		192.96	26.93	166.03	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	---	---
MW8	10/31/12		192.96	31.35	161.61	0.00	75	2.5	19	1.7	8.7	<0.50	---	---
MW8	05/02/13		192.96	28.44	164.52	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW8	11/09/13		192.96	32.89	160.07	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW8	05/12/14	a	192.96	30.27	162.69	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW8	11/19/14	a	192.96	33.16	159.80	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW8	05/13/15	a	192.96	30.35	162.61	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW8	12/16/15	a	192.96	33.41	159.55	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW8	06/15/16	a	192.96	30.68	162.28	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW8	**12/20/16**	**a**	**192.96**	**29.38**	**163.58**	**0.00**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**---**	**---**
MW9	SCREEN INTERVAL (feet bgs) 30-40													
MW9	03/05/09		---	Well installed.										
MW9	03/30/09		195.16	28.31	166.85	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW9	04/02/09		195.16	Well surveyed.									---	---
MW9	05/28/09		195.16	29.69	165.47	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW9	08/31/09		195.16	33.20	161.96	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW9	12/11/09		195.16	32.62	162.54	0.00	<50	0.73	1.7	0.54	2.2	<0.50	---	---
MW9	05/07/10		195.16	26.59	168.57	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	---	---
MW9	11/01/10		195.16	32.45	162.71	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	---	---
MW9	05/27/11		195.16	29.62	165.54	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	---	---
MW9	11/23/11		195.16	30.56	164.60	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	---	---

TABLE 3 HISTORICAL GROUNDWATER MONITORING DATA,
FORMER EXXON SERVICE STATION 70234,
3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date		Elevation TOC (feet)	Depth to Water (feet below TOC)	Groundwater Elevation (feet)	LPH Thickness (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8260B (µg/L)	Total Pb (µg/L)	Organic Pb (mg/L)
MW9	05/24/12		195.16	27.94	167.22	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	---	---
MW9	10/31/12		195.16	32.66	162.50	0.00	140	6.9	38	2.7	13	<0.50	---	---
MW9	05/02/13		195.16	29.58	165.58	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW9	11/09/13		195.16	Well inaccessible.										
MW9	05/12/14	b	195.16	Well inaccessible.										
MW9	11/19/14	a	195.16	34.60	160.56	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW9	05/13/15	a	195.16	31.66	163.50	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW9	12/16/15	a	195.16	34.84	160.32	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW9	06/15/16	a	195.16	31.98	163.18	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW9	**12/20/16**	**b**	**195.16**	Well inaccessible.										
RW1	SCREEN INTERVAL (feet bgs) 29-39.5													
RW1	12/22/11		---	Well installed.										
RW1	12/30/11		195.15	Well surveyed.										
RW1	05/24/12		195.15	28.55	166.60	0.00	5,500b	920	5.9c	51	14	2,500	---	---
RW1	10/31/12	a	195.15	---	---	---	---	---	---	---	---	---	---	---
RW1	05/02/13	c	195.15	30.27	164.88	0.00	4,300b	1,200	<2.5	41	14	2,300	---	---
RW1	11/09/13		195.15	34.64	160.51	0.00	810b	210	<10	<10	<10	520	---	---
RW1	05/12/14	a	195.15	31.54	163.61	0.00	830 HD	450	<10	13	<10	490	---	---
RW1	11/19/14	a	195.15	34.94	160.21	0.00	910 HD	450	<10	<10	<10	590	---	---
RW1	05/13/15	a	195.15	32.26	162.89	0.00	1,300 HD	560	<5.0	8.1	2.4 JA	480	---	---
RW1	12/16/15	a	195.15	35.22	159.93	0.00	310 HD	150	<5.0	<5.0	<5.0	110	---	---
RW1	06/15/16	a	195.15	32.4	162.75	0.00	1300	850	3.6 J	17	5.5	450	---	---
RW1	**12/20/16**	**a**	**195.15**	**31.54**	**163.61**	**0.00**	**2,400 HD**	**1,100**	**<20**	**18 J**	**<20**	**540**	---	---
Grab Groundwater Samples														
Pit Water	06/14/02		---	---	---	---	5,600	140	840	100	530	12,000	---	---
UST Pit	06/19/02		---	---	---	---	680	2.7	36	18	130	640	---	---
W-38-B11	11/14/07		---	---	---	---	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
W-15-B12	11/13/07		---	---	---	---	8,400	67	<5.0	140	150	78	---	---
W-40-B13	11/12/07		---	---	---	---	<50	<0.50	<0.50	<0.50	<0.50	0.53	---	---
W-15-B14	11/13/07		---	---	---	---	2,500	1.7	3.0	26	13	16	---	---
W-38-B15	11/15/07		---	---	---	---	18,000	3,400	2,500	330	2,000	12,000	---	---
W-40-B16	11/15/07		---	---	---	---	<50	<0.50	<0.50	<0.50	<0.50	7.7	---	---
W-37-B17	11/13/07		---	---	---	---	630	1.8	<0.50	4.1	1.4	2,200	---	---
W-38-B18	11/12/07		---	---	---	---	4,300	52	<12	56	96	1,400	---	---
W-35-B19	03/03/09		---	---	---	---	4,400	<0.50	<0.50	<0.50	<1.0	7,100	---	---
W-35-B20	03/03/09		---	---	---	---	640	<0.50	<0.50	<0.50	<1.0	440	---	---
W-35-B21	03/03/09		---	---	---	---	<50	<0.50	<0.50	<0.50	<1.0	1.4	---	---

TABLE 3 HISTORICAL GROUNDWATER MONITORING DATA,
FORMER EXXON SERVICE STATION 70234,
3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date	Elevation TOC (feet)	Depth to Water (feet below TOC)	Groundwater Elevation (feet)	LPH Thickness (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8260B (µg/L)	Total Pb (µg/L)	Organic Pb (mg/L)

TOC	Top of casing.	bgs	Below ground surface.
LPH	Liquid-phase hydrocarbons.	µg/L	Micrograms per liter.
TPH-g	Total Petroleum Hydrocarbons as gasoline.	--	Not sampled or not analyzed.
MTBE	Methyl tertiary butyl ether.	NA	Not available.
NM	Not measured.	NC	Not calculated.

Total Pb	Total lead analyzed using EPA Method 6010.
Organic Pb	Organic lead analyzed using CA DHS LUFT method.
a	Well purged prior to sampling.
b	Well inaccessible.
c	Well sampled the following day.
HD	Chromat. profile inconsistent with the ref. fuel stnds.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.

Notes: Data prior to 1999 provided by EA Engineering, Science, and Technology. Data prior to 2013 provided by Cardno ERI.

APPENDIX C

Third Quarter 2017 Groundwater Monitoring Report, Former Atlantic Richfield Company Station #11132, 3201 35th Avenue, Oakland, CA, 94619

(Text and Selected Tables and Figures)

Mr. Keith Nowell
Alameda County LOP
1131 Harbor Bay Parkway
Alameda, California 94502

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ENVIRONMENT

Subject:
Third Quarter 2017
Groundwater Monitoring Report
Former Atlantic Richfield Company Station #11132
3201 35th Avenue, Oakland, California 94619
Alameda County LOP Case #RO0000014
SFB-RWQCB Case #01-0227

Date:
October 3, 2017

Dear Mr. Nowell:

Arcadis U.S., Inc. (Arcadis) has prepared this semi-annual groundwater monitoring report (GMR) to document the results of groundwater monitoring and sampling at the former Atlantic Richfield Company (ARCO) Service Station #11132, located at 3201 35th Avenue in Oakland, California (the Site).

If you have any questions or comments regarding the contents of this report, please contact Megan Smoley at 626.590.1502 or by e-mail at Megan.Smoley@arcadis.com.

"I declare that to the best of my knowledge at the present time, that the information and/or recommendations contained in the attached document are true and correct."

Sincerely,

Arcadis U.S., Inc.

Megan Smoley, P.G. No. 8614
Certified Project Manager

Contact:
Megan Smoley

Phone:
626.590.1502

Email:
Megan.Smoley@arcadis.com

Our ref:
GP09BPNA.C112.N0000

WORK PERFORMED DURING THE SECOND AND THIRD QUARTER 2017

- Submitted the *First Quarter 2017 Groundwater Monitoring Report* to the Alameda County Department of Environmental Health (ACDEH) on April 24, 2017.
- Submitted the *Property Foundation Survey* to ACDEH on April 24, 2017 to document the results of a foundation survey completed south of the Site to determine soil vapor sample probe installation depths.
- Revised historical groundwater flow direction on figures and in rose diagram because some figures have previously depicted the north arrow incorrectly. Uploaded revised figures as GEO_MAPS to GeoTracker per ACDEH's request on June 22, 2017.
- Submitted the *Offsite Soil Vapor and Groundwater Investigation Work Plan* (Work Plan) to ACDEH on July 21, 2017.
- Conducted semi-annual groundwater monitoring and sampling in third quarter 2017 on August 2, 2017.
- Submitted correspondence with revised figures on August 28, 2017 to address ACDEH's August 21, 2017 comments to the Work Plan.
- Acquired well permit application from the Alameda County Public Works Agency – Water Resources for monitoring well and soil vapor probe installation.
- Began compiling information needed to complete the indenture agreement with the City of Oakland Public Works Department (City).

WORK PROPOSED FOR THE FOURTH QUARTER 2017 AND FIRST QUARTER 2018

- Submit the *Third Quarter 2017 Groundwater Monitoring Report*, contained herein.
- Finalize the necessary indenture agreement and excavation and obstruction permits with the City.
- Install two offsite monitoring wells and four offsite soil vapor probes and conduct associated sampling in accordance with the Work Plan, revised figures, and comments in ACDEH's August 29, 2017 conditional approval letter.
- Conduct semi-annual groundwater monitoring and sampling in the first quarter 2018.

SITE INFORMATION

Current Phase of Project:	Groundwater Monitoring and Sampling
Frequency of Monitoring and Sampling	Semi-Annual Gauging (1/3Q): MW-1 through MW-11, OW-1 and RW-1 Semi-Annual Sampling (1/3Q): MW-1, MW-2, MW-5, MW-8, MW-9, MW-10R, MW-11, OW-1 and RW-1 Annual Sampling (1Q): MW-4 and MW-7 Annual Sampling (3Q): MW-3 and MW-6
Have Liquid Phase Hydrocarbons (LPH) Been Measured Onsite, Historically?	Yes
Historical Range in Depth to Water (DTW; feet below top of casing [btoc]):	8.63 (MW-6 1Q/2017) to 32.20 (RW-1 2Q/1994)

CURRENT QUARTER MONITORING DATA

Wells Gauged:	MW-1 through MW-11, RW-1 and OW-1
Wells Sampled:	MW-1, MW-2, MW-3, MW-5, MW-6, MW-8, MW-10R, MW-11 and RW-1. OW-1 contained LPH and was not sampled. MW-9 was inaccessible and could not be sampled.
Monitoring and Sampling Date:	August 2, 2017
LPH Measured This Quarter (thickness in feet):	3Q 2017: OW-1 (0.07)
LPH Recovered This Quarter:	None
Cumulative LPH Recovered to Date:	113.7 gallons
3Q 2017 DTW Range (feet btoc):	16.34 (MW-11) to 22.10 (OW-1)
3Q 2017 Groundwater Flow Direction and Gradient (feet/foot):	Southwest (0.004 ft/ft)

GROUNDWATER MONITORING AND SAMPLING

During the third quarter 2017 sampling event, HydraSleeves were used to collect groundwater samples at the Site. Prior to groundwater sampling, depths to water were measured to within 0.01 feet below top of casing (btoc) in all wells using an oil/water interface probe. All monitoring and sampling activities were performed by Blaine Tech Services, Inc. (Blaine Tech).

Groundwater samples were submitted under chain-of-custody protocol to ESC Lab Sciences (ESC), a California state-certified laboratory. Samples were analyzed for total petroleum hydrocarbons gasoline range organics (GRO) by EPA Method 8015, benzene, toluene, ethylbenzene, and total xylenes (collectively BTEX), methyl tert-butyl ether (MTBE), tert-butyl alcohol (TBA), di-isopropyl ether (DIPE), ethyl tert-butyl ether (ETBE), tert-amyl methyl ether (TAME), ethanol, 1,2-dichloroethane (1,2-DCA), and ethylene dibromide (EDB) by EPA Method 8260B.

No issues were noted by ESC during sample analysis that would have an adverse effect on the quality of the data and no issues affecting the sampling protocol were noted.

RECOMMENDATIONS

Arcadis recommends continuation of groundwater monitoring and sampling on a semi-annual or annual basis at all site monitoring well locations in accordance with the approved schedule.

LIMITATIONS

The findings presented in this report are based upon observations of field personnel, points investigated, results of laboratory tests performed by ESC, and our understanding of the San Francisco Regional Water Quality Control Board (SF-RWQCB) requirements. Our services were performed in accordance with the generally accepted standard of practice at the time this report was written. No other warranty, expressed or implied was made. This report has been prepared for the exclusive use of Arcadis and ARCO. It is

possible that variations in soil or groundwater conditions could exist beyond points explored in this investigation. Also, changes in site conditions could occur in the future due to variations in rainfall, temperature, regional water usage, or other factors.

Tables

Figures

Attachments

TABLES

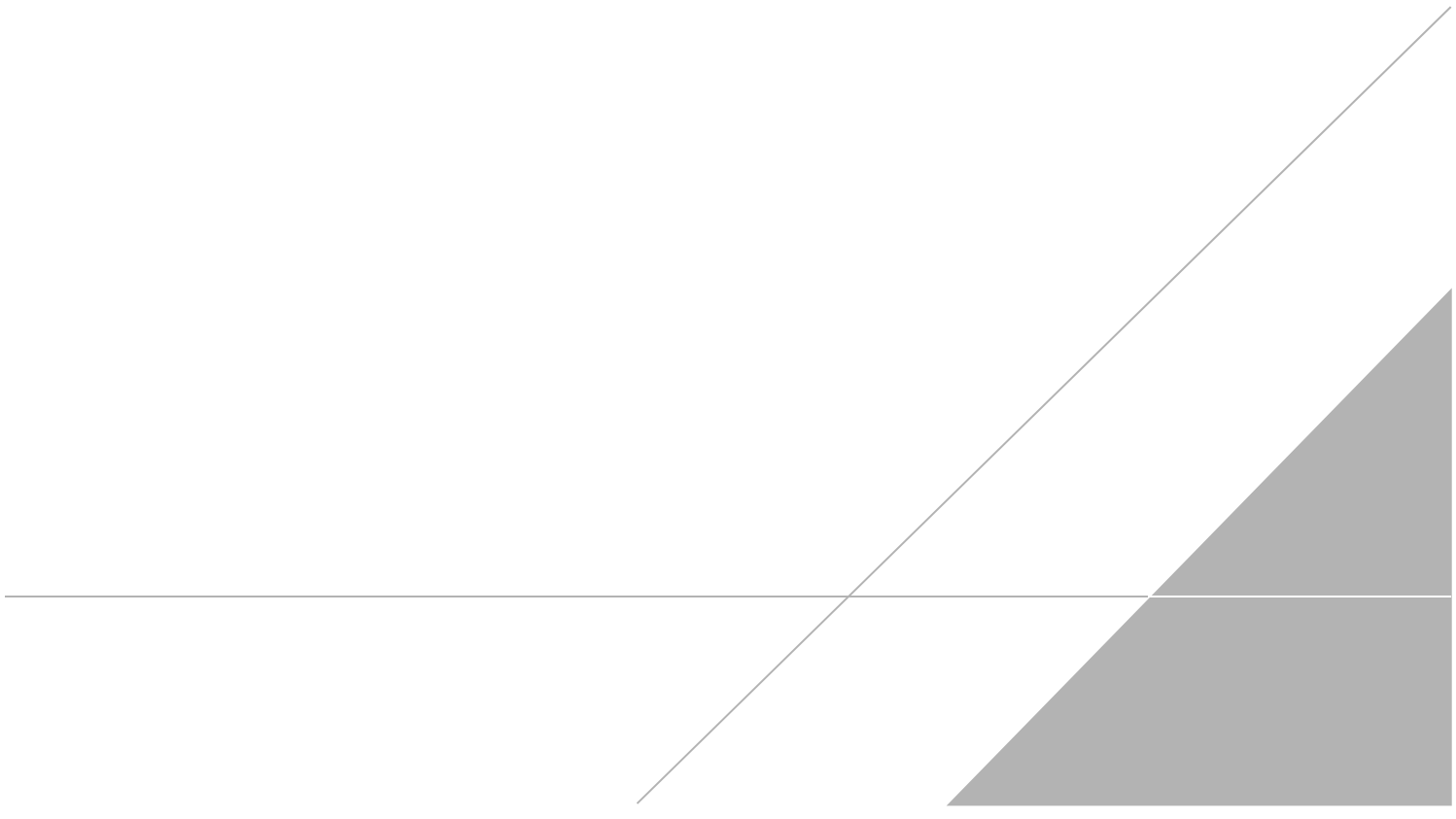

Table 1
Well Construction Details
CA-11132
3201 35th Avenue
Oakland, California

Well ID	Completion Date	Total Depth (feet bgs)	Well Depth (feet bgs)	Screen Interval (feet bgs)	Borehole Diameter (inches)	Casing Diameter (inches)	Destruction Date
AS-1	09/08/10	47	45	42 - 45	8	2	--
MW-1	07/30/86	45	45	10 - 45	8	2	--
MW-2	07/31/86	35	35	10 - 35	8	2	--
MW-3	07/31/86	35	35	10 - 35	8	2	--
MW-4	01/29/90	41	40	10 - 40	8	2	--
MW-5	02/01/90	35	35	10 - 35	8	2	--
MW-6	02/01/90	35	35	15 - 35	8	2	--
MW-7	02/01/90	35	35	17 - 35	8	2	--
MW-8	01/25/91	41.5	40	20 - 40	8	2	--
MW-9	02/26/91	35	35	15 - 35	8	2	--
MW-10	02/27/91	36	35	20 - 35	8	2	02/03/16
MW-10R	02/03/16	27	26	11 - 26	8	2	--
MW-11	02/10/16	28	26	11 - 26	8	2	--
OW-1	09/08/10	40	42	20 - 40	8	2	--
RW-1	01/29/90	41.5	40	20 - 40	12	6	--
SVE-1	09/07/10	20	20	10 - 20	8	2	--
VM-1	09/07/10	20	20	10 - 20	8	2	--
VM-2	09/07/10	20	22	10 - 20	8	2	--

Notes:
AS = air sparge well
MW = monitoring Well
OW = observation well
RW = groundwater recovery well
SVE = soil vapor extraction well
VM = soil vapor monitoring well
bgs = below ground surface
-- = not applicable

Table 2
Current Groundwater Monitoring and Analytical Data
CA-11132
3201 35th Ave, Oakland CA

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/l)	Notes
MW-1	8/2/2017		169.75	20.94	--	148.81	17,800	<10.0	<10.0	52.4	<30.0	<10.0	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0	<1,000	1.33	
MW-2	8/2/2017		168.14	22.03	--	146.11	8,600	1,960	82.1	130	311	46.5	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0	<1,000	1.22	
MW-3	8/2/2017		167.17	18.74	--	148.43	448	0.477J	<1.00	<1.00	<3.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	1.75	
MW-4	8/2/2017		170.36	21.33	--	149.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	8/2/2017		165.14	16.93	--	148.21	482	22.1	0.683J	1.55	1.08J	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	2.01	
MW-6	8/2/2017		165.40	17.40	--	148.00	<100	<1.00	<1.00	<1.00	<3.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	1.55	
MW-7	8/2/2017		168.08	19.29	--	148.79	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	8/2/2017		165.74	17.70	--	148.04	5,830	17.6	7.14	161	266	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	1.68	
MW-9	8/2/2017		166.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(INA)
MW-10R	8/2/2017		166.80	18.20	--	148.60	28,500	1,900	280	3150	8,100	<25.0	<125	<25.0	<25.0	<25.0	<25.0	<25.0	<2,500	1.99	
MW-11	8/2/2017		165.64	16.34	--	149.30	104	<1.00	<1.00	<1.00	<3.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	1.13	
RW-1	8/2/2017		168.01	19.13	--	148.88	1,120	1.79	0.775J	1.43	1.06J	2.52	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	1.97	
OW-1	8/2/2017		--	22.10	0.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(LPH)

Notes:
TOC = Top of casing measured
DTW = Depth to water
LNAPL = Light non-aqueous phase liquid (LPH)
GW Elev = Groundwater elevation
GRO = Gasoline range organics
B = Benzene
T = Toluene
E = Ethylbenzene
X = Total xylenes
MTBE = Methyl tert-butyl ether
TBA = tert-butyl alcohol
DIPE = Di-isopropyl ether
ETBE = Ethyl tert-butyl ether
TAME= tert-Amyl methyl ether
DO = Dissolved oxygen
1,2-DCA = 1,2-dichloroethane
EDB = 1,2-dibromoethane
Ft msl = Feet above mean sea level
LPH = Well not sampled due to presence of LPH and nature of the product
INA - Well inaccessible; well could not be sampled
J = The identification of the analyte is acceptable; the reported value is an estimate
-- = Not analyzed/applicable/measured/available
< = Not detected at or above specified laboratory reporting limit
mg/L = Milligrams per liter
µg/L = Micrograms per liter
Values for DO was obtained through field measurements
GRO analysis was completed by EPA method 8260B (C4-C12) for samples collected from the time period April 2006 through February 4, 2008; the analysis for GRO was changed to EPA method 8015B (C6-C12) for samples collected from the time period February 5, 2008 through August 6, 2009 and EPA method 8260B (C6-C12) from March 4, 2010 to the present

Table 3
Historical Groundwater Monitoring and Analytical Data
CA-11132
3201 35th Ave, Oakland CA

ARCADIS

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/l)	NAPH (µg/L)	Notes
MW-1	03/07/1991		169.75	20.59	--	149.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	04/01/1991		169.75	16.51	0.15	153.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	07/03/1992		169.75	22.30	0.27	147.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	10/05/1992		169.75	23.98	0.24	145.53	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	01/13/1993		169.75	17.03	0.24	152.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	04/23/1993		169.75	18.10	0.42	151.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	07/12/1993		169.75	22.02	0.49	147.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	10/21/1993		169.75	25.12	1.09	143.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	01/21/1994		169.75	23.02	0.76	145.97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	04/20/1994		169.75	24.54	1.8	143.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	08/01/1994		169.75	24.11	0.35	145.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	12/23/1994		169.75	18.19	--	151.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	01/26/1995		169.75	16.25	1.1	152.40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	06/08/1995		169.75	22.92	--	146.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	08/22/1995		169.75	24.45	0.85	144.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	10/27/1995		169.75	25.41	--	143.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	01/25/1996		169.75	18.20	--	151.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	04/19/1996		169.75	19.06	1.22	149.47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	07/23/1996		169.75	22.98	0.89	145.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	11/11/1996		169.75	23.99	0.89	144.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	01/21/1997		169.75	16.80	0.9	152.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	04/29/1997		169.75	21.90	0.85	147.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	04/30/1997	Dup	--	--	--	--	92,000	3,500	8,100	4,400	23,800	6,900	--	--	--	--	--	--	--	--	--	(Dup)
MW-1	04/30/1997		--	--	--	--	100,000	3,600	8,000	4,000	21,300	7,700	--	--	--	--	--	--	--	5.2	--	
MW-1	08/21/1997	Dup	169.75	23.40	--	146.35	120,000	3,200	8,100	3,800	19,600	5,200	--	--	--	--	--	--	--	--	--	(Dup)
MW-1	08/21/1997		169.75	23.40	--	146.35	140,000	3,000	8,500	3,900	22,100	5,700	--	--	--	--	--	--	--	5.3	--	
MW-1	11/05/1997	Dup	169.75	23.70	--	145.51	88,000	7,300	4,800	3,600	16,900	8,200	--	--	--	--	--	--	--	--	--	(Dup)
MW-1	11/05/1997		169.75	23.70	--	145.51	68,000	6,200	4,400	3,300	14,300	8,000	--	--	--	--	--	--	--	4.7	--	
MW-1	02/03/1998		169.75	13.63	0.32	155.80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	02/04/1998	Dup	--	--	--	--	160,000	2,300	8,400	5,000	29,400	<10,000	--	--	--	--	--	--	--	--	--	(Dup)
MW-1	02/04/1998		--	--	--	--	190,000	2,200	10,000	5,600	32,000	<10,000	--	--	--	--	--	--	--	5.3	--	
MW-1	05/28/1998		169.75	18.03	0.17	151.55	87,000	980	3,900	3,600	19,000	2,900	--	--	--	--	--	--	--	3.8	--	
MW-1	12/30/1998		169.75	19.50	0.08	150.17	70,000	530	3,200	2,900	16,000	3,600	--	--	--	--	--	--	--	--	--	
MW-1	02/02/1999		169.75	18.93	0.03	150.79	79,000	480	3,100	3,500	21,000	3,500	--	--	--	--	--	--	--	--	--	
MW-1	05/10/1999		169.75	18.28	0.03	151.44	110,000	160	1,900	3,700	24,000	3,000	--	--	--	--	--	--	--	--	--	
MW-1	08/24/1999		169.75	20.13	0.06	149.56	110,000	850	1,300	1,900	19,000	<50	--	--	--	--	--	--	--	--	--	
MW-1	11/03/1999		169.75	22.27	0.36	147.12	65,000	6,300	1,100	3,300	9,500	8,900	--	--	--	--	--	--	--	--	--	
MW-1	03/01/2000		169.75	14.79	0.23	154.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	04/21/2000		169.75	18.10	0.33	151.32	61,000	330	780	2,700	17,000	1,300	--	--	--	--	--	--	--	--	--	
MW-1	07/31/2000		169.75	21.60	0.53	147.62	1,500,000	340	2,100	24,000	120,000	2,700	--	--	--	--	--	--	--	--	--	
MW-1	11/20/2000		169.75	21.69	0.37	147.69	1,700,000	1,800	2,300	19,000	93,000	3,900	--	--	--	--	--	--	--	--	--	
MW-1	02/18/2001		169.75	16.70	0.13	152.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	02/26/2001		169.75	14.38	0.15	155.22	100,000	658	466	4,210	15,000	1,890	--	--	--	--	--	--	--	--	--	
MW-1	06/07/2001		169.75	20.78	--	148.97	70,000	705	440	3,870	12,200	2,720	--	--	--	--	--	--	--	--	--	
MW-1	09/05/2001		169.75	23.36	0.35	146.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	11/30/2001		169.75	20.85	0.41	148.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	12/06/2001		169.75	18.72	0.27	150.76	39,000	3,500	237	2,150	4,500	5,400	--	--	--	--	--	--	--	--	--	
MW-1	02/20/2002		169.75	17.43	0.15	152.17	52,000	465	271	1,600	11,400	106	--	--	--	--	--	--	--	--	--	
MW-1	06/20/2002		169.75	21.18	0.34	148.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	09/11/2002		169.75	22.86	0.4	146.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	11/12/2002		169.75	22.65	0.37	146.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	01/29/2003		169.75	18.15	0.3	151.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	05/22/2003		169.75	18.49	0.2	151.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	06/24/2003		169.75	21.44	0.35	147.96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	07/28/2003		169.75	22.72	0.35	146.68	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	08/12/2003		169.75	22.64	0.23	146.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	09/12/2003		169.75	20.70	0.24	148.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	11/18/2003		169.75	21.70	0.25	148.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	02/23/2004		169.75	16.34	0.09	153.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	05/04/2004		169.75	21.28	0.16	148.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	08/04/2004		169.75	22.54	0.1	147.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	09/22/2004		169.75	22.76	0.2	147.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	11/10/2004		169.75	20.19	0.14	149.67	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	01/13/2005		169.75	14.58	0.03	155.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	02/15/2005		169.75	16.13	0.04	153.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	03/07/2005		169.75	13.31	0.01	156.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	05/16/2005		169.75	15.74	0.02	154.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	08/17/2005		169.75	21.15	0.08	148.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	11/18/2005		169.75	20.15	--	149.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	02/07/2006		169.75	15.19	0.01	154.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	05/19/2006		169.75	17.42	--	152.33	44,000	73	510	3,300	5,300	86	<400	<10	<10	<10	<10	<10	<6,000	--	--	
MW-1	08/23/2006		169.75	22.01	0.14	147.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	11/15/2006		169.75	21.98	0.18	147.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	02/14/2007		169.75	17.12	0.17	152.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	05/22/2007		169.75	19.49	0.01	150.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	08/15/2007		169.75	22.24	0.01	147.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	11/08/2007		169.75	21.84	0.01	147.91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	02/20/2008		169.75	16.52	0.02	153.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

Table 3
Historical Groundwater Monitoring and Analytical Data
CA-11132
3201 35th Ave, Oakland CA

ARCADIS

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/l)	NAPH (µg/L)	Notes
MW-1	05/07/2008		169.75	20.91	0.02	148.84	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	08/20/2008		169.75	22.77	0.02	146.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	11/17/2008		169.75	22.05	--	147.70	27,000	780	30	1,800	1,400	590	350	<10	<10	<10	<10	27	<6,000	--	--	
MW-1	02/25/2009		169.75	15.28	0.02	154.47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	04/08/2009		169.75	18.18	--	151.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	05/28/2009		169.75	19.62	0.01	150.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	06/16/2009		169.75	20.94	0.01	148.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	08/06/2009		169.75	22.31	0.01	147.44	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	03/04/2010		169.75	14.27	--	155.48	14,000	45	<10	610	390	<10	<80	<10	<10	<10	<10	<	<2,000	0.54	--	(P)
MW-1	09/02/2010		169.75	22.32	--	147.43	8,200	10	<5.0	230	140	<5.0	<40	<5.0	<5.0	<5.0	<5.0	<5.0	<1,000	--	--	(NP)
MW-1	03/15/2011		169.75	14.99	--	154.76	4,500	<5.0	<5.0	56	30	16	<40	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	--	--	(P,t)
MW-1	08/17/2011		169.75	20.41	--	149.34	1,200	<1.0	<1.0	24	15	8.3	<8.0	<1.0	<1.0	<1.0	<1.0	<1.0	<500	--	--	(P)
MW-1	02/06/2012		169.75	18.69	--	151.06	710	<1.0	<1.0	2.9	2.2	10	100	<1.0	<1.0	<1.0	<1.0(*)	<1.0	<500	--	--	(P)
MW-1	08/21/2012		169.75	21.77	--	147.98	5,000	230	7.3	230	68	77	<20	<2.5	<2.5	<2.5	<2.5	4.3	<1,300	--	--	
MW-1	02/04/2013		169.75	18.36	(Sheen)	151.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	08/01/2013		169.75	22.25	0.15	147.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(LPH)
MW-1	02/27/2014		169.75	19.82	0.07	149.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	08/27/2014		169.75	22.03	0.15	147.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	03/27/2015		169.75	19.54	--	150.21	7,900	17	<2.5	110	25	13	<100	<2.5	<2.5	<2.5	<2.5	<2.5	<2,500	3.23	--	(odor, t)
MW-1	08/27/2015		169.75	21.64	0.1	148.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(LPH)
MW-1	03/28/2016		169.75	14.78	--	154.97	8,110	6.67J	<50.0	59.6	<30.0	5.80J	43.5J	<10.0	<10.0J3	<10.0	<10.0	<10.0	<1,000	1.75	--	
MW-1	09/07/2016		169.75	20.98	--	148.77	9,940	143	5.44J	123	15.2	<5.00	<25.0	<5.00	<5.00	<5.00	<5.00	<5.00	<500	0.22	--	
MW-1	03/01/2017		169.75	12.77	--	156.98	6,770	6.31	1.12	89.20	8.1	7.51	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	1.40	--	
MW-1	08/02/2017		169.75	20.94	--	148.81	17,800	<10.0	<10.0	52.40	<30.0	<10.0	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0	<1,000	1.33	--	
MW-2	03/07/1991		168.14	19.18	--	148.96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	04/01/1991		168.14	15.21	--	152.93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	07/03/1992		168.14	20.93	--	147.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	10/05/1992		168.14	22.74	--	145.40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	01/13/1993		168.14	15.55	--	152.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	04/23/1993		168.14	16.54	--	151.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	07/12/1993		168.14	20.46	--	147.68	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	10/21/1993		168.14	24.91	--	143.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	01/21/1994		168.14	21.20	--	146.94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	04/20/1994		168.14	22.44	--	145.70	1,800	140	370	54	290	24	--	--	--	--	--	--	--	1.7	--	
MW-2	08/01/1994		168.14	22.24	--	145.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	12/23/1994		168.14	16.25	--	151.89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	01/26/1995		168.14	14.55	--	153.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	06/08/1995		168.14	21.18	--	146.96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	08/22/1995		168.14	22.76	--	145.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	10/27/1995		168.14	23.61	--	144.53	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	01/25/1996		168.14	15.95	--	152.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	04/19/1996		168.14	17.33	--	150.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	07/23/1996		168.14	21.25	--	146.89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	11/11/1996		168.14	22.27	--	145.87	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	01/21/1997		168.14	15.19	--	152.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	04/29/1997		168.14	20.22	--	147.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	04/30/1997		--	--	--	--	130,000	4,600	15,000	6,000	37,000	<5,000	--	--	--	--	--	--	--	5	--	
MW-2	08/21/1997		168.14	21.74	--	146.40	110,000	6,000	16,000	4,700	28,000	<500	--	--	--	--	--	--	--	4.6	--	
MW-2	11/05/1997		168.14	21.61	--	146.53	120,000	7,800	18,000	4,900	28,100	<2,500	--	--	--	--	--	--	--	4.6	--	
MW-2	02/03/1998		168.14	11.51	--	156.63	75,000	590	1,500	1,800	12,800	<2,500	--	--	--	--	--	--	--	4.5	--	
MW-2	05/28/1998		168.14	16.51	--	151.63	79,000	3,900	3,100	3,100	18,000	900	--	--	--	--	--	--	--	4.3	--	
MW-2	12/30/1998		168.14	17.70	--	150.44	95,000	4,700	3,500	3,700	21,000	<250	--	--	--	--	--	--	--	--	--	
MW-2	02/02/1999		168.14	15.46	--	152.68	170,000	3,500	1,500	5,200	34,000	<500	--	--	--	--	--	--	--	--	--	
MW-2	05/10/1999		168.14	16.52	--	151.62	84,000	3,200	3,200	3,700	20,000	75	--	--	--	--	--	--	--	--	--	
MW-2	08/24/1999		168.14	20.73	--	147.41	130,000	9,100	9,200	4,700	27,000	<250	--	--	--	--	--	--	--	--	--	
MW-2	11/03/1999		168.14	20.93	--	147.21	120,000	10,000	21,000	4,700	30,200	2,200	--	--	--	--	--	--	--	--	--	
MW-2	03/01/2000		168.14	13.37	--	154.77	39,000	1,400	1,500	1,700	8,100	44	--	--	--	--	--	--	--	--	--	
MW-2	04/21/2000		168.14	16.59	--	151.55	68,000	3,300	2,500	3,100	20,000	260	--	--	--	--	--	--	--	--	--	
MW-2	07/31/2000		168.14	16.37	--	151.77	99,000	5,600	1,400	4,300	22,000	490	--	--	--	--	--	--	--	--	--	
MW-2	11/20/2000		168.14	19.71	--	148.43	37,000	5,100	1,500	1,300	4,800	2,800	--	--	--	--	--	--	--	--	--	
MW-2	02/18/2001		168.14	15.29	--	152.85	54,000	5,020	3,880	2,850	15,400	1,010	--	--	--	--	--	--	--	--	--	
MW-2	06/07/2001		168.14	19.43	--	148.71	110,000	7,240	4,380	4,160	22,100	567	--	--	--	--	--	--	--	--	--	
MW-2	09/05/2001		168.14	22.44	--	145.70	69,000	5,750	5,790	2,770	14,200	1,510	--	--	--	--	--	--	--	--	--	
MW-2	11/30/2001		168.14	19.58	--	148.56	120,000	7,270	6,540	4,590	23,000	794	--	--	--	--	--	--	--	--	--	
MW-2	02/20/2002		168.14	16.39	--	151.75	56,000	2,410	2,270	2,910	14,300	160	--	--	--	--	--	--	--	--	--	
MW-2	06/20/2002		168.14	19.77	--	148.37	86,000	7,310	6,490	3,080	14,600	659	--	--	--	--	--	--	--	--	--	
MW-2	09/11/2002		168.14	21.60	--	146.54	130,000	7,600	13,000	5,400	30,000	<5,000	--	--	--	--	--	--	--	--	--	
MW-2	11/12/2002		168.14	21.34	--	146.80	46,000	4,100	4,300	1,900	10,000	1,900	--	--	--	--	--	--	--	--	--	
MW-2	01/29/2003		168.14	16.80	--	151.34	77,000	4,700	2,600	2,800	13,000	820	<2,000	<50	<50	<50	<50	<50	<4,000	--	--	
MW-2	05/22/2003		168.14	17.15	--	150.99	52,000	6,400	2,600	1,800	7,400	1,000	<2,000	--	<50	<50	--	<50	<10,000	--	--	
MW-2	07/28/2003		168.14	21.47	--	146.67	31,000	6,900	5,500	2,200	12,000	1,700	<4,000	<100	<100	<100	<100	<100	<20,000	--	--	
MW-2	11/18/2003		168.14	20.50	--	147.64	23,000	3,300	800	500	2,000	500	<1,000	--	<25	<25	--	<25	<5,000	--	--	
MW-2	02/23/2004		168.14	14.77	--	153.37	84,000	14,000	6,200	3,100	14,000	790	<5,000	<120	<120	<120	<120	<120	<25,000	--	--	
MW-2	05/04/2004		168.14	20.09	--	148.05	120,000	15,000	17,000	4,900	24,000	780	<10,000	<250	<250	<250	<250	<250	<50,000	--	--	
MW-2	08/04/2004		168.14	21.39	--	146.75	38,000	9,100	3,300	1,900	5,800	430	<10,000	<250	<250	<250	<250	<250	<50,000	--	--	
MW-2	11/10/2004		168.14	18.98	--	149.16	22,000	4,400	2,000	940	3,600	310	<1,000	<25	<25	<25	<25	<25	<5,000	--	--	
MW-2	02/15/2005		168.14	15.62	--	152.52	67,000	11,000	4,200	3,000	11,000	690	<4,000	<100	<100	<100	<100	<100	<20,000	--	--	

Table 3
Historical Groundwater Monitoring and Analytical Data
CA-11132
3201 35th Ave, Oakland CA

ARCADIS

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/l)	NAPH (µg/L)	Notes
MW-2	05/16/2005		168.14	14.71	--	153.43	94,000	11,000	7,600	4,100	17,000	560	<10,000	<250	<250	<250	<250	<250	<50,000	--	--	
MW-2	08/17/2005		168.14	20.00	--	148.14	110,000	13,000	8,000	4,300	18,000	480	<4,000	<100	<100	<100	<100	<100	<20,000	--	--	
MW-2	11/18/2005		168.14	20.89	--	147.25	37,000	11,000	2,400	1,500	4,600	340	<4,000	<100	<100	<100	<100	<100	<20,000	--	--	
MW-2	02/07/2006		168.14	13.31	--	154.83	74,000	8,900	5,800	3,600	14,000	440	<4,000	160	<100	<100	<100	<100	<60,000	--	--	
MW-2	05/19/2006		168.14	16.30	--	151.84	78,000	11,000	3,700	4,500	14,000	430	<4,000	<100	<100	<100	<100	<100	<60,000	--	--	
MW-2	08/23/2006		168.14	20.83	--	147.31	100,000	12,000	9,100	5,800	25,000	480	<4,000	<100	<100	<100	<100	<100	<60,000	--	--	
MW-2	11/15/2006		168.14	20.80	--	147.34	46,000	8,800	3,600	2,300	8,500	400	<4,000	<100	<100	<100	<100	<100	<60,000	0.7	--	
MW-2	02/14/2007		168.14	15.96	(Sheen)	152.18	100,000	13,000	3,600	6,200	26,000	810	<4,000	<100	<100	<100	<100	<100	<60,000	1.43	--	
MW-2	05/22/2007		168.14	18.20	--	149.94	91,000	15,000	8,700	4,700	20,000	1,000	<10,000	<250	<250	<250	<250	<250	<150,000	0.08	--	
MW-2	08/15/2007		168.14	21.23	(Sheen)	146.91	14,000	7,300	130	280	600	260	2,400	<50	<50	<50	<50	<50	<30,000	4.24	--	
MW-2	11/08/2007		168.14	20.32	--	147.82	22,000	7,400	420	640	1,700	240	2,800	<50	<50	<50	<50	<50	<30,000	1.21	--	
MW-2	02/20/2008		168.14	15.20	0.06	152.94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	05/07/2008		168.14	19.80	0.04	148.34	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	08/20/2008		168.14	21.70	0.01	146.44	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	11/17/2008		168.14	20.73	--	147.41	45,000	8,400	700	1,500	5,600	320	1,800	<10	<10	<10	<10	<10	<6,000	--	--	
MW-2	02/25/2009		168.14	14.15	--	153.99	18,000	5,200	<250	380	1,400	<250	<5,000	<250	<250	<250	<250	<250	<150,000	2.11	--	
MW-2	04/08/2009		168.14	17.00	--	151.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	05/28/2009		168.14	18.43	(Sheen)	149.71	37,000	5,300	1,600	1,400	5,600	510	<2,500	<120	<120	<120	<120	<120	<75,000	0.16	--	
MW-2	06/16/2009		168.14	19.80	0.01	148.34	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	08/06/2009		168.14	21.17	0.01	146.97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	03/04/2010		168.14	13.03	--	155.11	18,000	9,500	270	510	1,400	350	2,600	<5.0	<5.0	<5.0	<5.0	12	<1,000	1.28	--	(P)
MW-2	09/02/2010		168.14	20.62	--	147.52	58,000	11,000	3,600	3,900	16,000	470	<80	<10	<10	<10	<10	14	<2,000	--	--	(NP, y)
MW-2	03/15/2011		168.14	13.70	--	154.44	63,000	12,000	2,900	4,100	15,000	500	<800	<100	<100	<100	<100	<100	<50,000	--	--	(P)
MW-2	08/17/2011		168.14	19.31	--	148.83	23,000	4,900	620	1,500	4,400	150	<800	<100	<100	<100	<100	<100	<50,000	--	--	(P)
MW-2	02/06/2012		168.14	17.49	--	150.65	26,000	6,400	200	1,700	3,400	360	<800	<100	<100	<100	<100(*)	<100	<50,000	--	--	(P)
MW-2	08/21/2012		168.14	20.66	--	147.48	20,000	4,900	440	1,400	2,400	220	<800	<100	<100	<100	<100	<100	<50,000	--	--	
MW-2	02/04/2013		168.14	17.24	--	150.90	25,000	4,000	1,700	1,600	5,300	130	<800	<100	<100	<100	<100	<100	<50,000	--	--	
MW-2	08/01/2013		168.14	21.10	--	147.04	43,000	9,100	630	2,800	9,700	220	<2,000	<100	<100	<100	<100	<100	<50,000	--	--	
MW-2	02/27/2014		168.14	18.65	--	149.49	31,000	9,600	180	2,700	6,100	310	<2,000	<100	<100	<100	<100	<100	<50,000	--	--	
MW-2	08/27/2014		168.14	20.78	--	147.36	35,000	9,900	230	3,100	5,500	240	<4,000	<100	<100	<100	<100	<100	<100,000	3.24	450	(odor)
MW-2	03/27/2015		168.14	18.32	--	149.82	29,000	13,000	210	1,400	1,300	140	<4,000	<100	<100	<100	<100	<100	<100,000	2.29	--	(odor)
MW-2	08/27/2015		168.14	20.40	--	147.74	22,400	8,550	80.3	1,110	444	41.1J	416J	<1.00	<1.00	<1.00	--	<1.00	<100	6.2	--	
MW-2	03/28/2016		168.14	13.55	--	154.59	36,500	7,360	609	1,350	3,140	118	463	<50.0	<50.0J3	<50.0	<50.0	<50.0	<5,000	1.64	--	
MW-2	09/07/2016		168.14	19.54	--	148.60	24,200	8,960	122J	626	668	90.8J	<500	<100	<100	<100	<100	<100	<10,000	0.38	--	
MW-2	03/01/2017		168.14	11.95	--	156.19	35,000	7,630	897	1,810	3,920	175	<500	<100	<100	<100	<100	<100	<10,000	3.13	--	
MW-2	08/02/2017		168.14	22.03	--	146.11	8,600	1,960	82.1	130	311	46.5	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0	<1,000	1.22	--	
MW-3	07/09/1990		--	--	--	--	140	5.3	4.6	2	3.8	--	--	--	--	--	--	--	--	--	--	
MW-3	12/21/1990		--	--	--	--	0.19	100	6	0.9	27	--	--	--	--	--	--	--	--	--	--	
MW-3	03/07/1991		167.17	17.40	--	149.77	0.4	69	22	6.1	57	--	--	--	--	--	--	--	--	--	--	
MW-3	04/01/1991		167.17	13.69	--	153.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	06/27/1991		--	--	--	--	380	28	26	13	46	--	--	--	--	--	--	--	--	--	--	
MW-3	09/27/1991		--	--	--	--	0.07	7.9	--	0.4	1.1	--	--	--	--	--	--	--	--	--	--	
MW-3	12/18/1991		--	--	--	--	0.26	34	24	0.8	28	--	--	--	--	--	--	--	--	--	--	
MW-3	07/03/1992		167.17	19.59	--	147.58	71	9.4	0.9	5	13	--	--	--	--	--	--	--	--	--	--	
MW-3	10/05/1992	Dup	167.17	21.22	--	145.95	<50	2.2	<0.5	1.5	2.8	--	--	--	--	--	--	--	--	--	--	(Dup)
MW-3	10/05/1992		167.17	21.22	--	145.95	67	5.1	1.1	6.1	8.1	--	--	--	--	--	--	--	--	--	--	
MW-3	01/13/1993		167.17	13.63	--	153.54	830	50	34	42	89	--	--	--	--	--	--	--	--	--	--	
MW-3	04/23/1993	Dup	167.17	15.02	--	152.15	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	(Dup)
MW-3	04/23/1993		167.17	15.02	--	152.15	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	
MW-3	07/12/1993		167.17	19.16	--	148.01	250	12	4.2	12	16	<5.0	--	--	--	--	--	--	--	--	--	
MW-3	10/21/1993	Dup	167.17	21.81	--	145.36	65	7.4	1	6.9	4.2	--	--	--	--	--	--	--	--	--	--	(Dup)
MW-3	10/21/1993		167.17	21.81	--	145.36	52	4.4	1.4	4.7	3.3	<5.0	--	--	--	--	--	--	--	--	--	
MW-3	01/21/1994		167.17	19.94	--	147.23	57	3	3.4	3.6	9	<5.0	--	--	--	--	--	--	--	--	--	
MW-3	04/20/1994		167.17	20.24	--	146.93	600	26	23	33	88	28.7	--	--	--	--	--	--	--	1.8	--	
MW-3	08/01/1994	Dup	167.17	20.74	--	146.43	120	7.7	1.6	5.9	6.7	5.43	--	--	--	--	--	--	--	--	--	(Dup)
MW-3	08/01/1994		167.17	20.74	--	146.43	99	6.2	1.1	4.5	5.2	<5.0	--	--	--	--	--	--	--	1.4	--	
MW-3	12/23/1994	Dup	167.17	14.70	--	152.47	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	(Dup)
MW-3	12/23/1994		167.17	14.70	--	152.47	<50	<0.5	0.78	<0.5	<0.5	9.8	--	--	--	--	--	--	--	1.7	--	
MW-3	01/26/1995		167.17	12.89	--	154.28	190	16	0.5	35	24	--	--	--	--	--	--	--	--	6.6	--	
MW-3	06/08/1995		167.17	19.95	--	147.22	330	21	4	34	32	--	--	--	--	--	--	--	--	7	--	
MW-3	08/22/1995		167.17	21.41	--	145.76	150	14	<0.50	<0.50	1.6	<5.0	--	--	--	--	--	--	--	6.6	--	
MW-3	10/27/1995		167.17	22.43	--	144.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	10/30/1995		--	--	--	--	51	2.4	<0.50	<0.50	<1.0	<5.0	--	--	--	--	--	--	--	6.9	--	
MW-3	01/25/1996		167.17	14.03	--	153.14	<50	<0.50	<0.50	<0.50	<1.0	5.1	--	--	--	--	--	--	--	--	--	
MW-3	04/19/1996		167.17	15.26	--	151.91	460	55	4	33	63	<10	--	--	--	--	--	--	--	9.4	--	
MW-3	07/23/1996		167.17	19.19	--	147.98	<50	<0.5	<0.5	<0.5	<0.5	<10	--	--	--	--	--	--	--	9.2	--	
MW-3	11/11/1996		167.17	20.24	--	146.93	<250	<2.5	<5.0	<5.0	<5.0	<50	--	--	--	--	--	--	--	8.4	--	
MW-3	01/21/1997		167.17	13.09	--	154.08	<50	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	5.4	--	
MW-3	04/29/1997		167.17	18.14	--	149.03	<50	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	4.3	--	
MW-3	08/21/1997		167.17	19.64	--	147.53	<50	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	4.9	--	
MW-3	11/05/1997		167.17	19.95	--	147.22	<250	<2.5	<5.0	<5.0	<5.0	<50	--	--	--	--	--	--	--	4.5	--	
MW-3	02/03/1998		167.17	10.57	--	156.60	<50	<0.50	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	4.7	--	
MW-3	05/28/1998		167.17	14.65	--	152.52	330	<2.5	<5.0	<5.0	<5.0	<50	--	--	--	--	--	--	--	4.2	--	
MW-3	12/30/1998		167.17	16.63	--	150.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	02/02/1999		167.17	13.12	--	154.05	<250	<5.0	<5.0	<5.0	<5.0	<5.0	--	--	--	--	--	--	--	--	--	
MW-3	05/10/1999		167.17	14.21	--	152.96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	08/24/1999		167.17	14.36	--	152.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

Table 3
Historical Groundwater Monitoring and Analytical Data
CA-11132
3201 35th Ave, Oakland CA

ARCADIS

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/l)	NAPH (µg/L)	Notes
MW-3	11/03/1999		167.17	19.21	--	147.96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	03/01/2000		167.17	15.17	--	152.00	<50	<0.5	0.57	<0.5	0.62	<0.5	--	--	--	--	--	--	--	--	--	
MW-3	04/21/2000		167.17	14.88	--	152.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	07/31/2000		167.17	15.29	--	151.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	11/20/2000		167.17	17.31	--	149.86	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	02/18/2001		167.17	12.85	--	154.32	160	1.95	1.31	10.2	9.09	1	--	--	--	--	--	--	--	--	--	
MW-3	06/07/2001		167.17	18.00	--	149.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	09/05/2001		167.17	20.32	--	146.85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	11/30/2001		167.17	16.94	--	150.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	02/20/2002		167.17	14.84	--	152.33	86	<0.5	0.845	6.58	5.75	<0.5	--	--	--	--	--	--	--	--	--	
MW-3	06/20/2002		167.17	18.40	--	148.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	09/11/2002		167.17	20.06	--	147.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	11/12/2002		167.17	19.84	--	147.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	01/27/2003		167.17	14.83	--	152.34	850	20	9.7	24	45	0.76	--	--	--	--	--	--	--	--	--	
MW-3	01/29/2003		--	--	--	--	--	--	--	--	--	0.76	<20	<50	<50	<50	<50	<50	<40	--	--	
MW-3	05/22/2003		167.17	15.60	--	151.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	07/28/2003		167.17	20.12	--	147.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	11/18/2003		167.17	19.15	--	148.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	02/23/2004		167.17	13.53	--	153.64	160	<0.50	1.1	9.6	12	<0.50	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<100	--	--	
MW-3	05/04/2004		167.17	18.61	--	148.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	08/04/2004		167.17	19.21	--	147.96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	11/10/2004		167.17	17.48	--	149.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	02/15/2005		167.17	14.31	--	152.86	500	7.8	1.8	9.2	9.6	1.7	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<100	--	--	
MW-3	05/16/2005		167.17	13.11	--	154.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	08/17/2005		167.17	18.53	--	148.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	11/18/2005		167.17	19.34	--	147.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	02/07/2006		167.17	11.64	--	155.53	65	<0.50	<0.50	1.4	2.3	<0.50	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<300	--	--	
MW-3	05/19/2006		167.17	14.88	--	152.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	08/23/2006		167.17	19.43	--	147.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	11/15/2006		167.17	19.22	--	147.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	02/14/2007		167.17	13.80	--	153.37	200	1.1	<0.50	5.9	3.2	3.8	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<300	0.68	--	
MW-3	05/22/2007		167.17	16.80	--	150.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	08/15/2007		167.17	19.87	--	147.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	11/08/2007		167.17	19.27	--	147.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	02/20/2008		167.17	13.58	--	153.59	240	1.1	<0.50	0.99	0.79	2.3	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<100	2.58	--	
MW-3	05/07/2008		167.17	18.32	--	148.85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	08/20/2008		167.17	20.29	--	146.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	11/17/2008		167.17	19.35	--	147.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	02/25/2009		167.17	11.77	--	155.40	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<300	3.45	--	
MW-3	05/28/2009		167.17	17.02	--	150.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	08/06/2009		167.17	19.87	--	147.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	03/04/2010		167.17	10.79	--	156.38	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<4.0	<0.50	<0.50	<0.50	<0.50	<0.50	<100	3.16	--	(P)
MW-3	09/02/2010		167.17	19.32	--	147.85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	03/15/2011		167.17	11.77	--	155.40	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<4.0	<0.50	<0.50	<0.50	<0.50	<0.50	<250	--	--	(P)
MW-3	08/17/2011		167.17	17.98	--	149.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	02/06/2012		167.17	15.92	--	151.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	08/21/2012		167.17	19.42	--	147.75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(slight odor)
MW-3	02/04/2013		167.17	15.75	--	151.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	08/01/2013		167.17	19.78	--	147.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	02/27/2014		167.17	16.95	--	150.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	08/27/2014		167.17	19.64	--	147.53	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	03/27/2015		167.17	17.16	--	150.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	08/27/2015		167.17	19.40	--	147.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	03/28/2016		167.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	09/07/2016		167.17	18.75	--	148.42	280	<1.00	<5.00	<1.00	<3.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	0.40	--	
MW-3	03/01/2017		167.17	10.16	--	157.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	08/02/2017		167.17	18.74	--	148.43	448	0.477J	<1.00	<1.00	<3.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	1.75	--	
MW-4	12/21/1990		--	--	--	--	--	--	--	--	0.8	--	--	--	--	--	--	--	--	--	--	
MW-4	03/07/1991		170.36	20.72	--	149.64	--	2.2	3.8	1.5	2.8	--	--	--	--	--	--	--	--	--	--	
MW-4	04/01/1991		170.36	17.49	--	152.87	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	06/27/1991		--	--	--	--	--	6.3	1.8	0.4	1	--	--	--	--	--	--	--	--	--	--	
MW-4	07/03/1992		170.36	22.16	--	148.20	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	
MW-4	10/05/1992		170.36	23.38	--	146.98	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	
MW-4	01/13/1993		170.36	17.58	--	152.78	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	
MW-4	04/23/1993		170.36	15.72	--	154.64	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	
MW-4	07/12/1993		170.36	21.74	--	148.62	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	--	--	--	--	--	--	
MW-4	10/21/1993		170.36	23.84	--	146.52	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	--	--	--	--	--	--	
MW-4	01/21/1994		170.36	22.42	--	147.94	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	--	--	--	--	--	--	
MW-4	04/20/1994		170.36	22.66	--	147.70	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	--	--	--	--	2.2	--	
MW-4	08/01/1994		170.36	23.01	--	147.35	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	--	--	--	--	1.9	--	
MW-4	12/23/1994		170.36	17.03	--	153.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	01/26/1995		170.36	17.42	--	152.94	<50	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--	7.5	--	
MW-4	06/08/1995		170.36	21.55	--	148.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	08/22/1995		170.36	23.47	--	146.89	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	--	--	--	--	--	--	6.4	--	
MW-4	10/27/1995		170.36	24.50	--	145.86	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	01/25/1996		170.36	18.74	--	151.62	<50	<0.50	<0.50	<0.50	<1.0	58	--	--	--	--	--	--	--	--	--	
MW-4	04/19/1996		170.36	18.63	--	151.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

Table 3
Historical Groundwater Monitoring and Analytical Data
CA-11132
3201 35th Ave, Oakland CA

ARCADIS

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/l)	NAPH (µg/L)	Notes
MW-4	07/23/1996		170.36	22.56	--	147.80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	11/11/1996		170.36	23.63	--	146.73	<50	<1.0	<1.0	<1.0	<1.0	34	--	--	--	--	--	--	--	8.2	--	
MW-4	01/21/1997		170.36	16.59	--	153.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	04/29/1997		170.36	21.43	--	148.93	<50	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	4.7	--	
MW-4	08/21/1997		170.36	22.91	--	147.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	11/05/1997		170.36	22.34	--	148.02	60	<0.5	<1.0	<1.0	<1.0	76	--	--	--	--	--	--	--	4.9	--	
MW-4	02/03/1998		170.36	12.26	--	158.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	05/28/1998		170.36	18.50	--	151.86	70	<0.5	<1.0	<1.0	<1.0	160	--	--	--	--	--	--	--	4.2	--	
MW-4	12/30/1998		170.36	19.69	--	150.67	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	02/02/1999		170.36	18.26	--	152.10	70	<1.0	<1.0	<1.0	<1.0	130	--	--	--	--	--	--	--	--	--	
MW-4	05/10/1999		170.36	17.86	--	152.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	08/24/1999		170.36	17.93	--	152.43	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	11/03/1999		170.36	22.78	--	147.58	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	03/01/2000		170.36	18.04	--	152.32	<50	<0.5	0.67	<0.5	0.7	110	--	--	--	--	--	--	--	--	--	
MW-4	04/21/2000		170.36	17.36	--	153.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	07/31/2000		170.36	17.83	--	152.53	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	11/20/2000		170.36	18.91	--	151.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	02/18/2001		170.36	17.72	--	152.64	88	<0.5	<0.5	<0.5	<0.5	97.3	--	--	--	--	--	--	--	--	--	
MW-4	06/07/2001		170.36	20.23	--	150.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	09/05/2001		170.36	22.76	--	147.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	11/30/2001		170.36	21.30	--	149.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	02/20/2002		170.36	19.32	--	151.04	76	<0.5	<0.5	<0.5	<1.0	81	--	--	--	--	--	--	--	--	--	
MW-4	06/20/2002		170.36	20.71	--	149.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	09/11/2002		170.36	22.22	--	148.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	11/12/2002		170.36	22.22	--	148.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	01/29/2003		170.36	19.80	--	150.56	100	<0.5	<0.5	<0.5	<0.5	66	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<40	--	--	
MW-4	05/22/2003		170.36	19.35	--	151.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	07/28/2003		170.36	22.18	--	148.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	11/18/2003		170.36	21.65	--	148.71	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	02/23/2004		170.36	17.53	--	152.83	75	<0.50	<0.50	<0.50	<0.50	65	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<100	--	--	
MW-4	05/04/2004		170.36	20.62	--	149.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	08/04/2004		170.36	21.30	--	149.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	11/10/2004		170.36	20.65	--	149.71	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	02/15/2005		170.36	18.91	--	151.45	<50	<0.50	<0.50	<0.50	<0.50	62	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<100	--	--	
MW-4	05/16/2005		170.36	17.34	--	153.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	08/17/2005		170.36	21.31	--	149.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	11/18/2005		170.36	21.67	--	148.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	02/07/2006		170.36	16.74	--	153.62	100	<0.50	<0.50	1	3	29	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<300	--	--	
MW-4	05/19/2006		170.36	18.22	--	152.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	08/23/2006		170.36	20.95	--	149.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	11/15/2006		170.36	22.21	--	148.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	02/14/2007		170.36	18.25	--	152.11	<50	<0.50	<0.50	<0.50	<0.50	61	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<300	0.95	--	
MW-4	05/22/2007		170.36	20.16	--	150.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	08/15/2007		170.36	22.34	--	148.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	11/08/2007		170.36	21.86	--	148.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	02/20/2008		170.36	17.74	--	152.62	<50	<0.50	<0.50	<0.50	<0.50	36	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<100	2.13	--	
MW-4	05/07/2008		170.36	21.38	--	148.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	08/20/2008		170.36	22.44	--	147.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	11/17/2008		170.36	22.20	--	148.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	02/25/2009		170.36	16.81	--	153.55	<50	<0.50	<0.50	<0.50	<0.50	26	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<300	2.8	--	
MW-4	05/28/2009		170.36	20.37	--	149.99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	08/06/2009		170.36	22.46	--	147.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	03/04/2010		170.36	17.11	--	153.25	<50	<0.50	<0.50	<0.50	<1.0	34	4.4	<0.50	<0.50	<0.50	<0.50	<0.50	<100	0.63	--	(P)
MW-4	09/02/2010		170.36	20.63	--	149.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	03/15/2011		170.36	16.47	--	153.89	<50	<0.50	<0.50	<0.50	<1.0	26	4.1	<0.50	<0.50	<0.50	<0.50	<0.50	<250	--	--	(P)
MW-4	08/17/2011		170.36	20.94	--	149.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	02/06/2012		170.36	19.65	--	150.71	<50	<0.50	<0.50	<0.50	<1.0	32	<4.0	<0.50	<0.50	<0.50	<0.50(*)	<0.50	<250	--	--	(P)
MW-4	08/21/2012		170.36	22.00	--	148.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	02/04/2013		170.36	19.43	--	150.93	<50	<0.50	<0.50	<0.50	<1.0	34	<4.0	<0.50	<0.50	<0.50	<0.50	<0.50	<250	--	--	
MW-4	08/01/2013		170.36	22.43	--	147.93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	02/27/2014		170.36	20.64	--	149.72	<50	<0.50	<0.50	<0.50	<1.0	24	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	--	--	
MW-4	08/27/2014		170.36	22.24	--	148.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	03/27/2015		170.36	20.23	--	150.13	<50	<0.50	<0.50	<0.50	<1.0	22	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<500	3.5	--	
MW-4	08/27/2015		170.36	21.87	--	148.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	03/28/2016		170.36	16.29	--	154.07	<100	<1.00	<5.00	<1.00	<3.00	15	<5.00	<1.00	<1.00J3	<1.00	<1.00	<1.00	<100	2.27	--	
MW-4	09/07/2016		170.36	21.21	--	149.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	03/01/2017		170.36	15.00	--	155.36	<100	<1.00	<1.00	<1.00	<3.00	2.31	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	1.99	--	
MW-4	08/02/2017		170.36	21.33	--	149.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	07/09/1990		--	--	--	--	280	200	210	46	290	--	--	--	--	--	--	--	--	--	--	
MW-5	12/21/1990		--	--	--	--	0.69	300	34	8.4	39	--	--	--	--	--	--	--	--	--	--	
MW-5	03/07/1991		165.14	16.60	--	148.54	--	17	0.9	0.7	1.6	--	--	--	--	--	--	--	--	--	--	
MW-5	04/01/1991		165.14	11.99	--	153.15	800	250	54	11	60	--	--	--	--	--	--	--	--	--	--	
MW-5	06/27/1991		--	--	--	--	330	120	10	12	8	--	--	--	--	--	--	--	--	--	--	
MW-5	09/27/1991		--	--	--	--	0.73	230	16	20	22	--	--	--	--	--	--	--	--	--	--	
MW-5	07/03/1992		165.14	18.65	--	146.49	150	36	<0.5	<0.5	1.1	--	--	--	--	--	--	--	--	--	--	
MW-5	10/05/1992		165.14	20.32	--	144.82	270	79	4	1.7	2.9	--	--	--	--	--	--	--	--	--	--	
MW-5	01/13/1993		165.14	13.03	--	152.11	180	59	6	1.8	7.6	--	--	--	--	--	--	--	--	--	--	

Table 3
Historical Groundwater Monitoring and Analytical Data
CA-11132
3201 35th Ave, Oakland CA

ARCADIS

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/l)	NAPH (µg/L)	Notes
MW-5	04/23/1993		165.14	13.51	--	151.63	8,700	440	96	35	136	--	--	--	--	--	--	--	--	--	--	
MW-5	07/12/1993		165.14	18.06	--	147.08	250	57	2.9	2.1	6	<5.0	--	--	--	--	--	--	--	--	--	
MW-5	10/21/1993		165.14	20.41	--	144.73	210	82	1.5	<0.5	1.4	--	--	--	--	--	--	--	--	--	--	
MW-5	01/21/1994		165.14	18.86	--	146.28	110	36	1.2	<0.5	0.7	<5.0	--	--	--	--	--	--	--	--	--	
MW-5	04/20/1994		165.14	17.30	--	147.84	690	230	4.5	1.6	11	21.2	--	--	--	--	--	--	--	1.3	--	
MW-5	08/01/1994		165.14	17.53	--	147.61	170	44	1.6	0.9	2.7	<5.0	--	--	--	--	--	--	--	0.9	--	
MW-5	12/23/1994		165.14	11.63	--	153.51	630	180	1.9	0.66	1.9	7.81	--	--	--	--	--	--	--	1.4	--	
MW-5	01/26/1995		165.14	11.25	--	153.89	160	68	<0.5	<0.5	22	--	--	--	--	--	--	--	--	5.9	--	
MW-5	06/08/1995	Dup	165.14	16.80	--	148.34	1,700	560	51	55	170	--	--	--	--	--	--	--	--	--	--	(Dup)
MW-5	06/08/1995		165.14	16.80	--	148.34	2,000	630	58	61	180	--	--	--	--	--	--	--	--	6.5	--	
MW-5	08/22/1995		165.14	19.02	--	146.12	3,700	1,100	18	27	59	<130	--	--	--	--	--	--	--	7.3	--	
MW-5	10/27/1995		165.14	20.94	--	144.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	10/30/1995		--	--	--	--	6,500	2,200	55	180	270	<250	--	--	--	--	--	--	--	7.5	--	
MW-5	01/25/1996	Dup	165.14	13.30	--	151.84	540	37	0.66	<0.50	<1.0	<5.0	--	--	--	--	--	--	--	--	--	(Dup)
MW-5	01/25/1996		165.14	13.30	--	151.84	590	37	0.7	<0.50	<1.0	<5.0	--	--	--	--	--	--	--	--	--	
MW-5	04/19/1996		165.14	13.63	--	151.51	1,500	470	38	49	210	<50	--	--	--	--	--	--	--	8.1	--	
MW-5	07/23/1996		165.14	17.61	--	147.53	140	4.6	<0.5	<0.5	<0.5	<10	--	--	--	--	--	--	--	8	--	
MW-5	11/11/1996		165.14	18.70	--	146.44	140	40	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	7.9	--	
MW-5	01/21/1997		165.14	11.63	--	153.51	730	300	<5.0	7.8	26	<50	--	--	--	--	--	--	--	5	--	
MW-5	04/29/1997		165.14	16.74	--	148.40	340	530	<5.0	<5.0	<5.0	<50	--	--	--	--	--	--	--	4.8	--	
MW-5	08/21/1997		165.14	18.26	--	146.88	<50	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	4.9	--	
MW-5	11/05/1997		165.14	18.84	--	146.30	120	13	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	4.4	--	
MW-5	02/03/1998		165.14	9.49	--	155.65	<50	<0.50	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	4.3	--	
MW-5	05/28/1998		165.14	13.57	--	151.57	4,900	1,500	34	180	311	<10	--	--	--	--	--	--	--	4.1	--	
MW-5	12/30/1998		165.14	14.65	--	150.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	02/02/1999		165.14	12.56	--	152.58	100	<1.0	<1.0	<1.0	<1.0	9.1	--	--	--	--	--	--	--	--	--	
MW-5	05/10/1999		165.14	13.36	--	151.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	08/24/1999		165.14	13.50	--	151.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	11/03/1999		165.14	18.48	--	146.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	03/01/2000		165.14	9.59	--	155.55	<50	<0.5	0.58	<0.5	0.54	2.9	--	--	--	--	--	--	--	--	--	
MW-5	04/21/2000		165.14	13.52	--	151.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	07/31/2000		165.14	14.04	--	151.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	11/20/2000		165.14	15.89	--	149.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	02/18/2001		165.14	11.88	--	153.26	560	161	2.38	6.11	13	5.67	--	--	--	--	--	--	--	--	--	
MW-5	06/07/2001		165.14	15.30	--	149.84	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	09/05/2001		165.14	19.32	--	145.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	11/30/2001		165.14	17.44	--	147.70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	02/20/2002		165.14	13.88	--	151.26	4,200	940	18.7	98.2	176	55.6	--	--	--	--	--	--	--	--	--	
MW-5	06/20/2002		165.14	16.20	--	148.94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	09/11/2002		165.14	19.15	--	145.99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	11/12/2002		165.14	19.01	--	146.13	390	55	0.89	3.4	3.5	210	--	--	--	--	--	--	--	--	--	
MW-5	01/29/2003		165.14	16.33	--	148.81	7,900	1,400	34	220	350	82	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<400	--	--	
MW-5	05/22/2003		165.14	14.35	--	150.79	9,900	2,300	91	400	690	<50	<2,000	--	<50	<50	--	<50	<10,000	--	--	
MW-5	07/28/2003		165.14	18.90	--	146.24	3,200	690	14	81	100	120	<400	<10	<10	<10	<10	<10	<2,000	--	--	
MW-5	02/23/2004		165.14	12.21	--	152.93	7,500	1,500	100	190	350	100	<1,000	38	<25	<25	<25	<25	<5,000	--	--	
MW-5	05/04/2004		165.14	17.12	--	148.02	5,900	1,500	57	200	280	42	<1,000	<25	<25	<25	<25	<25	<5,000	--	--	
MW-5	08/04/2004		165.14	19.05	--	146.09	<2,500	<25	<25	<25	<25	390	<1,000	<25	<25	<25	<25	<25	<5,000	--	--	
MW-5	11/10/2004		165.14	16.95	--	148.19	870	80	<5.0	<5.0	<5.0	530	<200	<5.0	<5.0	<5.0	<5.0	5.5	<1,000	--	--	
MW-5	02/15/2005		165.14	12.75	--	152.39	1,600	330	8	37	67	260	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<1,000	--	--	
MW-5	05/16/2005		165.14	15.46	--	149.68	<500	<5.0	<5.0	<5.0	<5.0	370	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<1,000	--	--	
MW-5	08/17/2005		165.14	17.00	--	148.14	7,000	1,000	17	110	130	51	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<1,000	--	--	
MW-5	11/18/2005		165.14	18.33	--	146.81	1,900	91	<5.0	33	29	340	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<1,000	--	--	
MW-5	02/07/2006		165.14	10.27	--	154.87	2,100	590	9.6	86	110	200	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<3,000	--	--	
MW-5	05/19/2006		165.14	13.08	--	152.06	3,200	720	9.7	150	170	44	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<3,000	--	--	
MW-5	08/23/2006		165.14	17.02	--	148.12	1,400	69	<5.0	20	24	230	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<3,000	--	--	
MW-5	11/15/2006		165.14	18.30	--	146.84	1,100	24	<2.5	10	8.6	490	<100	<2.5	<2.5	<2.5	<2.5	4.2	<1,500	0.85	--	
MW-5	02/14/2007		165.14	13.16	--	151.98	680	110	<2.5	16	11	420	<100	<2.5	<2.5	<2.5	<2.5	3.6	<1,500	2.54	--	
MW-5	05/22/2007		165.14	15.42	--	149.72	2,800	660	8.8	74	100	26	<100	<2.5	<2.5	<2.5	<2.5	<2.5	<1,500	1.41	--	
MW-5	08/15/2007		165.14	18.80	--	146.34	2,800	50	<10	26	29	280	<400	<10	<10	<10	<10	<10	<6,000	3.81	--	
MW-5	11/08/2007		165.14	18.55	(Sheen)	146.59	3,800	77	<2.5	46	35	270	310	<2.5	<2.5	<2.5	<2.5	<2.5	<1,500	1.08	--	
MW-5	02/20/2008		165.14	12.21	--	152.93	2,500	530	<5.0	75	62	43	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<1,000	2.01	--	
MW-5	05/07/2008		165.14	16.91	--	148.23	6,700	1,800	29	270	360	30	<200	<10	<10	<10	<10	<10	<6,000	2.45	--	
MW-5	08/20/2008		165.14	19.45	--	145.69	300	22	<2.0	8.5	5.3	260	270	<2.0	<2.0	<2.0	<2.0	3	<1,200	5.57	--	
MW-5	02/25/2009		165.14	11.12	--	154.02	140	6.4	<0.50	2.4	3.1	68	110	<0.50	<0.50	<0.50	<0.50	0.62	<300	4.38	--	
MW-5	05/28/2009		165.14	15.70	--	149.44	3,800	790	9.5	140	110	11	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<600	0.04	--	
MW-5	08/06/2009		165.14	18.84	(Sheen)	146.30	78	<5.0	<5.0	<5.0	<5.0	190	340	<5.0	<5.0	<5.0	<5.0	<5.0	<3,000	0.06	--	
MW-5	03/04/2010		165.14	10.02	--	155.12	1,200	420	5.5	69	58	15	38	<0.50	<0.50	<0.50	<0.50	<0.50	<100	0.66	--	(P)
MW-5	09/02/2010		165.14	16.24	--	148.90	200	69	1.3	3.2	7.3	13	<4.0	<0.50	<0.50	<0.50	<0.50	<0.50	<100	--	--	(NP,y)
MW-5	03/15/2011		165.14	11.36	--	153.78	1,700	410	7.9	88	80	5.9	<4.0	<0.50	<0.50	<0.50	<0.50	<0.50	<250	--	--	(P)
MW-5	08/17/2011		165.14	16.62	--	148.52	1,900	460	7.6	44	51	<5.0	<40	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	--	--	(P)
MW-5	02/06/2012		165.14	14.36	--	150.78	580	140	<5.0	9.2	<10	9.6	<40	<5.0	<5.0	<5.0	<5.0(*)	<5.0	<2,500	--	--	(P)
MW-5	08/21/2012		165.14	18.22	--	146.92	290	23	0.75	4.8	4.3	17	200	<0.50	<0.50	<0.50	<0.50	<0.50	<250	--	--	
MW-5	02/04/2013		165.14	13.99	--	151.15	1,400	230	2.7	55	34	3.1	13	<0.50	<0.50	<0.50	<0.50	<0.50	<250	--	--	
MW-5	08/01/2013		165.14	18.64	--	146.50	<50	<0.50	<0.50	<0.50	<1.0	27	250	<0.50	<0.50	<0.50	<0.50	<0.50	<250	--	--	
MW-5	02/27/2014		165.14	16.03	--	149.11	83	3.5	<0.50	<0.50	<1.0	12	77	<0.50	<0.50	<0.50	<0.50	<0.50	<250	--	--	
MW-5	08/27/2014		165.14	18.28	--	146.86	430	43	0.59	2.8	1.2	9.1	210	<0.50	<0.50	<0.50	<0.50	<0.50	<500	3.08	<1.0	(odor)
MW-5	03/27/2015		165.14	15.56	--	149.58	2,200	370	5.1	74	37	4.2	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<500	3.08	--	(odor)
MW-5	08/27/2015		165.14	17.96	--	147.18	7,370	803	8.60J	62.2	75.8	8.63J	126	<10.0	<10.0	<10.0	--	<10.0	<1,000	3.37	--	

Table 3
Historical Groundwater Monitoring and Analytical Data
CA-11132
3201 35th Ave, Oakland CA

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Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/l)	NAPH (µg/L)	Notes
MW-5	03/28/2016		165.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(INA)
MW-5	09/07/2016		165.14	17.10	--	148.04	1,830	325	9.39J	47.3	22.1J	<10.0	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0	<1,000	0.29	--	
MW-5	03/01/2017		165.14	8.89	--	156.25	426	32.8	1.01	22.6	8.62	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	2.65	--	
MW-5	08/02/2017		165.14	16.93	--	148.21	482	22.1	0.683J	1.55	1.08J	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	2.01	--	
MW-6	12/21/1990		--	--	--	--	0.17	2.6	7	4.9	26	--	--	--	--	--	--	--	--	--	--	
MW-6	04/01/1991		165.40	11.79	--	153.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	12/18/1991		--	--	--	--	--	1.3	22	--	2.7	--	--	--	--	--	--	--	--	--	--	
MW-6	07/03/1992		165.40	17.77	--	147.63	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	
MW-6	10/05/1992		165.40	19.46	--	145.94	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	
MW-6	01/13/1993		165.40	11.34	--	154.06	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	
MW-6	04/23/1993		165.40	12.92	--	152.48	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	
MW-6	07/12/1993		165.40	17.36	--	148.04	<50	<0.5	<0.5	<0.5	0.7	<5.0	--	--	--	--	--	--	--	--	--	
MW-6	10/21/1993		165.40	19.98	--	145.42	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	
MW-6	01/21/1994		165.40	18.10	--	147.30	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	--	--	--	--	--	--	
MW-6	04/20/1994		165.40	18.68	--	146.72	<50	<0.5	<0.5	<0.5	<0.5	17.4	--	--	--	--	--	--	--	2	--	
MW-6	08/01/1994		165.40	18.90	--	146.50	<50	<0.5	<0.5	<0.5	<0.5	8.66	--	--	--	--	--	--	--	1.5	--	
MW-6	12/23/1994		165.40	12.94	--	152.46	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	01/26/1995		165.40	10.46	--	154.94	<50	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--	7.3	--	
MW-6	06/08/1995		165.40	16.84	--	148.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	08/22/1995		165.40	19.48	--	145.92	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	--	--	--	--	--	--	6.7	--	
MW-6	10/27/1995		165.40	20.39	--	145.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	01/25/1996		165.40	12.24	--	153.16	<50	<0.50	<0.50	<0.50	<1.0	9.9	--	--	--	--	--	--	--	--	--	
MW-6	04/19/1996		165.40	13.90	--	151.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	07/23/1996		165.40	17.83	--	147.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	11/11/1996		165.40	18.90	--	146.50	<50	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	7.7	--	
MW-6	01/21/1997		165.40	11.97	--	153.43	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	04/29/1997		165.40	17.04	--	148.36	<50	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	4.5	--	
MW-6	08/21/1997		165.40	18.58	--	146.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	11/05/1997		165.40	19.17	--	146.23	70	<0.5	<1.0	<1.0	<1.0	85	--	--	--	--	--	--	--	4.3	--	
MW-6	02/03/1998		165.40	9.87	--	155.53	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	05/28/1998		165.40	13.38	--	152.02	<50	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	3.7	--	
MW-6	12/30/1998		165.40	14.45	--	150.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	02/02/1999		165.40	18.29	--	147.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	05/10/1999		165.40	17.49	--	147.91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	08/24/1999		165.40	17.61	--	147.79	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	11/03/1999		165.40	16.26	--	149.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	03/01/2000		165.40	17.43	--	147.97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	04/21/2000		165.40	13.32	--	152.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	07/31/2000		165.40	13.46	--	151.94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	11/20/2000		165.40	14.78	--	150.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	02/18/2001		165.40	11.33	--	154.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	06/07/2001		165.40	16.36	--	149.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	09/05/2001		165.40	18.61	--	146.79	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	11/30/2001		165.40	15.20	--	150.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	02/20/2002		165.40	12.74	--	152.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	06/20/2002		165.40	16.68	--	148.72	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	09/11/2002		165.40	18.38	--	147.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	11/12/2002		165.40	18.78	--	146.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	01/29/2003		165.40	14.45	--	150.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	05/22/2003		165.40	14.36	--	151.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	07/28/2003		165.40	18.43	--	146.97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	11/18/2003		165.40	17.48	--	147.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	02/23/2004		165.40	11.54	--	153.86	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	05/04/2004		165.40	16.58	--	148.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	08/04/2004		165.40	18.12	--	147.28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	11/10/2004		165.40	15.75	--	149.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	02/15/2005		165.40	12.50	--	152.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	05/16/2005		165.40	11.51	--	153.89	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<100	--	--	
MW-6	08/17/2005		165.40	16.85	--	148.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	02/07/2006		165.40	9.93	--	155.47	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<300	--	--	
MW-6	08/23/2006		165.40	16.35	--	149.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	11/15/2006		165.40	17.42	--	147.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	02/14/2007		165.40	12.03	--	153.37	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<300	1.07	--	
MW-6	05/22/2007		165.40	15.11	--	150.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	08/15/2007		165.40	18.08	--	147.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	11/08/2007		165.40	17.79	--	147.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	02/20/2008		165.40	11.81	--	153.59	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<100	1.29	--	
MW-6	05/07/2008		165.40	16.75	--	148.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	02/25/2009		165.40	9.99	--	155.41	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<300	2.39	--	
MW-6	08/06/2009		165.40	18.33	--	147.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	03/04/2010		165.40	9.11	--	156.29	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<4.0	<0.50	<0.50	<0.50	<0.50	<0.50	<100	0.88	--	(P)
MW-6	09/02/2010		165.40	17.80	--	147.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	03/15/2011		165.40	10.08	--	155.32	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<4.0	<0.50	<0.50	<0.50	<0.50	<0.50	<250	--	--	(P)
MW-6	08/17/2011		165.40	16.50	--	148.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	02/06/2012		165.40	14.44	--	150.96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	08/21/2012		165.40	17.91	--	147.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	02/04/2013		165.40	14.13	--	151.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

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3201 35th Ave, Oakland CA

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Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/l)	NAPH (µg/L)	Notes
MW-6	08/01/2013		165.40	18.27	--	147.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	02/27/2014		165.40	15.33	--	150.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	08/27/2014		165.40	19.12	--	146.28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	03/27/2015		165.40	15.58	--	149.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	08/27/2015		165.40	17.92	--	147.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	03/28/2016		165.40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(NS)
MW-6	09/07/2016		165.40	17.12	--	148.28	<100	<1.00	<5.00	<1.00	<3.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	1.63	--	
MW-6	03/01/2017		165.40	8.63	--	156.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	08/02/2017		165.40	17.40	--	148	<100	<1.00	<1.00	<1.00	<3.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	1.55	--	
MW-7	03/07/1991		167.61	19.04	--	148.57	--	--	0.4	0.3	2.4	--	--	--	--	--	--	--	--	--	--	
MW-7	04/01/1991		167.61	15.18	--	152.43	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	06/27/1991		--	--	--	--	70	17	4	0.8	2.2	--	--	--	--	--	--	--	--	--	--	
MW-7	09/27/1991		--	--	--	--	--	0.4	--	--	0.4	--	--	--	--	--	--	--	--	--	--	
MW-7	12/18/1991		--	--	--	--	--	0.7	2.9	0.8	3.3	--	--	--	--	--	--	--	--	--	--	
MW-7	07/03/1992		167.61	20.28	--	147.33	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	
MW-7	10/05/1992		167.61	21.56	--	146.05	<50	<0.5	<0.5	<0.5	1.5	--	--	--	--	--	--	--	--	--	--	
MW-7	01/13/1993		167.61	15.41	--	152.20	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	
MW-7	04/23/1993		167.61	15.84	--	151.77	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	
MW-7	07/12/1993		167.61	19.84	--	147.77	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	--	--	--	--	--	--	
MW-7	10/21/1993		167.61	21.61	--	146.00	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	
MW-7	01/21/1994	Dup	167.61	20.49	--	147.12	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	(Dup)
MW-7	01/21/1994		167.61	20.49	--	147.12	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	--	--	--	--	--	--	
MW-7	04/20/1994		167.61	20.54	--	147.07	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	--	--	--	--	1.5	--	
MW-7	08/01/1994		167.61	20.99	--	146.62	<50	0.7	<0.5	<0.5	<0.5	<5.0	--	--	--	--	--	--	--	1.9	--	
MW-7	12/23/1994		167.61	15.00	--	152.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	01/26/1995		167.61	14.69	--	152.92	<50	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--	7	--	
MW-7	06/08/1995		167.61	19.87	--	147.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	08/22/1995		167.61	21.49	--	146.12	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	--	--	--	--	--	--	6.4	--	
MW-7	10/27/1995		167.61	22.53	--	145.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	01/25/1996		167.61	17.21	--	150.40	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	--	--	--	--	--	--	--	--	
MW-7	04/19/1996		167.61	17.09	--	150.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	07/23/1996		167.61	21.02	--	146.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	11/11/1996		167.61	22.03	--	145.58	<50	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	7.8	--	
MW-7	01/21/1997		167.61	15.06	--	152.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	04/29/1997		167.61	20.11	--	147.50	<50	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	4.4	--	
MW-7	08/21/1997		167.61	21.59	--	146.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	11/05/1997		167.61	20.05	--	147.56	<50	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	4.4	--	
MW-7	02/03/1998		167.61	9.97	--	157.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	05/28/1998		167.61	13.52	--	154.09	<50	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	4.3	--	
MW-7	12/30/1998		167.61	18.33	--	149.28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	02/02/1999		167.61	12.33	--	155.28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	05/10/1999		167.61	13.52	--	154.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	08/24/1999		167.61	14.01	--	153.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	11/03/1999		167.61	19.91	--	147.70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	03/01/2000		167.61	19.89	--	147.72	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	04/21/2000		167.61	17.94	--	149.67	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	07/31/2000		167.61	17.33	--	150.28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	11/20/2000		167.61	18.41	--	149.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	02/18/2001		167.61	15.13	--	152.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	06/07/2001		167.61	18.75	--	148.86	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	09/05/2001		167.61	20.48	--	147.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	11/30/2001		167.61	20.11	--	147.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	02/20/2002		167.61	18.40	--	149.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	06/20/2002		167.61	18.62	--	148.99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	09/11/2002		167.61	20.05	--	147.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	11/12/2002		167.61	21.13	--	146.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	01/29/2003		167.61	19.10	--	148.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	05/22/2003		167.61	18.83	--	148.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	07/28/2003		167.61	19.88	--	147.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	11/18/2003		167.61	20.50	--	147.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	02/23/2004		168.08	15.92	--	152.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	05/04/2004		168.08	18.86	--	149.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	08/04/2004		168.08	19.10	--	148.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	11/10/2004		168.08	20.25	--	147.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	02/15/2005		168.08	16.37	--	151.71	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	08/17/2005		168.08	19.74	--	148.34	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	11/18/2005		168.08	20.82	--	147.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	02/07/2006		168.08	14.26	--	153.82	<500	<5.0	<5.0	<5.0	<5.0	270	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<3,000	--	--	
MW-7	05/19/2006		168.08	16.51	--	151.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	08/23/2006		168.08	20.30	--	147.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	11/15/2006		168.08	20.85	--	147.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	02/14/2007		168.08	16.57	--	151.51	520	<5.0	<5.0	<5.0	<5.0	740	<200	<5.0	<5.0	<5.0	<5.0	9.6	<3,000	3.08	--	
MW-7	05/22/2007		168.08	18.40	--	149.68	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	08/15/2007		168.08	20.85	--	147.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	11/08/2007		168.08	20.41	--	147.67	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	02/20/2008		168.08	15.90	--	152.18	<50	<0.50	<0.50	<0.50	<0.50	700	13	0.6	<0.50	<0.50	<0.50	12	<100	4.34	--	
MW-7	05/07/2008		168.08	19.41	--	148.67	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

Table 3
Historical Groundwater Monitoring and Analytical Data
CA-11132
3201 35th Ave, Oakland CA

ARCADIS

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/l)	NAPH (µg/L)	Notes
MW-7	08/20/2008		168.08	21.34	--	146.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	11/17/2008		168.08	20.54	--	147.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	02/25/2009		168.08	14.89	--	153.19	130	<20	<20	<20	<20	540	<400	<20	<20	<20	<20	<20	<12,000	4.28	--	
MW-7	05/28/2009		168.08	18.57	--	149.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	08/06/2009		168.08	20.83	--	147.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	03/04/2010		168.08	14.02	--	154.06	430	<0.50	<0.50	<0.50	<1.0	920	4	0.74	<0.50	<0.50	<0.50	17	<100	3.3	--	(P)
MW-7	09/02/2010		168.08	20.43	--	147.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	03/15/2011		168.08	14.86	--	153.22	<1,000	<0.50	<0.50	<0.50	<1.0	990	130	0.81	<0.50	<0.50	<0.50	17	<250	--	--	(P)
MW-7	08/17/2011		168.08	19.01	--	149.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	02/06/2012		168.08	18.20	--	149.88	<50	<0.50	<0.50	<0.50	<1.0	22	<4.0	<0.50	<0.50	<0.50	<0.50	<0.50	<250	--	--	(P)
MW-7	08/21/2012		168.08	20.29	--	147.79	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	02/04/2013		168.08	17.60	--	150.48	<500	<0.50	<0.50	<0.50	<1.0	290	<4.0	<0.50	<0.50	<0.50	<0.50	6.4	<250	--	--	
MW-7	08/01/2013		168.08	20.68	--	147.40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	02/27/2014		168.08	18.86	--	149.22	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	--	--	
MW-7	08/27/2014		168.08	19.68	--	148.40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	03/27/2015		168.08	18.09	--	149.99	<50	<0.50	<0.50	<0.50	<1.0	240	<20	<0.50	<0.50	<0.50	<0.50	3.3	<500	3.42	--	
MW-7	08/27/2015		168.08	19.59	--	148.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	03/28/2016		168.08	13.92	--	154.16	222	<1.00	<5.00	<1.00	<3.00	458	<5.00	<1.00	<1.00J3	<1.00	<1.00	7	<100	2.51	--	
MW-7	09/07/2016		168.08	18.90	--	149.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	03/01/2017		168.08	12.75	--	155.33	<100	<1.00	<1.00	<1.00	<3.00	7.44	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	1.87	--	
MW-7	08/02/2017		168.08	19.29	--	148.79	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	03/07/1991		165.74	16.72	--	149.02	2.7	780	450	64	310	--	--	--	--	--	--	--	--	--	--	
MW-8	04/01/1991		165.74	12.54	--	153.20	15,000	3,600	2,600	410	1,900	--	--	--	--	--	--	--	--	--	--	
MW-8	06/27/1991		--	--	--	--	12,000	3,400	1,100	240	750	--	--	--	--	--	--	--	--	--	--	
MW-8	09/27/1991		--	--	--	--	41	5,700	5,200	1,100	4,300	--	--	--	--	--	--	--	--	--	--	
MW-8	12/18/1991		--	--	--	--	3.2	990	150	120	250	--	--	--	--	--	--	--	--	--	--	
MW-8	07/03/1992		165.74	18.78	--	146.96	72,000	19,000	32,000	3,000	15,000	--	--	--	--	--	--	--	--	--	--	
MW-8	10/05/1992		165.74	20.48	--	145.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	01/13/1993		165.74	12.87	--	152.87	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	04/23/1993		165.74	13.90	--	151.84	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	07/12/1993		165.74	18.30	--	147.44	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	10/21/1993		165.74	21.91	--	142.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	01/21/1994		165.74	19.12	--	146.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	04/20/1994		165.74	19.28	--	146.46	26,000	1,700	4,100	960	4,000	632	--	--	--	--	--	--	--	1.1	--	
MW-8	12/23/1994		165.74	13.81	--	151.93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	06/08/1995		165.74	17.82	--	147.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	08/22/1995		165.74	19.41	--	146.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	10/27/1995		165.74	20.47	--	145.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	01/25/1996		165.74	13.35	--	152.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	04/19/1996		165.74	14.40	--	151.34	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	07/23/1996		165.74	18.35	--	147.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	11/11/1996		165.74	19.41	--	146.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	01/21/1997		165.74	12.29	--	153.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	08/21/1997		165.74	19.61	--	146.13	240,000	1,100	9,300	4,100	31,100	<1,000	--	--	--	--	--	--	--	5.2	--	
MW-8	11/05/1997		165.74	19.45	--	146.29	57,000	790	2,700	2,300	15,200	<1,000	--	--	--	--	--	--	--	5	--	
MW-8	02/03/1998		165.74	9.33	--	156.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	02/04/1998		--	--	--	--	94,000	570	1,500	2,100	15,200	<2,500	--	--	--	--	--	--	--	5.5	--	
MW-8	12/30/1998		165.74	15.48	--	150.26	120,000	460	2,300	2,200	15,000	150	--	--	--	--	--	--	--	--	--	
MW-8	02/02/1999		165.74	18.29	--	147.45	82,000	450	2,200	3,700	26,000	<500	--	--	--	--	--	--	--	--	--	
MW-8	05/10/1999		165.74	15.62	--	150.12	28,000	740	1,800	1,100	5,800	<25	--	--	--	--	--	--	--	--	--	
MW-8	08/24/1999		165.74	18.41	--	147.33	75,000	530	1,400	3,300	21,000	150	--	--	--	--	--	--	--	--	--	
MW-8	11/03/1999		165.74	18.71	--	147.03	70,000	600	1,300	3,600	20,500	750	--	--	--	--	--	--	--	--	--	
MW-8	03/01/2000		165.74	19.37	--	146.37	27,000	1,600	1,200	2,600	6,600	120	--	--	--	--	--	--	--	--	--	
MW-8	11/20/2000		165.74	17.42	--	148.32	1,300,000	1,400	1,700	20,000	16,000	5,700	--	--	--	--	--	--	--	--	--	
MW-8	09/05/2001		165.74	21.45	0.04	144.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	11/30/2001		165.74	18.31	--	147.43	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	02/20/2002		165.74	14.02	--	151.72	20,000	163	114	403	3,810	80.4	--	--	--	--	--	--	--	--	--	
MW-8	06/20/2002		165.74	17.56	--	148.18	28,000	466	141	962	5,850	2,520	--	--	--	--	--	--	--	--	--	
MW-8	09/11/2002		165.74	19.45	--	146.29	190,000	1,500	670	4,500	23,000	1,200	--	--	--	--	--	--	--	--	--	
MW-8	11/12/2002		165.74	19.15	--	146.59	420	6.4	2.9	16	110	31	--	--	--	--	--	--	--	--	--	
MW-8	01/29/2003		165.74	15.02	--	150.72	200,000	810	<500	2,000	11,000	<500	<2,000	<50	<50	<50	<50	<50	<4,000	--	--	
MW-8	05/22/2003		165.74	15.07	--	150.67	--	--	--	--	--	--	<1,000	--	<25	<25	--	<25	<5,000	--	--	
MW-8	06/24/2003		165.74	17.95	--	147.79	43,000	860	300	2,100	9,600	46	--	--	--	--	--	--	--	--	--	
MW-8	07/28/2003		165.74	19.45	--	146.29	62,000	690	230	1,800	15,000	2,100	<4,000	<100	<100	<100	<100	<100	<20,000	--	--	
MW-8	08/12/2003		165.74	19.40	0.01	146.34	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	09/12/2003		165.74	19.34	--	146.40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	11/18/2003		165.74	18.80	0.01	146.94	8,800	500	37	530	930	1,700	<400	--	<10	<10	--	20	<2,000	--	--	
MW-8	02/23/2004		165.74	12.82	0.01	152.92	32,000	840	360	1,000	7,100	110	<2,000	<50	<50	<50	<50	<50	<10,000	--	--	
MW-8	05/04/2004		165.74	18.87	0.01	146.87	42,000	570	230	1,700	8,400	2,000	<1,000	<25	<25	<25	<25	33	<5,000	--	--	
MW-8	08/04/2004		165.74	19.37	0.05	146.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	09/22/2004		165.74	19.60	--	146.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	11/10/2004		165.74	16.58	--	149.16	11,000	790	61	1,000	830	74	<1,000	<25	<25	<25	<25	<25	<5,000	--	--	
MW-8	02/15/2005		165.74	12.85	--	152.89	38,000	1,300	390	2,300	7,900	<50	<2,000	<50	<50	<50	<50	<50	<10,000	--	--	
MW-8	05/16/2005		165.74	12.22	--	153.52	31,000	1,000	360	2,500	7,500	<50	<2,000	<50	<50	<50	<50	<50	<10,000	--	--	
MW-8	08/17/2005		165.74	17.80	--	147.94	60,000	540	240	2,500	8,600	<50	<2,000	<50	<50	<50	<50	<50	<10,000	--	--	
MW-8	11/18/2005		165.74	21.02	--	144.72	33,000	340	120	1,400	4,900	140	<2,000	<50	<50	<50	<50	<50	<10,000	--	--	
MW-8	02/07/2006		165.74	10.73	--	155.01	5,700	94	27	260	820	7.5	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<3,000	--	--	

Table 3
Historical Groundwater Monitoring and Analytical Data
CA-11132
3201 35th Ave, Oakland CA

ARCADIS

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/l)	NAPH (µg/L)	Notes
MW-8	05/19/2006		165.74	13.89	--	151.85	40,000	1,100	320	2,900	6,000	<25	<1,000	<25	<25	<25	<25	<25	<15,000	--	--	
MW-8	08/23/2006		165.74	18.85	--	146.89	21,000	520	150	1,800	6,300	82	<1,000	<25	<25	<25	<25	<25	<15,000	--	--	
MW-8	11/15/2006		165.74	18.75	--	146.99	3,300	81	<25	130	430	110	<1,000	<25	<25	<25	<25	<25	<15,000	0.81	--	
MW-8	02/14/2007		165.74	13.45	(Sheen)	152.29	9,300	320	<25	360	710	82	<1,000	<25	<25	<25	<25	<25	<15,000	1.89	--	
MW-8	05/22/2007		165.74	15.92	(Sheen)	149.82	17,000	370	51	760	1,600	11	<400	<10	<10	<10	<10	<10	<6,000	1.05	--	
MW-8	08/15/2007		165.74	19.11	(Sheen)	146.63	17,000	170	44	1,000	2,700	28	<400	<10	<10	<10	<10	<10	<6,000	3.93	--	
MW-8	11/08/2007		165.74	18.46	(Sheen)	147.28	24,000	150	43	1,100	3,200	27	<1,000	<25	<25	<25	<25	<25	<15,000	1.29	--	
MW-8	08/20/2008		165.74	19.66	0.01	146.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	02/25/2009		165.74	11.50	(Sheen)	154.24	3,400	160	11	88	65	35	<200	<10	<10	<10	<10	<10	<6,000	2.18	--	
MW-8	04/08/2009		165.74	14.55	--	151.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	05/28/2009		165.74	16.12	(Sheen)	149.62	8,300	410	54	660	800	<2.5	<50	<2.5	<2.5	<2.5	<2.5	<2.5	<1,500	0.06	--	
MW-8	06/16/2009		165.74	17.63	--	148.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	03/04/2010		165.74	10.33	--	155.41	11,000	520	110	830	1,600	<5.0	<40	<5.0	<5.0	<5.0	<5.0	<5.0	<1,000	0.82	--	(P)
MW-8	09/02/2010		165.74	18.52	--	147.22	6,900	180	24	280	480	<5.0	<40	<5.0	<5.0	<5.0	<5.0	<5.0	<1,000	--	--	(P)
MW-8	03/15/2011		165.74	11.03	--	154.71	14,000	470	150	1,400	3,000	<2.5	<20	<2.5	<2.5	<2.5	<2.5	<2.5	<1,200	--	--	(P)
MW-8	08/17/2011		165.74	17.14	--	148.60	4,100	180	24	280	340	<5.0	<40	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	--	--	(P)
MW-8	02/06/2012		165.74	15.07	--	150.67	5,100	140	18	210	220	<5.0	<40	<5.0	<5.0	<5.0	<5.0(*)	<5.0	2,900	--	--	(P)
MW-8	08/21/2012		165.74	18.88	--	146.86	3,600	220	25	170	170	<5.0	<40	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	--	--	
MW-8	02/04/2013		165.74	14.88	--	150.86	2,300	71	13	150	230	<5.0	<40	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	--	--	
MW-8	08/01/2013		165.74	18.96	--	146.78	5,300	140	20	220	190	<5.0	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	--	--	
MW-8	02/27/2014		165.74	16.30	--	149.44	4,900	200	26	200	110	<5.0	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	--	--	
MW-8	08/27/2014		165.74	18.66	--	147.08	6,400	170	29	290	240	<5.0	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<5,000	2.49	80	
MW-8	03/27/2015		165.74	16.10	--	149.64	6,300	140	25	380	310	<5.0	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<5,000	1.48	--	(odor)
MW-8	08/27/2015		165.74	18.39	--	147.35	5,800	94.2	14.7	112	62.9	<1.00	<5.00	<1.00	<1.00	<1.00	--	<1.00	<100	8.61	--	
MW-8	03/28/2016		165.74	10.72	--	155.02	14,100	167	53.8	835	1,330	<50.0	3.70J	<1.00	<1.00J3	<1.00	<1.00	<1.00	<100	1.5	--	
MW-8	09/07/2016		165.74	17.63	--	148.11	8,220	49.8	12.3J	245	180	<5.00	<25.0	<5.00	<5.00	<5.00	<5.00	<5.00	<500	0.32	--	
MW-8	03/01/2017		165.74	9.40	--	156.34	21,500	138	57.2J	1,120	1,880	<100	<500	<100	<100	<100	<100	<100	<10,000	2.91	--	
MW-8	08/02/2017		165.74	17.70	--	148.04	5,830	18	7.14	161	266	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	1.68	--	
MW-9	03/07/1991		166.20	16.79	--	149.41	7.1	220	4	2.4	2,400	--	--	--	--	--	--	--	--	--	--	
MW-9	04/01/1991		166.20	12.89	--	153.31	14,000	2,000	2,600	360	1,600	<10	<80	<10	<10	<10	<10	<10	<2,000	--	--	
MW-9	06/27/1991		--	--	--	--	3,600	520	400	85	310	--	--	--	--	--	--	--	--	--	--	
MW-9	09/27/1991		--	--	--	--	3.2	720	150	50	180	--	--	--	--	--	--	--	--	--	--	
MW-9	12/18/1991		--	--	--	--	--	2.5	1.1	0.3	5.8	--	--	--	--	--	--	--	--	--	--	
MW-9	07/03/1992		166.20	18.89	--	147.31	5,700	17,000	840	230	800	--	--	--	--	--	--	--	--	--	--	
MW-9	10/05/1992		166.20	20.52	--	145.68	1,400	440	17	14	100	--	--	--	--	--	--	--	--	--	--	
MW-9	01/13/1993	Dup	166.20	12.92	--	153.28	11,000	1,200	1,600	330	1,300	--	--	--	--	--	--	--	--	--	--	(Dup)
MW-9	01/13/1993		166.20	12.92	--	153.28	11,000	1,200	1,700	340	1,400	--	--	--	--	--	--	--	--	--	--	
MW-9	04/23/1993		166.20	14.08	--	152.12	24,000	2,800	4,500	730	3,400	350	2,600	<5.0	<5.0	<5.0	<5.0	12	<1,000	--	--	
MW-9	07/12/1993	Dup	166.20	18.44	--	147.76	10,000	1,200	900	310	1,200	--	--	--	--	--	--	--	--	--	--	(Dup)
MW-9	07/12/1993		166.20	18.44	--	147.76	13,000	1,400	1,100	360	1,400	20.8	--	--	--	--	--	--	--	--	--	
MW-9	10/21/1993		166.20	21.81	--	143.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	01/21/1994		166.20	19.28	--	146.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	04/20/1994	Dup	166.20	19.72	--	146.48	45,000	2,700	6,800	1,200	8,200	740	160	<2.5	<2.5	<2.5	<2.5	<2.5	<500	--	--	(Dup)
MW-9	04/20/1994		166.20	19.72	--	146.48	43,000	2,800	6,800	1,300	7,900	768	--	--	--	--	--	--	--	1.7	--	
MW-9	08/01/1994		166.20	20.18	--	146.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	12/23/1994		166.20	14.22	--	151.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	01/26/1995		166.20	11.85	--	154.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	06/08/1995		166.20	18.33	--	147.87	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	08/22/1995		166.20	19.95	--	146.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	10/27/1995		166.20	20.88	--	145.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	01/25/1996		166.20	13.84	--	152.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	07/23/1996		166.20	18.84	--	147.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	11/11/1996		166.20	19.91	--	146.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	01/21/1997		166.20	12.93	--	153.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	04/29/1997		166.20	18.03	0.1	148.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	04/30/1997		--	--	--	--	78,000	1,900	3,600	3,100	20,600	<5,000	<4.0	<0.50	<0.50	<0.50	<0.50	<0.50	<100	5.5	--	
MW-9	08/21/1997		166.20	19.56	--	146.64	110,000	2,100	3,400	2,300	18,800	<500	--	--	--	--	--	--	--	5.1	--	
MW-9	11/05/1997		166.20	20.59	0.01	145.60	59,000	1,400	1,700	2,200	17,000	<500	--	--	--	--	--	--	--	4.5	--	
MW-9	02/03/1998		166.20	10.56	--	155.64	55,000	490	1,200	1,400	10,200	<1,000	--	--	--	--	--	--	--	4.9	--	
MW-9	05/28/1998	Dup	166.20	14.21	--	151.99	53,000	290	830	1,400	10,500	<500	<40	<5.0	<5.0	<5.0	<5.0	<5.0	<1,000	--	--	(Dup)
MW-9	05/28/1998		166.20	14.21	--	151.99	430	250	1,200	1,500	11,400	<250	4	0.74	<0.50	<0.50	<0.50	17	<100	3.8	--	
MW-9	12/30/1998		166.20	15.61	--	150.59	83,000	860	1,300	2,400	21,000	180	--	--	--	--	--	--	--	--	--	
MW-9	02/02/1999		166.20	12.33	--	153.87	75,000	530	960	1,900	17,000	<50	--	--	--	--	--	--	--	--	--	
MW-9	05/10/1999		166.20	15.67	--	150.53	22,000	600	1,500	1,100	4,400	72	--	--	--	--	--	--	--	--	--	
MW-9	08/24/1999		166.20	19.10	--	147.10	85,000	850	1,300	1,700	20,000	<250	--	--	--	--	--	--	--	--	--	
MW-9	11/03/1999		166.20	19.58	--	146.62	72,000	700	780	1,900	19,000	<5.0	--	--	--	--	--	--	--	--	--	
MW-9	03/01/2000		166.20	13.19	--	153.01	34,000	78	490	1,100	8,200	63	--	--	--	--	--	--	--	--	--	
MW-9	04/21/2000		166.20	14.29	--	151.91	55,000	260	920	1,500	16,000	<5.0	--	--	--	--	--	--	--	--	--	
MW-9	07/31/2000		166.20	15.01	--	151.19	1,200,000	1,500	6,300	15,000	120,000	1,600	--	--	--	--	--	--	--	--	--	
MW-9	11/20/2000		166.20	18.23	--	147.97	320,000	3,500	19,000	5,000	40,000	3,900	--	--	--	--	--	--	--	--	--	
MW-9	02/18/2001		166.20	13.14	--	153.06	32,000	290	417	1,180	10,400	121	--	--	--	--	--	--	--	--	--	
MW-9	06/07/2001		166.20	17.41	--	148.79	96,000	421	704	2,330	17,300	223	--	--	--	--	--	--	--	--	--	
MW-9	09/05/2001		166.20	20.56	--	145.64	39,000	445	323	1,240	8,940	310	--	--	--	--	--	--	--	--	--	
MW-9	11/30/2001		166.20	17.42	--	148.78	60,000	310	586	1,890	14,200	285	--	--	--	--	--	--	--	--	--	
MW-9	02/20/2002		166.20	13.87	--	152.33	14,000	64	122	897	2,650	293	--	--	--	--	--	--	--	--	--	
MW-9	06/20/2002		166.20	18.22	--	147.98	29,000	307	168	1,100	5,670	208	--	--	--	--	--	--	--	--	--	
MW-9	09/11/2002		166.20	20.27	--	145.93	230,000	1,400	680	3,600	23,000	<2,500	--	--	--	--	--	--	--	--	--	

Table 3
Historical Groundwater Monitoring and Analytical Data
CA-11132
3201 35th Ave, Oakland CA

ARCADIS

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/l)	NAPH (µg/L)	Notes
MW-9	11/12/2002		166.20	19.40	--	146.80	840	5.8	3.6	28	160	21	--	--	--	--	--	--	--	--	--	
MW-9	01/29/2003		166.20	14.30	0.1	151.80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	05/22/2003		166.20	15.16	--	151.04	23,000	420	<50	1,000	2,900	<50	38	<0.50	<50	<50	<0.50	<50	<100	--	--	
MW-9	07/28/2003		166.20	19.55	0.01	146.65	1,500,000	<500	<500	9,800	79,000	<500	<20,000	<500	<500	<500	<500	<500	<100,000	--	--	
MW-9	08/12/2003		166.20	19.60	0.01	146.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	09/12/2003		166.20	19.60	0.01	146.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	11/18/2003		166.20	18.98	0.01	147.22	19,000	250	18	690	2,400	45	<400	--	<10	<10	--	<10	<2,000	--	--	
MW-9	02/23/2004		166.20	13.91	0.01	152.29	91,000	<250	440	2,200	13,000	<250	<10,000	<250	<250	<250	<250	<250	<50,000	--	--	
MW-9	05/04/2004		166.20	18.11	0.01	148.09	39,000	230	44	1,100	4,200	<25	<1,000	<25	<25	<25	<25	<25	<5,000	--	--	
MW-9	08/04/2004		166.20	18.90	0.03	147.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	09/22/2004		166.20	19.69	--	146.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	11/10/2004		166.20	16.95	--	149.25	31,000	300	<50	1,100	3,800	<50	<2,000	<50	<50	<50	<50	<50	<10,000	--	--	
MW-9	02/15/2005		166.20	12.95	--	153.25	19,000	200	<50	720	2,000	<50	<2,000	<50	<50	<50	<50	<50	<10,000	--	--	
MW-9	05/16/2005		166.20	12.53	--	153.67	17,000	99	15	770	2,500	<10	4.4	<10	<10	<10	<10	<10	<2,000	--	--	
MW-9	08/17/2005		166.20	18.03	--	148.17	28,000	160	26	1,000	2,700	<12	<500	<12	<12	<12	<12	<12	<2,500	--	--	
MW-9	11/18/2005		166.20	19.04	--	147.16	12,000	98	<5.0	410	510	19	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<1,000	--	--	
MW-9	02/07/2006		166.20	10.95	(Sheen)	155.25	18,000	110	8.7	770	1,500	<5.0	<4.0	<5.0	<5.0	<5.0	<5.0	5.4	<3,000	--	--	
MW-9	08/23/2006		166.20	18.91	--	147.29	28,000	84	<50	1,600	6,200	<50	<2,000	<50	<50	<50	<50	<50	<30,000	--	--	
MW-9	11/15/2006		166.20	18.60	--	147.60	8,200	44	<25	190	370	26	<1,000	<25	<25	<25	<25	<25	<15,000	0.92	--	
MW-9	02/14/2007		166.20	13.30	--	152.90	20,000	64	<25	720	2,000	<25	<1,000	<25	<25	<25	<25	<25	<15,000	0.87	--	
MW-9	05/22/2007		166.20	16.14	(Sheen)	150.06	16,000	80	<25	460	1,200	<25	<1,000	<25	<25	<25	<25	<25	<15,000	0.81	--	
MW-9	08/15/2007		166.20	19.31	(Sheen)	146.89	5,900	27	<2.5	59	170	27	<100	<2.5	<2.5	<2.5	<2.5	<2.5	<1,500	2.57	--	
MW-9	11/08/2007		166.20	18.70	--	147.50	6,100	29	<5.0	98	250	52	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<3,000	1.24	--	
MW-9	02/20/2008		166.20	12.79	0.03	153.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	05/07/2008		166.20	17.68	0.03	148.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	08/20/2008		166.20	19.75	0.01	146.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	11/17/2008		166.20	18.73	--	147.47	10,000	24	<2.5	160	140	33	<50	<2.5	<2.5	<2.5	<2.5	<2.5	<1,500	--	--	
MW-9	02/25/2009		166.20	11.23	(Sheen)	154.97	14,000	60	<10	550	140	<10	<200	<10	<10	<10	<10	<10	<6,000	2.27	--	
MW-9	04/08/2009		166.20	14.21	--	151.99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	05/28/2009		166.20	16.33	(Sheen)	149.87	8,000	49	<2.5	790	140	<2.5	<200	<2.5	<2.5	<2.5	<2.5	<2.5	<6,000	0.07	--	
MW-9	06/16/2009		166.20	17.82	0.01	148.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	08/06/2009		166.20	19.25	(Sheen)	146.95	6,800	19	<2.0	120	250	18	<40	<2.0	<2.0	<2.0	<2.0	<2.0	<1,200	0	--	
MW-9	03/04/2010		166.20	10.32	--	155.88	6,000	29	<2.5	<2.5	100	<2.5	<20	<2.5	<2.5	<2.5	<2.5	<2.5	<500	0.62	--	(P)
MW-9	09/02/2010		166.20	18.72	--	147.48	5,700	31	<2.5	160	120	<2.5	<20	<2.5	<2.5	<2.5	<2.5	<2.5	<500	--	--	(NP)
MW-9	03/15/2011		166.20	11.08	--	155.12	6,500	17	<2.5	150	73	<2.5	<20	<2.5	<2.5	<2.5	<2.5	<2.5	<1,200	--	--	(P)
MW-9	08/17/2011		166.20	17.35	--	148.85	5,200	9.5	<2.5	71	54	<2.5	<20	<2.5	<2.5	<2.5	<2.5	<2.5	<1,300	--	--	
MW-9	02/06/2012		166.20	15.52	--	150.68	4,200	14	<2.5	49	22	<2.5	<20	<2.5	<2.5	<2.5	<2.5(*)	<2.5	<1,300	--	--	(P)
MW-9	08/21/2012		166.20	18.79	--	147.41	4,200	22	<2.5	42	21	<2.5	<20	<2.5	<2.5	<2.5	<2.5	<2.5	<1,300	--	--	
MW-9	02/04/2013		166.20	14.16	--	152.04	4,100	4.8	<2.5	34	13	<2.5	<20	<2.5	<2.5	<2.5	<2.5	<2.5	<1,300	--	--	
MW-9	08/01/2013		166.20	19.16	--	147.04	5,500	4.8	<2.5	36	21	<2.5	<50	<2.5	<2.5	<2.5	<2.5	<2.5	<1,300	--	--	
MW-9	02/27/2014		166.20	16.27	--	149.93	6,300	9.1	<2.5	36	11	<2.5	<50	<2.5	<2.5	<2.5	<2.5	<2.5	<1,300	--	--	
MW-9	08/27/2014		166.20	18.94	--	147.26	5,400	8.5	<2.5	41	6.3	<2.5	<100	<2.5	<2.5	<2.5	<2.5	<2.5	<2,500	0.2	17	(odor)
MW-9	03/27/2015		166.20	16.42	--	149.78	6,500	7.8	<2.5	38	5.6	<2.5	<100	<2.5	<2.5	<2.5	<2.5	<2.5	<2,500	1.96	--	
MW-9	08/27/2015		166.20	18.69	--	147.51	10,000	10.7	<5.00	21.7	2.86J	<1.00	<5.00	<1.00	<1.00	<1.00	--	<1.00	<100	2.59	--	
MW-9	03/28/2016		166.20	10.96	--	155.24	7,630	4.41	<5.00	26.8	6.32	<1.00	<5.00	<1.00	<1.00J3	<1.00	<1.00	<1.00	<100	3.96	--	
MW-9	09/07/2016		166.20	17.89	--	148.31	7,730	7.22	<5.00	17.4	2.7J	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	0.24	--	
MW-9	03/01/2017		166.20	9.44	--	156.76	9,210	1.92	<1.00	16.7	3.65	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	3.24	--	
MW-9	08/02/2017		166.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(INA)
MW-10	03/07/1991		167.01	18.09	--	148.92	1.6	120	190	32	230	--	--	--	--	--	--	--	--	--	--	
MW-10	04/01/1991		167.01	13.92	--	153.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	06/27/1991		--	--	--	--	12,000	7,300	500	150	300	--	--	--	--	--	--	--	--	--	--	
MW-10	09/27/1991		--	--	--	--	57	12,000	7,200	1,400	4,600	--	--	--	--	--	--	--	--	--	--	
MW-10	12/18/1991		--	--	--	--	5.3	2,500	120	36	79	--	--	--	--	--	--	--	--	--	--	
MW-10	07/03/1992		167.01	19.92	--	147.09	8,600	5,100	1,300	180	690	--	--	--	--	--	--	--	--	--	--	
MW-10	10/05/1992		167.01	21.92	--	145.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	01/13/1993		167.01	14.43	--	152.58	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	04/23/1993		167.01	15.26	--	151.75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	07/12/1993		167.01	19.78	--	147.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	10/21/1993		167.01	22.90	--	144.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	01/21/1994		167.01	20.25	--	146.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	04/20/1994		167.01	20.74	--	146.27	100,000	12,000	24,000	2,400	14,000	1,577	--	--	--	--	--	--	--	1	--	
MW-10	08/01/1994		167.01	22.00	--	145.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	12/23/1994		167.01	16.08	--	150.93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	01/26/1995		167.01	13.68	--	153.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	06/08/1995		167.01	19.08	--	147.93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	08/22/1995		167.01	20.73	--	146.28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	10/27/1995		167.01	21.69	--	145.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	01/25/1996		167.01	15.05	--	151.96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	04/19/1996		167.01	16.26	--	150.75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	07/23/1996		167.01	20.18	--	146.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	11/11/1996		167.01	21.20	--	145.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	01/21/1997		167.01	13.66	--	153.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	04/29/1997		167.01	18.71	--	148.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	04/30/1997		--	--	--	--	170,000	9,700	38,000	4,700	30,500	<5,000	--	--	--	--	--	--	--	5.6	--	
MW-10	08/21/1997		167.01	20.19	--	146.82	170,000	9,500	35,000	4,300	27,100	<5,000	--	--	--	--	--	--	--	5.3	--	
MW-10	11/05/1997		167.01	20.52	--	146.49	80,000	3,800	12,000	2,700	15,700	<500	--	--	--	--	--	--	--	4.4	--	
MW-10	02/03/1998		167.01	10.62	--	156.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

Table 3
Historical Groundwater Monitoring and Analytical Data
CA-11132
3201 35th Ave, Oakland CA

ARCADIS

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/l)	NAPH (µg/L)	Notes
MW-10	02/04/1998		--	--	--	--	72,000	500	1,300	1,700	12,000	<1,000	--	--	--	--	--	--	--	5.1	--	
MW-10	05/28/1998		167.01	15.46	--	151.55	220,000	3,200	24,000	5,200	43,000	<1,000	--	--	--	--	--	--	--	4.8	--	
MW-10	12/30/1998		167.01	16.65	--	150.36	110,000	3,500	14,000	5,800	50,000	<50	--	--	--	--	--	--	--	--	--	
MW-10	02/02/1999		167.01	14.58	--	152.43	74,000	1,000	2,800	1,000	26,000	860	--	--	--	--	--	--	--	--	--	
MW-10	05/10/1999		167.01	15.72	--	151.29	81,000	2,800	2,800	3,000	17,000	220	--	--	--	--	--	--	--	--	--	
MW-10	08/24/1999		167.01	19.85	--	147.16	54,000	3,500	3,800	1,500	9,100	<250	--	--	--	--	--	--	--	--	--	
MW-10	11/03/1999		167.01	20.00	--	147.01	30,000	3,000	3,500	1,200	5,000	31	--	--	--	--	--	--	--	--	--	
MW-10	03/01/2000		167.01	14.62	--	152.39	62,000	320	1,200	1,100	26,000	4,400	--	--	--	--	--	--	--	--	--	
MW-10	04/21/2000		167.01	15.46	--	151.55	88,000	2,700	7,400	3,700	35,000	2,400	--	--	--	--	--	--	--	--	--	
MW-10	11/20/2000		167.01	18.74	--	148.27	78,000	3,800	5,500	2,800	13,000	450	--	--	--	--	--	--	--	--	--	
MW-10	02/18/2001		167.01	14.10	--	152.91	39,000	1,050	1,160	1,550	14,700	4,180	--	--	--	--	--	--	--	--	--	
MW-10	06/07/2001		167.01	18.78	--	148.23	76,000	2,460	2,840	3,330	20,700	635	--	--	--	--	--	--	--	--	--	
MW-10	09/05/2001		167.01	21.40	0.01	145.60	25,000	2,510	2,070	1,090	4,540	189	--	--	--	--	--	--	--	--	--	
MW-10	11/30/2001		167.01	18.50	--	148.51	100,000	2,480	5,720	3,890	22,800	325	--	--	--	--	--	--	--	--	--	
MW-10	02/20/2002		167.01	14.39	--	152.62	49,000	2,170	3,070	1,960	12,300	1,090	--	--	--	--	--	--	--	--	--	
MW-10	06/20/2002		167.01	18.80	--	148.21	44,000	2,040	3,050	1,690	8,430	224	--	--	--	--	--	--	--	--	--	
MW-10	09/11/2002		167.01	20.52	--	146.49	28,000	1,200	2,700	1,400	6,800	<250	--	--	--	--	--	--	--	--	--	
MW-10	11/12/2002		167.01	20.37	0.07	146.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	01/29/2003		167.01	16.33	0.03	150.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	05/22/2003		167.01	16.32	--	150.69	13,000	2,100	850	630	1,600	300	<2,000	--	<50	<50	--	<50	<10,000	--	--	
MW-10	06/24/2003		167.01	18.73	0.04	148.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	07/28/2003		167.01	20.39	0.04	146.58	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	08/12/2003		167.01	20.43	0.01	146.58	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	09/12/2003		167.01	20.41	--	146.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	11/18/2003		167.01	19.55	0.01	147.46	9,900	2,200	530	320	860	<50	<2,000	--	<50	<50	--	<50	<10,000	--	--	
MW-10	02/23/2004		167.01	15.45	0.01	151.56	46,000	1,900	2,000	1,800	9,000	180	<4,000	<100	<100	<100	<100	<100	<20,000	--	--	
MW-10	05/04/2004		167.01	18.81	0.01	148.20	35,000	3,100	3,600	1,400	5,600	<25	<1,000	<25	<25	<25	<25	<25	<5,000	--	--	
MW-10	08/04/2004		167.01	18.90	--	148.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	09/22/2004		167.01	20.60	--	146.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	11/10/2004		167.01	17.95	--	149.06	9,800	470	91	450	1,700	230	<1,000	<25	<25	<25	<25	<25	<5,000	--	--	
MW-10	01/13/2005		167.01	12.21	--	154.80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	02/15/2005		167.01	14.19	--	152.82	30,000	510	330	1,800	7,200	77	<2,000	<50	<50	<50	<50	<50	<10,000	--	--	
MW-10	05/16/2005		167.01	13.85	--	153.16	37,000	540	730	2,100	9,200	<50	<2,000	<50	<50	<50	<50	<50	<10,000	--	--	
MW-10	08/17/2005		167.01	19.01	--	148.00	15,000	1,100	420	1,200	4,100	<50	<2,000	<50	<50	<50	<50	<50	<10,000	--	--	
MW-10	11/18/2005		167.01	19.95	--	147.06	12,000	1,200	240	550	1,300	16	<500	<12	<12	<12	<12	<12	<2,500	--	--	
MW-10	02/07/2006		167.01	12.28	(Sheen)	154.73	22,000	340	580	1,300	4,500	73	<1,000	<25	<25	<25	<25	<25	<15,000	--	--	
MW-10	05/19/2006		167.01	15.12	--	151.89	40,000	690	430	2,600	4,900	<25	<1,000	<25	<25	<25	<25	<25	<15,000	--	--	
MW-10	08/23/2006		167.01	20.00	--	147.01	13,000	1,500	540	1,200	3,000	<10	<400	<10	<10	<10	<10	<10	<6,000	--	--	
MW-10	11/15/2006		167.01	19.84	--	147.17	3,800	700	22	67	160	54	<400	<10	<10	<10	<10	<10	<6,000	0.65	--	
MW-10	02/14/2007		167.01	14.94	(Sheen)	152.07	37,000	350	120	2,400	8,100	120	<400	<10	<10	<10	<25	<10	<6,000	2.12	--	
MW-10	05/22/2007		167.01	17.17	(Sheen)	149.84	13,000	810	130	750	2,200	15	<400	<10	<10	<10	<10	<10	<6,000	0.06	--	
MW-10	08/15/2007		167.01	20.30	(Sheen)	146.71	4,400	550	38	160	310	<10	<400	<10	<10	<10	<10	<10	<6,000	3.09	--	
MW-10	11/08/2007		167.01	19.58	(Sheen)	147.43	13,000	970	130	480	1,600	6	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<3,000	1.47	--	
MW-10	02/20/2008		167.01	14.27	0.05	152.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	05/07/2008		167.01	18.61	--	148.40	16,000	970	150	770	2,000	<20	<400	<20	<20	<20	<20	<20	<12,000	2.18	--	
MW-10	08/20/2008		167.01	20.71	0.01	146.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	11/17/2008		167.01	19.71	--	147.30	10,000	960	57	270	720	23	<400	<20	<20	<20	<20	<20	<12,000	--	--	
MW-10	02/25/2009		167.01	13.10	--	153.91	2,900	53	14	69	160	170	280	<10	<10	<10	<10	<10	<6,000	4.06	--	
MW-10	04/08/2009		167.01	15.91	--	151.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	05/28/2009		167.01	17.37	(Sheen)	149.64	15,000	640	280	790	2,500	65	110	<2.5	<2.5	<2.5	<2.5	<2.5	<1,500	0.03	--	
MW-10	06/16/2009		167.01	18.79	0.01	148.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	08/06/2009		167.01	20.19	(Sheen)	146.82	23,000	850	490	1,200	4,100	<25	<500	<25	<25	<25	<25	<25	<15,000	0.06	--	
MW-10	03/04/2010		167.01	12.32	--	154.69	12,000	71	72	740	1,800	<2.5	160	<2.5	<2.5	<2.5	<2.5	<2.5	<500	0.56	--	(P)
MW-10	09/02/2010		167.01	19.63	--	147.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(b,j)
MW-10	03/15/2011		167.01	13.20	--	153.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(b,j)
MW-10	08/17/2011		167.01	18.27	--	148.74	4,000	780	39	250	290	<5.0	<40	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	--	--	(P)
MW-10	02/06/2012		167.01	16.32	--	150.69	6,300	1,100	39	340	470	<5.0	<40	<5.0	<5.0	<5.0	<5.0(*)	<5.0	<2,500	--	--	(P)
MW-10	08/21/2012		167.01	19.66	0.02	147.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(LPH)
MW-10	02/04/2013		167.01	15.75	(Sheen)	151.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	08/01/2013		167.01	20.03	0.01	146.99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(LPH)
MW-10	02/27/2014		167.01	17.65	0.01	149.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	08/27/2014		167.01	19.69	0.01	147.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	03/27/2015		167.01	17.19	0.01	149.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(b,j)
MW-10	08/27/2015		167.01	19.26	0.02	147.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(LPH)
MW-10R	03/28/2016		166.80	12.50	--	154.30	38,000	3,830	2,810	1,130	5,310	1.3	40.5	<1.00	<1.00J3	<1.00	<1.00	<1.00	<100	1.82	--	
MW-10R	06/19/2016		166.80	17.51	--	149.29	24,800	447	68.8	1,090	1,950	<1.00	18.9	<1.00	<1.00	<1.00	<1.00	<1.00	<100	0.32	--	
MW-10R	09/07/2016		166.80	18.43	--	148.37	32,300	2,520	693	3,010	8,140	<50.0	<250	<50.0	<50.0	<50.0	<50.0	<50.0	<5,000	0.24	--	
MW-10R	12/14/2016		166.80	14.81	--	151.99	19,800	2,610	382	702	2,000	1.14	78.5	<1.00	<1.00	<1.00	<1.00	<1.00	<100	1.25	--	
MW-10R	03/01/2017		166.80	11.23	--	155.57	15,600	1,610	1,410	799	2,340	<50.0	<250	<50.0	<50.0	<50.0	<50.0	<50.0	<5,000	1.96	--	
MW-10R	08/02/2017		166.80	18.20	--	148.60	28,500	1,900	280	3150	8,100	<25.0	<125	<25.0	<25.0	<25.0	<25.0	<25.0	<2,500	1.99	--	
MW-11	03/28/2016		165.64	11.32	--	154.32	<100	<1.00	<5.00	<1.00	<3.00	<1.00	<5.00	<1.00	<1.00J3	<1.00	<1.00	<1.00	<100	1.12	--	
MW-11	06/19/2016		165.64	15.71	--	149.93	197	<1.00	<5.00	<1.00	<3.00(J3)	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	0.35	--	
MW-11	09/07/2016		165.64	17.91	--	147.73	244	<1.00	<5.00	<1.00	<3.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	0.20	--	
MW-11	12/14/2016		165.64	13.09	--	152.55	260	<1.00	<5.00	<1.00	<3.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	1.77	--	
MW-11	03/01/2017		165.64	10.95	--	154.69	42.4J	<1.00	<1.00	<1.00	<3.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	1.91	--	
MW-11	08/02/2017		165.64	16.34	--	149.30	104	<1.00	<1.00	<1.00	<3.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	1.13	--	

Table 3
Historical Groundwater Monitoring and Analytical Data
CA-11132
3201 35th Ave, Oakland CA

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Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/l)	NAPH (µg/L)	Notes
RW-1	03/07/1991		168.01	17.62	--	150.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	04/01/1991		168.01	14.40	--	153.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	07/03/1992		168.01	20.66	--	147.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	10/05/1992		168.01	23.34	--	144.67	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	01/13/1993		168.01	16.59	--	151.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	04/23/1993		168.01	16.17	--	151.84	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	07/12/1993		168.01	20.18	--	147.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	10/21/1993		168.01	25.70	--	142.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	01/21/1994		168.01	21.24	--	146.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	04/20/1994		168.01	32.20	--	135.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	08/01/1994		168.01	21.70	--	146.31	29,000	580	950	300	7,800	1,200	--	--	--	--	--	--	--	1.1	--	
RW-1	12/23/1994		168.01	16.02	--	151.99	1,300	25	8.6	1.4	69	616	--	--	--	--	--	--	--	1.8	--	
RW-1	01/26/1995	Dup	168.01	13.78	--	154.23	<50	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--	--	--	(Dup)
RW-1	01/26/1995		168.01	13.78	--	154.23	<50	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--	--	--	
RW-1	06/08/1995		168.01	20.05	--	147.96	1,300	130	<1.0	<1.0	36	--	--	--	--	--	--	--	--	--	--	
RW-1	08/22/1995	Dup	168.01	21.74	--	146.27	3,300	230	13	4.9	280	<25	--	--	--	--	--	--	--	--	--	(Dup)
RW-1	08/22/1995		168.01	21.74	--	146.27	2,800	210	9.3	4.3	250	<25	--	--	--	--	--	--	--	6.6	--	
RW-1	10/27/1995		168.01	32.00	--	136.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	10/30/1995	Dup	--	--	--	--	240	1.6	<1.0	<1.0	<2.0	630	--	--	--	--	--	--	--	--	--	(Dup)
RW-1	10/30/1995		--	--	--	--	230	1.4	<1.0	<1.0	<2.0	650	--	--	--	--	--	--	--	6.9	--	
RW-1	01/25/1996		168.01	15.41	--	152.60	15,000	3,400	930	330	2,500	5,300	--	--	--	--	--	--	--	--	--	
RW-1	04/19/1996	Dup	168.01	16.83	--	151.18	33,000	5,600	3,200	1,700	8,800	15,000	--	--	--	--	--	--	--	--	--	(Dup)
RW-1	04/19/1996		168.01	16.83	--	151.18	35,000	5,500	3,300	1,700	9,400	14,000	--	--	--	--	--	--	--	7.6	--	
RW-1	07/23/1996	Dup	168.01	20.76	--	147.25	47,000	3,700	2,500	930	5,300	35,000	--	--	--	--	--	--	--	--	--	(Dup)
RW-1	07/23/1996		168.01	20.76	--	147.25	46,000	3,600	2,300	900	5,100	36,000	--	--	--	--	--	--	--	7.4	--	
RW-1	11/11/1996	Dup	168.01	21.73	--	146.28	31,000	2,900	1,000	860	4,600	22,000	--	--	--	--	--	--	--	--	--	(Dup)
RW-1	11/11/1996		168.01	21.73	--	146.28	34,000	3,000	1,200	880	4,600	22,000	--	--	--	--	--	--	--	8.3	--	
RW-1	01/21/1997	Dup	168.01	14.20	--	153.81	270	42	17	2.7	36	1,500	--	--	--	--	--	--	--	--	--	(Dup)
RW-1	01/21/1997		168.01	14.20	--	153.81	260	40	16	2.7	34	1,500	--	--	--	--	--	--	--	6.1	--	
RW-1	04/29/1997		168.01	19.15	--	148.86	32,000	3,100	590	1,300	6,000	46,000	--	--	--	--	--	--	--	5.3	--	
RW-1	08/21/1997		168.01	20.67	--	147.34	7,600	730	58	370	1,780	9,500	--	--	--	--	--	--	--	4.7	--	
RW-1	11/05/1997		168.01	21.01	--	147.00	39,000	2,300	86	1,300	3,840	56,000	--	--	--	--	--	--	--	4.5	--	
RW-1	02/03/1998		168.01	10.68	--	157.33	3,400	31	11	29	161	3,200	--	--	--	--	--	--	--	5.1	--	
RW-1	05/28/1998		168.01	15.55	--	152.46	2,000	90	15	60	305	2,700	--	--	--	--	--	--	--	4.3	--	
RW-1	12/30/1998		168.01	17.35	--	150.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	02/02/1999		168.01	14.58	--	153.43	82,000	2,300	120	2,000	3,200	78,000	--	--	--	--	--	--	--	--	--	
RW-1	05/10/1999		168.01	16.00	--	152.01	15,000	620	88	340	660	61,000	--	--	--	--	--	--	--	--	--	
RW-1	08/24/1999		168.01	20.00	--	148.01	52,000	1,400	170	2,200	2,900	37,000	--	--	--	--	--	--	--	--	--	
RW-1	11/03/1999		168.01	20.39	--	147.62	17,000	2,500	86	1,500	970	54,000	--	--	--	--	--	--	--	--	--	
RW-1	03/01/2000		168.01	12.97	--	155.04	17,000	580	78	790	1,100	13,000	--	--	--	--	--	--	--	--	--	
RW-1	04/21/2000		168.01	16.02	--	151.99	31,000	2,100	100	1,400	1,100	39,000	--	--	--	--	--	--	--	--	--	
RW-1	07/31/2000		168.01	21.89	--	146.12	47,000	1,300	170	2,700	2,300	30,000	--	--	--	--	--	--	--	--	--	
RW-1	11/20/2000		168.01	19.15	--	148.86	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	02/18/2001		168.01	15.35	--	152.66	14,000	589	89	600	712	13,000	--	--	--	--	--	--	--	--	--	
RW-1	06/07/2001		168.01	19.09	--	148.92	28,000	1,140	68.2	504	530	19,100	--	--	--	--	--	--	--	--	--	
RW-1	09/05/2001		168.01	22.06	0.02	145.93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	11/30/2001		168.01	19.53	--	148.48	20,000	405	39.4	545	740	8,260	--	--	--	--	--	--	--	--	--	
RW-1	02/20/2002		168.01	15.99	--	152.02	13,000	469	29	434	655	7,240	--	--	--	--	--	--	--	--	--	
RW-1	06/20/2002		168.01	19.31	--	148.70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	09/11/2002		168.01	21.07	0.03	146.91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	11/12/2002		168.01	20.92	0.02	147.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	01/29/2003		168.01	16.31	0.04	151.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	05/22/2003		168.01	16.68	--	151.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	06/24/2003		168.01	19.76	0.07	148.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	07/28/2003		168.01	21.04	0.04	146.93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	08/12/2003		168.01	21.41	0.01	146.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	09/12/2003		168.01	21.10	0.07	146.84	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	11/18/2003		168.01	20.10	0.01	147.91	12,000	770	<50	320	250	6,100	11,000	--	<50	<50	--	160	<10,000	--	--	
RW-1	02/23/2004		168.01	14.35	0.01	153.67	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	05/04/2004		168.01	19.58	0.02	148.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	08/04/2004		168.01	22.05	0.05	146.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	09/22/2004		168.01	21.28	0.06	146.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	11/10/2004		168.01	18.56	0.02	149.47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	01/13/2005		168.01	12.51	0.01	155.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	02/15/2005		168.01	15.24	0.03	152.79	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	03/07/2005		168.01	11.90	0.02	156.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	05/16/2005		168.01	14.39	0.02	153.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	08/17/2005		168.01	19.91	0.03	148.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	11/18/2005		168.01	20.36	0.07	147.71	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	02/07/2006		168.01	12.87	0.01	155.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	05/19/2006		168.01	15.87	0.04	152.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	08/23/2006		168.01	20.50	0.07	147.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	11/15/2006		168.01	20.52	0.07	147.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	02/14/2007		168.01	15.44	0.04	152.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	05/22/2007		168.01	17.78	(Sheen)	150.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	08/15/2007		168.01	20.80	0.02	147.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	11/08/2007		168.01	20.32	0.01	147.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

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3201 35th Ave, Oakland CA

ARCADIS

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/l)	NAPH (µg/L)	Notes
RW-1	02/20/2008		168.01	14.55	0.02	153.46	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	08/20/2008		168.01	21.34	0.02	146.67	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	11/17/2008		168.01	20.41	--	147.60	13,000	120	<20	590	320	120	<400	<20	<20	<20	<20	<20	<12,000	--	--	
RW-1	02/25/2009		168.01	13.40	0.02	154.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	04/08/2009		168.01	16.45	--	151.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	05/28/2009		168.01	17.88	0.01	150.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	06/16/2009		168.01	19.30	0.01	148.71	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	08/06/2009		168.01	20.72	0.01	147.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	03/04/2010		168.01	12.33	--	155.68	8,000	20	<2.5	230	140	110	45	<2.5	<2.5	<2.5	<2.5	5.7	<500	1.24	--	(P)
RW-1	09/02/2010		168.01	20.14	--	147.87	4,700	18	<2.5	78	46	<2.5	<20	<2.5	<2.5	<2.5	<2.5	<2.5	<500	--	--	(NP)
RW-1	03/15/2011		168.01	13.03	--	154.98	7,000	3.7	<2.5	44	31	6.7	<20	<2.5	<2.5	<2.5	<2.5	<2.5	<1,200	--	--	(P)
RW-1	08/17/2011		168.01	18.60	--	149.41	2,800	7.5	<2.5	12	10	8.8	<20	<2.5	<2.5	<2.5	<2.5	<2.5	<1,300	--	--	(P)
RW-1	02/06/2012		168.01	16.81	--	151.20	1,300	3.1	<2.5	5.2	5.1	2.9	<20	<2.5	<2.5	<2.5	<2.5(*)	<2.5	<1,300	--	--	(P)
RW-1	08/21/2012		168.01	20.06	--	147.95	1,200	10	0.58	10	5.2	15	<4.0	<0.50	<0.50	<0.50	<0.50	1	<250	--	--	(P)
RW-1	02/04/2013		168.01	16.36	(Sheen)	151.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	08/01/2013		168.01	20.50	0.01	147.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(LPH)
RW-1	02/27/2014		168.01	17.66	--	150.35	800	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	--	--	
RW-1	08/27/2014		168.01	20.35	(Sheen)	147.66	2,800	5.9	1.7	12	5.2	6.7	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<500	0.22	6.8	(odor)
RW-1	03/27/2015		168.01	17.57	--	150.44	970	0.98	<0.50	0.91	1.5	0.74	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<500	2.35	--	(odor)
RW-1	08/27/2015		168.01	19.90	--	148.11	2,550	4.57	1.14J	4.54	3.66	<1.00	6.22	<1.00	<1.00	<1.00	--	<1.00	<100	8.36	--	(odor)
RW-1	03/28/2016		168.01	12.68	--	155.33	199	<1.00	<5.00	<1.00	<3.00	<1.00	<5.00	<1.00	<1.00J3	<1.00	<1.00	<1.00	<100	1.01	--	
RW-1	09/07/2016		168.01	19.36	--	148.65	1,120	2.86	0.919J	2.28	2.66J	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	0.18	--	
RW-1	03/01/2017		168.01	10.63	--	157.38	225	<1.00	<1.00	<1.00	<3.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	2.31	--	
RW-1	08/02/2017		168.01	19.13	--	148.88	1,120	2	0.775J	1	1.06J	3	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	1.97	--	
OW-1	09/07/2016		--	19.74	0.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(LPH)
OW-1	03/01/2017		--	12.04	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(LPH)
OW-1	08/02/2017		--	22.10	0.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(LPH)

Notes:
TOC = Top of casing measured
DTW = Depth to water
LNAPL = Light non-aqueous phase liquid (LPH)
GW Elev = Groundwater elevation
GRO = Gasoline range organics
B = Benzene
T = Toluene
E = Ethylbenzene
X = Total xylenes
MTBE = Methyl tert-butyl ether
TBA = tert-butyl alcohol
DIPE = Di-isopropyl ether
ETBE = Ethyl tert-butyl ether
TAME= tert-Amyl methyl ether
DO = Dissolved oxygen
1,2-DCA = 1,2-dichloroethane
EDB = 1,2-dibromoethane
Ft msl = Feet above mean sea level
DUP = Duplicate sample
-- = Not analyzed/applicable/measured/available
< = Not detected at or above specified laboratory reporting limit
mg/L = Milligrams per liter
µg/L = Micrograms per liter
NP = Well not purged prior to sampling
P = Well purged prior to sampling
b = GWE adjusted assuming a specific gravity of 0.75 for free product
j or LPH = Well not sampled due to presence of LPH and nature of the product
J3 = The associated batch QC was outside the established quality control range for precision.
J = The identification of the analyte is acceptable; the reported value is an estimate
INA - Well inaccessible; well could not be sampled
t = Sheen in well
y = Sample dilution was done with headspace in the sample vial; the samples were originally analyzed from VOAs without headspace
* = LCS or LCS D exceeds the control limits
Beginning in the Fourth Quarter 2003, the laboratory modified the reported analyte list; TPHg was changed to GRO; the resulting data may be impacted by the potential of non-TPHg analytes within the requested fuel range resulting in a higher concentration being reported
Beginning in the Second Quarter 2004, the carbon range for GRO was changed from C6-C10 to C4-C12
Values for DO was obtained through field measurements
GRO analysis was completed by EPA method 8260B (C4-C12) for samples collected from the time period April 2006 through February 4, 2008; the analysis for GRO was changed to EPA method 8015B (C6-C12)
for samples collected from the time period February 5, 2008 through August 6, 2009 and EPA method 8260B (C6-C12) from March 4, 2010 to the present
The data within this table collected prior to April 2006 was provided to Broadbent & Associates, Inc. by Atlantic Richfield Company and their previous consultants; Broadbent & Associates, Inc. has not verified the accuracy of this information

Table 4
Historical Groundwater Gradient and Flow Direction
CA-11132
3201 35th Ave, Oakland CA

Site No.	Monitoring Date	Groundwater Gradient	Groundwater Flow Direction															
		(feet per foot)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW
11132	4Q00 [1]	0.03	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	1Q01 [1]	0.009	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	2Q01 [1]	0.01	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	3Q01 [1]	0.02	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	4Q01	0.016	0	0	0	0	0	0	0.5	0	0.5	0	0	0	0	0	0	0
	1Q02	0.016	0	0	0	0	0	0.5	0	0	0	0	0.5	0	0	0	0	0
	2Q02	0.010	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	3Q02	0.02	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	4Q02	0.005	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	1Q03	0.013	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	2Q03	0.006 to 0.016	0	0	0	0	0	0	0.33	0	0.33	0	0.33	0	0	0	0	0
	3Q03	0.008	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	4Q03	0.007	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	1Q04	0.004 to 0.045	0	0	0	0	0.33	0	0.33	0	0	0	0.33	0	0	0	0	0
	2Q04	0.011	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	3Q04	0.018	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	4Q04	0.002	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	1Q05	0.01	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	2Q05 [2]	0.01	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	3Q05 [2]	0.005	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	4Q05	0.03	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	1Q06	0.02	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	2Q06	0.003 to 0.005	0	0	0	0	0	0	0	0.5	0.5	0	0	0	0	0	0	0
	3Q06	0.01	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	4Q06	0.004	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	1Q07	0.01	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	2Q07	0.005	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	3Q07	0.008	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	4Q07	0.006	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	1Q08	0.008	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	2Q08	0.003	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	3Q08	0.007	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	4Q08	0.005	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	1Q09	0.01	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	2Q09	0.004	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	3Q09	0.005	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	1Q10	0.02	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	3Q10	0.01	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	1Q11	0.01	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	3Q11	0.003	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	1Q12	0.005	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	3Q12 [1]	0.007	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	1Q13 [1]	0.01	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	3Q13 [1]	0.007	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	1Q14 [1]	0.007	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	3Q14 [1]	0.01	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	1Q15 [1]	0.004	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	3Q15 [1]	0.010	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	1Q16 [1]	0.007	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	3Q16	0.005	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	1Q17	0.01	0	0	0	0.5	0	0	0.5	0	0	0	0	0	0	0	0	0
	3Q17	0.004	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Avg Gradient: **		0.010	**0.00**	**0.00**	**0.00**	**0.50**	**1.33**	**2.50**	**9.67**	**0.50**	**4.33**	**14.00**	**14.17**	**5.00**	**0.00**	**0.00**	**0.00**	**0.00**

Notes:

Number of Events: ~ 52

~ Total number of gauging events, manually updated

Groundwater gradient and flow direction data from 2Q06 to 1Q12 provided by Broadbent & Associates, Inc.

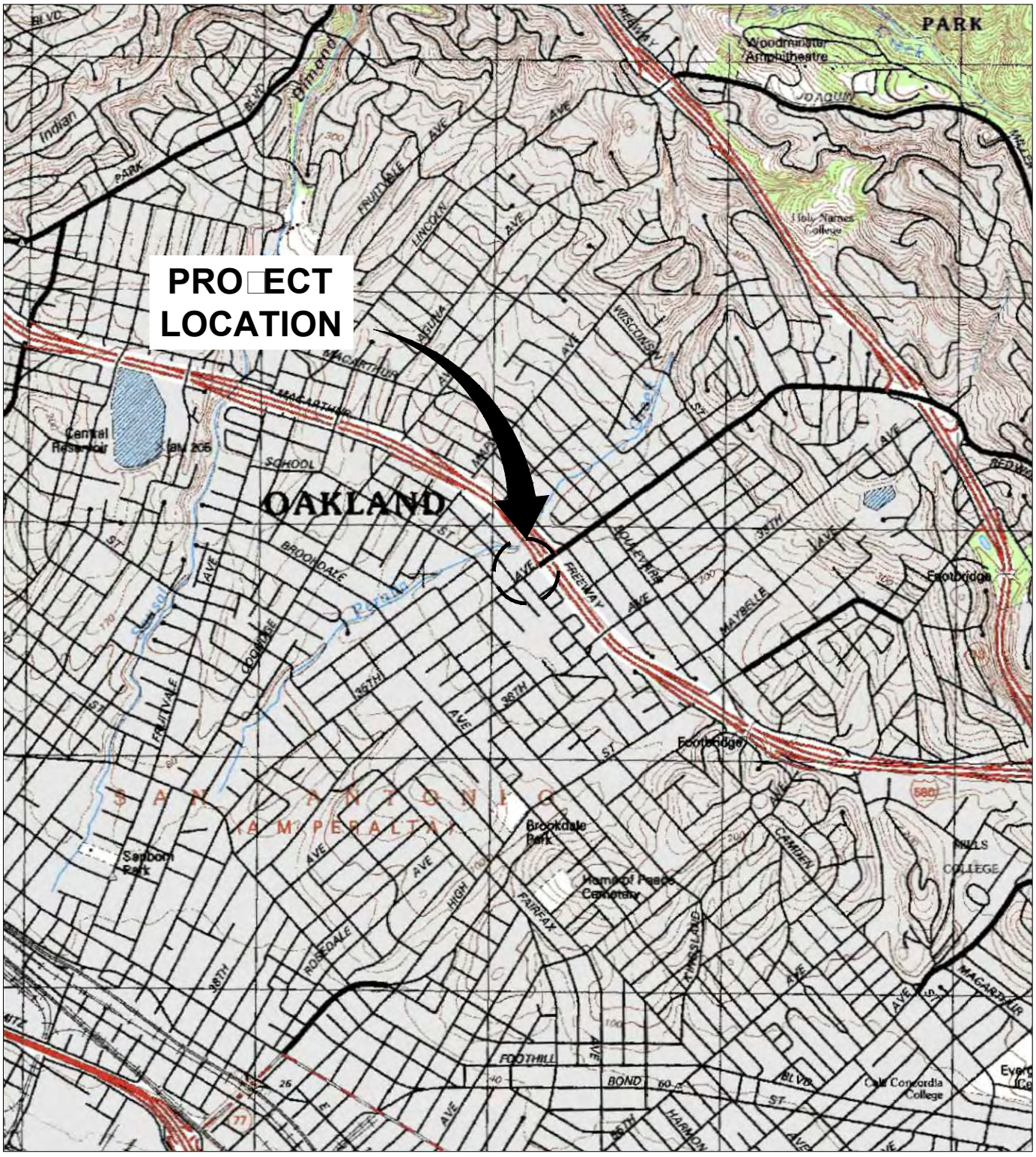
Groundwater flow direction data from 4Q00 to 1Q06 estimated from figures provided by RRM, Cambria and URS consultants.

[1] Groundwater flow direction was updated to reflect a change made to the north arrow on the historic groundwater elevation figure.

[2] After a review of the historical groundwater elevation figure, an error observed in the groundwater flow direction was corrected.

** Average gradient only includes single listed values.

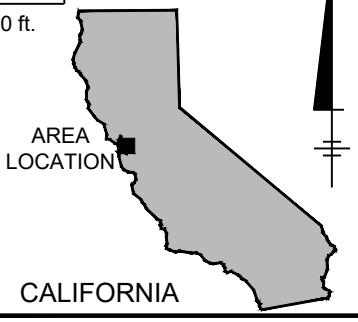
FIGURES



REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., OAKLAND EAST, CALIFORNIA, 1997.

0 2000' 4000'

Approximate Scale: 1 in. = 2000 ft.



FORMER BP STATION No. 11132
3201 35TH AVENUE
OAKLAND, CALIFORNIA

SITE LOCATION MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE 1

CITY: PETALUMA, CA DIV/GROUP: ENV DB: J. HARRIS LD:--- PIC:--- PM: H. PHILLIPS TM: J. PETERSON LYR:(Opt)ON=*;OFF=*REF*
C:\ENVCAD\Emeryville\ACTGP09BPNAC112\C0000\DWG\GP09BPNAC112-N01.dwg LAYOUT: 1 SAVED: 2/19/2016 1:55 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 2/19/2016 1:58 PM BY: REYES, ALEC
XREFS: IMAGES: PROJECTNAME: ---
USGS TOPO 11132.jpg

LEGEND:

- GROUNDWATER MONITORING WELL
- GROUNDWATER RECOVERY WELL
- OBSERVATION WELL
- SOIL VAPOR EXTRACTION WELL
- SOIL VAPOR MONITORING WELL
- SOIL BORING
- CPT/UVOST LOCATION
- SOIL GAS BORING
- AIR SPARGE WELL
- ABANDONED MONITORING WELL
- PROPERTY BOUNDARIES
- PROPERTY BOUNDARY
- CANOPY
- UNDERGROUND STORAGE TANKS

NOTES:
1. PARCEL DATA BOUNDARIES FROM ALAMEDA COUNTY WEBB SERVER
https://www.acgov.org/government/geospatial.htm

0 50 100

SCALE IN FEET

FORMER BP SERVICE STATION #11132
3201 35TH AVENUE
OAKLAND, CALIFORNIA

SITE PLAN

ARCADIS Design & Consultancy for natural and built assets

FIGURE
2

CITY: SAN FRANCISCO DIV/GROUP: ENV/IM DB: kgpeters LD: PIC: PM: TM:
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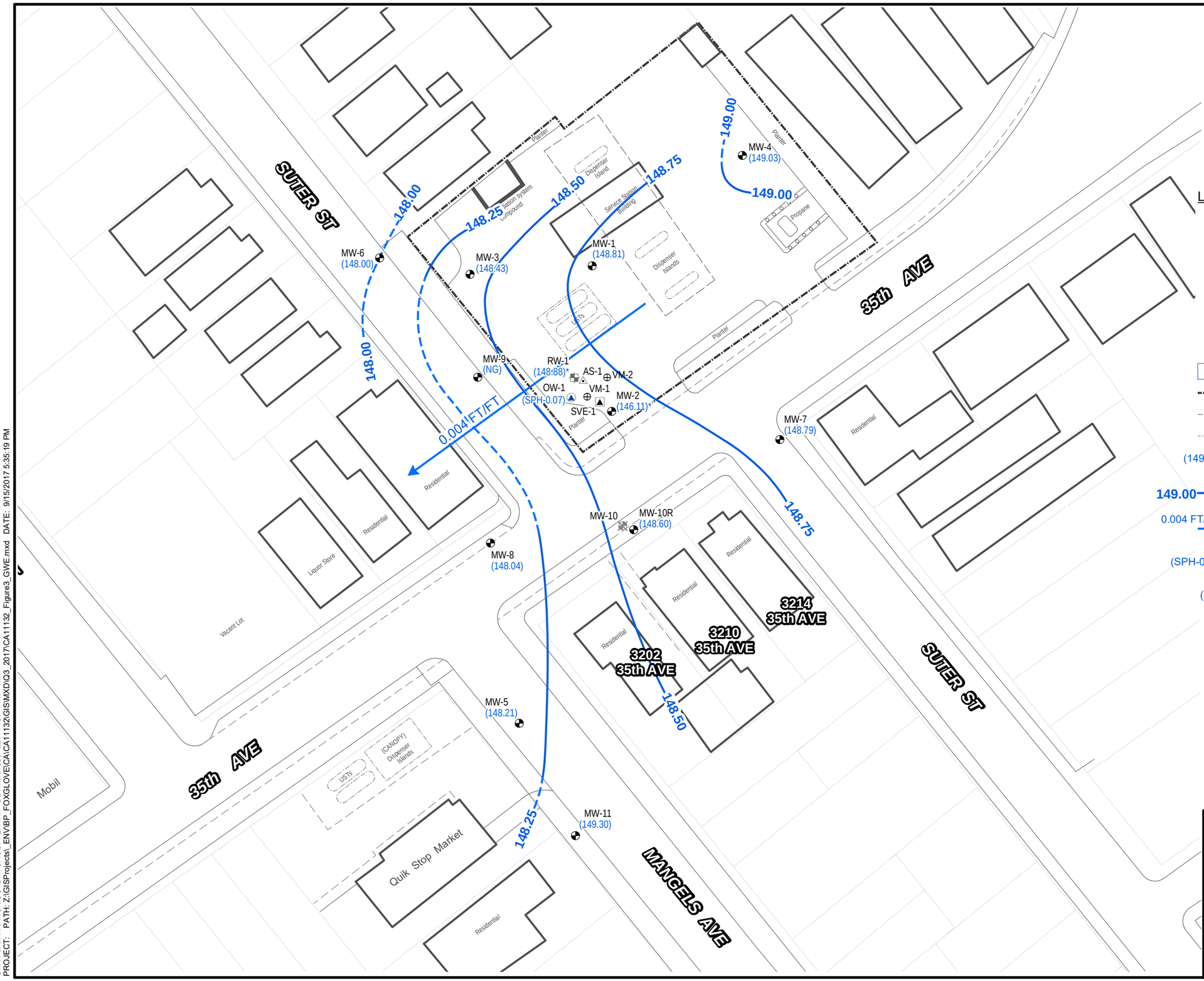

LEGEND:

- GROUNDWATER MONITORING WELL
- GROUNDWATER RECOVERY WELL
- OBSERVATION WELL
- SOIL VAPOR EXTRACTION WELL
- SOIL VAPOR MONITORING WELL
- AIR SPARGE WELL
- ABANDONED MONITORING WELL
- PROPERTY BOUNDARIES
- PROPERTY BOUNDARY
- CANOPY
- UNDERGROUND STORAGE TANKS
- (149.03) GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)
- 149.00 GROUNDWATER ELEVATION CONTOUR LINE (DASHED WHERE INFERRED)
- 0.004 FT/FT GROUNDWATER FLOW DIRECTION (FOOT PER FOOT)
- (SPH-0.07) SEPARATE PHASE HYDROCARBONS - THICKNESS IN FEET
- (NG) NOT GAUGED
- * NOT USED IN CONTOURING

NOTES:
1. PARCEL DATA BOUNDARIES FROM ALAMEDA COUNTY WEBB SERVER https://www.acgov.org/government/geospatial.htm

0 50 100

SCALE IN FEET

FORMER BP SERVICE STATION #11132
3201 35TH AVENUE
OAKLAND, CALIFORNIA

GROUNDWATER ELEVATION MAP
AUGUST 02, 2017

ARCADIS Design & Consultancy for natural and built assets

FIGURE
3

CITY: SAN FRANCISCO DIV/GROUP: ENV/IM DB: msi01059 LD: PIC: PM: TM:
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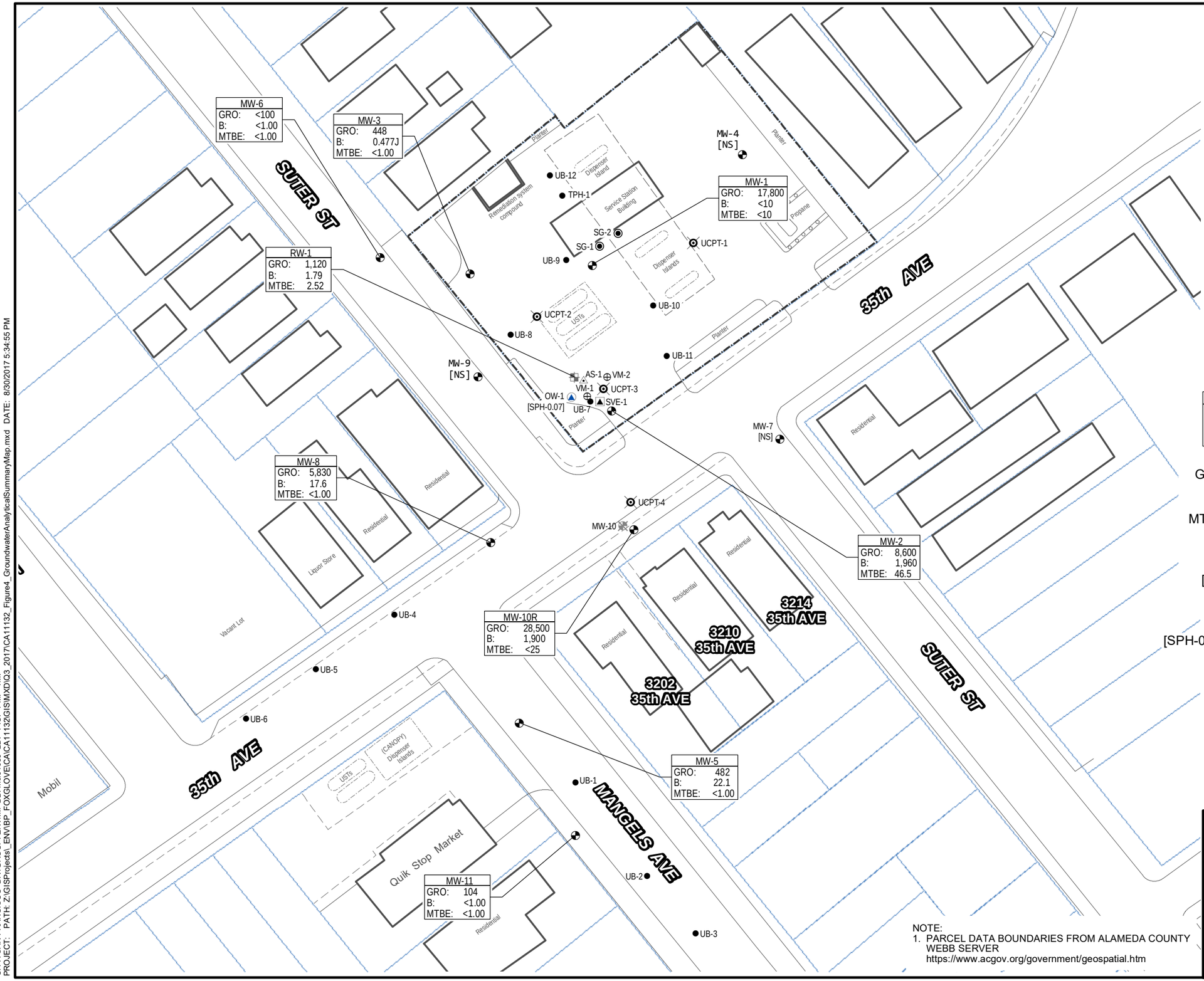


LEGEND:

- GROUNDWATER MONITORING WELL
- GROUNDWATER RECOVERY WELL
- OBSERVATION WELL
- SOIL VAPOR EXTRACTION WELL
- SOIL VAPOR MONITORING WELL
- SOIL BORING
- CPT/UVOST LOCATION
- SOIL GAS BORING
- AIR SPARGE WELL
- ABANDONED MONITORING WELL
- PROPERTY BOUNDARIES
- PROPERTY BOUNDARY
- CANOPY
- UNDERGROUND STORAGE TANKS

MW-2
GRO: 8,600
B: 1,960
MTBE: 46.5

SAMPLE LOCATION ID
CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
ANALYTE

GRO	GASOLINE RANGE ORGANICS
B	BENZENE
MTBE	METHYL TERT-BUTYL ETHER
J	CONCENTRATION BETWEEN REPORTING AND DETECTION LIMITS
[NS]	NOT SAMPLED
<	NOT DETECTED AT OR ABOVE STATED LABORATORY REPORTING LIMIT
[SPH-0.07]	SEPARATE PHASE HYDROCARBONS - THICKNESS IN FEET

0 50 100

SCALE IN FEET

NOTE:
1. PARCEL DATA BOUNDARIES FROM ALAMEDA COUNTY WEBB SERVER https://www.acgov.org/government/geospatial.htm

FORMER BP SERVICE STATION #11132
3201 35TH AVENUE
OAKLAND, CALIFORNIA

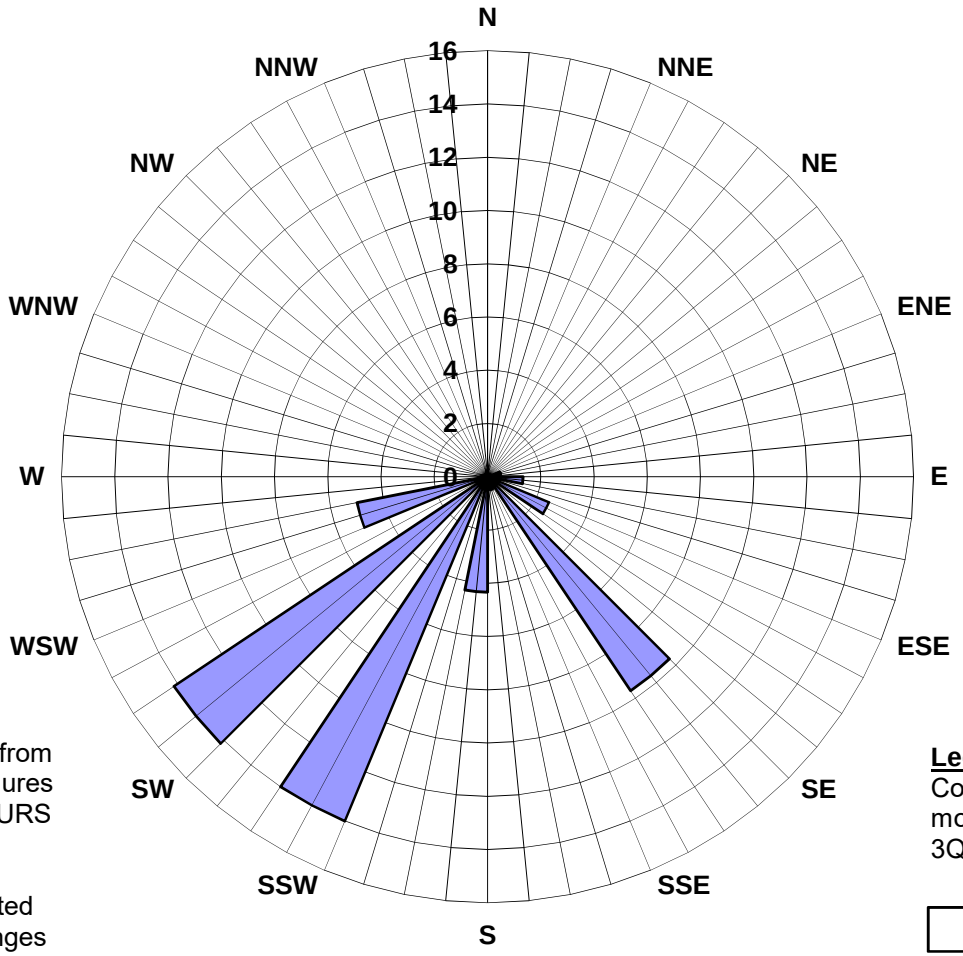
GROUNDWATER ANALYTICAL SUMMARY MAP AUGUST 02, 2017

ARCADIS Design & Consultancy for natural and built assets

FIGURE 4

CITY: SAN FRANCISCO DIV/GROUP: ENV/IM DB: msl01059 LD: PIC: PM: TM:
PROJECT: PATH: Z:\GISProjects_ENV\BP_FOXGLOVE\CA\CA11132\GIS\MXD\Q3_2017\CA11132_Figure4_GroundwaterAnalyticalSummaryMap.mxd DATE: 8/30/2017 5:34:55 PM

Figure 5
Groundwater Flow Direction Rose Diagram
CA BP 11132
3201 35th Ave
Oakland, California 94619



Notes
Groundwater gradient and flow data from 2Q06 to 1Q12 monitoring events provided by Broadbent & Associates, Inc.

Groundwater flow direction data from 4Q00 to 1Q06 estimated from figures provided by RRM, Cambria and URS consultants.

On June 20, 2017, Arcadis updated the Rose Diagram to reflect changes made to the north arrow on select groundwater elevation figures.

Legend
Concentric circles represent 52 monitoring events from 4Q00 to 3Q17.

Groundwater Flow Direction

9/7/2017
CA11132_Figure5_RoseDiagram.xlsx

APPENDIX D

August 22, 2017 ACDEH Directive Letter

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
REBECCA GEBHART, Interim Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
LOCAL OVERSIGHT PROGRAM (LOP) FOR
HAZARDOUS MATERIALS RELEASES
1131 HARBOR BAY PARKWAY
ALAMEDA, CA 94502
(510) 567-6700
FAX (510) 337-9335

August 22, 2017

Chevron Environmental Management Company
6001 Bollinger Canyon Road, Room C2102
San Ramon, CA 94583
Attn.: James Kiernan (*Sent via electronic mail to: jkiernan@chevron.com*)

Son T. & Pham Le Nguyen Trust
5022 Crystal Ridge Court
Oakland, CA 94605
(*Sent via electronic mail to: amylepham@yahoo.com*)

Subject: Request for a Site Conceptual Model Update; Fuel Leak Case No. RO0000058 and Geotracker Global ID T0600101465, Unocal #6129, 3420 35th Ave, Oakland, CA

Dear Responsible Parties:

Thank you James Kiernan, representing the Chevron Environmental Management Company (CEMC), and Katherine Brandt of ARCADIS U.S., Inc. (Arcadis) for participating in our meeting held in our offices on July 14, 2017. In addition to the subject case, the discussion included the potential comingling of the contaminant plume with two nearby fuel leak cases- the up gradient former Valero service station, ACDEH case file number RO0002515, that is currently an unoccupied lot located at 3450 35th Avenue, and the former BP station, an active gas station located at 3201 35th Avenue and having ACDEH case file number RO0000014.

As a follow up to the meeting, ACDEH is requesting an update of the site conceptual model (SCM) for the subject case, incorporating the data for the nearby Valero and BP cases, to aid in the determination of the extent and stability of the contaminant plume. Plume extent and stability are evaluation criteria in the Media Specific Groundwater portion of the State Water Resources Control Board's (SWRCBs) Low Threat Underground Storage Tank Case Closure Policy (LTCP).

As part of the SCM update, ACDEH requests preparation of cross sections incorporating data from the three cases referenced above and an evaluation of potential effects of varying well screen intervals on groundwater data. Additionally, ACDEH requests incorporating into the SCM the findings of a previous groundwater study, entitled *Groundwater Plume Evaluation* (GPE), dated September 29, 2015 and prepared by AECOM for the subject case. The GPE discussed the potential influence on groundwater flow by Interstate Highway 580, a sunken highway in the vicinity site.

Please present your findings in an updated SCM by the date specified below. ACDEH requests the SCM be presented in a tabular format that highlights the major SCM elements and associated data gaps, which need to be addressed to progress the site to case closure under the LTCP. Please see Attachment A "Site Conceptual Model Requisite Elements". An example of a SCM with data gap identification is provided as an attachment.

SUBMITTAL ACKNOWLEDGEMENT STATEMENT

Please note that ACDEH has updated its Attachment 1 with regard to report submittals to our agency. ACDEH will now be requiring a Submittal Acknowledgement Statement, replacing the perjury statement, as a cover letter signed by the Responsible Party (RP). The language for the Submittal Acknowledgement Statement is as follows:

"I have read and acknowledge the content, recommendations and/or conclusions contained in the attached document or report submitted on my behalf to ACDEH's FTP server and the SWRCB's GeoTracker website."

Please make this change to your submittals to ACDEH.

TECHNICAL REPORT REQUEST

Please upload technical reports to the ACDEH FTP site (Attention: Keith Nowell), and to the SWRCB GeoTracker website, in accordance with the following specified file naming convention and schedule:

- **October 23, 2017** – Site Conceptual Model Update (file name: RO0000058_SCM_R_yyyy-mm-dd)

Thank you for your cooperation. ACDEH looks forward to working with you and your consultants to advance the case toward closure. Should you have any questions regarding this correspondence or your case, please call me at (510) 567-6764 or send an electronic mail message at keith.nowell@acgov.org.

Sincerely,

Digitally signed by Keith Nowell
DN: cn=Keith Nowell, o=Alameda County, ou=Department of Environmental Health, email=keith.nowell@acgov.org, c=US
Date: 2017.08.22 11:58:22 -07'00'

Keith Nowell, P.G., C.HG
Hazardous Materials Specialist

Enclosures: Attachment 1 – Responsible Party (ies) Legal Requirements/Obligations and Electronic Report Upload (FTP) Instructions

Attachment A – Site Conceptual Model Requisite Elements

cc: Ed Ralston, Phillips 66 Company, 76 Broadway, Sacramento, CA 95818 (Sent via electronic mail to: *Ed.C.Ralston@p66.com*)

Katherine Brandt, ARCADIS U.S., Inc., 2000 Powell St., 7th Floor, Emeryville, CA 94608 (*Sent via electronic mail to: Katherine.Brandt@arcadis-us.com*)

Dilan Roe, ACDEH, (*Sent via electronic mail to: dilan.roe@acgov.org*)
Paresh Khatri, ACDEH, (*Sent via electronic mail to: paresh.khatri@acgov.org*)
Keith Nowell, ACDEH (*Sent via electronic mail to: keith.nowell@acgov.org*)

Geotracker, File

Attachment 1

Responsible Party(ies) Legal Requirements / Obligations

REPORT REQUESTS

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

Alameda County Department of Environmental Health's (ACDEH) Environmental Cleanup Oversight Programs, Local Oversight Program (LOP) and Site Cleanup Program (SCP) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program File Transfer Protocol (FTP) site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) GeoTracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the GeoTracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to SCP sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in GeoTracker (in PDF format). Please visit the SWRCB website (http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/) for more information on these requirements.

ACKNOWLEDGEMENT STATEMENT

All work plans, technical reports, or technical documents submitted to ACDEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I have read and acknowledge the content, recommendations and/or conclusions contained in the attached document or report submitted on my behalf to ACDEH's FTP server and the SWRCB's GeoTracker website." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6731, 6735, and 7835) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately licensed or certified professional. For your submittal to be considered a valid technical report, you are to present site-specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this case meet this requirement. Additional information is available on the Board of Professional Engineers, Land Surveyors, and Geologists website at: http://www.bpelsg.ca.gov/laws/index.shtml.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, late reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

Alameda County Environmental Cleanup Oversight Programs (LOP and SCP)	**REVISION DATE:** December 1, 2016
	ISSUE DATE: July 5, 2005
	PREVIOUS REVISIONS: October 31, 2005; December 16, 2005; March 27, 2009; July 8, 2010, July 25, 2010; May 15, 2014, November 29, 2016
SECTION: Miscellaneous Administrative Topics & Procedures	**SUBJECT:** Electronic Report Upload (ftp) Instructions

The Alameda County Environmental Cleanup Oversight Programs (LOP and SCP) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

REQUIREMENTS

- **Please do not submit reports as attachments to electronic mail.**
- Entire report including cover letter must be submitted to the ftp site as **a single portable document format (PDF) with no password protection.**
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- **Signature pages and acknowledgement and perjury statements must be included and have either original or electronic signature.**
- **Do not password protect the document.** Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted.**
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:

  RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Submission Instructions

1) Obtain User Name and Password
   a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
      i) Send an e-mail to deh.loptoxic@acgov.org.
   b) In the subject line of your request, be sure to include **"ftp PASSWORD REQUEST"** and in the body of your request, include the **Contact Information, Site Addresses,** and the **Case Numbers (RO# available in Geotracker) you will be posting for.**

2) Upload Files to the ftp Site
   a) Open File Explorer using the Windows key + E keyboard shortcut.
      i) Note: Netscape, Safari, and Firefox browsers will not open the FTP site as they are NOT being supported at this time.
   b) On the address bar, type in ftp://alcoftp1.acgov.org.
   c) Enter your User Name and Password. (Note: Both are Case Sensitive)
   d) Click Log On.
   e) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
   f) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.

3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
   a) Send email to deh.loptoxic@acgov.org notify us that you have placed a report on our ftp site.
   b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., firstname.lastname@acgov.org)
   c) The subject line of the e-mail must start with the RO# followed by **Report Upload.** (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO#, use the street address instead.
   d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.

STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER ESI

UPLOADING A GEO_REPORT FILE

SUCCESS

Your GEO_REPORT file has been successfully submitted!

Submittal Type:	**GEO_REPORT**
Report Title:	**CONCEPTUAL SITE MODEL UPDATE**
Report Type:	**Conceptual Site Model**
Report Date:	**10/20/2017**
Facility Global ID:	**T0600101465**
Facility Name:	**UNOCAL #6129**
File Name:	**351639 Conceptual Site Model Update 10202017.pdf**
Organization Name:	**ARCADIS**
Username:	**ARCADIS76**
IP Address:	**8.39.233.41**
Submittal Date/Time:	**10/20/2017 2:29:12 PM**
Confirmation Number:	**9692230463**