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August 8, 2012

Mr. Mark E. Detterman, PG, CEG
Senior Hazardous Materials Specialist
Alameda County Health Care Services Agency
Environmental Health Department
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

RECEIVED

2:09 pm, Aug 14, 2012

Alameda County
Environmental Health

Dear Mr. Detterman:

Attached for your review is the *First Semiannual 2012 Groundwater Monitoring Report* for former Texaco Service Station 21-1283, located at 3810 Broadway in Oakland, California. This report was prepared by ARCADIS, upon whose assistance and advice I have relied. I declare under penalty of perjury that the information and/or recommendations contained in the attached report are true and correct to the best of my knowledge.

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

Sincerely,

A handwritten signature in blue ink that reads "Kelly C. Esters".

Kelly Esters
Chevron Environmental Management Company



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Environmental Health Department
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Alameda, California 94502-6577

ENVIRONMENT

Subject:
First Semiannual 2012 Groundwater Monitoring Report
Former Texaco Service Station No. 21-1283
3810 Broadway
Oakland, California
Fuel Leak Case No. RO0000056

Date:
August 8, 2012

Contact:
Toni DeMayo

Phone:
714.508.2657

Email:
toni.demayo@arcadis-us.com

Our ref:
B0060901.1283

Dear Mr. Detterman:

ARCADIS has prepared this *First Semiannual 2012 Groundwater Monitoring Report* on behalf of Chevron Environmental Management Company (CEMC) to document the results of groundwater monitoring and sampling at former Texaco Service Station 211283, located at 3810 Broadway in Oakland, California (Figure 1).

Groundwater Monitoring and Sampling

Groundwater monitoring and sampling was performed by Blaine Tech Services, Inc. (BTS) of San Jose, California on June 13, 2012. The groundwater monitoring and sampling program consists of water level elevation monitoring, sample collection, and chemical analysis of samples for nine monitoring wells (MW-1, MW-4, MW-5B, MW-6, MW-7, MW-9, MW-10, MW-11 and MW-12). Monitoring well MW-1 was not monitored or sampled during the first semiannual 2012 event. The BTS groundwater monitoring and sample package is presented in Attachment 1. Separate phase hydrocarbons (SPH) were not observed during the first semiannual 2012 monitoring and sampling event, nor have they historically been observed at the site.

Imagine the result

Groundwater Flow

Depth-to-water measurements were subtracted from surveyed top of casing elevations to calculate the groundwater elevation at each monitoring well. Depth-to-water measurements and calculated groundwater elevations are presented in Table 1. Calculated groundwater elevation data was used to construct a groundwater elevation contour map of the site, presented as Figure 2

Laboratory Analysis

Subsequent to collection, samples were packed on ice, cooled to approximately 4 degrees Celsius (°C) and shipped under appropriate chain-of-custody protocols for analysis to Test America Laboratories, Inc. of Irvine, California, a California Department of Public Health certified analytical laboratory. Groundwater samples were screened for the following analytes per the parameters listed:

- Total petroleum hydrocarbons as diesel (TPH-DRO) [C₁₃-C₂₃] by United States Environmental Protection Agency (USEPA) Method 8015B, with and without silica gel clean-up
- Total petroleum hydrocarbons as gasoline (TPH-GRO) [C₄-C₁₂] by USEPA Method 8015B
- Benzene, toluene, ethylbenzene and total xylenes (BTEX) by USEPA Method 8260B
- Methyl tertiary butyl ether (MTBE), di-isopropyl ether (DIPE), ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA) and ethanol by USEPA Method 8260B

A quality assurance/quality control (QA/QC) sample, inclusive of a trip blank, was submitted for laboratory analysis. The trip blank sample was analyzed for TPH-GRO, BTEX, MTBE, DIPE, ETBE, TAME, TBA and ethanol.

The analytical results of the groundwater samples collected during the first semiannual 2012 sampling event are consistent with the results of recent semiannual groundwater sampling events. The analytical sample concentrations are summarized in Table 1. A concentration map of TPH-DRO, TPH-GRO, benzene, and MTBE is presented as Figure 3. The laboratory analytical report and chain-of-

custody record for the quarterly groundwater sampling event are included in Attachment 2. The historical groundwater monitoring and sampling data is presented in Attachment 3.

Summary and Conclusions

- Groundwater flow was variable across the site, with components of flow southwest and outward from MW-12
- Concentrations of petroleum hydrocarbon constituents detected in groundwater samples collected from the well network were consistent with the results of recent sampling events

Sincerely,

ARCADIS U.S., Inc.



Toni DeMayo
Project Geologist



Melissa Blanchette, PG (CA 8531)
Principal Geologist



Enclosures:

Figure 1 Site Plan
Figure 2 Groundwater Elevation Contour Map - First Semiannual 2012
Figure 3 Concentration Map – First Semiannual 2012

Table 1 Groundwater Monitoring Data and Analytical Results

Attachment 1 Groundwater Monitoring and Sampling Field Data Sheets
Attachment 2 Laboratory Analytical Report and Chain-of-Custody Record
Attachment 3 Historical Monitoring and Sampling Data

Copies:

Ms. Kelly Esters – CEMC, electronic copy
Mr. Joe Zadik

Tables

TABLE 1

GROUNDWATER MONITORING AND SAMPLING DATA
 FORMER CHEVRON SERVICE STATION 9-9708
 5910 MACARTHUR BOULEVARD
 OAKLAND, CALIFORNIA

Location	Date	TOC	DTW	GWE	TPH-MO	TPH-DRO	TPH-GRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Ethanol
	Units	(ft amsl)	(ft)	(ft amsl)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
MW-1	06/13/11	97.52	11.25	86.27	<41	75	<50	<0.5	<0.5	<0.5	<0.5	13	<50
MW-1	12/02/11	97.52	12.82	84.70	<520	<520	140	1.7	<0.50	<0.50	<1.5	14	<150
MW-1	06/21/12	97.52	13.27	84.25	<470	<470	130	<0.50	<0.50	<0.50	<1.0	11	<150
MW-2	06/13/11	97.81	14.06	83.75	<41	<50	<50	<0.5	<0.5	<0.5	<0.5	1	<50
MW-2	12/02/11	97.81	13.42	84.39	<520	<520	<50	<0.50	<0.50	<0.50	<1.5	3.8	<150
MW-2	06/21/12	97.81	13.90	83.91	<480	<480	<50	<0.50	<0.50	<0.50	<1.0	15	<150
MW-3	06/13/11	98.78	11.69	87.09	38,000	19,000	<50	<0.5	2	<0.5	<0.5	<0.5	<50
MW-3	12/02/11	98.78	11.44	87.34	4,100	2,000	<50	<0.50	<0.50	<0.50	<1.5	<0.50	<150
MW-3	06/21/12	98.78	11.80	86.98	1,500	6,800	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<150
MW-4	06/13/11	97.14	13.07	84.07	1,900	2,000	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50
MW-4	12/02/11	97.14	INACCESSIBLE		--	--	--	--	--	--	--	--	--
MW-4	06/21/12	97.14	14.43	82.71	620	1,900	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<150
MW-5	06/13/11	95.71	11.58	84.13	<42	240	240	<0.5	<0.5	<0.5	<0.5	0.9	<50
MW-5	12/02/11	95.71	11.68	84.03	<500	<500	180	<0.50	<0.50	<0.50	<1.5	1.4	<150
MW-5	06/21/12	95.71	12.22	83.49	<510	<510	200	<0.50	<0.50	<0.50	<1.0	0.68	<150
MW-6	06/13/11	95.84	10.59	85.25	<40	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50
MW-6	12/02/11	95.84	INACCESSIBLE		--	--	--	--	--	--	--	--	--
MW-6	06/21/12	95.84	INACCESSIBLE		--	--	--	--	--	--	--	--	--

TABLE 1

GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 9-9708
5910 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

Location	Date	TOC	DTW	GWE	TPH-MO	TPH-DRO	TPH-GRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Ethanol
	Units	(ft amsl)	(ft)	(ft amsl)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
QA	06/13/11	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
QA	12/02/11	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<0.50	<150
QA	06/21/12	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<150

Abbreviations and Notes:

TOC = Top of casing

DTW = Depth to Water (measured from top of casing)

GWE = Groundwater elevation

TPH-MO = Total petroleum hydrocarbons as motor oil range organics

TPH-DRO = Total petroleum hydrocarbons as diesel range organics

TPH-GRO = Total petroleum hydrocarbons as gasoline range organics

MTBE = Methyl tertiary butyl ether

Ft amsl = Feet above mean sea level

Ft = Feet

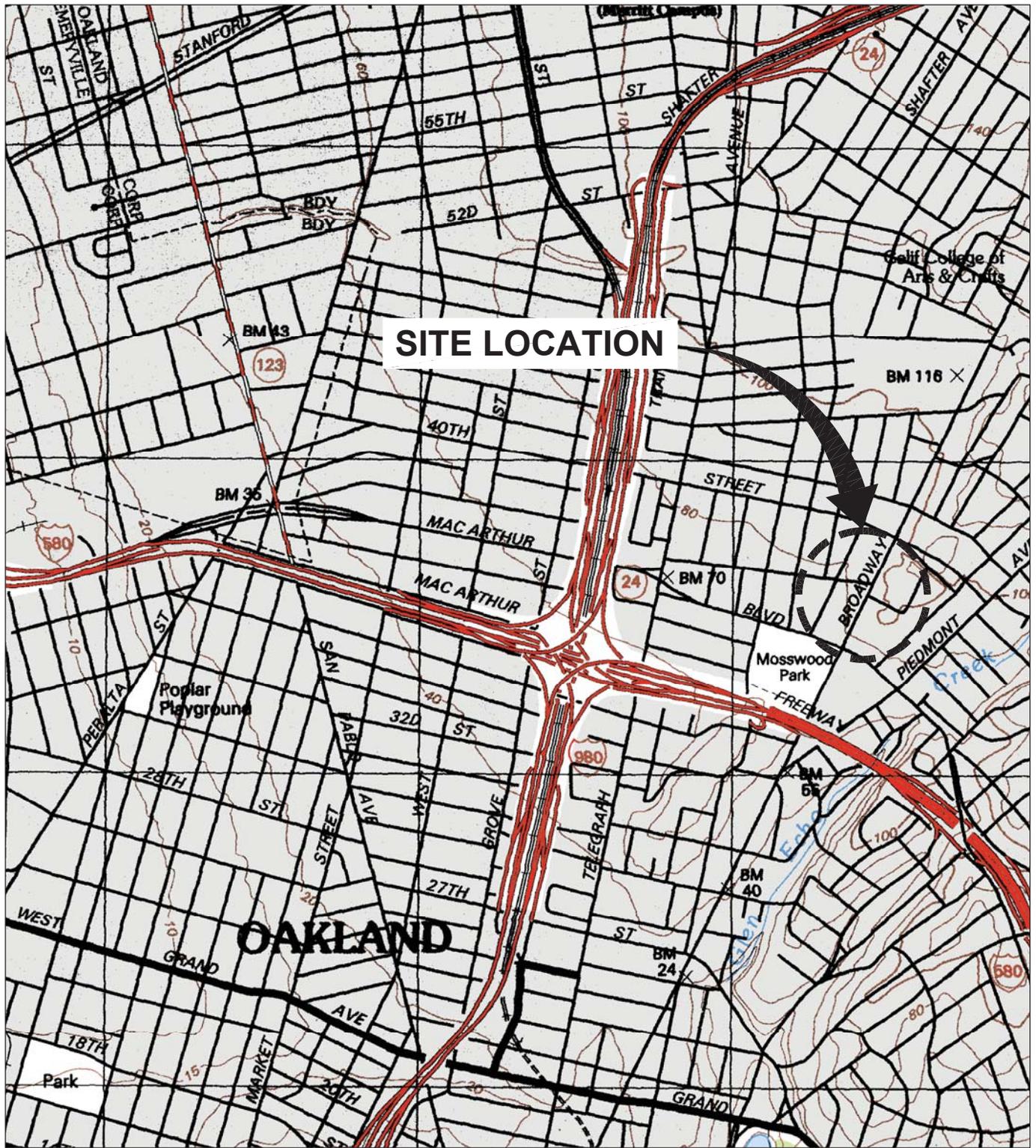
µg/l = micrograms per liter

< = Not detected above detection limit indicated

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Figures

CITY:(SYRACUSE) DIV:(GROUP:ENVI/MI/DV) DB:(HOWES) LD:(OP) PIC:(NA) PM:(B/WALL) TM:(OR) L YR:(OR)ON:"OFF=REF"
 G:\ENVCAD\STRACUSE\ACT1800699\11283\00001\DWG\60901\01.dwg LAYOUT: 1 SAVED: 1/29/2012 3:43 PM ACADVER: 18.05 (LMS TECH) PAGESETUP: A-PDF PLOTSTYLETABLE: PLT\FULL.CTB PLOTTED: 1/29/2012 3:43 PM BY: KOWALCZYK, STEVE
 XREFS: IMAGES: PROJECTNAME: 60901X01.rvt



REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., OAKLAND WEST, CA, 1993.

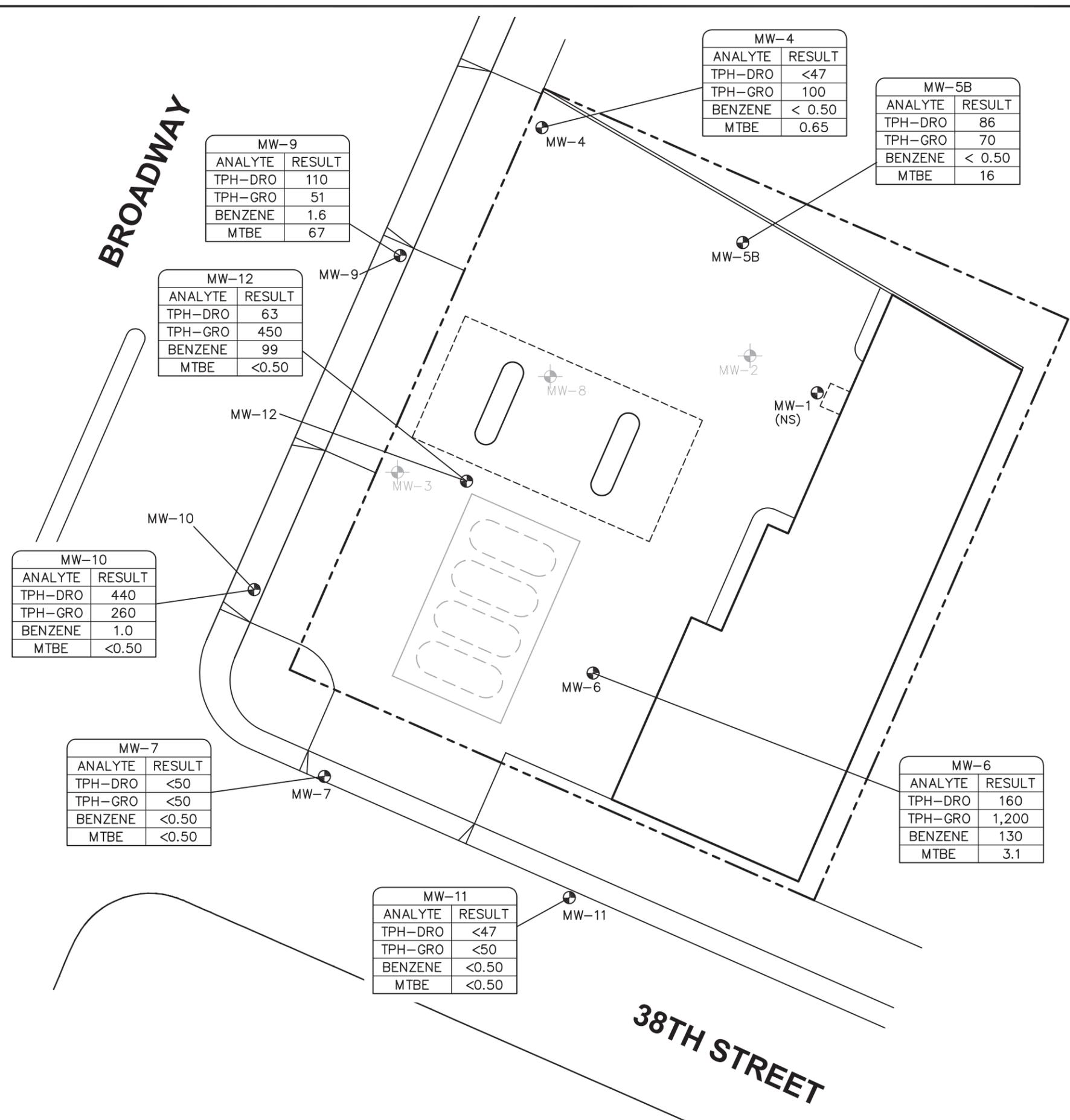


Approximate Scale: 1 in. = 1500 ft.



FORMER TEXACO SERVICE STATION NO. 21-1283 3810 BROADWAY, OAKLAND, CA	
SITE LOCATION MAP	
	FIGURE 1

CITY: SYRACUSE, NY DIV/GROUP: ENV/INDV DB: P. LISTER PW/TM: R. ANDRESEN TR: BJ. WALL LYR: ONE-OFF-REF
 G:\ENV\CAD\SYRACUSE\ACT\B0609011283\00003\DWG\60901C03.dwg LAYOUT: 3 SAVED: 8/1/2012 2:55 PM ACADVER: 18.1S (LMS TECH) PAGESETUP: B-PDF PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 8/1/2012 2:55 PM BY: KOVALCZYK, STEVE
 XREFS: IMAGES: PROJECTNAME: ---



FORMER TEXACO SERVICE STATION 21-1283
 3810 BROADWAY, OAKLAND, CA

CONCENTRATION MAP

FIGURE
3

ARCADIS

Attachment 1

Groundwater Monitoring and
Sampling Field Data Sheets

WELL GAUGING DATA

Project # 120613-PH1 Date 6/13/12 Client Cherrom

Site 3810 Broadway, Oakland

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes	
MW-4	0815	2					19.67	28.62	↓		
MW-5B	0830	2					21.86	30.13			
MW-6	0901	2					22.38	28.00			
MW-7	0845	2					20.65	32.90			
MW-9	0824	2					18.62	33.45			
MW-10	0855	2					18.40	32.55			
MW-11	0830	2					26.76	38.40			
MW-12	0836	2					20.10	29.22			

CHEVRON WELL MONITORING DATA SHEET

Project #: <u>120613-PH1</u>	Station #: <u>21-1283</u>
Sampler: <u>PH</u>	Date: <u>6/13/12</u>
Weather: <u>clear</u>	Ambient Air Temperature: <u>60°F</u>
Well I.D.: <u>MW-4</u>	Well Diameter: <u>②</u> 3 4 6 8 _____
Total Well Depth: <u>28.62</u>	Depth to Water: <u>19.67</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVO</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>21.43</u>	

Purge Method: Bailer Waterra Disposable Bailer
Disposable Bailer Peristaltic
 Positive Air Displacement Extraction Pump
 Electric Submersible Other _____

Sampling Method: Bailer
Disposable Bailer
 Extraction Port
 Dedicated Tubing
 Other: _____

<u>1.4</u> (Gals.) X	<u>3</u>	<u>= 4.3</u> Gals.
I Case Volume	Specified Volumes	Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

Time	Temp (°F)	pH	Cond. (mS or <u>µS</u>)	Turbidity (NTUs)	Gals. Removed	Observations
<u>0913</u>	<u>65.9</u>	<u>6.3</u>	<u>392</u>	<u>>1000</u>	<u>1.5</u>	
<u>0915</u>	<u>65.9</u>	<u>6.5</u>	<u>347</u>	<u>>1000</u>	<u>3.0</u>	
<u>0917</u>	<u>65.8</u>	<u>6.5</u>	<u>344</u>	<u>>1000</u>	<u>4.5</u>	

Did well dewater? Yes No Gallons actually evacuated: 4.8

Sampling Date: 6/13/12 Sampling Time: 0925 Depth to Water: 21.23

Sample I.D.: MW-4 Laboratory: Lancaster Other TA

Analyzed for: TPH-G BTEX MTBE OXYS Other see cal

Duplicate I.D.: Analyzed for: TPH-G BTEX MTBE OXYS Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

CHEVRON WELL MONITORING DATA SHEET

Project #: 120613-PH1	Station #: 21-1283
Sampler: PH	Date: 6/13/12
Weather: clear	Ambient Air Temperature: 65°F
Well I.D.: MW-SB	Well Diameter: (2) 3 4 6 8
Total Well Depth: 30.13	Depth to Water: 21.86
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 23.51	

Purge Method: Bailer Waterra Disposable Bailer Peristaltic Extraction Pump Electric Submersible Other _____

Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing Other: _____

*Sampled out of order due to car parked on well

1.3 (Gals.) X	3	=	3.9	Gals.
1 Case Volume	Specified Volumes		Calculated Volume	

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

Time	Temp (°F)	pH	Cond. (mS or μ S)	Turbidity (NTUs)	Gals. Removed	Observations
1233	65.9	7.6	945	>1000	1.5	
1235	65.7	6.8	949	>1000	3.0	
1237	66.0	6.8	963	>1000	4.0	

Did well dewater? Yes No Gallons actually evacuated: 4

Sampling Date: 6/13/12 Sampling Time: 1245 Depth to Water: 23.32

Sample I.D.: MW-SB Laboratory: Lancaster Other TA

Analyzed for: TPH-G BTEX MTBE OXYS Other see coc

Duplicate I.D.: Analyzed for: TPH-G BTEX MTBE OXYS Other:

D.O. (if req'd): Pre-purge: mg/L Post-purge: mg/L

O.R.P. (if req'd): Pre-purge: mV Post-purge: mV

CHEVRON WELL MONITORING DATA SHEET

Project #: <u>120613-PH1</u>	Station #: <u>21-1283</u>
Sampler: <u>PH</u>	Date: <u>6/13/12</u>
Weather: <u>clear</u>	Ambient Air Temperature: <u>65°F</u>
Well I.D.: <u>MW-6</u>	Well Diameter: <u>2</u> 3 4 6 8 _____
Total Well Depth: <u>28.00</u>	Depth to Water: <u>22.38</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>23.50</u>	

Purge Method:

- Bailer
- Disposable Bailer
- Positive Air Displacement
- Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- Other _____

Sampling Method:

- Bailer
- Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: _____

<u>0.9</u> (Gals.) X	<u>3</u>	<u>=</u>	<u>2.7</u> Gals.
1 Case Volume	Specified Volumes		Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

Time	Temp (°F)	pH	Cond. (mS or <u>µS</u>)	Turbidity (NTUs)	Gals. Removed	Observations
<u>1200</u>	<u>67.0</u>	<u>7.2</u>	<u>1240</u>	<u>>1000</u>	<u>1.0</u>	
<u>1202</u>	<u>67.1</u>	<u>6.7</u>	<u>1100</u>	<u>>1000</u>	<u>2.0</u>	
<u>1204</u>	<u>67.4</u>	<u>6.7</u>	<u>1091</u>	<u>>1000</u>	<u>2.7</u>	

Did well dewater? Yes No Gallons actually evacuated: 2.7

Sampling Date: 6/13/12 Sampling Time: 1215 Depth to Water: 23.17

Sample I.D.: MW-6 Laboratory: Lancaster Other TA

Analyzed for: TPH-G BTEX MTBE OXYS Other: See Cox

Duplicate I.D.: Analyzed for: TPH-G BTEX MTBE OXYS Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

CHEVRON WELL MONITORING DATA SHEET

Project #: <u>120613-PH1</u>	Station #: <u>21-1283</u>
Sampler: <u>PH</u>	Date: <u>6/13/12</u>
Weather: <u>clear</u>	Ambient Air Temperature: <u>65°F</u>
Well I.D.: <u>MW-7</u>	Well Diameter: <u>2</u> 3 4 6 8 _____
Total Well Depth: <u>32.90</u>	Depth to Water: <u>20.65</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>23.10</u>	

Purge Method: Bailer Waterra Disposable Bailer Peristaltic Positive Air Displacement Extraction Pump Electric Submersible Other _____

Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing Other: _____

<u>1.9</u>	(Gals.) X	<u>3</u>	=	<u>5.9</u>	Gals.
1 Case Volume		Specified Volumes		Calculated Volume	

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

Time	Temp (°F)	pH	Cond. (mS or μ S)	Turbidity (NTUs)	Gals. Removed	Observations
<u>1100</u>	<u>66.0</u>	<u>7.7</u>	<u>479</u>	<u>>1000</u>	<u>2</u>	
<u>1103</u>	<u>65.8</u>	<u>7.0</u>	<u>466</u>	<u>>1000</u>	<u>4</u>	
<u>1106</u>	<u>65.7</u>	<u>7.0</u>	<u>462</u>	<u>>1000</u>	<u>6</u>	

Did well dewater? Yes No Gallons actually evacuated: 6

Sampling Date: 6/13/12 Sampling Time: 1115 Depth to Water: 22.25

Sample I.D.: MW-7 Laboratory: Lancaster Other: TA

Analyzed for: TPH-G BTEX MTBE OXYS Other: see loc

Duplicate I.D.: Analyzed for: TPH-G BTEX MTBE OXYS Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

CHEVRON WELL MONITORING DATA SHEET

Project #: <u>120613-PH1</u>	Station #: <u>21-1283</u>
Sampler: <u>PH</u>	Date: <u>6/13/12</u>
Weather: <u>clear</u>	Ambient Air Temperature: <u>60°F</u>
Well I.D.: <u>MW-9</u>	Well Diameter: <u>(2)</u> 3 4 6 8 _____
Total Well Depth: <u>33.45</u>	Depth to Water: <u>18.62</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>(pvc)</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>21.58</u>	

Purge Method: Bailer Waterra Disposable Bailer
 Disposable Bailer Peristaltic
 Positive Air Displacement Extraction Pump
 Electric Submersible Other _____

Sampling Method: Bailer
Disposable Bailer
 Extraction Port
 Dedicated Tubing
 Other: _____

$\frac{2.4 \text{ (Gals.)} \times 3}{\text{I Case Volume Specified Volumes}} = \frac{7.1 \text{ Gals.}}{\text{Calculated Volume}}$	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F)	pH	Cond. (mS or <u>µS</u>)	Turbidity (NTUs)	Gals. Removed	Observations
<u>0938</u>	<u>65.6</u>	<u>6.3</u>	<u>803</u>	<u>>1000</u>	<u>2.5</u>	
<u>0941</u>	<u>65.8</u>	<u>6.5</u>	<u>798</u>	<u>>1000</u>	<u>5.0</u>	
<u>0944</u>	<u>65.7</u>	<u>6.5</u>	<u>794</u>	<u>>1000</u>	<u>7.2</u>	

Did well dewater? Yes NO Gallons actually evacuated: 7.2

Sampling Date: 6/13/12 Sampling Time: 0955 Depth to Water: 21.54

Sample I.D.: MW-9 Laboratory: Lancaster (Other) TA

Analyzed for: TPH-G BTEX MTBE OXYS (Other) See COC

Duplicate I.D.: Analyzed for: TPH-G BTEX MTBE OXYS Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

CHEVRON WELL MONITORING DATA SHEET

Project #: 120613-PH1	Station #: 21-1283
Sampler: PH	Date: 6/13/12
Weather: clear	Ambient Air Temperature: 65°F
Well I.D.: MW-10	Well Diameter: ② 3 4 6 8 _____
Total Well Depth: 32.55	Depth to Water: 18.40
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 21.23	

Purge Method: Bailer Waterra Disposable Bailer Peristaltic Positive Air Displacement Extraction Pump Electric Submersible Other _____

Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing Other _____

2.3 (Gals.) X	3	=	6.8	Gals.
1 Case Volume	Specified Volumes		Calculated Volume	

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

Time	Temp (°F)	pH	Cond. (mS or μ S)	Turbidity (NTUs)	Gals. Removed	Observations
1130	66.2	7.1	696	>1000	2.5	
1133	66.4	6.8	680	>1000	4.7	
1136	66.4	6.8	686	>1000	7.0	

Did well dewater? Yes No Gallons actually evacuated: 7

Sampling Date: 6/13/12 Sampling Time: 1145 Depth to Water: 20.02

Sample I.D.: MW-10 Laboratory: Lancaster Other TA

Analyzed for: TPH-G BTEX MTBE OXYS Other: See COC

Duplicate I.D.: Analyzed for: TPH-G BTEX MTBE OXYS Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
	O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:

CHEVRON WELL MONITORING DATA SHEET

Project #: <u>120613-P411</u>	Station #: <u>21-1283</u>
Sampler: <u>PH</u>	Date: <u>6/13/12</u>
Weather: <u>clear</u>	Ambient Air Temperature: <u>65°F</u>
Well I.D.: <u>MW-11</u>	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth: <u>38.40</u>	Depth to Water: <u>26.76</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> <u>HACH</u>
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>29.08</u>	

Purge Method: Bailer Sampling Method: Bailer
Disposable Bailer Disposible Bailer
 Positive Air Displacement Peristaltic
 Electric Submersible Extraction Pump Dedicated Tubing
 Other: _____

1.8 (Gals.) X 3 = 5.6 Gals.
 1 Case Volume Specified Volumes Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

Time	Temp (°F)	pH	Cond. (mS or <u>µS</u>)	Turbidity (NTUs)	Gals. Removed	Observations
<u>1013</u>	<u>66.6</u>	<u>7.1</u>	<u>597</u>	<u>>1000</u>	<u>2</u>	
<u>1016</u>	<u>66.8</u>	<u>7.0</u>	<u>598</u>	<u>>1000</u>	<u>4</u>	
<u>1018</u>	<u>67.0</u>	<u>7.0</u>	<u>600</u>	<u>>1000</u>	<u>5.7</u>	

Did well dewater? Yes No Gallons actually evacuated: 5.7

Sampling Date: 6/13/12 Sampling Time: 1025 Depth to Water: 28.36

Sample I.D.: MW-11 Laboratory: Lancaster Other TA

Analyzed for: TPH-G BTEX MTBE OXYS Other see col

Duplicate I.D.: Analyzed for: TPH-G BTEX MTBE OXYS Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

CHEVRON WELL MONITORING DATA SHEET

Project #: <u>120613-PH1</u>	Station #: <u>21-1283</u>
Sampler: <u>PH</u>	Date: <u>6/13/12</u>
Weather: <u>clear</u>	Ambient Air Temperature: <u>65°F</u>
Well I.D.: <u>MW-12</u>	Well Diameter: <u>2</u> 3 4 6 8 _____
Total Well Depth: <u>29.22</u>	Depth to Water: <u>20.10</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>21.92</u>	

Purge Method: Bailer Water Sampling Method: Bailer
 Disposable Bailer Peristaltic Disposable Bailer
 Positive Air Displacement Extraction Pump Extraction Port
 Electric Submersible Other _____ Dedicated Tubing
 Other: _____

<u>1.5</u>	(Gals.) X	<u>3</u>	=	<u>4.4</u>	Gals.
I Case Volume		Specified Volumes		Calculated Volume	

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

Time	Temp (°F)	pH	Cond. (mS or <u>µS</u>)	Turbidity (NTUs)	Gals. Removed	Observations
—						—
						—
						—
						—
<u>1040</u>	<u>69.2</u>	<u>7.2</u>	<u>985</u>	<u>223</u>	—	

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: 6/13/12 Sampling Time: 1040 Depth to Water: 20.10

Sample I.D.: MW-12 Laboratory: Lancaster Other TA

Analyzed for: TPH-G BTEX MTBE OXYS Other see coc

Duplicate I.D.: Analyzed for: TPH-G BTEX MTBE OXYS Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

IRVINE
 17461 Derian Ave
 Suite 100
 Irvine, CA 92614
 phone 949.261.1022 fax 949.260.3299

Chain of Custody Record



TestAmerica Laboratories, Inc.

Client Contact		Project Manager: Toni DeMayo			Site Contact:		Date: 6/13/12		COC No:		
Arcadis - U.S., Inc. - Irvine		Tel/Fax: (916) 985-2079			Lab Contact: Sushmitha Reddy		Carrier:		1 of 1 COCs		
320 Commerce, Suite 200		Analysis Turnaround Time			Filtered Sample GRO by EPA 8015 MOD BTEX & MTBE (8260B) DRO with Silica Gel Clean Up by 8015 DRO without Silica Gel Clean Up by 8015 Ethanol by 8260B				Job No. 120613-PH1		
Irvine, CA 92602		Calendar (C) or Work Days (W) _____							SDG No.		
714-508-2657 Phone		TAT if different from Below _____									
714-730-9345 FAX		<input checked="" type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day									
Project Name: 3810 Broadway Terrace, Oakland, CA											
Site: 21-1283									Sample Specific Notes:		
P O Global ID: T0600101108											
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	1	2	3	4	5	6
MW-4	6/13/12	0925	Various	W	9	X	X	X	X	X	
MW-5B		1245				X	X	X	X	X	
MW-6		1215				X	X	X	X	X	
MW-7		1115				X	X	X	X	X	
MW-9		0935				X	X	X	X	X	
MW-10		1145				X	X	X	X	X	
MW-11		1025				X	X	X	X	X	
MW-12		1040				X	X	X	X	X	
TB- 2020513		0800	VOA		4	X	X				
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____						1,2	1,2	1	1	1	
Possible Hazard Identification						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)					
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Unknown						<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months					
Special Instructions/QC Requirements & Comments:											
MUST MEET LOWEST DETECTION LIMITS POSSIBLE FOR 8260 COMPOUNDS USE 10 GRAM SILICA GEL CLEAN UP											
Relinquished by:		Company:		Date/Time:		Received by:		Company:		Date/Time:	
		BTS		6/13/12 1530							
Relinquished by:		Company:		Date/Time:		Received by:		Company:		Date/Time:	
Relinquished by:		Company:		Date/Time:		Received by:		Company:		Date/Time:	

WELLHEAD INSPECTION CHECKLIST

Client Chevron Date 6/13/12
 Site Address 3810 Broadway, Oakland
 Job Number 120613-PH1 Technician PH

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
MW-4						X		
MW-5B						X		
MW-6						X		
MW-7	X							
MW-9	X							
MW-10						F		
MW-11	X							
MW-12						X		

NOTES: MW-4 1/2 tabs stripped MW-12 - 1/2 bolts 1/2 tabs broken
1/2 tabs stripped MW-5B 2/3 tabs stripped MW-10 2 1/2 tabs stripped
MW-6 1/2 tabs stripped

CHEVRON-NORTHERN CALIFORNIA TYPE **A** BILL OF LADING

SOURCE RECORD **BILL OF LADING**
 FOR PURGEWATER RECOVERED FROM
 GROUNDWATER WELLS AT CHEVRON FACILITIES IN
 THE STATE OF CALIFORNIA. THE PURGE- WATER
 WHICH HAS BEEN RECOVERED FROM GROUND-
 WATER WELLS IS COLLECTED BY THE CONTRACTOR
 AND HAULED TO THEIR FACILITY IN SAN JOSE,
 CALIFORNIA FOR TEMPORARILY HOLDING PENDING
 TRANSPORT BY OTHERS TO FINAL DESTINATION.

The contractor performing this work is BLAINE TECH SERVICES, INC. (BLAINE TECH), 1680 Rogers Ave. San Jose CA (408) 573-0555). BLAINE TECH. is authorized by Chevron Environmental Management Company (CHEVRON EMC) to recover, collect, apportion into loads, and haul the purgewater that is drawn from wells at the CHEVRON EMC facility indicated below and to deliver that purgewater to BLAINE TECH for temporarily holding. Transport routing of the purgewater may be direct from one CHEVRON EMC facility to BLAINE TECH; from one CHEVRON EMC facility to BLAINE TECH via another CHEVRON EMC facility; or any combination thereof. The well purgewater is and remains the property of CHEVRON EMC.

This Source Record **BILL OF LADING** was initiated to cover the recovery of Non-Hazardous Well Purgewater from wells at the Chevron facility described below:

21-1283
 CHEVRON # Rob Speer
 Chevron Project Manager

3810 Broadway Terrace Oakland CA
 street number street name city state

WELL I.D.	GALS.	WELL I.D.	GALS.
<u>MW-4</u>	<u>1 4.5</u>		
<u>MW-5B</u>	<u>1 4</u>		
<u>MW-6</u>	<u>1 2.7</u>		
<u>MW-7</u>	<u>1 6</u>		
<u>MW-9</u>	<u>1 7.2</u>		
<u>MW-10</u>	<u>1 7</u>		
<u>MW-11</u>	<u>1 5.7</u>		
MW-12	<u>1</u>		
added equip.		any other	
rinse water	<u>1 8</u>	adjustments	<u>/</u>
TOTAL GALS.		loaded onto	
RECOVERED	<u>215</u>	BTS vehicle #	<u>81</u>
BTS event #	time	date	
<u>120613-PH1</u>	<u>1300</u>	<u>6/13/12</u>	
signature	<u>[Signature]</u>		

REC'D AT	time	date	
<u>BTS</u>	<u>1530</u>	<u>6/13/12</u>	
unloaded by			
signature	<u>[Signature]</u>		

ARCADIS

Attachment 2

Laboratory Analytical Report and
Chain-of-Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Irvine

17461 Derian Ave

Suite 100

Irvine, CA 92614-5817

Tel: (949)261-1022

TestAmerica Job ID: 440-14875-1

Client Project/Site: Chevron - 21-1283

For:

ARCADIS U.S., Inc.

3240 El Camino Real

Suite 200

Irvine, California 92602

Attn: Toni DeMayo



Authorized for release by:

6/27/2012 6:02:10 PM

Sushmitha Reddy

Project Manager I

sushmitha.reddy@testamericainc.com

LINKS

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results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1

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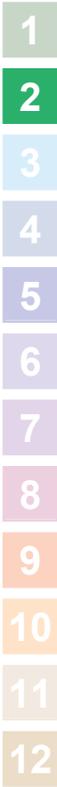
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11

12



Cover Page	1
Table of Contents	2
Sample Summary	3
Case Narrative	4
Client Sample Results	5
Chronicle	6
Sample Results	7
Association	8
Definitions	9
Certification Summary	10
Chain of Custody	11
Receipt Records	12



Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - 21-1283

TestAmerica Job ID: 440-14875-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-14875-1	MW-4	Water	06/13/12 09:25	06/15/12 09:50
440-14875-2	MW-5B	Water	06/13/12 12:45	06/15/12 09:50
440-14875-3	MW-6	Water	06/13/12 12:15	06/15/12 09:50
440-14875-4	MW-7	Water	06/13/12 11:15	06/15/12 09:50
440-14875-5	MW-9	Water	06/13/12 09:55	06/15/12 09:50
440-14875-6	MW-10	Water	06/13/12 11:45	06/15/12 09:50
440-14875-7	MW-11	Water	06/13/12 10:25	06/15/12 09:50
440-14875-8	MW-12	Water	06/13/12 10:40	06/15/12 09:50
440-14875-9	TB-20120613	Water	06/13/12 08:00	06/15/12 09:50

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12

Case Narrative

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - 21-1283

TestAmerica Job ID: 440-14875-1

Job ID: 440-14875-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-14875-1

Comments

No additional comments.

Receipt

The samples were received on 6/15/2012 9:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.4° C.

Except:

One or more containers for the following sample(s) was received broken or leaking
For All Samples we received at least 1 to 2 Voas Broken .. For Sample # 5 we received 3 voas broken so we only had 1 for each analysis..

GC/MS VOA

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 33956 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

GC VOA

Method(s) 8015B: The following sample(s) was analyzed with headspace in the sample vial due to multiple runs: MW-12 (440-14875-8).

No other analytical or quality issues were noted.

GC Semi VOA

Method(s) 8015B: Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 33360 and 33793. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

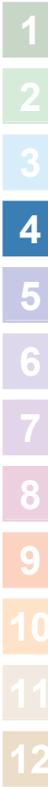
No other analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

VOA Prep

No analytical or quality issues were noted.



Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - 21-1283

TestAmerica Job ID: 440-14875-1

Client Sample ID: MW-4
Date Collected: 06/13/12 09:25
Date Received: 06/15/12 09:50

Lab Sample ID: 440-14875-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			06/19/12 17:33	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			06/19/12 17:33	1
Ethanol	ND		150		ug/L			06/19/12 17:33	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			06/19/12 17:33	1
Ethylbenzene	ND		0.50		ug/L			06/19/12 17:33	1
m,p-Xylene	ND		1.0		ug/L			06/19/12 17:33	1
Methyl-t-Butyl Ether (MTBE)	0.65		0.50		ug/L			06/19/12 17:33	1
o-Xylene	ND		0.50		ug/L			06/19/12 17:33	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			06/19/12 17:33	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			06/19/12 17:33	1
Toluene	ND		0.50		ug/L			06/19/12 17:33	1
Xylenes, Total	ND		1.0		ug/L			06/19/12 17:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120					06/19/12 17:33	1
Dibromofluoromethane (Surr)	90		80 - 120					06/19/12 17:33	1
Toluene-d8 (Surr)	99		80 - 120					06/19/12 17:33	1

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	100		50		ug/L			06/23/12 02:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		65 - 140					06/23/12 02:52	1

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C28)	0.13		0.048		mg/L		06/19/12 11:29	06/20/12 02:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane	76		45 - 120				06/19/12 11:29	06/20/12 02:19	1

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C28)	ND		0.047		mg/L		06/16/12 14:01	06/16/12 18:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane	69		45 - 120				06/16/12 14:01	06/16/12 18:54	1

Client Sample ID: MW-5B
Date Collected: 06/13/12 12:45
Date Received: 06/15/12 09:50

Lab Sample ID: 440-14875-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			06/19/12 18:00	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			06/19/12 18:00	1
Ethanol	ND		150		ug/L			06/19/12 18:00	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			06/19/12 18:00	1
Ethylbenzene	ND		0.50		ug/L			06/19/12 18:00	1
m,p-Xylene	ND		1.0		ug/L			06/19/12 18:00	1
Methyl-t-Butyl Ether (MTBE)	16		0.50		ug/L			06/19/12 18:00	1
o-Xylene	ND		0.50		ug/L			06/19/12 18:00	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - 21-1283

TestAmerica Job ID: 440-14875-1

Client Sample ID: MW-5B
Date Collected: 06/13/12 12:45
Date Received: 06/15/12 09:50

Lab Sample ID: 440-14875-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			06/19/12 18:00	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			06/19/12 18:00	1
Toluene	ND		0.50		ug/L			06/19/12 18:00	1
Xylenes, Total	ND		1.0		ug/L			06/19/12 18:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					06/19/12 18:00	1
Dibromofluoromethane (Surr)	88		80 - 120					06/19/12 18:00	1
Toluene-d8 (Surr)	97		80 - 120					06/19/12 18:00	1

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	70		50		ug/L			06/23/12 03:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		65 - 140					06/23/12 03:20	1

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C28)	0.12		0.048		mg/L		06/19/12 11:29	06/20/12 02:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane	81		45 - 120				06/19/12 11:29	06/20/12 02:40	1

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C28)	0.086		0.048		mg/L		06/16/12 14:01	06/16/12 19:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane	70		45 - 120				06/16/12 14:01	06/16/12 19:17	1

Client Sample ID: MW-6

Date Collected: 06/13/12 12:15
Date Received: 06/15/12 09:50

Lab Sample ID: 440-14875-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	130		0.50		ug/L			06/19/12 18:27	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			06/19/12 18:27	1
Ethanol	ND		150		ug/L			06/19/12 18:27	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			06/19/12 18:27	1
Ethylbenzene	75		0.50		ug/L			06/19/12 18:27	1
m,p-Xylene	21		1.0		ug/L			06/19/12 18:27	1
Methyl-t-Butyl Ether (MTBE)	3.1		0.50		ug/L			06/19/12 18:27	1
o-Xylene	15		0.50		ug/L			06/19/12 18:27	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			06/19/12 18:27	1
tert-Butyl alcohol (TBA)	65		10		ug/L			06/19/12 18:27	1
Toluene	9.5		0.50		ug/L			06/19/12 18:27	1
Xylenes, Total	36		1.0		ug/L			06/19/12 18:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		80 - 120					06/19/12 18:27	1
Dibromofluoromethane (Surr)	88		80 - 120					06/19/12 18:27	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - 21-1283

TestAmerica Job ID: 440-14875-1

Client Sample ID: MW-6

Lab Sample ID: 440-14875-3

Date Collected: 06/13/12 12:15

Matrix: Water

Date Received: 06/15/12 09:50

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		06/19/12 18:27	1

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	1200		50		ug/L			06/23/12 03:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	72		65 - 140		06/23/12 03:47	1

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C28)	0.28		0.049		mg/L		06/19/12 11:29	06/20/12 03:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	
n-Octacosane	82		45 - 120		06/19/12 11:29	06/20/12 03:00	1

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C28)	0.16		0.047		mg/L		06/16/12 14:01	06/16/12 19:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	
n-Octacosane	73		45 - 120		06/16/12 14:01	06/16/12 19:41	1

Client Sample ID: MW-7

Lab Sample ID: 440-14875-4

Date Collected: 06/13/12 11:15

Matrix: Water

Date Received: 06/15/12 09:50

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			06/19/12 18:54	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			06/19/12 18:54	1
Ethanol	ND		150		ug/L			06/19/12 18:54	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			06/19/12 18:54	1
Ethylbenzene	ND		0.50		ug/L			06/19/12 18:54	1
m,p-Xylene	ND		1.0		ug/L			06/19/12 18:54	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			06/19/12 18:54	1
o-Xylene	ND		0.50		ug/L			06/19/12 18:54	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			06/19/12 18:54	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			06/19/12 18:54	1
Toluene	ND		0.50		ug/L			06/19/12 18:54	1
Xylenes, Total	ND		1.0		ug/L			06/19/12 18:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		80 - 120		06/19/12 18:54	1
Dibromofluoromethane (Surr)	85		80 - 120		06/19/12 18:54	1
Toluene-d8 (Surr)	99		80 - 120		06/19/12 18:54	1

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			06/23/12 04:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		65 - 140		06/23/12 04:15	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - 21-1283

TestAmerica Job ID: 440-14875-1

Client Sample ID: MW-7

Lab Sample ID: 440-14875-4

Date Collected: 06/13/12 11:15

Matrix: Water

Date Received: 06/15/12 09:50

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C28)	ND		0.048		mg/L		06/19/12 11:29	06/20/12 03:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane	79		45 - 120				06/19/12 11:29	06/20/12 03:20	1

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C28)	ND		0.050		mg/L		06/16/12 14:01	06/16/12 20:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane	73		45 - 120				06/16/12 14:01	06/16/12 20:05	1

Client Sample ID: MW-9

Lab Sample ID: 440-14875-5

Date Collected: 06/13/12 09:55

Matrix: Water

Date Received: 06/15/12 09:50

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.6		0.50		ug/L			06/20/12 15:35	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			06/20/12 15:35	1
Ethanol	ND		150		ug/L			06/20/12 15:35	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			06/20/12 15:35	1
Ethylbenzene	ND		0.50		ug/L			06/20/12 15:35	1
m,p-Xylene	ND		1.0		ug/L			06/20/12 15:35	1
Methyl-t-Butyl Ether (MTBE)	67		0.50		ug/L			06/20/12 15:35	1
o-Xylene	ND		0.50		ug/L			06/20/12 15:35	1
Tert-amyl-methyl ether (TAME)	2.0		0.50		ug/L			06/20/12 15:35	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			06/20/12 15:35	1
Toluene	ND		0.50		ug/L			06/20/12 15:35	1
Xylenes, Total	ND		1.0		ug/L			06/20/12 15:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120					06/20/12 15:35	1
Dibromofluoromethane (Surr)	99		80 - 120					06/20/12 15:35	1
Toluene-d8 (Surr)	102		80 - 120					06/20/12 15:35	1

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	51		50		ug/L			06/23/12 04:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		65 - 140					06/23/12 04:43	1

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C28)	0.13		0.048		mg/L		06/19/12 11:29	06/20/12 08:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane	77		45 - 120				06/19/12 11:29	06/20/12 08:23	1

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C28)	0.11		0.047		mg/L		06/16/12 14:01	06/16/12 20:28	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - 21-1283

TestAmerica Job ID: 440-14875-1

Client Sample ID: MW-9

Lab Sample ID: 440-14875-5

Date Collected: 06/13/12 09:55

Matrix: Water

Date Received: 06/15/12 09:50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	73		45 - 120	06/16/12 14:01	06/16/12 20:28	1

Client Sample ID: MW-10

Lab Sample ID: 440-14875-6

Date Collected: 06/13/12 11:45

Matrix: Water

Date Received: 06/15/12 09:50

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0		0.50		ug/L			06/20/12 16:05	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			06/20/12 16:05	1
Ethanol	ND		150		ug/L			06/20/12 16:05	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			06/20/12 16:05	1
Ethylbenzene	0.73		0.50		ug/L			06/20/12 16:05	1
m,p-Xylene	ND		1.0		ug/L			06/20/12 16:05	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			06/20/12 16:05	1
o-Xylene	0.64		0.50		ug/L			06/20/12 16:05	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			06/20/12 16:05	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			06/20/12 16:05	1
Toluene	ND		0.50		ug/L			06/20/12 16:05	1
Xylenes, Total	ND		1.0		ug/L			06/20/12 16:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		80 - 120		06/20/12 16:05	1
Dibromofluoromethane (Surr)	106		80 - 120		06/20/12 16:05	1
Toluene-d8 (Surr)	104		80 - 120		06/20/12 16:05	1

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	260		50		ug/L			06/23/12 11:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		65 - 140		06/23/12 11:13	1

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C28)	0.44		0.048		mg/L		06/19/12 11:29	06/20/12 08:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	73		45 - 120	06/19/12 11:29	06/20/12 08:44	1

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C28)	0.44		0.048		mg/L		06/16/12 14:01	06/16/12 20:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	76		45 - 120	06/16/12 14:01	06/16/12 20:52	1

Client Sample ID: MW-11

Lab Sample ID: 440-14875-7

Date Collected: 06/13/12 10:25

Matrix: Water

Date Received: 06/15/12 09:50

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			06/20/12 16:36	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - 21-1283

TestAmerica Job ID: 440-14875-1

Client Sample ID: MW-11

Lab Sample ID: 440-14875-7

Date Collected: 06/13/12 10:25

Matrix: Water

Date Received: 06/15/12 09:50

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl Ether (DIPE)	ND		0.50		ug/L			06/20/12 16:36	1
Ethanol	ND		150		ug/L			06/20/12 16:36	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			06/20/12 16:36	1
Ethylbenzene	ND		0.50		ug/L			06/20/12 16:36	1
m,p-Xylene	ND		1.0		ug/L			06/20/12 16:36	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			06/20/12 16:36	1
o-Xylene	ND		0.50		ug/L			06/20/12 16:36	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			06/20/12 16:36	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			06/20/12 16:36	1
Toluene	ND		0.50		ug/L			06/20/12 16:36	1
Xylenes, Total	ND		1.0		ug/L			06/20/12 16:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120					06/20/12 16:36	1
Dibromofluoromethane (Surr)	103		80 - 120					06/20/12 16:36	1
Toluene-d8 (Surr)	102		80 - 120					06/20/12 16:36	1

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			06/23/12 11:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		65 - 140					06/23/12 11:41	1

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C28)	ND		0.048		mg/L		06/19/12 11:29	06/20/12 09:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane	84		45 - 120				06/19/12 11:29	06/20/12 09:04	1

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C28)	ND		0.047		mg/L		06/16/12 14:01	06/16/12 21:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane	78		45 - 120				06/16/12 14:01	06/16/12 21:15	1

Client Sample ID: MW-12

Lab Sample ID: 440-14875-8

Date Collected: 06/13/12 10:40

Matrix: Water

Date Received: 06/15/12 09:50

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	99		0.50		ug/L			06/21/12 04:04	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			06/21/12 04:04	1
Ethanol	ND		150		ug/L			06/21/12 04:04	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			06/21/12 04:04	1
Ethylbenzene	34		0.50		ug/L			06/21/12 04:04	1
m,p-Xylene	22		1.0		ug/L			06/21/12 04:04	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			06/21/12 04:04	1
o-Xylene	0.65		0.50		ug/L			06/21/12 04:04	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			06/21/12 04:04	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - 21-1283

TestAmerica Job ID: 440-14875-1

Client Sample ID: MW-12

Lab Sample ID: 440-14875-8

Date Collected: 06/13/12 10:40

Matrix: Water

Date Received: 06/15/12 09:50

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butyl alcohol (TBA)	ND		10		ug/L			06/21/12 04:04	1
Toluene	2.1		0.50		ug/L			06/21/12 04:04	1
Xylenes, Total	23		1.0		ug/L			06/21/12 04:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		80 - 120					06/21/12 04:04	1
Dibromofluoromethane (Surr)	102		80 - 120					06/21/12 04:04	1
Toluene-d8 (Surr)	102		80 - 120					06/21/12 04:04	1

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	450		50		ug/L			06/25/12 17:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		65 - 140					06/25/12 17:16	1

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C28)	0.14		0.048		mg/L		06/19/12 11:29	06/20/12 09:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane	86		45 - 120				06/19/12 11:29	06/20/12 09:46	1

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C28)	0.063		0.047		mg/L		06/16/12 14:01	06/16/12 21:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane	53		45 - 120				06/16/12 14:01	06/16/12 21:39	1

Client Sample ID: TB-20120613

Lab Sample ID: 440-14875-9

Date Collected: 06/13/12 08:00

Matrix: Water

Date Received: 06/15/12 09:50

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			06/21/12 04:35	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			06/21/12 04:35	1
Ethanol	ND		150		ug/L			06/21/12 04:35	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			06/21/12 04:35	1
Ethylbenzene	ND		0.50		ug/L			06/21/12 04:35	1
m,p-Xylene	ND		1.0		ug/L			06/21/12 04:35	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			06/21/12 04:35	1
o-Xylene	ND		0.50		ug/L			06/21/12 04:35	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			06/21/12 04:35	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			06/21/12 04:35	1
Toluene	ND		0.50		ug/L			06/21/12 04:35	1
Xylenes, Total	ND		1.0		ug/L			06/21/12 04:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		80 - 120					06/21/12 04:35	1
Dibromofluoromethane (Surr)	103		80 - 120					06/21/12 04:35	1
Toluene-d8 (Surr)	103		80 - 120					06/21/12 04:35	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - 21-1283

TestAmerica Job ID: 440-14875-1

Client Sample ID: TB-20120613

Lab Sample ID: 440-14875-9

Date Collected: 06/13/12 08:00

Matrix: Water

Date Received: 06/15/12 09:50

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			06/22/12 22:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		65 - 140		06/22/12 22:15	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - 21-1283

TestAmerica Job ID: 440-14875-1

Client Sample ID: MW-4

Date Collected: 06/13/12 09:25

Date Received: 06/15/12 09:50

Lab Sample ID: 440-14875-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	33721	06/19/12 17:33	WC	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	34674	06/23/12 02:52	RG	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			1055 mL	1 mL	33360	06/16/12 14:01	EC	TAL IRV
Silica Gel Cleanup	Analysis	8015B		1			33389	06/16/12 18:54	CN	TAL IRV
Total/NA	Prep	3510C			1050 mL	1 mL	33793	06/19/12 11:29	KW	TAL IRV
Total/NA	Analysis	8015B		1			33923	06/20/12 02:19	ES	TAL IRV

Client Sample ID: MW-5B

Date Collected: 06/13/12 12:45

Date Received: 06/15/12 09:50

Lab Sample ID: 440-14875-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	33721	06/19/12 18:00	WC	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	34674	06/23/12 03:20	RG	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			1045 mL	1 mL	33360	06/16/12 14:01	EC	TAL IRV
Silica Gel Cleanup	Analysis	8015B		1			33389	06/16/12 19:17	CN	TAL IRV
Total/NA	Prep	3510C			1050 mL	1 mL	33793	06/19/12 11:29	KW	TAL IRV
Total/NA	Analysis	8015B		1			33923	06/20/12 02:40	ES	TAL IRV

Client Sample ID: MW-6

Date Collected: 06/13/12 12:15

Date Received: 06/15/12 09:50

Lab Sample ID: 440-14875-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	33721	06/19/12 18:27	WC	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	34674	06/23/12 03:47	RG	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			1055 mL	1 mL	33360	06/16/12 14:01	EC	TAL IRV
Silica Gel Cleanup	Analysis	8015B		1			33389	06/16/12 19:41	CN	TAL IRV
Total/NA	Prep	3510C			1030 mL	1 mL	33793	06/19/12 11:29	KW	TAL IRV
Total/NA	Analysis	8015B		1			33923	06/20/12 03:00	ES	TAL IRV

Client Sample ID: MW-7

Date Collected: 06/13/12 11:15

Date Received: 06/15/12 09:50

Lab Sample ID: 440-14875-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	33721	06/19/12 18:54	WC	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	34674	06/23/12 04:15	RG	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			1010 mL	1 mL	33360	06/16/12 14:01	EC	TAL IRV
Silica Gel Cleanup	Analysis	8015B		1			33389	06/16/12 20:05	CN	TAL IRV
Total/NA	Prep	3510C			1040 mL	1 mL	33793	06/19/12 11:29	KW	TAL IRV
Total/NA	Analysis	8015B		1			33923	06/20/12 03:20	ES	TAL IRV

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - 21-1283

TestAmerica Job ID: 440-14875-1

Client Sample ID: MW-9

Lab Sample ID: 440-14875-5

Date Collected: 06/13/12 09:55

Matrix: Water

Date Received: 06/15/12 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	33956	06/20/12 15:35	SS	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	34674	06/23/12 04:43	RG	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			1055 mL	1 mL	33360	06/16/12 14:01	EC	TAL IRV
Silica Gel Cleanup	Analysis	8015B		1			33389	06/16/12 20:28	CN	TAL IRV
Total/NA	Prep	3510C			1050 mL	1 mL	33793	06/19/12 11:29	KW	TAL IRV
Total/NA	Analysis	8015B		1			33923	06/20/12 08:23	ES	TAL IRV

Client Sample ID: MW-10

Lab Sample ID: 440-14875-6

Date Collected: 06/13/12 11:45

Matrix: Water

Date Received: 06/15/12 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	33956	06/20/12 16:05	SS	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	34674	06/23/12 11:13	RG	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			1050 mL	1 mL	33360	06/16/12 14:01	EC	TAL IRV
Silica Gel Cleanup	Analysis	8015B		1			33389	06/16/12 20:52	CN	TAL IRV
Total/NA	Prep	3510C			1040 mL	1 mL	33793	06/19/12 11:29	KW	TAL IRV
Total/NA	Analysis	8015B		1			33923	06/20/12 08:44	ES	TAL IRV

Client Sample ID: MW-11

Lab Sample ID: 440-14875-7

Date Collected: 06/13/12 10:25

Matrix: Water

Date Received: 06/15/12 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	33956	06/20/12 16:36	SS	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	34674	06/23/12 11:41	RG	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			1055 mL	1 mL	33360	06/16/12 14:01	EC	TAL IRV
Silica Gel Cleanup	Analysis	8015B		1			33389	06/16/12 21:15	CN	TAL IRV
Total/NA	Prep	3510C			1050 mL	1 mL	33793	06/19/12 11:29	KW	TAL IRV
Total/NA	Analysis	8015B		1			33923	06/20/12 09:04	ES	TAL IRV

Client Sample ID: MW-12

Lab Sample ID: 440-14875-8

Date Collected: 06/13/12 10:40

Matrix: Water

Date Received: 06/15/12 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	34218	06/21/12 04:04	YK	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	34944	06/25/12 17:16	RG	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			1060 mL	1 mL	33360	06/16/12 14:01	EC	TAL IRV
Silica Gel Cleanup	Analysis	8015B		1			33389	06/16/12 21:39	CN	TAL IRV
Total/NA	Prep	3510C			1050 mL	1 mL	33793	06/19/12 11:29	KW	TAL IRV
Total/NA	Analysis	8015B		1			33923	06/20/12 09:46	ES	TAL IRV

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - 21-1283

TestAmerica Job ID: 440-14875-1

Client Sample ID: TB-20120613

Lab Sample ID: 440-14875-9

Date Collected: 06/13/12 08:00

Matrix: Water

Date Received: 06/15/12 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	34218	06/21/12 04:35	YK	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	34674	06/22/12 22:15	RG	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

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QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - 21-1283

TestAmerica Job ID: 440-14875-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-33721/5

Matrix: Water

Analysis Batch: 33721

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			06/19/12 11:21	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			06/19/12 11:21	1
Ethanol	ND		150		ug/L			06/19/12 11:21	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			06/19/12 11:21	1
Ethylbenzene	ND		0.50		ug/L			06/19/12 11:21	1
m,p-Xylene	ND		1.0		ug/L			06/19/12 11:21	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			06/19/12 11:21	1
o-Xylene	ND		0.50		ug/L			06/19/12 11:21	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			06/19/12 11:21	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			06/19/12 11:21	1
Toluene	ND		0.50		ug/L			06/19/12 11:21	1
Xylenes, Total	ND		1.0		ug/L			06/19/12 11:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		20 - 180		06/19/18 11:21	1
1,3-Dibromofluorobenzene (Surr)	90		20 - 180		06/19/18 11:21	1
1,4-Dibromobenzene (Surr)	100		20 - 180		06/19/18 11:21	1

Lab Sample ID: LCS 440-33721/10

Matrix: Water

Analysis Batch: 33721

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	24.4		ug/L		97	70 - 120
Isopropyl Ether (DIPE)	25.0	24.0		ug/L		96	60 - 135
Ethanol	250	251		ug/L		100	40 - 155
Ethyl-t-butyl ether (ETBE)	25.0	22.4		ug/L		90	65 - 135
Ethylbenzene	25.0	25.1		ug/L		100	75 - 125
m,p-Xylene	50.0	49.5		ug/L		99	75 - 125
Methyl-t-Butyl Ether (MTBE)	25.0	24.1		ug/L		96	60 - 135
o-Xylene	25.0	25.3		ug/L		101	75 - 125
Tert-amyl-methyl ether (TAME)	25.0	25.1		ug/L		100	60 - 135
tert-Butyl alcohol (TBA)	125	149		ug/L		119	70 - 135
Toluene	25.0	25.4		ug/L		102	70 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		20 - 180
1,3-Dibromofluorobenzene (Surr)	90		20 - 180
1,4-Dibromobenzene (Surr)	108		20 - 180

Lab Sample ID: 440-14314-A-4 MS

Matrix: Water

Analysis Batch: 33721

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		25.0	21.7		ug/L		87	65 - 125
Isopropyl Ether (DIPE)	ND		25.0	20.8		ug/L		83	60 - 140
Ethanol	ND		250	219		ug/L		88	40 - 155
Ethyl-t-butyl ether (ETBE)	ND		25.0	20.2		ug/L		81	60 - 135

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - 21-1283

TestAmerica Job ID: 440-14875-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-14314-A-4 MS

Client Sample ID: Matrix Spike

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 33721

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier	Added	Result	Qualifier				
Ethylbenzene	ND		25.0	22.6		ug/L		90	65 - 130
m,p-Xylene	ND		50.0	46.0		ug/L		92	65 - 130
Methyl-t-Butyl Ether (MTBE)	ND		25.0	21.8		ug/L		87	55 - 145
o-Xylene	ND		25.0	24.5		ug/L		98	65 - 125
Tert-amyl-methyl ether (TAME)	ND		25.0	22.0		ug/L		88	60 - 140
tert-Butyl alcohol (TBA)	ND		125	129		ug/L		103	65 - 140
Toluene	ND		25.0	24.1		ug/L		96	70 - 125
MS MS									
Surrogate	%Recovery	Qualifier	Limits						
4-Bromofluorobenzene (Surr)	104		20 - 180						
1,3-Dibromofluorobenzene (Surr)	90		20 - 180						
toluene-a2 (Surr)	104		20 - 180						

Lab Sample ID: 440-14314-A-4 MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 33721

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec. Limits	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier					RPD	Limit
Benzene	ND		25.0	24.2		ug/L		97	65 - 125	11	20
Isopropyl Ether (DIPE)	ND		25.0	23.7		ug/L		95	60 - 140	13	25
Ethanol	ND		250	233		ug/L		93	40 - 155	6	30
Ethyl-t-butyl ether (ETBE)	ND		25.0	22.7		ug/L		91	60 - 135	12	25
Ethylbenzene	ND		25.0	25.3		ug/L		101	65 - 130	11	20
m,p-Xylene	ND		50.0	49.4		ug/L		99	65 - 130	7	25
Methyl-t-Butyl Ether (MTBE)	ND		25.0	24.5		ug/L		98	55 - 145	12	25
o-Xylene	ND		25.0	25.9		ug/L		103	65 - 125	5	20
Tert-amyl-methyl ether (TAME)	ND		25.0	25.6		ug/L		103	60 - 140	15	30
tert-Butyl alcohol (TBA)	ND		125	135		ug/L		108	65 - 140	5	25
Toluene	ND		25.0	25.2		ug/L		101	70 - 125	5	20
MSD MSD											
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	108		20 - 180								
1,3-Dibromofluorobenzene (Surr)	26		20 - 180								
toluene-a2 (Surr)	100		20 - 180								

Lab Sample ID: MB 440-33956/3

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 33956

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	ND		0.50		ug/L			06/20/12 08:46	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			06/20/12 08:46	1
Ethanol	ND		150		ug/L			06/20/12 08:46	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			06/20/12 08:46	1
Ethylbenzene	ND		0.50		ug/L			06/20/12 08:46	1
m,p-Xylene	ND		1.0		ug/L			06/20/12 08:46	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			06/20/12 08:46	1
o-Xylene	ND		0.50		ug/L			06/20/12 08:46	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			06/20/12 08:46	1

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - 21-1283

TestAmerica Job ID: 440-14875-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-33956/3

Matrix: Water

Analysis Batch: 33956

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butyl alcohol (TBA)	ND		10		ug/L			06/20/12 08:46	1
Toluene	ND		0.50		ug/L			06/20/12 08:46	1
Xylenes, Total	ND		1.0		ug/L			06/20/12 08:46	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		20 - 180		06/80/18 02746	1
3-Bromofluorobenzene (Surr)	107		20 - 180		06/80/18 02746	1
toluene-a2 (Surr)	101		20 - 180		06/80/18 02746	1

Lab Sample ID: LCS 440-33956/4

Matrix: Water

Analysis Batch: 33956

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	23.9		ug/L		96	70 - 120
Isopropyl Ether (DIPE)	25.0	24.0		ug/L		96	60 - 135
Ethanol	250	234		ug/L		94	40 - 155
Ethyl-t-butyl ether (ETBE)	25.0	24.9		ug/L		99	65 - 135
Ethylbenzene	25.0	26.7		ug/L		107	75 - 125
m,p-Xylene	50.0	48.9		ug/L		98	75 - 125
Methyl-t-Butyl Ether (MTBE)	25.0	25.7		ug/L		103	60 - 135
o-Xylene	25.0	24.6		ug/L		99	75 - 125
Tert-amyl-methyl ether (TAME)	25.0	25.1		ug/L		100	60 - 135
tert-Butyl alcohol (TBA)	125	147		ug/L		118	70 - 135
Toluene	25.0	26.0		ug/L		104	70 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		20 - 180
3-Bromofluorobenzene (Surr)	107		20 - 180
toluene-a2 (Surr)	104		20 - 180

Lab Sample ID: 440-14975-D-1 MS

Matrix: Water

Analysis Batch: 33956

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	3.7		25.0	26.7		ug/L		92	65 - 125
Isopropyl Ether (DIPE)	ND		25.0	24.6		ug/L		98	60 - 140
Ethanol	ND		250	228		ug/L		91	40 - 155
Ethyl-t-butyl ether (ETBE)	ND		25.0	25.0		ug/L		100	60 - 135
Ethylbenzene	96		25.0	104	F	ug/L		32	65 - 130
m,p-Xylene	46		50.0	90.4		ug/L		89	65 - 130
Methyl-t-Butyl Ether (MTBE)	ND		25.0	49.7	F	ug/L		199	55 - 145
o-Xylene	1.9		25.0	27.2		ug/L		101	65 - 125
Tert-amyl-methyl ether (TAME)	ND		25.0	26.4		ug/L		105	60 - 140
tert-Butyl alcohol (TBA)	700		125	815	4	ug/L		94	65 - 140
Toluene	ND		25.0	26.0		ug/L		102	70 - 125

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - 21-1283

TestAmerica Job ID: 440-14875-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-14975-D-1 MS

Matrix: Water

Analysis Batch: 33956

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		20 - 180
1,3-Dibromofluorobenzene (Surr)	99		20 - 180
1,4-Dibromobenzene (Surr)	104		20 - 180

Lab Sample ID: 440-14975-D-1 MSD

Matrix: Water

Analysis Batch: 33956

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	3.7		25.0	27.4		ug/L		95	65 - 125	3	20
Isopropyl Ether (DIPE)	ND		25.0	23.8		ug/L		95	60 - 140	3	25
Ethanol	ND		250	209		ug/L		84	40 - 155	9	30
Ethyl-t-butyl ether (ETBE)	ND		25.0	24.7		ug/L		99	60 - 135	1	25
Ethylbenzene	96		25.0	106	F	ug/L		40	65 - 130	2	20
m,p-Xylene	46		50.0	92.4		ug/L		92	65 - 130	2	25
Methyl-t-Butyl Ether (MTBE)	ND		25.0	50.8	F	ug/L		203	55 - 145	2	25
o-Xylene	1.9		25.0	27.6		ug/L		103	65 - 125	2	20
Tert-amyl-methyl ether (TAME)	ND		25.0	26.8		ug/L		107	60 - 140	2	30
tert-Butyl alcohol (TBA)	700		125	823	4	ug/L		100	65 - 140	1	25
Toluene	ND		25.0	26.3		ug/L		103	70 - 125	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		20 - 180
1,3-Dibromofluorobenzene (Surr)	96		20 - 180
1,4-Dibromobenzene (Surr)	104		20 - 180

Lab Sample ID: MB 440-34218/4

Matrix: Water

Analysis Batch: 34218

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			06/20/12 20:59	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			06/20/12 20:59	1
Ethanol	ND		150		ug/L			06/20/12 20:59	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			06/20/12 20:59	1
Ethylbenzene	ND		0.50		ug/L			06/20/12 20:59	1
m,p-Xylene	ND		1.0		ug/L			06/20/12 20:59	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			06/20/12 20:59	1
o-Xylene	ND		0.50		ug/L			06/20/12 20:59	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			06/20/12 20:59	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			06/20/12 20:59	1
Toluene	ND		0.50		ug/L			06/20/12 20:59	1
Xylenes, Total	ND		1.0		ug/L			06/20/12 20:59	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		20 - 180		06/20/12 20:59	1
1,3-Dibromofluorobenzene (Surr)	106		20 - 180		06/20/12 20:59	1
1,4-Dibromobenzene (Surr)	108		20 - 180		06/20/12 20:59	1

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - 21-1283

TestAmerica Job ID: 440-14875-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-34218/5

Matrix: Water

Analysis Batch: 34218

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	24.0		ug/L		96	70 - 120
Isopropyl Ether (DIPE)	25.0	24.3		ug/L		97	60 - 135
Ethanol	250	207		ug/L		83	40 - 155
Ethyl-t-butyl ether (ETBE)	25.0	25.4		ug/L		102	65 - 135
Ethylbenzene	25.0	26.6		ug/L		106	75 - 125
m,p-Xylene	50.0	49.7		ug/L		99	75 - 125
Methyl-t-Butyl Ether (MTBE)	25.0	27.4		ug/L		110	60 - 135
o-Xylene	25.0	25.0		ug/L		100	75 - 125
Tert-amyl-methyl ether (TAME)	25.0	26.8		ug/L		107	60 - 135
tert-Butyl alcohol (TBA)	125	136		ug/L		109	70 - 135
Toluene	25.0	25.8		ug/L		103	70 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	10d		20 - 180
1,3-Dibromofluorobenzene (Surr)	104		20 - 180
toluene-a2 (Surr)	104		20 - 180

Lab Sample ID: 440-14818-F-1 MS

Matrix: Water

Analysis Batch: 34218

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		25.0	22.8		ug/L		91	65 - 125
Isopropyl Ether (DIPE)	ND		25.0	23.7		ug/L		95	60 - 140
Ethanol	ND		250	223		ug/L		89	40 - 155
Ethyl-t-butyl ether (ETBE)	ND		25.0	25.0		ug/L		100	60 - 135
Ethylbenzene	ND		25.0	25.4		ug/L		102	65 - 130
m,p-Xylene	ND		50.0	47.7		ug/L		95	65 - 130
Methyl-t-Butyl Ether (MTBE)	ND		25.0	27.2		ug/L		109	55 - 145
o-Xylene	ND		25.0	24.2		ug/L		97	65 - 125
Tert-amyl-methyl ether (TAME)	ND		25.0	25.9		ug/L		104	60 - 140
tert-Butyl alcohol (TBA)	ND		125	136		ug/L		109	65 - 140
Toluene	ND		25.0	24.8		ug/L		99	70 - 125

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	10d		20 - 180
1,3-Dibromofluorobenzene (Surr)	105		20 - 180
toluene-a2 (Surr)	105		20 - 180

Lab Sample ID: 440-14818-F-1 MSD

Matrix: Water

Analysis Batch: 34218

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		25.0	22.2		ug/L		89	65 - 125	3	20
Isopropyl Ether (DIPE)	ND		25.0	23.5		ug/L		94	60 - 140	1	25
Ethanol	ND		250	213		ug/L		85	40 - 155	5	30
Ethyl-t-butyl ether (ETBE)	ND		25.0	24.7		ug/L		99	60 - 135	1	25
Ethylbenzene	ND		25.0	24.3		ug/L		97	65 - 130	4	20

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - 21-1283

TestAmerica Job ID: 440-14875-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-14818-F-1 MSD

Matrix: Water

Analysis Batch: 34218

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
m,p-Xylene	ND		50.0	46.3		ug/L		93	65 - 130	3	25
Methyl-t-Butyl Ether (MTBE)	ND		25.0	27.6		ug/L		110	55 - 145	2	25
o-Xylene	ND		25.0	23.4		ug/L		94	65 - 125	3	20
Tert-amyl-methyl ether (TAME)	ND		25.0	26.7		ug/L		107	60 - 140	3	30
tert-Butyl alcohol (TBA)	ND		125	131		ug/L		105	65 - 140	3	25
Toluene	ND		25.0	23.9		ug/L		95	70 - 125	4	20
Surrogate	%Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	107		20 - 180								
1,3-Dibromofluorobenzene (Surr)	10d		20 - 180								
1,4-Dibromofluorobenzene (Surr)	105		20 - 180								

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 440-34674/4

Matrix: Water

Analysis Batch: 34674

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
GRO (C4-C12)	ND		50		ug/L			06/22/12 19:52	1
Surrogate	%Recovery	MB Qualifier	Limits						
4-Bromofluorobenzene (Surr)	96		6d - 140						
						Prepared	Analyzed	Dil Fac	
							06/88/18 19:58	1	

Lab Sample ID: LCS 440-34674/2

Matrix: Water

Analysis Batch: 34674

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
		Added	Result				Qualifier
GRO (C4-C12)	800	812		ug/L		101	80 - 120
Surrogate	%Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	9d		6d - 140				

Lab Sample ID: 440-14867-A-2 MS

Matrix: Water

Analysis Batch: 34674

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				Limits
GRO (C4-C12)	ND		800	777		ug/L		97	65 - 140
Surrogate	%Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	90		6d - 140						

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - 21-1283

TestAmerica Job ID: 440-14875-1

Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Lab Sample ID: 440-14867-A-2 MSD

Matrix: Water

Analysis Batch: 34674

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C4-C12)	ND		800	780		ug/L		97	65 - 140	0	20
Surrogate	%Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	98		6d - 140								

Lab Sample ID: MB 440-34944/3

Matrix: Water

Analysis Batch: 34944

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			06/25/12 12:45	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		6d - 140					06/8d/18 1874d	1

Lab Sample ID: LCS 440-34944/2

Matrix: Water

Analysis Batch: 34944

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
GRO (C4-C12)	800	841		ug/L		105	80 - 120
Surrogate	%Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	T1		6d - 140				

Lab Sample ID: 440-15134-A-2 MS

Matrix: Water

Analysis Batch: 34944

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
GRO (C4-C12)	ND		800	841		ug/L		99	65 - 140
Surrogate	%Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	108		6d - 140						

Lab Sample ID: 440-15134-A-2 MSD

Matrix: Water

Analysis Batch: 34944

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C4-C12)	ND		800	824		ug/L		97	65 - 140	2	20
Surrogate	%Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	10d		6d - 140								

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - 21-1283

TestAmerica Job ID: 440-14875-1

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level

Lab Sample ID: MB 440-33793/1-A

Matrix: Water

Analysis Batch: 33923

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33793

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C28)	ND		0.050		mg/L		06/19/12 11:29	06/19/12 20:54	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>n-Octadecane</i>	28		4d - 180				06/19/18 11:29	06/19/18 20:54	1

Lab Sample ID: LCS 440-33793/2-A

Matrix: Water

Analysis Batch: 33923

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33793

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
EFH (C10-C28)	1.00	0.794		mg/L		79	40 - 115
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
<i>n-Octadecane</i>	24		4d - 180				

Lab Sample ID: LCSD 440-33793/3-A

Matrix: Water

Analysis Batch: 33923

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 33793

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
EFH (C10-C28)	1.00	0.803		mg/L		80	40 - 115	1	25
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
<i>n-Octadecane</i>	24		4d - 180						

Lab Sample ID: MB 440-33360/1-A

Matrix: Water

Analysis Batch: 33388

Client Sample ID: Method Blank

Prep Type: Silica Gel Cleanup

Prep Batch: 33360

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C28)	ND		0.050		mg/L		06/16/12 14:01	06/16/12 18:54	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>n-Octadecane</i>	70		4d - 180				06/16/18 14:01	06/16/18 12:54	1

Lab Sample ID: LCS 440-33360/2-A

Matrix: Water

Analysis Batch: 33388

Client Sample ID: Lab Control Sample

Prep Type: Silica Gel Cleanup

Prep Batch: 33360

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
EFH (C10-C28)	1.00	0.717		mg/L		72	40 - 115
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
<i>n-Octadecane</i>	70		4d - 180				

QC Sample Results

Client: ARCADIS U.S., Inc.
 Project/Site: Chevron - 21-1283

TestAmerica Job ID: 440-14875-1

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level (Continued)

Lab Sample ID: LCSD 440-33360/3-A
 Matrix: Water
 Analysis Batch: 33388

Client Sample ID: Lab Control Sample Dup
 Prep Type: Silica Gel Cleanup
 Prep Batch: 33360

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
EFH (C10-C28)	1.00	0.631		mg/L		63	40 - 115	13	25
Surrogate		%Recovery	LCSD Qualifier						Limits
<i>n-Octadecane</i>		65							4d - 180

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QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - 21-1283

TestAmerica Job ID: 440-14875-1

GC/MS VOA

Analysis Batch: 33721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-14314-A-4 MS	Matrix Spike	Total/NA	Water	8260B	
440-14314-A-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
440-14875-1	MW-4	Total/NA	Water	8260B	
440-14875-2	MW-5B	Total/NA	Water	8260B	
440-14875-3	MW-6	Total/NA	Water	8260B	
440-14875-4	MW-7	Total/NA	Water	8260B	
LCS 440-33721/10	Lab Control Sample	Total/NA	Water	8260B	
MB 440-33721/5	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 33956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-14875-5	MW-9	Total/NA	Water	8260B	
440-14875-6	MW-10	Total/NA	Water	8260B	
440-14875-7	MW-11	Total/NA	Water	8260B	
440-14975-D-1 MS	Matrix Spike	Total/NA	Water	8260B	
440-14975-D-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 440-33956/4	Lab Control Sample	Total/NA	Water	8260B	
MB 440-33956/3	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 34218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-14818-F-1 MS	Matrix Spike	Total/NA	Water	8260B	
440-14818-F-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
440-14875-8	MW-12	Total/NA	Water	8260B	
440-14875-9	TB-20120613	Total/NA	Water	8260B	
LCS 440-34218/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-34218/4	Method Blank	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 34674

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-14867-A-2 MS	Matrix Spike	Total/NA	Water	8015B	
440-14867-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	
440-14875-1	MW-4	Total/NA	Water	8015B	
440-14875-2	MW-5B	Total/NA	Water	8015B	
440-14875-3	MW-6	Total/NA	Water	8015B	
440-14875-4	MW-7	Total/NA	Water	8015B	
440-14875-5	MW-9	Total/NA	Water	8015B	
440-14875-6	MW-10	Total/NA	Water	8015B	
440-14875-7	MW-11	Total/NA	Water	8015B	
440-14875-9	TB-20120613	Total/NA	Water	8015B	
LCS 440-34674/2	Lab Control Sample	Total/NA	Water	8015B	
MB 440-34674/4	Method Blank	Total/NA	Water	8015B	

Analysis Batch: 34944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-14875-8	MW-12	Total/NA	Water	8015B	
440-15134-A-2 MS	Matrix Spike	Total/NA	Water	8015B	
440-15134-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	
LCS 440-34944/2	Lab Control Sample	Total/NA	Water	8015B	
MB 440-34944/3	Method Blank	Total/NA	Water	8015B	

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - 21-1283

TestAmerica Job ID: 440-14875-1

GC Semi VOA

Prep Batch: 33360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-14875-1	MW-4	Silica Gel Cleanup	Water	3510C SGC	
440-14875-2	MW-5B	Silica Gel Cleanup	Water	3510C SGC	
440-14875-3	MW-6	Silica Gel Cleanup	Water	3510C SGC	
440-14875-4	MW-7	Silica Gel Cleanup	Water	3510C SGC	
440-14875-5	MW-9	Silica Gel Cleanup	Water	3510C SGC	
440-14875-6	MW-10	Silica Gel Cleanup	Water	3510C SGC	
440-14875-7	MW-11	Silica Gel Cleanup	Water	3510C SGC	
440-14875-8	MW-12	Silica Gel Cleanup	Water	3510C SGC	
LCS 440-33360/2-A	Lab Control Sample	Silica Gel Cleanup	Water	3510C SGC	
LCSD 440-33360/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	3510C SGC	
MB 440-33360/1-A	Method Blank	Silica Gel Cleanup	Water	3510C SGC	

Analysis Batch: 33388

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 440-33360/2-A	Lab Control Sample	Silica Gel Cleanup	Water	8015B	33360
LCSD 440-33360/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	8015B	33360
MB 440-33360/1-A	Method Blank	Silica Gel Cleanup	Water	8015B	33360

Analysis Batch: 33389

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-14875-1	MW-4	Silica Gel Cleanup	Water	8015B	33360
440-14875-2	MW-5B	Silica Gel Cleanup	Water	8015B	33360
440-14875-3	MW-6	Silica Gel Cleanup	Water	8015B	33360
440-14875-4	MW-7	Silica Gel Cleanup	Water	8015B	33360
440-14875-5	MW-9	Silica Gel Cleanup	Water	8015B	33360
440-14875-6	MW-10	Silica Gel Cleanup	Water	8015B	33360
440-14875-7	MW-11	Silica Gel Cleanup	Water	8015B	33360
440-14875-8	MW-12	Silica Gel Cleanup	Water	8015B	33360

Prep Batch: 33793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-14875-1	MW-4	Total/NA	Water	3510C	
440-14875-2	MW-5B	Total/NA	Water	3510C	
440-14875-3	MW-6	Total/NA	Water	3510C	
440-14875-4	MW-7	Total/NA	Water	3510C	
440-14875-5	MW-9	Total/NA	Water	3510C	
440-14875-6	MW-10	Total/NA	Water	3510C	
440-14875-7	MW-11	Total/NA	Water	3510C	
440-14875-8	MW-12	Total/NA	Water	3510C	
LCS 440-33793/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 440-33793/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 440-33793/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 33923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-14875-1	MW-4	Total/NA	Water	8015B	33793
440-14875-2	MW-5B	Total/NA	Water	8015B	33793
440-14875-3	MW-6	Total/NA	Water	8015B	33793
440-14875-4	MW-7	Total/NA	Water	8015B	33793
440-14875-5	MW-9	Total/NA	Water	8015B	33793
440-14875-6	MW-10	Total/NA	Water	8015B	33793
440-14875-7	MW-11	Total/NA	Water	8015B	33793

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - 21-1283

TestAmerica Job ID: 440-14875-1

GC Semi VOA (Continued)

Analysis Batch: 33923 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-14875-8	MW-12	Total/NA	Water	8015B	33793
LCS 440-33793/2-A	Lab Control Sample	Total/NA	Water	8015B	33793
LCSD 440-33793/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	33793
MB 440-33793/1-A	Method Blank	Total/NA	Water	8015B	33793

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Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - 21-1283

TestAmerica Job ID: 440-14875-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F	MS or MSD exceeds the control limits
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

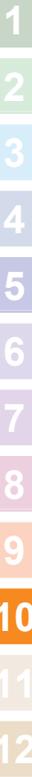
Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - 21-1283

TestAmerica Job ID: 440-14875-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Irvine	Arizona	State Program	9	AZ0671
TestAmerica Irvine	California	LA Cty Sanitation Districts	9	10256
TestAmerica Irvine	California	NELAC	9	1108CA
TestAmerica Irvine	California	State Program	9	2706
TestAmerica Irvine	Guam	State Program	9	Cert. No. 12.002r
TestAmerica Irvine	Hawaii	State Program	9	N/A
TestAmerica Irvine	Nevada	State Program	9	CA015312007A
TestAmerica Irvine	New Mexico	State Program	6	N/A
TestAmerica Irvine	Northern Mariana Islands	State Program	9	MP0002
TestAmerica Irvine	Oregon	NELAC	10	4005
TestAmerica Irvine	USDA	Federal		P330-09-00080

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.



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 17461 Derian Ave
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 Irvine, CA 92614
 phone 949.261.1022 fax 949.260.3299

Chain of Custody Record

TestAmerica Laboratories, Inc.

Client Contact		Project Manager: Toni DeMayo		Site Contact:		Date: 6/13/12		COC No:	
Arcadis - U.S., Inc. - Irvine		Tel/Fax: (916) 985-2079		Lab Contact: Sushmitha Reddy		Carrier:		1 of 1 COCs	
320 Commerce, Suite 200		Analysis Turnaround Time						Job No. 120613-PH1	
Irvine, CA 92602		Calendar (C) or Work Days (W) _____							
714-508-2657 Phone		TAT if different from Below _____							
714-730-9345 FAX		<input checked="" type="checkbox"/> 2 weeks							
Project Name: 3810 Broadway Terrace, Oakland, CA		<input type="checkbox"/> 1 week							
Site: 21-1283		<input type="checkbox"/> 2 days							
P O		<input type="checkbox"/> 1 day							
Global ID: T0600101108									

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample:						Sample Specific Notes:
						GRO by EPA 8015 MOD	BTEX & MTBE (8260B)	DRO with Silica Gel Clean Up by 8015	DRO without Silica Gel Clean Up by 8015	Ethanol by 8260B		
MW-4	6/13/12	0925	various	W	9	X	X	X	X	X		
MW-5B		1245				X	X	X	X	X		
MW-6		1215				X	X	X	X	X		
MW-7		1115				X	X	X	X	X		
MW-9		0955				X	X	X	X	X		
MW-10		1145				X	X	X	X	X		
MW-11		1025				X	X	X	X	X		
MW-12		1040				X	X	X	X	X		
TB- 2020513		0800	VDA		4	X	X					

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other _____ 1,2 1,2 1 1 1

Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
<input checked="" type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison
<input type="checkbox"/> Unknown	<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		

Special Instructions/QC Requirements & Comments:
 MUST MEET LOWEST DETECTION LIMITS POSSIBLE FOR 8260 COMPOUNDS
 USE 10 GRAM SILICA GEL CLEAN UP

Relinquished by:	Company: BTS	Date/Time: 6/13/12 1530	Received by:	Company: BTS	Date/Time: 6/13/12 1530
Relinquished by:	Company: BTS	Date/Time: 6/14/12 1300	Received by:	Company: T.A.	Date/Time: 6-14-12 13:00
Relinquished by: 6-14-12 16:30	Company:	Date/Time:	Received by: Vubana	Company: TAI S.H. (CS)	Date/Time: 6/15/12 9:50



Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 440-14875-1

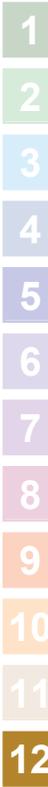
Login Number: 14875

List Number: 1

Creator: Perez, Angel

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	



ARCADIS

Attachment 3

Historical Groundwater Monitoring
and Sampling Data

Table 1
Groundwater Monitoring Data and Analytical Results
 Former Texaco Service Station (Site #211283)
 3810 Broadway
 Oakland, California

WELL ID/ DATE	TOC* (fL)	DTW (fL)	GWE (msl)	SPHT (fL)	TPH- DRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE by 8021♦ (µg/L)	MTBE by 8260 (µg/L)	ETHANOL (µg/L)
MW-1													
06/28/96	86.69	21.77	64.92	--	<50	<100	<0.5	<1.0	<1.0	<2.0	--	--	--
10/10/96	86.69	23.26	63.43	--	<400	520	9.2	53	17	70	22	16 ¹	--
11/07/96	86.69	23.27	63.42	--	--	--	--	--	--	--	--	--	--
12/18/97	86.69	19.70	66.99	--	<50	2,200	<3.0	<3.0	<3.0	<3.0	<200	--	--
04/06/98	86.69	16.88	69.81	--	<50	1,600	16.4	0.8	<0.5	<0.5	38.3	--	--
06/18/98	86.69	19.78	66.91	--	280	330	7.8	<0.5	<0.5	<0.5	<0.5	--	--
08/31/98	86.69	21.71	64.98	--	150	<50	1.5	<0.5	<0.5	<0.5	<2.5	--	--
12/21/98	86.69	22.15	64.54	--	130	130	2.3	0.90	<0.5	<0.5	110	13	--
03/24/99	86.69	19.55	67.14	--	305	1,520	11.7	<2.50	<2.50	<2.50	21.6	<25.0	--
06/25/99	86.69	21.60	65.09	--	207	231	5.29	<0.500	<0.500	<0.500	3.94	1.01	--
09/24/99	86.69	22.58	64.11	--	71.7	58.6	6.03	<0.500	<0.500	<0.500	3.70	--	--
12/29/99	86.69	22.81	63.88	--	345	117	4.26	<0.500	<0.500	1.97	26.2	<0.500	--
03/21/00	86.69	19.00	67.69	--	319	834	<0.500	<0.500	<0.500	<0.500	21.5	--	--
07/26/00	86.69	21.50	65.19	--	125	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	--	--
09/06/00	86.69	21.90	64.79	--	192	88.1	15.60	<0.500	<0.500	<0.500	--	--	--
11/29/00	86.92	22.05	64.87	--	331	<50.0	3.52	<0.500	<0.500	<0.500	--	--	--
03/06/01	86.92	19.79	67.13	--	--	--	--	--	--	--	--	--	--
03/23/01	86.92	20.15	66.77	--	5	204	10.7	<0.500	<0.500	<0.500	--	--	--
06/19/01 ⁶	86.92	21.78	65.14	--	330	<50	<0.50	<0.50	<0.50	<0.50	--	0.87	--
09/05/01 ⁶	86.92	24.37	62.55	--	400	74	<0.50	0.63	<0.50	2.7	--	<5.0	--
12/20/01 ⁶	86.92	20.25	66.67	--	530	59	1.7	<0.50	<0.50	<0.50	--	<5.0	--
06/25/02	86.69	21.64	65.05	0.00	490 ⁹	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	--
09/18/02	86.69	22.44	64.25	0.00	180	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	--
12/19/02	86.69	21.49	65.20	0.00	320	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	--
03/20/03	86.69	20.92	65.77	0.00	UNABLE TO SAMPLE - BEND IN WELL			--	--	--	--	--	--
06/23/03 ¹⁰	86.69	21.34	65.35	0.00	310	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	--
09/22/03 ¹⁰	86.69	22.46	64.23	0.00	150	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
12/22/03 ¹⁰	86.69	22.10	64.59	0.00	350	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
03/22/04 ¹⁰	86.69	20.42	66.27	0.00	270	<50	<0.5	<0.5	<0.5	<0.5	--	2	<50
06/21/04 ¹⁰	86.69	21.93	64.76	0.00	130	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
09/20/04 ¹⁰	86.69	22.99	63.70	0.00	240	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
12/20/04 ¹⁰	86.69	21.78	64.91	0.00	320 ⁹	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
03/28/05 ¹⁰	86.69	19.28	67.41	0.00	400 ⁹	<50	<0.5	<0.5	<0.5	<0.5	--	0.6	<50

Table 1
Groundwater Monitoring Data and Analytical Results
Former Texaco Service Station (Site #211283)
3810 Broadway
Oakland, California

WELL ID/ DATE	TOC* (fl.)	DTW (fl.)	GWE (msl)	SPHT (fl.)	TPH- DRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE by 8021♦ (µg/L)	MTBE by 8260 (µg/L)	ETHANOL (µg/L)	
MW-1 (cont)														
06/27/05 ¹⁰	86.69	20.82	65.87	0.00	200 ¹²	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50	
09/19/05 ¹⁰	86.69	22.17	64.52	0.00	62	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50	
12/19/05 ¹⁰	86.69	22.06	64.63	0.00	360 ¹⁰	<50	<0.5	0.8	<0.5	<0.5	--	<0.5	<50	
03/27/06 ¹⁰	86.69	18.27	68.42	0.00	320	77	<0.5	0.5	2	4	--	0.7	<50	
06/26/06 ¹⁰	86.69	20.20	66.49	0.00	290	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50	
09/25/06 ¹⁰	86.69	21.86	64.83	0.00	270	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50	
12/18/06	86.69	21.60	65.09	UNABLE TO SAMPLE - DUE TO BENT WELL CASING							--	--	--	--
03/19/07 ¹⁰	NP ¹⁸	86.69	20.82	65.87	0.00	630	<50	<0.5	<0.5	<0.5	--	<0.5	<50	
06/25/07 ¹⁰	NP ¹⁸	86.69	28.62	58.07	0.00	4,100 ¹⁹	<50	<0.5	<0.5	<0.5	--	<0.5	<50	
09/24/07	86.69	DRY	--	--	--	--	--	--	--	--	--	--	--	
12/18/07	86.69	29.35	57.34	UNABLE TO SAMPLE - DUE TO INSUFFICIENT WATER							--	--	--	--
03/11/08	86.69	28.41	58.28	UNABLE TO SAMPLE - DUE TO BENT WELL CASING							--	--	--	--
06/11/08 ¹⁰	NP ¹⁸	86.69	25.87	60.82	0.00	2,200	760	<0.5	<0.5	<0.5	--	<0.5	<50	
09/22/08 ¹⁰	NP ¹⁸	86.69	24.18	62.51	0.00	700	190	<0.5	<0.5	<0.5	--	<0.5	<50	
12/22/08 ¹⁰	86.69	23.30	63.39	0.00	290	65	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50	
03/23/09 ¹⁰	NP ¹⁸	86.69	21.35	65.34	0.00	1,500	<50	<0.5	<0.5	<0.5	--	0.9	<50	
06/22/09 ¹⁰	NP ¹⁸	86.69	22.06	64.63	0.00	87	<50	<0.5	<0.5	<0.5	--	<0.5	<50	
12/02/09 ¹⁰	86.69	25.02	61.67	0.00	530	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50	
06/26/10 ¹⁰	NP ¹⁸	86.69	24.83	61.86	0.00	340	<50	<0.5	<0.5	<0.5	--	<0.5	<50	
MW-4														
06/28/96	83.31	18.83	64.48	--	<50	<100	<0.5	<1.0	<1.0	<2.0	--	--	--	
10/10/96	83.31	19.84	63.47	--	<50	650	3.9	65	22	120	<5.0	--	--	
11/07/96	83.31	19.84	63.47	--	--	--	--	--	--	--	--	--	--	
12/18/97	83.31	17.77	65.54	--	2,000	<50	<0.5	<0.5	<0.5	<0.5	<30	--	--	
04/06/98	83.31	15.45	67.86	--	<50	<50	<0.5	<0.5	<0.5	<0.5	<30	--	--	
06/18/98	83.31	16.89	66.42	--	53	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	
08/31/98	83.31	18.48	64.83	--	60	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--	
12/21/98	83.31	18.80	64.51	--	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--	
03/24/99	83.31	16.70	66.61	--	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<2.00	--	--	
06/25/99	83.31	18.16	65.15	--	128	<50.0	<0.500	<0.500	<0.500	<0.500	<2.00	--	--	
09/24/99	83.31	19.12	64.19	--	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	--	--	

Table 1
Groundwater Monitoring Data and Analytical Results
Former Texaco Service Station (Site #211283)
3810 Broadway
Oakland, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (mst)	SPHT (ft.)	TPH- DRG (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE by 8021♦ (µg/L)	MTBE by 8260 (µg/L)	ETHANOL (µg/L)
MW-4 (cont)													
12/29/99	83.31	19.08	64.23	--	169	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	--	--
03/21/00	83.31	16.10	67.21	--	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	--	--
07/26/00	83.31	OBSTRUCTION IN WELL			--	--	--	--	--	--	--	--	--
09/06/00	83.31	18.52	64.79	--	-- ⁵	<50.0	<0.500	<0.500	<0.500	<0.500	--	--	--
11/29/00	83.63	18.75	64.88	--	183	<50.0	<0.500	<0.500	<0.500	<0.500	--	--	--
03/06/01	83.63	17.81	65.82	--	50.9	<50.0	<0.500	<0.500	<0.500	<0.500	--	--	--
06/19/01 ⁶	83.63	18.55	65.08	--	<50	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--
09/05/01 ⁶	83.63	19.10	64.53	--	710	<50	<0.50	<0.50	<0.50	<0.50	--	<5.0	--
12/20/01 ⁶	83.63	17.55	66.08	--	460	<50	<0.50	<0.50	<0.50	<0.50	--	<5.0	--
06/25/02	83.31	18.39	64.92	0.00	250	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	--
09/18/02	83.31	19.16	64.15	0.00	160	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	--
12/19/02	83.31	18.14	65.17	0.00	56	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	--
03/20/03	83.31	17.76	65.55	0.00	180	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	--
06/23/03 ¹⁰	83.31	18.13	65.18	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	--
09/22/03 ¹⁰	83.31	19.08	64.23	0.00	110	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
12/22/03 ¹⁰	83.31	18.78	64.53	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
03/22/04 ¹⁰	83.31	17.31	66.00	0.00	130	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
06/21/04 ¹⁰	83.31	18.67	64.64	0.00	87	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
09/20/04 ¹⁰	83.31	19.58	63.73	0.00	120	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
12/20/04 ¹⁰	83.31	18.59	64.72	0.00	66 ⁹	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
03/28/05 ¹⁰	83.31	16.82	66.49	0.00	71 ⁹	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
06/27/05 ¹⁰	83.31	17.61	65.70	0.00	120 ¹²	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
09/19/05 ¹⁰	83.31	19.00	64.31	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
12/19/05 ¹⁰	83.31	18.69	64.62	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
03/27/06 ¹⁰	83.31	15.05	68.26	0.00	160	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
06/26/06 ¹⁰	83.31	16.81	66.50	0.00	110	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
09/25/06 ¹⁰	83.31	18.59	64.72	0.00	120	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
12/18/06 ¹⁰	83.31	18.26	65.05	0.00	250	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
03/19/07 ¹⁰	83.31	17.62	65.69	0.00	93	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
06/25/07 ¹⁰	83.31	24.82	58.49	0.00	4,600 ¹⁹	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
09/24/07 ¹⁰	83.31	26.76	56.55	0.00	4,300	94	<0.5	<0.5	<0.5	<0.5	--	0.6	<50
12/18/07 ¹⁰	83.31	25.91	57.40	0.00	3,700	<50	<0.5	<0.5	<0.5	<0.5	--	0.6	<50
03/11/08 ¹⁰	83.31	25.15	58.16	0.00	430	54	<0.5	<0.5	<0.5	<0.5	--	0.6	<50

Table 1
Groundwater Monitoring Data and Analytical Results
Former Texaco Service Station (Site #211283)
3810 Broadway
Oakland, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	SPHT (ft.)	TPH- DRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE by 8021♦ (µg/L)	MTBE by 8260 (µg/L)	ETHANOL (µg/L)
MW-4 (cont)													
06/11/08 ¹⁰	83.31	22.53	60.78	0.00	520	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
09/22/08 ¹⁰	83.31	20.99	62.32	0.00	59	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
12/22/08 ¹⁰	83.31	19.93	63.38	0.00	260	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
03/23/09 ¹⁰	83.31	18.17	65.14	0.00	74	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
06/22/09 ¹⁰	83.31	18.90	64.41	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
12/02/09 ¹⁰	83.31	21.63	61.68	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
06/26/10 ¹⁰	83.31	21.56	61.75	0.00	56	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
MW-5B													
06/25/02 ⁷	85.36	20.48	64.88	0.00	320	660	89	1.9	39	11	130	--	--
09/18/02	85.36	21.18	64.18	0.00	480	1,100	220	1.2	19	<1.5	35	--	--
12/19/02	85.36	20.36	65.00	0.00	330	<50	<0.50	<0.50	<0.50	<1.5	190	--	--
03/20/03	85.36	INACCESSIBLE - VEHICLE OVER WELL				--	--	--	--	--	--	--	--
06/23/03 ¹⁰	85.36	20.18	65.18	0.00	300	<50	<0.5	<0.5	<0.5	<0.5	--	290	--
09/22/03 ¹⁰	85.36	21.19	64.17	0.00	200	91	19	<0.5	3	<0.5	--	260	<50
12/22/03 ¹⁰	85.36	20.85	64.51	0.00	410	99	18	<0.5	<0.5	<0.5	--	52	<50
03/22/04 ¹⁰	85.36	19.26	66.10	0.00	400	<50	<0.5	<0.5	<0.5	<0.5	--	210	<50
06/21/04 ¹⁰	85.36	20.70	64.66	0.00	270	<50	<0.5	<0.5	<0.5	<0.5	--	100	<50
09/20/04 ¹⁰	85.36	21.69	63.67	0.00	430	<50	<0.5	<0.5	<0.5	<0.5	--	9	<50
12/20/04 ¹⁰	85.36	20.56	64.80	0.00	400 ⁹	<50	<0.5	<0.5	<0.5	<0.5	--	48	<50
03/28/05 ¹⁰	85.36	18.12	67.24	0.00	480 ⁹	<50	<0.5	<0.5	<0.5	<0.5	--	67	<50
06/27/05 ¹⁰	85.36	19.61	65.75	0.00	350 ¹³	<50	<0.5	<0.5	<0.5	<0.5	--	57	<50
09/19/05 ¹⁰	85.36	20.88	64.48	0.00	220	<50	<0.5	<0.5	<0.5	<0.5	--	32	<50
12/19/05 ¹⁰	85.36	20.74	64.62	0.00	330 ¹⁶	<50	<0.5	<0.5	<0.5	<0.5	--	21	<50
03/27/06 ¹⁰	85.36	17.10	68.26	0.00	550	<50	<0.5	<0.5	<0.5	<0.5	--	31	<50
06/26/06 ¹⁰	85.36	19.05	66.31	0.00	410	<50	<0.5	<0.5	<0.5	<0.5	--	30	<50
09/25/06 ¹⁰	85.36	20.61	64.75	0.00	320	<50	<0.5	<0.5	<0.5	<0.5	--	25	<50
12/18/06 ¹⁰	85.36	20.35	65.01	0.00	580	<50	<0.5	<0.5	<0.5	<0.5	--	14	<50
03/19/07 ¹⁰	85.36	19.62	65.74	0.00	170	<50	<0.5	<0.5	<0.5	<0.5	--	24	<50
06/25/07 ¹⁰	85.36	26.94	58.42	0.00	950 ¹⁹	250 ¹⁹	2	<0.5	0.6	1	--	15	<50
09/24/07 ¹⁰	85.36	28.78	56.58	0.00	1,300	1,900	5	0.6	3	5	--	25	<50
12/18/07 ¹⁰	85.36	27.98	57.38	0.00	560	2,100	19	<0.5	2	4	--	28	<50

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3810 Broadway
Oakland, California

WELL ID/ DATE	TOC* (fl)	DTW (fl)	GWE (msl)	SPHT (fl)	TPH- DRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE by 8021♦ (µg/L)	MTBE by 8260 (µg/L)	ETHANOL (µg/L)
MW-5B (cont)													
03/11/08 ¹⁰	85.36	27.17	58.19	0.00	290	640	16	<0.5	4	0.5	--	38	<50
06/11/08 ¹⁰	85.36	24.51	60.85	0.00	280	1,100	20	<0.5	6	1	--	21	<50
09/22/08 ¹⁰	85.36	22.85	62.51	0.00	110	280	9	<0.5	<0.5	<0.5	--	22	<50
12/22/08 ¹⁰	85.36	22.00	63.36	0.00	220	200	2	<0.5	<0.5	<0.5	--	25	<50
03/23/09 ¹⁰	85.36	20.20	65.16	0.00	240	97	<0.5	<0.5	<0.5	<0.5	--	11	<50
06/22/09 ¹⁰	85.36	20.92	64.44	0.00	97	220	<0.5	<0.5	<0.5	<0.5	--	7	<50
12/02/09 ¹⁰	85.36	23.74	61.62	0.00	130	130	<0.5	<0.5	<0.5	<0.5	--	8	<50
06/26/10 ¹⁰	85.36	23.60	61.76	0.00	130	160	<0.5	<0.5	<0.5	<0.5	--	17	<50
MW-6													
10/10/96	86.09	22.44	63.65	--	500	45,000	8,300	2,900	810	3,100	190	40 ¹	--
11/07/96	86.09	22.60	63.49	--	--	--	--	--	--	--	--	--	--
12/18/97	86.09	22.28	63.81	--	1,900	60,000	12,000	9,800	1,800	8,600	<2,000	--	--
04/06/98	86.09	19.90	66.19	--	<50	30,500	5,950	3,720	952	3,750	<1,000	--	--
06/18/98	86.09	20.49	65.60	--	1,100	23,000	2,600	540	410	1,300	<250	--	--
08/31/98	86.09	21.05	65.04	--	1,800	17,000	3,400	460	530	1,800	<250	--	--
12/21/98	86.09	21.74	64.35	--	930	7,900	1,900	510	280	730	150	2.6	--
03/24/99	86.09	21.18	64.91	--	763	12,200	1,970	327	338	794	<40.0	<50.0	--
06/25/99	86.09	21.34	64.75	--	1,050	14,800	2,040	1,080	406	1,430	<40.0	--	--
09/24/99	86.09	22.28	63.81	--	1,720	17,200	2,810	1,330	489	2,340	<50.0	--	--
12/29/99	86.09	24.96	61.13	--	1,480	14,700	2,790	974	469	1,720	<500	--	--
03/21/00	86.09	18.70	67.39	--	1,120	20,000	4,160	962	719	2,330	<250	--	--
07/26/00	86.09	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
09/06/00	86.09	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
11/29/00	86.48	21.30	65.18	--	2,060	22,800	4,120	2,010	872	3,180	--	--	--
03/06/01	86.48	19.05	67.43	--	2,220	32,100	3,760	4,590	1,160	5,360	--	--	--
06/19/01 ⁶	86.48	21.11	65.37	--	<1,500	40,000	2,800	6,000	1,200	5,300	--	<25	--
09/05/01 ⁶	86.48	21.37	65.11	--	<1,000	18,000	3,800	800	730	1,400	--	<200	--
12/20/01 ⁶	86.48	19.80	66.68	--	<1,300	29,000	2,600	3,700	1,100	4,100	--	<100	--
06/25/02	86.09	21.13	64.96	0.00	2,500	21,000	2,200	1,800	850	2,100	<100	--	--
09/18/02	86.09	22.00	64.09	0.00	1,300	13,000	1,700	480	610	970	110	--	--
12/19/02	86.09	20.98	65.11	0.00	2,700	20,000	2,900	620	770	2,100	<20	--	--

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MW-6 (cont)													
03/20/03	86.09	20.23	65.86	0.00	2,600	23,000	1,500	2,200	920	3,400	<100	--	--
06/23/03 ¹⁰	86.09	20.96	65.13	0.00	2,400	21,000	2,000	1,400	890	2,500	--	6	--
09/22/03 ¹⁰	86.09	21.95	64.14	0.00	1,800	7,400	920	220	360	580	--	5	<50
12/22/03 ¹⁰	86.09	21.63	64.46	0.00	2,300	9,700	1,700	240	450	1,000	--	6	<100 ¹¹
03/22/04 ¹⁰	86.09	20.31	65.78	0.00	2,700	23,000	1,500	1,400	830	2,800	--	4	<250
06/21/04 ¹⁰	86.09	20.64	65.45	0.00	2,800	20,000	2,000	2,300	1,100	3,800	--	4	<130
09/20/04 ¹⁰	86.09	22.29	63.80	0.00	1,300	4,600	480	65	200	260	--	4	<100
12/20/04 ¹⁰	86.09	21.33	64.76	0.00	1,500	9,500	1,500	220	450	840	--	5	<250
03/28/05 ¹⁰	86.09	19.65	66.44	0.00	2,400 ⁹	13,000	1,100	550	600	1,600	--	3	<250
06/27/05 ¹⁰	86.09	19.86	66.23	0.00	2,100 ¹⁴	15,000	1,100	1,300	790	2,600	--	3	<100
09/19/05 ¹⁰	86.09	20.49	65.60	0.00	2,300	18,000	1,300	1,200	800	2,500	--	3	<100
12/19/05 ¹⁰	86.09	21.49	64.60	0.00	1,900 ¹⁴	13,000	1,900	190	620	890	--	5	110
03/27/06 ¹⁰	86.09	18.28	67.81	0.00	1,300	14,000	740	420	600	1,400	--	2	<50
06/26/06 ¹⁰	86.09	19.08	67.01	0.00	2,300	23,000	660	1,700	870	3,000	--	<3	<250
09/25/06 ¹⁰	86.09	20.02	66.07	0.00	2,100	18,000	580	1,200	760	2,600	--	1	<100
12/18/06 ¹⁰	86.09	20.57	65.52	0.00	2,700	14,000	1,200	370	680	1,300	--	4	<50
03/19/07 ¹⁰	86.09	20.56	65.53	0.00	2,700	17,000	990	560	840	2,100	--	3	<100
06/25/07	86.09	DRY	--	--	--	--	--	--	--	--	--	--	--
09/24/07	86.09	DRY	--	--	--	--	--	--	--	--	--	--	--
12/18/07	86.09	DRY	--	--	--	--	--	--	--	--	--	--	--
03/11/08	86.09	DRY	--	--	--	--	--	--	--	--	--	--	--
06/11/08 ¹⁰	86.09	25.35	60.74	0.00	820	1,400	110	<0.5	6	0.8	--	4	<50
09/22/08 ¹⁰	86.09	23.51	62.58	0.00	780	1,400	52	<0.5	6	1	--	6	<50
12/22/08 ¹⁰	86.09	22.75	63.34	0.00	880	1,100	39	<0.5	1	<0.5	--	6	<50
03/23/09 ¹⁰	86.09	20.48	65.61	0.00	2,100	7,900	460	140	470	1,200	--	3	<50
06/22/09 ¹⁰	86.09	21.40	64.69	0.00	1,900	7,300	370	210	330	810	--	4	<50
12/02/09 ¹⁰	86.09	24.48	61.61	0.00	1,200	3,200	170	10	39	42	--	3	<50
06/26/10 ¹⁰	86.09	24.14	61.95	0.00	1,300	2,800	230	14	110	120	--	3	<50

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MW-7													
10/10/96	84.11	20.78	63.33	--	<50	<50	0.6	<0.5	<0.5	<0.5	<5.0	--	--
11/07/96	84.11	20.80	63.31	--	--	--	--	--	--	--	--	--	--
12/18/97	84.11	17.27	66.84	--	<50	<50	<0.5	<0.5	<0.5	<0.5	<30	--	--
04/06/98	84.11	15.91	68.20	--	<50	<50	<0.5	<0.5	<0.5	<0.5	<30	--	--
06/18/98	84.11	17.95	66.16	--	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--
08/31/98	84.11	19.40	64.71	--	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
12/21/98	84.11	19.75	64.36	--	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
03/24/99	84.11	17.54	66.57	--	51.3	<50.0	<0.500	<0.500	<0.500	<0.500	<2.00	--	--
06/25/99	84.11	19.22	64.89	--	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<2.00	--	--
09/24/99	84.11	20.18	63.93	--	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	--	--
12/29/99	84.11	20.15	63.96	--	99.0	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	--	--
03/21/00	84.11	16.35	67.76	--	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	--	--
07/26/00	84.11	18.99	65.12	--	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	--	--
09/06/00	84.11	19.49	64.62	--	-- ⁵	<50.0	<0.500	<0.500	<0.500	<0.500	--	--	--
11/29/00	84.44	19.52	64.92	--	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	--	--	--
03/06/01	84.44	17.15	67.29	--	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	--	--	--
06/19/01 ⁶	84.44	19.30	65.14	--	<50	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--
09/05/01 ⁶	84.44	20.22	64.22	--	<50	<50	0.64	0.84	0.94	5.2	--	<5.0	--
12/20/01 ⁶	84.44	17.85	66.59	--	<50	<50	<0.50	<0.50	<0.50	<0.50	--	<5.0	--
06/25/02	84.11	19.30	64.81	0.00	<50	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	--
09/18/02	84.11	20.10	64.01	0.00	170	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	--
12/19/02	84.11	18.73	65.38	0.00	<50	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	--
03/20/03	84.11	18.86	65.25	0.00	<50	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	--
06/23/03 ¹⁰	84.11	19.00	65.11	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	--
09/22/03 ¹⁰	84.11	20.05	64.06	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
12/22/03 ¹⁰	84.11	19.72	64.39	0.00	72	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
03/22/04 ¹⁰	84.11	17.94	66.17	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
06/21/04 ¹⁰	84.11	19.53	64.58	0.00	73	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
09/20/04 ¹⁰	84.11	20.59	63.52	0.00	69	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
12/20/04 ¹⁰	84.11	19.43	64.68	0.00	67 ⁹	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
03/28/05 ¹⁰	84.11	16.68	67.43	0.00	69 ⁹	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
06/27/05 ¹⁰	84.11	18.43	65.68	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50

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MW-7 (cont)													
09/19/05 ¹⁰	84.11	19.77	64.34	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
12/19/05 ¹⁰	84.11	19.38	64.73	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
03/27/06 ¹⁰	84.11	15.51	68.60	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
06/26/06 ¹⁰	84.11	17.85	66.26	0.00	70	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
09/25/06 ¹⁰	84.11	19.53	64.58	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
12/18/06 ¹⁰	84.11	19.28	64.83	0.00	270	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
03/19/07 ¹⁰	84.11	18.32	65.79	0.00	81	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
06/25/07 ¹⁰	84.11	26.92	57.19	0.00	65	<50	<0.5	<0.5	<0.5	<0.5	--	1	<50
09/24/07 ¹⁰	84.11	28.32	55.79	0.00	<150	<50	<0.5	<0.5	<0.5	<0.5	--	0.7	<50
12/18/07 ¹⁰	84.11	27.61	56.50	0.00	130	<50	<0.5	<0.5	<0.5	<0.5	--	1	<50
03/11/08 ¹⁰	84.11	26.63	57.48	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
06/11/08 ¹⁰	84.11	23.43	60.68	0.00	98	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
09/22/08 ¹⁰	84.11	21.69	62.42	0.00	54	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
12/22/08 ¹⁰	84.11	20.78	63.33	0.00	120	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
03/23/09 ¹⁰ NP ²²	84.11	18.45	65.66	0.00	58	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
06/22/09 ¹⁰	84.11	19.70	64.41	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
12/02/09 ¹⁰	84.11	22.40	61.71	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
06/26/10 ¹⁰	84.11	22.44	61.67	0.00	68	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
MW-9													
10/10/96	82.17	18.62	63.55	--	520	80	2.5	13	2.2	13	<5.0	--	--
11/07/96	82.17	63.53	18.64	--	--	--	--	--	--	--	--	--	--
12/18/97	82.17	16.42	65.75	--	<50	<50	<0.5	<0.5	<0.5	<0.5	<30	--	--
04/06/98	82.17	14.00	68.17	--	<50	<50	<0.5	<0.5	<0.5	<0.5	<30	--	--
06/18/98	82.17	15.33	66.84	--	100	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--
08/31/98	82.17	17.14	65.03	--	57	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
12/21/98	82.17	17.40	64.77	--	71	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
03/24/99	82.17	16.22	65.95	--	84.0	<50.0	<0.500	<0.500	<0.500	<0.500	<2.00	--	--
06/25/99	82.17	16.90	65.27	--	92.0	<50.0	<0.500	<0.500	<0.500	<0.500	<2.00	--	--
09/24/99	82.17	17.89	64.28	--	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	--	--
12/29/99	82.17	18.01	64.16	--	52.8	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	--	--
03/21/00	82.17	14.80	67.37	--	72.4	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	--	--

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3810 Broadway
Oakland, California

WELL ID/ DATE	TOC* (fL)	DTW (fL)	GWE (mst)	SPHT (fL)	TPH- DRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE by 8621♦ (µg/L)	MTBE by 8260 (µg/L)	ETHANOL (µg/L)
MW-9 (cont)													
07/26/00	82.17	17.17	65.00	--	83.6	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	--	--
09/06/00	82.17	17.95	64.22	--	74.3	<50.0	<0.500	<0.500	<0.500	<0.500	--	--	--
11/29/00	82.52	18.10	64.42	--	96.2	<50.0	<0.500	<0.500	<0.500	<0.500	--	--	--
03/06/01	82.52	16.75	65.77	--	94.2	<50.0	<0.500	<0.500	<0.500	<0.500	--	--	--
06/19/01 ⁸	82.52	17.83	64.69	--	<50	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--
09/05/01 ⁹	82.52	17.98	64.54	--	<50	<50	<0.50	<0.50	<0.50	1.6	--	<5.0	--
12/20/01 ⁹	82.52	16.85	65.67	--	84	<50	<0.50	<0.50	<0.50	<0.50	--	<5.0	--
06/25/02	82.17	17.12	65.05	0.00	100	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	--
09/18/02	82.17	17.76	64.41	0.00	170	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	--
12/19/02	82.17	16.83	65.34	0.00	73	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	--
03/20/03	82.17	16.61	65.56	0.00	87	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	--
06/23/03 ¹⁰	82.17	17.14	65.03	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	--	0.7	--
09/22/03 ¹⁰	82.17	17.72	64.45	0.00	66	<50	<0.5	<0.5	<0.5	<0.5	--	0.7	<50
12/22/03 ¹⁰	82.17	17.44	64.73	0.00	94	<50	<0.5	<0.5	<0.5	<0.5	--	0.7	<50
03/22/04 ¹⁰	82.17	16.07	66.10	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	--	0.7	<50
06/21/04 ¹⁰	82.17	17.38	64.79	0.00	80	<50	<0.5	<0.5	<0.5	<0.5	--	1	<50
09/20/04 ¹⁰	82.17	18.14	64.03	0.00	120	<50	<0.5	<0.5	<0.5	<0.5	--	1	<50
12/20/04 ¹⁰	82.17	17.15	65.02	0.00	74 ⁹	<50	<0.5	<0.5	<0.5	<0.5	--	2	<50
03/28/05 ¹⁰	82.17	15.47	66.70	0.00	84 ⁹	<50	<0.5	<0.5	<0.5	<0.5	--	3	<50
06/27/05 ¹⁰	82.17	16.41	65.76	0.00	140 ¹²	<50	<0.5	<0.5	<0.5	<0.5	--	3	<50
09/19/05 ¹⁰	82.17	17.42	64.75	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	--	5	<50
12/19/05 ¹⁰	82.17	17.93	64.24	0.00	52 ¹⁷	<50	<0.5	<0.5	<0.5	<0.5	--	5	<50
03/27/06 ¹⁰	82.17	13.75	68.42	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	--	7	<50
06/26/06 ¹⁰	82.17	15.90	66.27	0.00	110	<50	<0.5	<0.5	<0.5	<0.5	--	9	<50
09/25/06 ¹⁰	82.17	17.27	64.90	0.00	57	<50	<0.5	<0.5	<0.5	<0.5	--	8	<50
12/18/06 ¹⁰	82.17	16.67	65.50	0.00	220	<50	<0.5	<0.5	<0.5	<0.5	--	7	<50
03/19/07 ¹⁰	82.17	16.16	66.01	0.00	210	<50	<0.5	<0.5	<0.5	<0.5	--	9	<50
06/25/07 ¹⁰	82.17	23.84	58.33	0.00	74	<50	<0.5	<0.5	<0.5	<0.5	--	6	<50
09/24/07 ¹⁰	82.17	25.68	56.49	0.00	280	<50	<0.5	<0.5	<0.5	<0.5	--	2	<50
12/18/07	82.17	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--
03/11/08 ¹⁰	82.17	24.07	58.10	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
06/11/08 ¹⁰	82.17	21.23	60.94	0.00	120	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
09/22/08 ¹⁰	82.17	19.52	62.65	0.00	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50

Table 1
Groundwater Monitoring Data and Analytical Results
Former Texaco Service Station (Site #211283)
3810 Broadway
Oakland, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	SPHT (ft.)	TPH- DRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE by 8011♠ (µg/L)	MTBE by 8260 (µg/L)	ETHANOL (µg/L)
MW-9 (cont)													
11/06/08 ¹⁰	82.17	19.15	63.02	0.00	<50 ²¹	--	--	--	--	--	--	--	--
12/22/08 ¹⁰	82.17	18.58	63.59	0.00	190	<50	<0.5	<0.5	<0.5	<0.5	--	7	<50
03/23/09	82.17	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--
06/22/09 ¹⁰	82.17	17.60	64.57	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	--	29	<50
12/02/09 ¹⁰	82.17	20.44	61.73	0.00	90	<50	<0.5	<0.5	<0.5	<0.5	--	21	<50
06/26/10 ¹⁰	82.17	20.38	61.79	0.00	120	<50	<0.5	<0.5	<0.5	<0.5	--	13	<50
MW-10													
10/10/96	81.83	18.40	63.43	--	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--
11/07/96	81.83	18.43	63.40	--	--	--	--	--	--	--	--	--	--
12/18/97	81.83	16.18	65.65	--	<50	350	6.9	0.87	0.88	0.77	<30	--	--
04/06/98	81.83	14.39	67.44	--	<50	2,300	224	168	81.4	253	<30	--	--
06/18/98	81.83	15.11	66.72	--	320	7,200	310	210	83	280	<0.5	--	--
08/31/98	81.83	17.03	64.80	--	120	460	51	8.2	5.1	10	<5.0	--	--
12/21/98	81.83	17.32	64.51	--	79	120	5.5	<1.0	<1.0	<1.0	8.7	<2.0	--
03/24/99	81.83	15.25	66.58	--	923	1,330	85.9	42.9	29.7	95.2	20.4	<25.0	--
06/25/99	81.83	16.82	65.01	--	167	1,130	115	32.6	17.2	36.3	<4.00	--	--
09/24/99	81.83	17.75	64.08	--	76.7	382	20.0	<1.00	2.21	1.37	8.83	--	--
12/29/99	81.83	18.13	63.70	--	107	114	9.03	<0.500	0.531	<0.500	<5.00	--	--
03/21/00	81.83	14.22	67.61	--	194	1,270	86.3	52.3	38.1	102	19.5	--	--
07/26/00	81.83	16.61	65.22	--	192	562	74.8	7.51	24.3	14.8	13.3	<1.00 ⁴	--
09/06/00	81.83	17.08	64.75	--	205	606	93.4	5.36	16.7	38.9	--	--	--
11/29/00	82.16	16.90	65.26	--	258	583	40.0	1.46	4.69	15.8	--	--	--
03/06/01	82.16	14.80	67.36	--	199	837	34.2	26.4	20.8	27.5	--	--	--
06/19/01 ⁶	82.16	16.85	65.31	--	<50	400	47	2.6	8.8	17	--	0.60	--
09/05/01 ⁶	82.16	17.87	64.29	--	<100	230	20	<0.50	1.2	5.3	--	<5.0	--
12/20/01 ⁶	82.16	15.54	66.62	--	110	300	13	2.5	1.7	4.6	--	<5.0	--
06/25/02	81.83	16.93	64.90	0.00	180	810	180	3.2	17	8.0	<2.5	--	--
09/18/02	81.83	17.68	64.15	0.00	200	260	24	<2.0	2.5	5.0	2.9	--	--
12/19/02	81.83	16.36	65.47	0.00	86	360	25	0.60	<0.50	1.5	<5.0	--	--
03/20/03	81.83	16.32	65.51	0.00	200	620	21	5.3	6.0	13	<10	--	--
06/23/03 ¹⁰	81.83	16.57	65.26	0.00	290	1,500	170	23	40	93	--	0.7	--

Table 1
Groundwater Monitoring Data and Analytical Results
Former Texaco Service Station (Site #211283)
3810 Broadway
Oakland, California

WELL ID/ DATE	TOC* (fl.)	DTW (fl.)	GWE (msl)	SPHT (fl.)	TPH- DRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE by 8021♦ (µg/L)	MTBE by 8260 (µg/L)	ETHANOL (µg/L)
MW-10 (cont)													
09/22/03 ¹⁰	81.83	17.60	64.23	0.00	180	480	48	3	7	17	--	0.8	<50
12/22/03 ¹⁰	81.83	17.31	64.52	0.00	120	230	7	<0.5	<0.5	1	--	0.9	<50
03/22/04 ¹⁰	81.83	15.58	66.25	0.00	230	1,500	72	26	30	82	--	0.7	<50
06/21/04 ¹⁰	81.83	17.12	64.71	0.00	220	1,000	120	29	47	73	--	2	<50
09/20/04 ¹⁰	81.83	18.12	63.71	0.00	230	470	36	5	6	20	--	2	<50
12/20/04 ¹⁰	81.83	17.01	64.82	0.00	170 ⁹	480	13	2	1	7	--	2	<50
03/28/05 ¹⁰	81.83	14.64	67.19	0.00	450 ⁹	1,900	64	46	55	140	--	1	<50
06/27/05 ¹⁰	81.83	15.99	65.84	0.00	400 ¹⁵	1,700	140	61	33	180	--	3	<50
09/19/05 ¹⁰	81.83	17.35	64.48	0.00	170	1,200	98	35	58	110	--	5	<50
12/19/05 ¹⁰	81.83	17.12	64.71	0.00	160 ¹⁴	1,000	61	23	20	47	--	5	<50
03/27/06 ¹⁰	81.83	13.35	68.48	0.00	180	670	6	4	8	11	--	5	<50
06/26/06 ¹⁰	81.83	15.10	66.73	0.00	580	4,700	220	110	150	390	--	0.8	<50
09/25/06 ¹⁰	81.83	17.10	64.73	0.00	480	4,400	290	180	200	350	--	4	<50
12/18/06 ¹⁰	81.83	16.75	65.08	0.00	2,900	2,500	270	97	97	170	--	1	<50
03/19/07 ¹⁰	81.83	15.91	65.92	0.00	650	2,000	150	43	52	88	--	1	<50
06/25/07 ¹⁰	81.83	24.41	57.42	0.00	7,600 ¹⁹	<50 ¹⁹	<0.5	<0.5	<0.5	<0.5	--	4	<50
09/24/07 ¹⁰	81.83	25.96	55.87	0.00	8,400	88	<0.5	<0.5	<0.5	<0.5	--	2	<50
12/18/07	81.83	INACCESSIBLE - WELL UNDER WATER				--	--	--	--	--	--	--	--
03/11/08 ¹⁰	81.83	24.56	57.27	0.00	1,200	190	1	<0.5	<0.5	<0.5	--	2	<50
06/11/08 ¹⁰	81.83	20.97	60.86	0.00	2,500	190	2	<0.5	<0.5	<0.5	--	2	<50
09/22/08 ¹⁰	81.83	19.27	62.56	0.00	--	500	2	<0.5	<0.5	<0.5	--	0.7	<50
11/06/08 ¹⁰	81.83	18.92	62.91	0.00	550 ²¹	--	--	--	--	--	--	--	--
12/22/08 ¹⁰	81.83	18.38	63.45	0.00	750	530	1	<0.5	<0.5	<0.5	--	0.8	<50
03/23/09	81.83	INACCESSIBLE				--	--	--	--	--	--	--	--
06/22/09 ¹⁰	81.83	17.45	64.38	0.00	1,100	970	26	14	46	79	--	0.6	<50
12/02/09 ¹⁰	81.83	20.12	61.71	0.00	86	170	1	<0.5	<0.5	0.9	--	0.9	<50
06/26/10 ¹⁰	81.83	20.14	61.69	0.00	93	160	<0.5	<0.5	<0.5	<0.5	--	2	<50
MW-11													
08/08/00	--	25.61	--	--	--	--	--	--	--	--	--	--	--
08/16/00	--	25.50	--	--	56.80	<50.0	<0.500	<0.500	<0.500	<0.500	--	--	--
09/06/00	--	25.90	--	--	-- ⁵	<50.0	<0.500	<0.500	<0.500	<0.500	--	--	--

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3810 Broadway
Oakland, California

WELL ID/ DATE	TOC* (fl)	DTW (fl)	GWE (msl)	SPHT (fl)	TPH- DRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE by 8021♦ (µg/L)	MTBE by 8260 (µg/L)	ETHANOL (µg/L)
MW-11 (cont)													
11/29/00	90.63	25.80	64.83	--	63.8	<50.0	<0.500	<0.500	<0.500	<0.500	--	--	--
03/06/01	90.63	23.32	67.31	--	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	--	--	--
06/19/01 ⁶	90.63	25.57	65.06	--	<50	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--
09/05/01 ⁶	90.63	26.42	64.21	--	<50	<50	<0.50	<0.50	<0.50	0.68	--	<5.0	--
12/20/01 ⁶	90.63	24.27	66.36	--	<50	<50	<0.50	<0.50	<0.50	<0.50	--	<5.0	--
06/25/02	-- ⁸	25.51	-- ⁸	0.00	<50	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	--
09/18/02	-- ⁸	26.31	-- ⁸	0.00	80	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	--
12/19/02	-- ⁸	25.08	-- ⁸	0.00	<50	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	--
03/20/03	-- ⁸	24.87	-- ⁸	0.00	<50	<50	<0.50	0.51	<0.50	<1.5	<2.5	--	--
06/23/03 ¹⁰	-- ⁸	25.21	-- ⁸	0.00	140	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	--
09/22/03 ¹⁰	-- ⁸	26.26	-- ⁸	0.00	52	<50	<0.5	<0.5	<0.5	<0.5	--	1	<50
12/22/03 ¹⁰	-- ⁸	25.97	-- ⁸	0.00	69	<50	<0.5	<0.5	<0.5	<0.5	--	2	<50
03/22/04 ¹⁰	-- ⁸	24.13	-- ⁸	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
06/21/04 ¹⁰	-- ⁸	25.74	-- ⁸	0.00	79	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
09/20/04 ¹⁰	-- ⁸	26.83	-- ⁸	0.00	140	<50	<0.5	<0.5	<0.5	<0.5	--	4	<50
12/20/04 ¹⁰	-- ⁸	25.67	-- ⁸	0.00	54 ⁹	<50	<0.5	<0.5	<0.5	<0.5	--	3	<50
03/28/05 ¹⁰	-- ⁸	23.03	-- ⁸	0.00	58 ⁹	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
06/27/05 ¹⁰	-- ⁸	24.61	-- ⁸	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
09/19/05 ¹⁰	-- ⁸	25.98	-- ⁸	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	--	0.6	<50
12/19/05 ¹⁰	-- ⁸	25.93	-- ⁸	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	--	2	<50
03/27/06 ¹⁰	-- ⁸	21.81	-- ⁸	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
06/26/06 ¹⁰	-- ⁸	24.00	-- ⁸	0.00	64	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
09/25/06 ¹⁰	-- ⁸	25.75	-- ⁸	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
12/18/06 ¹⁰	-- ⁸	25.55	-- ⁸	0.00	140	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
03/19/07 ¹⁰	-- ⁸	24.58	-- ⁸	0.00	63	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
06/25/07 ¹⁰	-- ⁸	32.81	-- ⁸	0.00	130	<50	<0.5	<0.5	<0.5	<0.5	--	1	<50
09/24/07 ¹⁰	-- ⁸	34.24	-- ⁸	0.00	110	<50	<0.5	<0.5	<0.5	<0.5	--	2	<50
12/18/07 ¹⁰	-- ⁸	33.52	-- ⁸	0.00	90	<50	<0.5	<0.5	<0.5	<0.5	--	2	<50
03/11/08 ¹⁰	-- ⁸	32.55	-- ⁸	0.00	52	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
06/11/08 ¹⁰	-- ⁸	29.77	-- ⁸	0.00	96	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
09/22/08 ¹⁰	-- ⁸	27.91	-- ⁸	0.00	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
11/06/08 ¹⁰	-- ⁸	27.65	-- ⁸	0.00	<50 ²¹	--	--	--	--	--	--	--	--
12/22/08 ¹⁰	-- ⁸	27.03	-- ⁸	0.00	61	<50	<0.5	<0.5	<0.5	<0.5	--	0.6	<50

Table 1
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 Former Texaco Service Station (Site #211283)
 3810 Broadway
 Oakland, California

WELL ID/ DATE	TOC* (fl.)	DTW (fl.)	GWE (msl)	SPHT (fl.)	TPH- DRG (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE by 8021Φ (µg/L)	MTBE by 8260 (µg/L)	ETHANOL (µg/L)
MW-11 (cont)													
03/23/09 ¹⁰	— ^s	25.03	— ^s	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	—	<0.5	<50
06/22/09 ¹⁰	— ^s	25.84	— ^s	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	—	<0.5	<50
12/02/09 ¹⁰	— ^s	28.54	— ^s	0.00	<50	<50	<0.5	<0.5	<0.5	0.8	—	<0.5	<50
06/26/10 ¹⁰	— ^s	28.58	— ^s	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	—	<0.5	<50
MW-12													
06/25/02 ⁷	84.19	18.65	65.54	0.00	410	1,000	340	8.2	16	8.3	11	—	—
09/18/02	84.19	19.67	64.52	0.00	230	130	52	<0.50	<0.50	<1.5	9.8	—	—
12/19/02	84.19	18.67	65.52	0.00	450	<50	11	<0.50	<0.50	<1.5	<2.5	—	—
03/20/03	84.19	17.97	66.22	0.00	300	280	120	1.9	11	<1.5	2.6	—	—
06/23/03 ¹⁰	84.19	18.27	65.92	0.00	400	400	130	4	1	0.7	—	14	—
09/22/03 ¹⁰	84.19	19.52	64.67	0.00	270	<50	9	<0.5	<0.5	<0.5	—	9	<50
12/22/03 ¹⁰	84.19	19.75	64.44	0.00	130	720	130	29	10	46	—	2	<50
03/22/04 ¹⁰	84.19	17.06	67.13	0.00	240	<50	3	<0.5	<0.5	1	—	0.5	<50
06/21/04 ¹⁰	84.19	18.82	65.37	0.00	350	140	43	<0.5	<0.5	<0.5	—	8	<50
09/20/04 ¹⁰	84.19	19.99	64.20	0.00	340	<50	<0.5	<0.5	<0.5	<0.5	—	2	<50
12/20/04 ¹⁰	84.19	19.46	64.73	0.00	160 ⁹	1,300	400	28	31	31	—	1	<50
03/28/05 ¹⁰	84.19	16.42	67.77	0.00	440 ⁹	90	24	<0.5	<0.5	<0.5	—	1	<50
06/27/05 ¹⁰	84.19	17.53	66.66	0.00	170 ¹³	<50	<0.5	<0.5	<0.5	<0.5	—	1	<50
09/19/05 ¹⁰	84.19	19.04	65.15	0.00	190	<50	<0.5	<0.5	<0.5	<0.5	—	3	<50
12/19/05 ¹⁰	84.19	19.41	64.78	0.00	340 ¹³	330	94	5	1	3	—	2	<50
03/27/06 ¹⁰	84.19	15.45	68.74	0.00	140	130	33	0.7	1	4	—	0.8	<50
06/26/06 ¹⁰	84.19	16.70	67.49	0.00	220	<50	<0.5	<0.5	<0.5	<0.5	—	<0.5	<50
09/25/06 ¹⁰	84.19	18.81	65.38	0.00	200	<50	<0.5	<0.5	<0.5	<0.5	—	<0.5	<50
12/18/06 ¹⁰	84.19	18.94	65.25	0.00	410	240	68	5	1	1	—	1	<50
03/19/07 ¹⁰	84.19	17.83	66.36	0.00	200	55	7	<0.5	<0.5	<0.5	—	2	<50
06/25/07 ¹⁰	84.19	25.80	58.39	0.00	1,600 ¹⁹	5,500 ¹⁹	1,000 ¹⁹	190 ¹⁹	170 ¹⁹	320 ¹⁹	—	2	<100
09/24/07 ¹⁰	84.19	27.88	56.31	0.00	2,300	<50	0.7	<0.5	<0.5	<0.5	—	1	<50
12/18/07 ¹⁰	84.19	27.06	57.13	0.00	550	230	17	<0.5	<0.5	<0.5	—	<0.5	<50
03/11/08 ¹⁰	84.19	25.60	58.59	0.00	1,100	7,000	960	330	410	860	—	<1	<100
06/11/08 ¹⁰	84.19	23.04	61.15	0.00	1,700	7,100	2,400	170	210	270	—	<1	<130

Table 1
Groundwater Monitoring Data and Analytical Results
 Former Texaco Service Station (Site #211283)
 3810 Broadway
 Oakland, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	SPHT (ft.)	TPH- DRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE by 8011 ¹ (µg/L)	MTBE by 8260 (µg/L)	ETHANOL (µg/L)
MW-12 (cont)													
09/22/08 ¹⁰	84.19	21.48	62.71	0.00	--	13,000	1,800	93	480	1,200	--	16	<100
11/06/08 ¹⁰	84.19	21.20	62.99	0.00	1,600 ²¹	--	--	--	--	--	--	--	--
12/22/08 ¹⁰	84.19	20.90	63.29	0.00	1,800	7,700	1,400	220	310	560	--	7	<100
03/23/09 ¹⁰	84.19	18.02	66.17	0.00	3,400	4,900	620	170	170	320	--	3	<50
06/22/09 ¹⁰	84.19	18.83	65.36	0.00	500	1,100	100	19	35	43	--	1	<50
12/02/09 ¹⁰	84.19	22.61	61.58	0.00	110	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<50
06/26/10 ¹⁰	84.19	21.83	62.36	0.00	1,200	7,600	580	47	36	1,400	--	<1	<100
MW-2													
06/28/96	85.83	22.10	63.73	1.35	--	--	--	--	--	--	--	--	--
10/10/96	85.83	22.36	63.47	--	1,800	99,000	4,100	9,400	2,300	9,900	390	<25 ¹	--
11/07/96	85.83	22.39	63.45**	0.01	--	--	--	--	--	--	--	--	--
12/18/97	85.83	20.19	65.64	--	4,700	24,000	600	1,800	750	2,400	<2,000	--	--
04/06/98	85.83	18.00	67.83	--	9.5	20,100	252	448	430	1,410	<200	--	--
06/18/98	85.83	19.63	66.20	--	5,200	20,000	240	370	270	790	<50	--	--
08/31/98	85.83	21.01	64.82	--	19,000	72,000	270	990	630	1,700	<125	--	--
12/21/98	85.83	21.31	64.52	--	13,000	290	8.7	18	9.7	38	10	29	--
03/24/99	85.83	19.18	66.65	--	5,590	80,400	651	1,860	1,120	3,730	<40.0	<100	--
06/25/99	85.83	20.78	65.05	--	12,100	34,700	504	1,300	716	2,160	<40.0	--	--
09/24/99	85.83	21.82	64.01	--	108	6,510	1,030	350	183	680	<50.0	--	--
12/29/99	85.83	22.17	63.90**	0.30	--	--	--	--	--	--	--	--	--
01/07/00	85.83	22.84	63.30**	0.39	--	--	--	--	--	--	--	--	--
03/21/00	-- ³	18.19	--	--	41,100	54,100	1,260	3,320	2,180	8,200	<1,250	--	--
DESTROYED													
MW-3													
06/28/96	83.18	19.04	64.14	--	--	--	--	--	--	--	--	--	--
10/10/96	83.18	19.51	63.67	--	1,200	110,000	6,600	16,000	2,200	12,000	<250	--	--
11/07/96	83.18	19.40	63.78	--	--	--	--	--	--	--	--	--	--
12/18/97	83.18	18.79	64.39	--	6,100,000	180,000	1,500	16,000	4,600	23,000	<3,000	--	--
04/06/98	83.18	16.58	66.64	0.05	--	--	--	--	--	--	--	--	--
06/18/98	83.18	--	--	>2.0 ²	--	--	--	--	--	--	--	--	--

Table 1
Groundwater Monitoring Data and Analytical Results
Former Texaco Service Station (Site #211283)
3810 Broadway
Oakland, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	SPHT (ft.)	TPH- DRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE by 8021♦ (µg/L)	MTBE by 8260 (µg/L)	ETHANOL (µg/L)
MW-3 (cont)													
08/31/98	83.18	19.56	63.68	0.07	--	--	--	--	--	--	--	--	--
12/21/98	83.18	20.23	65.13	2.73	--	--	--	--	--	--	--	--	--
03/24/99	83.18	16.76	67.11	0.86	--	--	--	--	--	--	--	--	--
06/25/99	83.18	18.47	64.95	0.30	--	--	--	--	--	--	--	--	--
09/24/99	83.18	19.43	63.81	0.08	--	--	--	--	--	--	--	--	--
12/29/99	83.18	19.25	63.96	0.04	--	--	--	--	--	--	--	--	--
01/07/00	83.18	19.87	63.37	0.07	--	--	--	--	--	--	--	--	--
DESTROYED													
MW-5													
10/10/96	85.41	21.93	63.48	--	<50	1,800	34	4.7	11	44	21	5.0 ¹	--
11/07/96	85.41	21.96	63.45	--	--	--	--	--	--	--	--	--	--
12/18/97	85.41	19.81	65.60	--	<50	1,200	15	<1.0	15	<1.0	72	--	--
04/06/98	85.41	17.43	67.98	--	<50	1,000	126	0.5	0.8	1.5	<30	--	--
06/18/98	85.41	19.15	66.26	--	100	110	6.9	<0.5	<0.5	<0.5	<0.5	--	--
08/31/98	85.41	20.46	64.95	--	120	480	5.3	<2.5	<2.5	<2.5	<12	--	--
12/21/98	85.41	20.91	64.50	--	100	270	16	2.9	1.3	<1.0	34	<2.0	--
03/24/99	85.41	18.74	66.67	--	93.3	143	2.80	<0.500	0.749	<0.500	<2.00	<5.00	--
06/25/99	85.41	20.31	65.10	--	125	847	6.61	<0.500	0.611	<0.500	2.69	<2.00	--
09/24/99	85.41	21.36	64.05	--	94.0	563	6.00	<2.50	<2.50	<2.50	25.1	--	--
12/29/99	85.41	21.41	64.00	--	173	896	16.6	1.48	8.92	2.67	61.1	<0.500	--
03/21/00	85.41	18.13	67.28	--	158	858	53.7	<1.00	21.4	8.00	11.6	--	--
07/26/00	85.41	OBSTRUCTION IN WELL		--	--	--	--	--	--	--	--	--	--
09/06/00	85.41	20.33	65.08	--	231	670	153	<2.50	7.87	<2.50	--	--	--
11/29/00	85.13	OBSTRUCTION IN WELL		--	--	--	--	--	--	--	--	--	--
03/06/01	85.13	OBSTRUCTION IN WELL		--	--	--	--	--	--	--	--	--	--
06/19/01	85.13	OBSTRUCTION IN WELL		--	--	--	--	--	--	--	--	--	--
09/05/01	85.13	OBSTRUCTION IN WELL		--	--	--	--	--	--	--	--	--	--
12/02/01	85.13	OBSTRUCTION IN WELL		--	--	--	--	--	--	--	--	--	--
DESTROYED													

Table 1
Groundwater Monitoring Data and Analytical Results
Former Texaco Service Station (Site #211283)
3810 Broadway
Oakland, California

WELL ID/ DATE	TOC* (fl.)	DTW (fl.)	GWE (msl)	SPHT (fl.)	TPH- DRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE by 8621♦ (µg/L)	MTBE by 8260 (µg/L)	ETHANOL (µg/L)
MW-8													
10/10/96	84.01	20.82	63.19	--	110	17,000	1,300	1,200	64	1,300	110	<5.0 ^l	--
11/07/96	84.01	20.44	63.57	--	--	--	--	--	--	--	--	--	--
12/18/97	84.01	19.36	64.65	--	630	15,000	3,600	1,800	410	930	<600	--	--
04/06/98	84.01	16.19	67.82	--	<50	32,300	8,230	5,900	718	2,120	<1,000	--	--
06/18/98	84.01	17.75	66.26	--	<50	74,000	5,400	4,500	700	2,200	2,400	--	--
08/31/98	84.01	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--
12/21/98	84.01	19.48	64.53	--	1,200	9,600	2,600	410	220	300	700	<2.0	--
03/24/99	84.01	17.44	66.57	--	2,890	86,100	9,890	11,700	1,650	7,130	<200	<250	--
06/25/99	84.01	20.69	63.40**	0.10	--	--	--	--	--	--	--	--	--
07/01/99	84.01	20.45	65.07**	1.89	--	--	--	--	--	--	--	--	--
09/24/99	84.01	20.98	64.25**	1.53	--	--	--	--	--	--	--	--	--
12/29/99	84.01	20.25	63.97**	0.26	--	--	--	--	--	--	--	--	--
01/07/00	84.01	21.00	63.33**	0.40	--	--	--	--	--	--	--	--	--
DESTROYED													
TRIP BLANK													
QA													
06/25/02	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	--
09/18/02	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	--
12/19/02	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	--
03/20/03	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	--
06/23/03 ¹⁰	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	--
09/22/03 ¹⁰	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	--
12/22/03 ¹⁰	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	--
03/22/04 ¹⁰	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	--
06/21/04 ¹⁰	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	--
09/20/04 ¹⁰	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	--
12/20/04 ¹⁰	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	--
03/28/05 ¹⁰	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	--
06/27/05 ¹⁰	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	--
09/19/05 ¹⁰	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	--
12/19/05 ¹⁰	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	--

Table 1
Groundwater Monitoring Data and Analytical Results
Former Texaco Service Station (Site #211283)
3810 Broadway
Oakland, California

WELL ID/ DATE	TOC* (fL)	DTW (fL)	GWE (msl)	SPHT (fL)	TPH- DRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE by 8021♦ (µg/L)	MTBE by 8260 (µg/L)	ETHANOL (µg/L)
QA (cont)													
03/27/06 ¹⁰	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	--
06/26/06 ¹⁰	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	--
09/25/06 ¹⁰	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	--
12/18/06 ¹⁰	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	--
03/19/07 ¹⁰	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	--
06/25/07 ¹⁰	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	--
09/24/07 ¹⁰	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	--
12/18/07 ¹⁰	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	--
03/11/08 ¹⁰	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	--
06/11/08 ²⁰	--	--	--	--	--	--	--	--	--	--	--	--	--
09/22/08 ¹⁰	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	--
12/22/08 ¹⁰	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	--
03/23/09 ¹⁰	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	--
06/22/09 ¹⁰	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	--
12/02/09 ¹⁰	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	--
06/26/10 ¹⁰	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	--

Table 1
Groundwater Monitoring Data and Analytical Results
 Former Texaco Service Station (Site #211283)
 3810 Broadway
 Oakland, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to June 25, 2002, were compiled from reports prepared by Toxichem Management Systems, Inc.

TOC = Top of Casing	TPH = Total Petroleum Hydrocarbons	MTBE = Methyl Tertiary Butyl Ether
(ft.) = Feet	DRO = Diesel Range Organics	(ppb) = Parts per billion
DTW = Depth to Water	GRO = Gasoline Range Organics	(µg/L) = Micrograms per liter
GWE = Groundwater Elevation	B = Benzene	-- = Not Measured/Not Analyzed
(msl) = Mean Sea Level	T = Toluene	QA = Quality Assurance/Trip Blank
SPH = Separate-phase hydrocarbons	E = Ethylbenzene	NP= No Purge
SPHT = Separate-phase hydrocarbon thickness	X = Xylenes	

* TOC elevations were surveyed June 24, 2002, by Morrow Surveying, and are based on City of Oakland Benchmark.

** GWE corrected for the presence of SPH; correction factor = [(TOC - DTW)+(0.80 x SPHT)].

◆ Prior to June 25, 2002, MTBE was analyzed by EPA Method 8020.

1 MTBE confirmed by EPA Method 8240.

2 Free product could not be accurately measured.

3 TOC altered.

4 Analyzed outside EPA recommended hold time.

5 Sample containers broken during transport to laboratory.

6 TPH-GRO and BTEX analyzed by EPA Method 8260.

7 Well development performed.

8 MW-11 was inaccessible during the re-surveying. TOC was not measured.

9 Laboratory report indicates the observed sample pattern is not typical of diesel/#2 fuel oil.

10 BTEX analyzed by EPA Method 8260.

11 Ethanol was previously reported as <50 ppb.

12 Laboratory report indicates the observed sample pattern is not typical of #2 fuel/diesel. It elutes in the DRO range later than #2 fuel.

13 Laboratory report indicates the observed sample pattern includes #2 fuel/diesel and an additional pattern which elutes later in the DRO range.

14 Laboratory report indicates the observed sample pattern is not typical of #2 fuel/diesel. It elutes in the DRO range earlier than #2 fuel.

15 Laboratory report indicates the observed sample patterns are not typical of #2 fuel/diesel. They elute in the DRO range earlier and later than #2 fuel.

16 Laboratory report indicates the observed sample pattern is not typical of #2 fuel/diesel. It elutes in the DRO range later than #2 fuel and contains individual peaks eluting in the DRO range.

17 Laboratory report indicates the observed sample pattern is not typical of #2 fuel/diesel. The reported result is due to an individual peak (s) eluting in the DRO range.

18 No purge due to bent casing.

19 Laboratory confirmed analytical result.

20 Sample containers not received at laboratory.

21 Laboratory report indicates the DRO analysis was performed on a resample due to a laboratory error during the extraction / analysis of the first submission.

22 No purge due to wells location in active construction zone.

Table 2
Field Measurements
Former Texaco Service Station (Site #211283)
3810 Broadway
Oakland, California

WELL ID	DATE	D.O.	ORP	D.O.	ORP	DO	ORP	
		Pre Purging (mg/L)	Pre Purging (mV)	Mid-Purging (mg/L)	Mid-Purging (mV)	Post Purging (mg/L)	Post Purging (mV)	
MW-6	09/24/99	1.00	--	--	--	1.20	--	
	12/29/99	1.30	--	--	--	1.50	--	
	03/21/00	3.00	--	--	--	4.30	--	
	11/29/00	2.00	--	--	--	1.80	--	
	03/06/01	3.70	--	--	--	4.00	--	
	06/19/01	3.00	--	--	--	3.40	--	
	09/05/01	10.40	--	--	--	10.80	--	
	12/20/01	1.30	--	--	--	1.50	--	
	06/25/02	1.00	--	0.60	--	0.40	--	
	09/18/02	0.60	58	0.90	69	1.00	72	
	12/19/02	1.20	71	--	--	1.10	79	
	03/20/03	0.40	-93	--	--	1.60	-87	
	06/23/03	0.90	64	--	--	1.20	78	
	09/22/03	1.10	70	--	--	1.30	76	
	12/22/03	0.90	68	--	--	1.00	70	
	03/22/04	1.00	74	--	--	1.20	82	
	06/21/04	1.10	72	--	--	1.10	86	
	09/20/04	1.20	68	--	--	1.30	76	
	12/20/04	1.00	71	--	--	1.10	80	
	03/28/05	1.10	75	--	--	1.10	86	
	06/27/05	1.10	78	--	--	1.20	90	
	09/19/05	2.90	-- ¹	--	--	1.20	-- ¹	
	12/19/05	1.00	69	--	--	1.00	74	
	03/27/06	1.60	89	--	--	1.20	75	
	06/26/06	1.40	105	--	--	1.20	82	
	09/25/06	1.20	103	--	--	1.30	91	
	12/18/06	1.20	87	--	--	-- ²	-- ²	
	03/19/07	1.9	-57	--	--	1.6	-63	
	06/25/07	DRY	--	--	--	--	--	
	09/24/07	DRY	--	--	--	--	--	
	12/18/07	DRY	--	--	--	--	--	
	03/11/08	DRY	--	--	--	--	--	
	06/11/08		0.9	53	--	--	1.1	67
	09/22/08		1.3	-27	--	--	1.6	-17
	12/22/08		1.2	-65	--	--	0.9	-54
	03/23/09		0.4	-81	--	--	0.9	-150
06/22/09		.70	-95	--	--	.60	-84	
12/02/09		0.5	-45	--	--	0.8	-39	
06/26/10		1.1	-67	--	--	1.3	-94	
MW-7	09/24/99	1.40	--	--	--	1.60	--	
	12/29/99	2.30	--	--	--	1.80	--	
	03/21/00	5.80	--	--	--	9.00	--	
	07/26/00	6.00	--	--	--	6.60	--	
	09/06/00	4.30	--	--	--	5.00	--	
	11/29/00	4.00	--	--	--	3.70	--	
	03/06/01	4.70	--	--	--	5.10	--	

Table 2
Field Measurements
Former Texaco Service Station (Site #211283)
3810 Broadway
Oakland, California

WELL ID	DATE	D.O.	ORP	D.O.	ORP	DO	ORP
		Pre Purgig (mg/L)	Pre Purgig (mV)	Mid-Purgig (mg/L)	Mid-Purgig (mV)	Post Purgig (mg/L)	Post Purgig (mV)
MW-7	06/19/01	3.80	--	--	--	4.20	--
(cont)	09/05/01	6.70	--	--	--	7.10	--
	12/20/01	4.90	--	--	--	5.00	--
	06/25/02	1.00	--	1.40	--	1.30	--
	09/18/02	1.80	112	1.90	98	2.10	102
	12/19/02	1.30	121	--	--	1.60	110
	03/20/03	2.60	129	--	--	2.70	152
	06/23/03	1.70	122	--	--	1.90	140
	09/22/03	1.40	92	--	--	1.70	124
	12/22/03	1.50	98	--	--	1.60	114
	03/22/04	1.30	90	--	--	1.50	96
	06/21/04	1.50	106	--	--	1.70	126
	09/20/04	1.40	115	--	--	0.96	110
	12/20/04	1.30	88	--	--	1.40	95
	03/28/05	1.40	92	--	--	1.40	88
	06/27/05	1.50	106	--	--	1.40	94
	09/19/05	3.70	17	--	--	3.10	29
	12/19/05	1.40	85	--	--	1.30	90
	03/27/06	1.80	126	--	--	2.10	132
	06/26/06	1.60	119	--	--	1.80	121
	09/25/06	1.70	125	--	--	1.60	124
	12/18/06	1.40	130	--	--	-- ²	-- ²
	03/19/07	2.8	-10	--	--	2.3	-13
	06/25/07	1.8	119	--	--	1.5	98
	09/24/07	1.7	1.3	--	--	94	76
	12/18/07	2.1	68	--	--	1.8	73
	03/11/08	1.8	93	--	--	1.7	104
	06/11/08	1.5	-32	--	--	1.3	-46
	09/22/08	1.2	27	--	--	1.5	39
	12/22/08	1.8	85	--	--	1.7	80
	03/23/09	1.4	185	--	--	--	--
	06/22/09	1.9	120	--	--	1.7	112
	12/02/09	2.0	61	--	--	1.8	65
	06/26/10	1.6	89	--	--	1.8	102
MW-9	09/24/99	1.00	--	--	--	1.20	--
	12/29/99	3.30	--	--	--	2.70	--
	03/21/00	3.20	--	--	--	7.30	--
	07/26/00	3.60	--	--	--	1.80	--
	09/06/00	3.80	--	--	--	4.00	--
	11/29/00	2.00	--	--	--	2.00	--
	03/06/01	4.00	--	--	--	4.90	--
	06/19/01	3.40	--	--	--	4.00	--
	09/05/01	2.70	--	--	--	2.00	--
	12/20/01	2.20	--	--	--	2.20	--
	06/25/02	0.90	--	1.00	--	1.20	--
	09/18/02	1.40	138	1.00	110	0.90	95

Table 2
Field Measurements
Former Texaco Service Station (Site #211283)
3810 Broadway
Oakland, California

WELL ID	DATE	D.O.	ORP	D.O.	ORP	DO	ORP
		Pre Purging (mg/L)	Pre Purging (mV)	Mid-Purging (mg/L)	Mid-Purging (mV)	Post Purging (mg/L)	Post Purging (mV)
MW-9	12/19/02	1.80	126	--	--	1.10	98
(cont)	03/20/03	0.10	206	--	--	1.10	193
	06/23/03	1.20	146	--	--	1.00	138
	09/22/03	1.10	126	--	--	1.00	130
	12/22/03	1.30	134	--	--	1.20	142
	03/22/04	3.70	120	--	--	1.40	126
	06/21/04	3.50	108	--	--	1.20	116
	09/20/04	2.70	54	--	--	1.10	62
	12/20/04	2.50	72	--	--	1.40	80
	03/28/05	2.80	92	--	--	1.70	68
	06/27/05	2.60	82	--	--	1.50	62
	09/19/05	1.00	-38	--	--	0.60	-30
	12/19/05	2.10	76	--	--	2.20	68
	03/27/06	2.20	136	--	--	1.90	125
	06/26/06	2.40	122	--	--	2.00	115
	09/25/06	2.10	116	--	--	1.90	120
	12/18/06	1.80	131	--	--	-- ²	-- ²
	03/19/07	1.7	-03	--	--	2.1	-11
	06/25/07	2.2	11	--	--	2.0	73
	09/24/07	2.4	2.2	--	--	93	75
	12/18/07	INACCESSIBLE - WELL UNDER WATER			--	--	--
	03/11/08	2.2	76	--	--	1.9	63
	06/11/08	1.9	103	--	--	1.9	117
	09/22/08	14	32	--	--	21	51
	12/22/08	2.3	115	--	--	2.1	109
	03/23/09	INACCESSIBLE		--	--	--	--
	06/22/09	2.1	98	--	--	1.9	91
	12/02/09	1.8	76	--	--	2.0	69
	06/26/10	1.3	63	--	--	1.7	107
MW-10	09/19/05	1.40	-97	--	--	0.80	-98
	03/23/09	INACCESSIBLE		--	--	--	--
MW-2	09/24/99	1.00	--	--	--	0.80	--
	12/29/99	2.60	--	--	--	--	--
	03/21/00	3.30	--	--	--	3.60	--
	DESTROYED						

Table 2
Field Measurements
Former Texaco Service Station (Site #211283)
3810 Broadway
Oakland, California

EXPLANATIONS:

Dissolved oxygen concentrations prior to June 25, 2002, were compiled from reports prepared by Toxichem Management Systems, Inc.

D.O. = Dissolved Oxygen

mg/L = milligrams per liter

ORP = Oxidation Reduction Potential

(mV) = Millivolts

-- = Not Measured

¹ ORP reading under range.

² Field technician inadvertently missed readings.

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<u>Facility Name:</u>	CHEVRON #21-1283 / EXPRESS AUTO CLINIC
<u>File Name:</u>	440-14875-1_27 Jun 12 1143_EDF.zip
<u>Organization Name:</u>	ARCADIS US
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<u>Facility Global ID:</u>	T0600101108
<u>Facility Name:</u>	CHEVRON #21-1283 / EXPRESS AUTO CLINIC
<u>File Name:</u>	GEO_WELL.zip
<u>Organization Name:</u>	ARCADIS US
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