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January 22, 2013

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

Re: Facility No. 21-1283
3810 Broadway, Oakland, California

RECEIVED

By Alameda County Environmental Health at 8:38 am, Jan 24, 2013

Dear Mr. Detterman:

Attached for your review is the *Second Semiannual 2012 Groundwater Monitoring Report* for the above-referenced site. 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. Should you have any further questions, please do not hesitate to contact me.

Very truly yours,

Kelly C. Esters

Kelly C. Esters
Property Specialist

KCE:st
Encl.



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ENVIRONMENT

Subject:

Second Semiannual 2012 Groundwater Monitoring Report

Former Texaco Service Station No. 21-1283
3810 Broadway
Oakland, California
Fuel Leak Case No. RO0000056

Date:
January 23, 2013

Dear Mr. Detterman:

ARCADIS has prepared this *Second 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 December 28, 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 second semiannual 2012 event. The BTS groundwater monitoring and sample package is presented in Attachment 1. Separate phase hydrocarbons (SPH) were not observed during the second semiannual 2012 monitoring and sampling event, nor have they historically been observed at the site.

Contact:
Toni DeMayo

Phone:
714.508.2657

Email:
Toni.DeMayo@
arcadis-us.com

Our ref:
B0060901.1283

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 ($^{\circ}\text{C}$) 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) [$\text{C}_{13}\text{-C}_{23}$] by United States Environmental Protection Agency (USEPA) Method 8015B, with and without silica gel clean-up
- Total petroleum hydrocarbons as gasoline (TPH-GRO) [$\text{C}_4\text{-C}_{12}$] 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 second 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

Toni DeMayo
Project Geologist

R. West

Brian Westhoff, PG (CA 8784)
Senior Geologist



Enclosures:

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

ARCADIS

Tables

TABLE 1
GROUNDWATER MONITORING AND SAMPLING DATA
 FORMER TEXACO SERVICE STATION 211283
 3810 BROADWAY
 OAKLAND, CALIFORNIA

Location	Date	TOC	DTW	GWE	TPH-DRO w/ Clean-Up	TPH-DRO w/o Clean-Up	TPH-GRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	DIPE	ETBE	TAME	TBA	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)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
INSUFFICIENT WATER TO COLLECT A SAMPLE																		
MW-1	12/20/10	86.69	29.58	57.11	--	<50	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	<50	
MW-1	06/20/11	86.69	23.91	62.78	<50	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	10/24/11	86.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	06/13/12	86.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	12/28/12	86.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	12/20/10	83.31	21.90	61.41	--	170	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	<50	
MW-4	06/20/11	83.31	20.60	62.71	<50	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	<50	
MW-4	10/24/11	83.31	21.97	61.34	<53	61	<50	<0.50	<0.50	<0.50	<0.50	<1.5	0.67	<0.50	<0.50	<0.50	<10	<150
MW-4	06/13/12	83.31	19.67	63.64	<47	130	100	<0.50	<0.50	<0.50	<0.50	<1.0	0.65	<0.50	<0.50	<0.50	<10	<150
MW-4	12/28/12	83.31	19.30	64.01	90	210	<50	<0.50	<0.50	<0.50	<0.50	<1.0	0.55	<0.50	<0.50	<0.50	<10	<150
MW-5B	12/20/10	85.36	24.00	61.36	--	370	150	3	<0.5	<0.5	<0.5	<0.5	24	--	--	--	--	<50
MW-5B	06/20/11	85.36	22.80	62.56	73	--	76	<0.5	<0.5	<0.5	<0.5	<0.5	3	--	--	--	--	<50
MW-5B	10/24/11	85.36	24.24	61.12	<51	<51	63	<0.50	<0.50	<0.50	<0.50	<1.5	19	<0.50	<0.50	<0.50	<10	<150
MW-5B	06/13/12	85.36	21.86	63.50	86	120	70	<0.50	<0.50	<0.50	<0.50	<1.0	16	<0.50	<0.50	<0.50	<10	<150
MW-5B	12/28/12	85.36	20.52	64.84	61	72	<50	<0.50	<0.50	<0.50	<0.50	<1.0	14	<0.50	<0.50	<0.50	<10	<150
MW-6	12/20/10	86.09	24.70	61.39	--	1,000	1,900	150	3	2	4	3	--	--	--	--	<50	
MW-6	06/20/11	86.09	23.49	62.60	960	--	2,500	290	12	77	120	3	--	--	--	--	<50	
MW-6	10/24/11	86.09	24.91	61.18	<53	120	1,600	63	2.7	1.9	6.0	1.7	<0.50	<0.50	<0.50	30	<150	
MW-6	06/13/12	86.09	22.38	63.71	160	280	1,200	130	9.5	75	36	3.1	<0.50	<0.50	<0.50	65	<150	
MW-6	12/28/12	86.09	21.39	64.70	100	230	2,100	460	6.5	13	9.9	<2.5	<2.5	<2.5	<2.5	58	<750	

TABLE 1
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER TEXACO SERVICE STATION 211283
3810 BROADWAY
OAKLAND, CALIFORNIA

Location	Date	TOC	DTW	GWE	TPH-DRO w/ Clean-Up	TPH-DRO w/o Clean-Up	TPH-GRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	DIPE	ETBE	TAME	TBA	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)	(µg/l)	(µg/l)	(µg/l)
MW-7	12/20/10	84.11	28.36	55.75	--	52	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	<50
MW-7	06/20/11	84.11	21.50	62.61	<50	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	<50
MW-7	10/24/11	84.11	23.05	61.06	<53	<53	<50	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	<0.50	<10	<150
MW-7	06/13/12	84.11	20.65	63.46	<50	<48	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<10	<150
MW-7	12/28/12	84.11	19.18	64.93	<48	<48	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<10	<150
MW-9	12/20/10	82.17	20.79	61.38	--	58	<50	<0.5	<0.5	<0.5	<0.5	1	--	--	--	--	<50
MW-9	06/20/11	82.17	19.53	62.64	<50	--	<50	<0.5	<0.5	<0.5	<0.5	42	--	--	--	--	<50
MW-9	10/24/11	82.17	21.04	61.13	<53	<53	<50	<0.50	<0.50	<0.50	<1.5	26	<0.50	<0.50	<0.50	<10	<150
MW-9	06/13/12	82.17	18.62	63.55	110	130	51	1.6	<0.50	<0.50	<1.0	67	<0.50	<0.50	2.0	<10	<150
MW-9	12/28/12	82.17	17.37	64.80	<48	88	<50	<0.50	<0.50	<0.50	<1.0	43	<0.50	<0.50	1.1	16	<150
MW-10	12/20/10	81.83	20.45	61.38	--	1,200	300	0.6	<0.5	<0.5	<0.5	3	--	--	--	--	<50
MW-10	06/20/11	81.83	19.27	62.56	160	--	730	16	3	14	46	<0.5	--	--	--	--	<50
MW-10	10/24/11	81.83	20.72	61.11	<52	70	300	1.2	<0.50	<0.50	<1.5	3.2	<0.50	<0.50	<0.50	<10	<150
MW-10	06/13/12	81.83	18.40	63.43	440	440	260	1.0	<0.50	0.73	<1.0	<0.50	<0.50	<0.50	<0.50	<10	<150
MW-10	12/28/12	81.83	19.19	62.64	100	150	340	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<10	<150
MW-11	12/20/10	--	29.05	--	--	150	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	<50
MW-11	06/20/11	--	27.65	--	<50	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	<50
MW-11	10/24/11	--	29.27	--	<53	<53	<50	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	<0.50	<10	<150
MW-11	06/13/12	--	26.76	--	<47	<48	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<10	<150
MW-11	12/28/12	--	25.55	--	<48	<48	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<10	<150
MW-12	12/20/10	84.19	22.07	62.12	--	1,100	4,800	500	82	260	800	<0.5	--	--	--	--	<50
MW-12	06/20/11	84.19	20.52	63.67	<50	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	<50
MW-12	10/24/11	84.19	22.92	61.27	59	290	7,900	650	170	520	2,000	<5.0	<5.0	<5.0	<5.0	<100	<1,500
MW-12	06/13/12	84.19	20.10	64.09	63	140	450	99	2.1	34	23	<0.50	<0.50	<0.50	<0.50	<10	<150
MW-12	12/28/12	84.19	19.60	64.59	120	240	3,900	850	38	34	29	<5.0	<5.0	<5.0	<5.0	<100	<1,500

TABLE 1
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER TEXACO SERVICE STATION 211283
3810 BROADWAY
OAKLAND, CALIFORNIA

Location	Date	TOC (ft amsl)	DTW (ft)	GWE (ft amsl)	TPH-DRO w/ Clean-Up (µg/l)	TPH-DRO w/o Clean-Up (µg/l)	TPH-GRO (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)	DIPE (µg/l)	ETBE (µg/l)	TAME (µg/l)	TBA (µg/l)	Ethanol (µg/l)
		Units															
QA	12/20/10	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
QA	06/20/11	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
QA	10/24/11	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	<0.50	<10	<150
QA	06/13/12	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<10	<150
QA	12/28/12	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<10	<150

Abbreviations and Notes:

TOC = Top of casing

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

GWE = Groundwater elevation

TPH-GRO = Total petroleum hydrocarbons as gasoline [C₆ - C₁₂]

MTBE = Methyl tertiary butyl ether

DIPE = Di-isopropyl ether

ETBE = Ethyl tert-Butyl Ether

TAME = tert-Amyl Methyl Ether

TBA = tert-Butanol or tertiary butyl alcohol

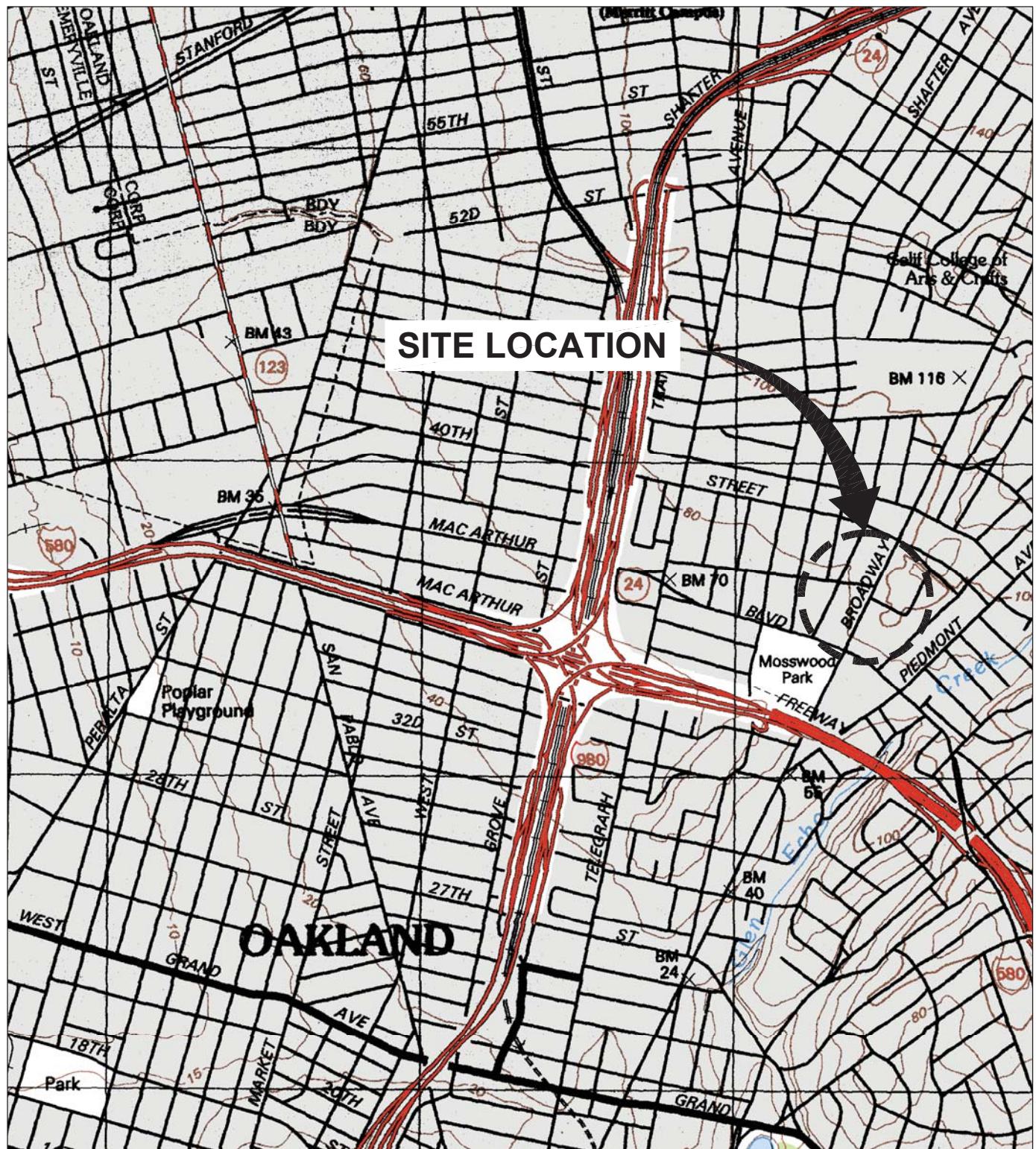
Ft amsl = Feet above mean sea level

Ft = Feet

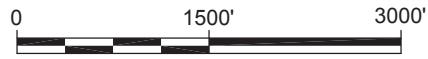
µg/l = micrograms per liter

< = Not detected above detection limit indicated

Figures



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



Approximate Scale: 1 in. = 1500 ft.

PROJECTNAME: ---
IMAGES: 60901X01.tif
XREFS:

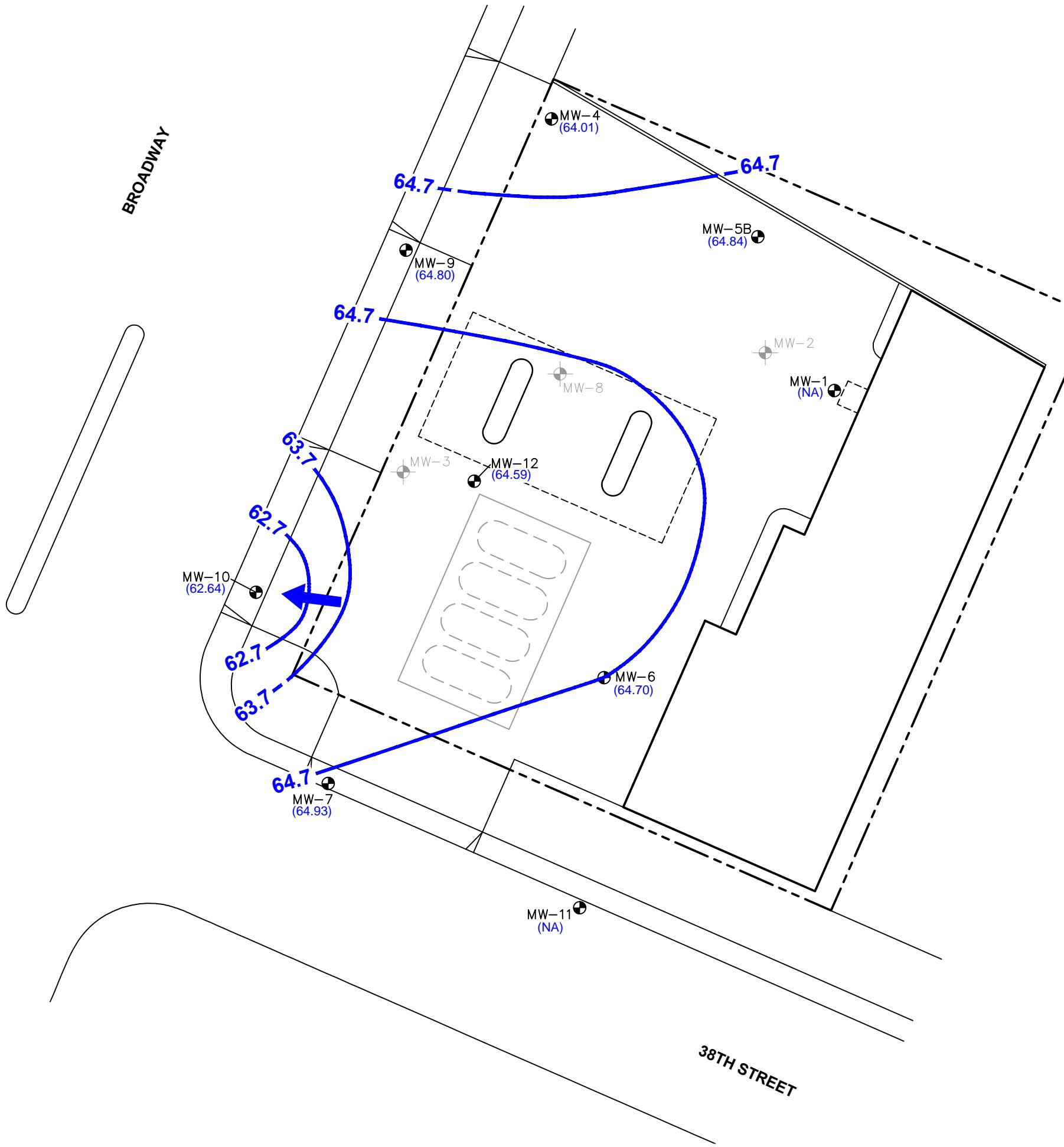


FORMER TEXACO SERVICE STATION NO. 21-1283
3810 BROADWAY, OAKLAND, CA

SITE LOCATION MAP

 ARCADIS

FIGURE
1

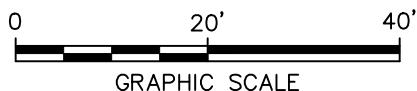


LEGEND:

- PROPERTY LINE
- MONITORING WELL LOCATION
- FORMER WELL LOCATION
- UST
- GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL (FT AMSL)
- GROUNDWATER ELEVATION CONTOUR, DASHED WHERE INFERRED (FT AMSL)
- APPROXIMATE DIRECTION OF GROUNDWATER FLOW. HYDRAULIC GRADIENT IS APPROXIMATELY 0.09 FEET PER FOOT (FT/FT)
- NA NOT AVAILABLE

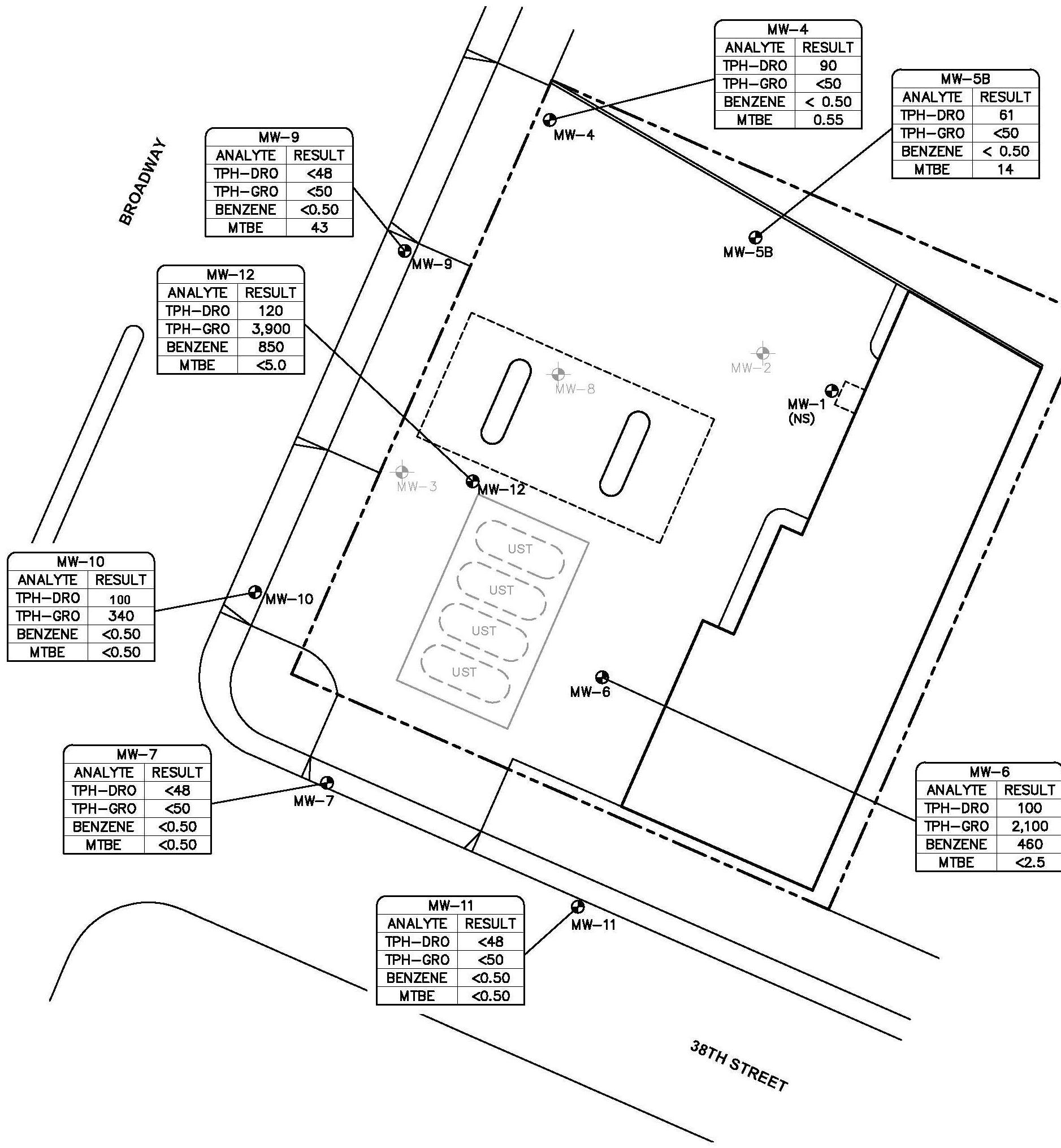
NOTES:

1. BASE MAP DIGITIZED FROM A DRAWING BY CONESTOGA-ROVERS & ASSOCIATES, INC., TITLED "GROUNDWATER ELEVATION AND HYDROCARBON CONCENTRATION MAP", DATED AUGUST 11, 2011.
2. WELL LOCATION COORDINATES FROM WELL SURVEY COMPLETED JUNE 24, 2002 BY MORROW SURVEYING OF WEST SACRAMENTO, CA. HORIZONTAL COORDINATE SYSTEM IS NORTH AMERICAN DATUM OF 1983, CALIFORNIA STATE PLANE ZONE 3. ELEVATIONS REFERENCED TO OAKLAND BENCHMARK, FEET ABOVE MEAN SEA LEVEL.



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

**GROUNDWATER ELEVATION
 CONTOUR MAP -
 DECEMBER 28, 2012**



LEGEND:

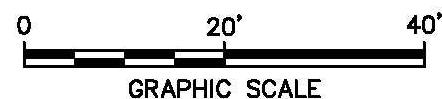
- PROPERTY LINE
- MONITORING WELL LOCATION
- FORMER WELL LOCATION
- UST
- UNDERGROUND STORAGE TANK

ABBREVIATIONS:

TPH-DRO	TOTAL PETROLEUM HYDROCARBONS AS DIESEL
TPH-GRO	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
MTBE	METHYL TERTIARY BUTYL ETHER
NS	NOT SAMPLED

NOTES:

1. BASE MAP DIGITIZED FROM A DRAWING BY CONESTOGA-ROVERS & ASSOCIATES, INC., TITLED "GROUNDWATER ELEVATION AND HYDROCARBON CONCENTRATION MAP", DATED AUGUST 11, 2011.
2. WELL LOCATION COORDINATES FROM WELL SURVEY COMPLETED JUNE 24, 2002 BY MORROW SURVEYING OF WEST SACRAMENTO, CA. HORIZONTAL COORDINATE SYSTEM IS NORTH AMERICAN DATUM OF 1983, CALIFORNIA STATE PLANE ZONE 3. ELEVATIONS REFERENCED TO OAKLAND BENCHMARK, FEET ABOVE MEAN SEA LEVEL.
3. ALL CONCENTRATIONS IN MICROGRAMS PER LITER.
4. TPH-DRO PERFORMED WITH SILICA GEL CLEAN-UP.



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

CONCENTRATION MAP

ARCADIS

Attachment 1

Groundwater Monitoring and
Sampling Field Data Sheets

WELL GAUGING DATA

Project # 121228-PC1

Date 12/28/12

Client Chevron

Site 3810 Broadway, Oakland

CHEVRON WELL MONITORING DATA SHEET

Project #:	121228-PC1					Station #:	21-1283				
Sampler:	PC					Date:	12/28/12				
Weather:	Cloudy					Ambient Air Temperature:	48 °F				
Well I.D.:	MW-4					Well Diameter:	2	3	4	6	8
Total Well Depth:	28.58					Depth to Water:	19.30				
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]: 21.16											

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: _____

$$\frac{1.5}{1 \text{ Case Volume}} \times \frac{3}{\text{Specified Volumes}} = \frac{4.5}{\text{Calculated Volume}}$$

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 uS)	Turbidity (NTUs)	Gals. Removed	Observations
0906	61.0	6.15	343.2	515	1.5	
0910	61.3	6.19	347.9	396	3	
0915	62.9	6.28	349.9	552	4.5	

Did well dewater? Yes Gallons actually evacuated: 4.5

Sampling Date: 12/28/12 Sampling Time: 0920 Depth to Water: 20.60

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

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

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 #: 121228-PC1	Station #: 21-1283
Sampler: PC	Date: 12/28/12
Weather: cloudy	Ambient Air Temperature: 50 °F
Well I.D.: MW-5B	Well Diameter: (2) 3 4 6 8
Total Well Depth: 30.11	Depth to Water: 20.52
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]: 22.44	

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: _____

$$\frac{1.5 \text{ (Gals.)} \times 3}{1 \text{ Case Volume}} = \frac{4.5 \text{ Gals.}}{\text{Specified Volumes}} = \frac{\text{Calculated Volume}}{}$$

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 μS)	Turbidity (NTUs)	Gals. Removed	Observations
1115	62.8	7.89	986.9	>1000	1.5	
1120	62.8	6.49	1071	777	3	
1126	61.3	6.74	1156	195	4.5	

Did well dewater? Yes Gallons actually evacuated: 4.5

Sampling Date: 12/28/12 Sampling Time: 1130 Depth to Water: 20.89

Sample I.D.: MW-5B Laboratory: Lancaster Other FA

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

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 #: 121228-PC1	Station #: 21-1283
Sampler: PC	Date: 12/28/12
Weather: cloudy	Ambient Air Temperature: 51 °F
Well I.D.: MW-6	Well Diameter: ② 3 4 6 8
Total Well Depth: 27.99	Depth to Water: 21.39
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 23.71	

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: _____

11	(Gals.) X	3	=	3.3	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 μS)	Turbidity (NTUs)	Gals. Removed	Observations
1300	62.8	6.65	1201	>1000	1.1	odor
1305	63.8	6.82	1077	>1000	2.2	
1310	61.3	7.01	1057	>1000	3.3	

Did well dewater? Yes Gallons actually evacuated: 2.3

Sampling Date: 12/28/12 Sampling Time: 1315 Depth to Water:

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

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

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 #: 121228-PC1	Station #: 21-1283	
Sampler: PC	Date: 12/28/12	
Weather: cloudy	Ambient Air Temperature: 50 °F	
Well I.D.: MW-7	Well Diameter: ④ 3 4 6 8	
Total Well Depth: 32.90	Depth to Water: 19.18	
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]: 21.92		

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: _____

$$\frac{2.2 \text{ (Gals.)} \times 3}{1 \text{ Case Volume} \quad \text{Specified Volumes}} = \frac{6.6}{\text{Calculated Volume}} \text{ Gals.}$$

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
1016	63.2	6.78	481.5	>1000	2.2	
1022	63.7	6.49	479.3	>1000	4.4	
1028	64.0	6.29	471.4	>1000	6.6	

Did well dewater? Yes No Gallons actually evacuated: 6.6

Sampling Date: 12/28/12 Sampling Time: 10:34 Depth to Water: 20.21

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

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

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 #: 121228-Pc1	Station #: 21-1283	
Sampler: PC	Date: 12/28/12	
Weather: cloudy	Ambient Air Temperature: 49 °F	
Well I.D.: MW-9	Well Diameter: (2) 3 4 6 8	
Total Well Depth: 33.46	Depth to Water: 17.37	
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]: 20.59		

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: _____

$$\frac{2.6 \text{ (Gals.)} \times 3}{1 \text{ Case Volume} \quad \text{Specified Volumes}} = \frac{7.8 \text{ Gals.}}{\text{Calculated Volume}}$$

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 μS)	Turbidity (NTUs)	Gals. Removed	Observations
0837	62.2	6.61	757.4	>1000	2.6	
0845	63.4	6.79	741.1	>1000	5.2	
0952	61.9	6.61	738.6	>1000	7.8	

Did well dewater? Yes No Gallons actually evacuated: 7.8

Sampling Date: 12/28/12 Sampling Time: 0958 Depth to Water:

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

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

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

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

Project #: 121228-PC1	Station #: 21-1283	
Sampler: PC	Date: 12/28/12	
Weather: cloudy	Ambient Air Temperature: 51 °F	
Well I.D.: MW-10	Well Diameter: (2) 3 4 6 8	
Total Well Depth: 32.51	Depth to Water: 19.19	
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]: 21.85		

Purge Method:

Bailer
 Disposable Bailer
 Positive Air Displacement
 Electric Submersible

Sampling Method: Bailer

Disposable Bailer
 Extraction Port
 Dedicated Tubing

Other: _____

$$\frac{2.1 \text{ (Gals.)} \times 3}{1 \text{ Case Volume} \quad \text{Specified Volumes}} = \frac{6.3}{\text{Calculated Volume}} \text{ Gals.}$$

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
1230	61.6	6.76	697.3	>1000	2.1	
1236	62.8	6.59	651.2	>1000	4.2	
1242	60.2	6.64	624.6	>1000	6.3	

Did well dewater? Yes Gallons actually evacuated: 6.3

Sampling Date: 12/28/12 Sampling Time: 1246 Depth to Water: 19.99

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:	mV
--------------------	------------	----	-------------	----

CHEVRON WELL MONITORING DATA SHEET

Project #: 121228-PC1	Station #: 21-1283	
Sampler: PC	Date: 12/28/12	
Weather: cloudy	Ambient Air Temperature: 51 °F	
Well I.D.: MW-11	Well Diameter: (2) 3 4 6 8	
Total Well Depth: 38.36	Depth to Water: 25.55	
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]: 28.11		

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 _____

$$\frac{2}{1} \text{ Case Volume} \times \frac{3}{\text{Specified Volumes}} = \frac{6}{\text{Calculated Volume}}$$

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 μS)	Turbidity (NTUs)	Gals. Removed	Observations
1151	61.0	7.42	576.1	733	2	
1158	61.4	6.87	563.6	>1000	4	
1205	58.9	6.83	577.1	>1000	6	

Did well dewater? Yes No Gallons actually evacuated: 6

Sampling Date: 12/28/12 Sampling Time: 1210 Depth to Water: 27.10

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

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

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

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

Project #:	121228-PC1			Station #:	21-1283				
Sampler:	PC			Date:	12/28/12				
Weather:	cloudy			Ambient Air Temperature:	50 °F				
Well I.D.:	MW-12			Well Diameter:	2	3	4	6	8
Total Well Depth:	80.19			Depth to Water:	19.60				
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]:									

Purge Method:

Sampling Method:

Bailer

Bailer

Waterra

Disposable Bailer

Disposable Bailer

Peristaltic

Extraction Port

Positive Air Displacement

Extraction Pump

Dedicated Tubing

Electric Submersible

Other _____

Other: _____

(Gals.) X	3	=	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
			Grab Sample due to access			
1046	63.0	6.44	930.3	>1000		

Did well dewater? Yes No Gallons actually evacuated: —

Sampling Date: 12/28/12 Sampling Time: 1046 Depth to Water: 19.60

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

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

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Chain of Custody Record

TestAmerica Laboratories, Inc.

Client Contact		Project Manager: Toni DeMayo			Site Contact:		Date: 12/28/12	COC No: 1 of 1 COCs	
Arcadis - U.S., Inc. - Irvine 320 Commerce, Suite 200 Irvine, CA 92602 714-508-2657 Phone 714-730-9345 FAX Project Name: 3810 Broadway Terrace, Oakland, CA Site: 21-1283 P O Global ID: T0600101108		Tel/Fax: (916) 985-2079 Analysis Turnaround Time Calendar (C) or Work Days (W) TAT if different from Below _____			Lab Contact: Sushmitha Reddy		Carrier:	Job No. 2440-33829	
		<input checked="" type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day						SDG No.	
Sample Identification		Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Sample Specific Notes:	
MW-4		12/28/12	0920	Gel	W	9	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> X X		
MW-5B			1130	Gel	1	9	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> X X		
MW-6			1315			9	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> X X		
MW-7			1034			9	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> X X		
MW-9			0915B			9	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> X X		
MW-10			1246			9	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> X X		
MW-11			1210			9	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> X X		
MW-12			1046			9	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> X X		
TB-2012-1228			0800			4	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		
Preservation Used: 1= Ice; 2= HCl; 3= H ₂ SO ₄ ; 4= HNO ₃ ; 5= NaOH; 6= Other							1,2 1,2 1 1 1		
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Unknown							Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <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: <i>STW</i>	Company: TP	Date/Time: 12/28/12 15:00	Received by: <i>Toni DeMayo</i>	Company: TA	Date/Time: 12/28/12 15:00				
Relinquished by: <i>Sushmitha Reddy</i>	Company: TA	Date/Time: 12/28/12 18:00	Received by: <i>Sushmitha Reddy</i>	Company: TA	Date/Time: 12/29/12 10:30				
Relinquished by: <i>Sushmitha Reddy</i>	Company: TA	Date/Time:	Received by:	Company:	Date/Time:				

WELLHEAD INSPECTION CHECKLIST

Page 1 of 1

Client **Chevron**

Date 12/28/12

Site Address 3810 Broadway, Oakland

Job Number 121228-FCI

Technician R. Lovvold

NOTES: MW-11 1/2 tabs broken; 1/2 bolts missing MW-4 1/2 tabs stripped

MW-10 $\frac{3}{2}$ fobs stopped

MW - 6 1/2 " " "

MW-12 $\frac{1}{3}$ tales stripped

MW-5B 3/3 "

MU-9 2½ " 15

CHEVRON-NORTHERN CALIFORNIA TYPE A BILL OF LADING

BILL OF LADING No. BTS-511

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	Rob Speer
CHEVRON #	Chevron Engineer
3810	Broadway
street number	city
	state

WELL I.D.	GALS.	WELL I.D.	GALS.
MW-4	4.5	/	/
MW-5B	4.5	/	/
MW-6	3.3	/	/
MW-7	6.6	/	/
MW-9	7.8	/	/
MW-10	6.3	/	/
MW-11	6	/	/
added equip.	/	any other	/
rinse water	10	adjustments	/
TOTAL GALS.		loaded onto	
RECOVERED	49	BTS vehicle #	73
BTS event #		time	
12228-PC1		1200	12/17/12
Transporter signature	Rob		

REC'D AT	BTS	time	
		1530	12/17/12
Unloaded/received by			
signature	Peter		

TEST EQUIPMENT CALIBRATION LOG

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: 440-33829-1

Client Project/Site: Chevron - 21-1283

Revision: 1

For:

ARCADIS U.S., Inc.

320 Commerce, Suite 200

Irvine, California 92602

Attn: Toni DeMayo

Debby Wilson

Authorized for release by:

1/16/2013 6:08:05 PM

Debby Wilson

Project Manager I

debby.wilson@testamericainc.com

Designee for

Sushmitha Reddy

Project Manager I

sushmitha.reddy@testamericainc.com

LINKS

Review your project
results through

Total Access

Have a Question?

Ask
The
Expert

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.

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QC Association	24
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Sample Summary

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

TestAmerica Job ID: 440-33829-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-33829-1	MW-4	Water	12/28/12 09:20	12/29/12 10:30
440-33829-2	MW-5B	Water	12/28/12 11:30	12/29/12 10:30
440-33829-3	MW-6	Water	12/28/12 13:15	12/29/12 10:30
440-33829-4	MW-7	Water	12/28/12 10:34	12/29/12 10:30
440-33829-5	MW-9	Water	12/28/12 09:58	12/29/12 10:30
440-33829-6	MW-10	Water	12/28/12 12:46	12/29/12 10:30
440-33829-7	MW-11	Water	12/28/12 12:10	12/29/12 10:30
440-33829-8	MW-12	Water	12/28/12 10:46	12/29/12 10:30
440-33829-9	TB-20121228	Water	12/28/12 08:00	12/29/12 10:30

1
2
3
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Case Narrative

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

TestAmerica Job ID: 440-33829-1

Job ID: 440-33829-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative 440-33829-1

Comments

This report was revised to include the DRO analysis of sample MW-10 after silica gel cleanup of the originally untreated extract. The original report included results from two extraction procedures performed on 2 different containers with the silica gel treated extract having a higher result than the untreated extract. The variance in the sample results is most likely due to the non-homogenous nature of the sample, e.g., different amounts of sediment in each container. To eliminate the non-homogeneity, the original untreated extract was treated with silica gel yielding a result lower than the untreated extract. Both silica gel results are included in this revision.

Receipt

The samples were received on 12/29/2012 10:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0° C.

GC/MS VOA

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 77179 exceeded control limits for the following analyte: ethanol. The analyte was biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 77179 were outside control limits.

No other analytical or quality issues were noted.

GC VOA

Method(s) 8015B: Surrogate recovery was outside control limits for the following sample: (440-33676-3 MS), (440-33676-3 MSD). The BFB surrogate coeluted with the TPH standard. The data was not affected.

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 76520, 76724 and 76760. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

Method(s) 8015B: Hydrocarbon result partly due to individual peaks in quantitation range. MW-4 (440-33829-1), MW-5B (440-33829-2).

No other analytical or quality issues were noted.

Organic Prep

Method(s) 3510C SGC: The following sample(s) was diluted due to the nature of the sample matrix: MW-11 (440-33829-7), MW-12 (440-33829-8), MW-6 (440-33829-3), MW-7 (440-33829-4), MW-9 (440-33829-5). Elevated reporting limits (RLs) are provided. Batch# 76520 Method# 3510C

No other 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: 440-33829-1

Client Sample ID: MW-4

Date Collected: 12/28/12 09:20
Date Received: 12/29/12 10:30

Lab Sample ID: 440-33829-1

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			01/04/13 22:06	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			01/04/13 22:06	1
Ethanol	ND *		150		ug/L			01/04/13 22:06	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			01/04/13 22:06	1
Ethylbenzene	ND		0.50		ug/L			01/04/13 22:06	1
m,p-Xylene	ND		1.0		ug/L			01/04/13 22:06	1
Methyl-t-Butyl Ether (MTBE)	0.55		0.50		ug/L			01/04/13 22:06	1
o-Xylene	ND		0.50		ug/L			01/04/13 22:06	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			01/04/13 22:06	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			01/04/13 22:06	1
Toluene	ND		0.50		ug/L			01/04/13 22:06	1
Xylenes, Total	ND		1.0		ug/L			01/04/13 22:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					01/04/13 22:06	1
Dibromofluoromethane (Surr)	92		80 - 120					01/04/13 22:06	1
Toluene-d8 (Surr)	104		80 - 120					01/04/13 22:06	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			01/02/13 16:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		65 - 140					01/02/13 16:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C28)	0.21		0.048		mg/L		01/02/13 19:02	01/03/13 00:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane	85		45 - 120				01/02/13 19:02	01/03/13 00:59	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)	0.090		0.048		mg/L		01/02/13 08:35	01/02/13 22:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane	83		45 - 120				01/02/13 08:35	01/02/13 22:00	1

Client Sample ID: MW-5B

Date Collected: 12/28/12 11:30
Date Received: 12/29/12 10:30

Lab Sample ID: 440-33829-2

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			01/04/13 23:27	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			01/04/13 23:27	1
Ethanol	ND *		150		ug/L			01/04/13 23:27	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			01/04/13 23:27	1
Ethylbenzene	ND		0.50		ug/L			01/04/13 23:27	1
m,p-Xylene	ND		1.0		ug/L			01/04/13 23:27	1

TestAmerica Irvine

Client Sample Results

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

TestAmerica Job ID: 440-33829-1

Client Sample ID: MW-5B
Date Collected: 12/28/12 11:30
Date Received: 12/29/12 10:30

Lab Sample ID: 440-33829-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl-t-Butyl Ether (MTBE)	14		0.50		ug/L			01/04/13 23:27	1
o-Xylene	ND		0.50		ug/L			01/04/13 23:27	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			01/04/13 23:27	1
tert-Butyl alcohol (TBA)	ND	ID	10		ug/L			01/04/13 23:27	1
Toluene	ND		0.50		ug/L			01/04/13 23:27	1
Xylenes, Total	ND		1.0		ug/L			01/04/13 23:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					01/04/13 23:27	1
Dibromofluoromethane (Surr)	96		80 - 120					01/04/13 23:27	1
Toluene-d8 (Surr)	104		80 - 120					01/04/13 23:27	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			01/02/13 16:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		65 - 140					01/02/13 16:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C28)	0.072		0.048		mg/L			01/03/13 08:29	01/04/13 09:32
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane	80		45 - 120					01/03/13 08:29	01/04/13 09:32

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)	0.061		0.048		mg/L			01/02/13 08:35	01/02/13 22:20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane	82		45 - 120					01/02/13 08:35	01/02/13 22:20

Client Sample ID: MW-6

Date Collected: 12/28/12 13:15
Date Received: 12/29/12 10:30

Lab Sample ID: 440-33829-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	460		2.5		ug/L			01/05/13 19:41	5
Isopropyl Ether (DIPE)	ND		2.5		ug/L			01/05/13 19:41	5
Ethanol	ND		750		ug/L			01/05/13 19:41	5
Ethyl-t-butyl ether (ETBE)	ND		2.5		ug/L			01/05/13 19:41	5
Ethylbenzene	13		2.5		ug/L			01/05/13 19:41	5
m,p-Xylene	7.4		5.0		ug/L			01/05/13 19:41	5
Methyl-t-Butyl Ether (MTBE)	ND		2.5		ug/L			01/05/13 19:41	5
o-Xylene	2.5		2.5		ug/L			01/05/13 19:41	5
Tert-amyl-methyl ether (TAME)	ND		2.5		ug/L			01/05/13 19:41	5
tert-Butyl alcohol (TBA)	58		50		ug/L			01/05/13 19:41	5
Toluene	6.5		2.5		ug/L			01/05/13 19:41	5
Xylenes, Total	9.9		5.0		ug/L			01/05/13 19:41	5

TestAmerica Irvine

Client Sample Results

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

TestAmerica Job ID: 440-33829-1

Client Sample ID: MW-6

Date Collected: 12/28/12 13:15
Date Received: 12/29/12 10:30

Lab Sample ID: 440-33829-3

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		80 - 120		01/05/13 19:41	5
Dibromofluoromethane (Surr)	110		80 - 120		01/05/13 19:41	5
Toluene-d8 (Surr)	106		80 - 120		01/05/13 19:41	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	2100		500		ug/L			01/03/13 11:06	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		65 - 140		01/03/13 11:06	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C28)	0.23		0.048		mg/L		01/03/13 08:29	01/03/13 15:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	91		45 - 120	01/03/13 08:29	01/03/13 15:58	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)	0.10		0.048		mg/L		01/02/13 08:35	01/02/13 22:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	83		45 - 120	01/02/13 08:35	01/02/13 22:40	1

Client Sample ID: MW-7

Date Collected: 12/28/12 10:34
Date Received: 12/29/12 10:30

Lab Sample ID: 440-33829-4

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			01/05/13 00:21	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			01/05/13 00:21	1
Ethanol	ND *		150		ug/L			01/05/13 00:21	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			01/05/13 00:21	1
Ethylbenzene	ND		0.50		ug/L			01/05/13 00:21	1
m,p-Xylene	ND		1.0		ug/L			01/05/13 00:21	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			01/05/13 00:21	1
o-Xylene	ND		0.50		ug/L			01/05/13 00:21	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			01/05/13 00:21	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			01/05/13 00:21	1
Toluene	ND		0.50		ug/L			01/05/13 00:21	1
Xylenes, Total	ND		1.0		ug/L			01/05/13 00:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		80 - 120		01/05/13 00:21	1
Dibromofluoromethane (Surr)	90		80 - 120		01/05/13 00:21	1
Toluene-d8 (Surr)	98		80 - 120		01/05/13 00:21	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			01/02/13 17:28	1

TestAmerica Irvine

Client Sample Results

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

TestAmerica Job ID: 440-33829-1

Client Sample ID: MW-7
Date Collected: 12/28/12 10:34
Date Received: 12/29/12 10:30

Lab Sample ID: 440-33829-4
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		65 - 140		01/02/13 17:28	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	D	01/03/13 08:29	01/03/13 16:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	85		45 - 120	01/03/13 08:29	01/03/13 16:18	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		0.048		mg/L	D	01/02/13 08:35	01/02/13 23:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	76		45 - 120	01/02/13 08:35	01/02/13 23:00	1

Client Sample ID: MW-9

Lab Sample ID: 440-33829-5

Matrix: Water

Date Collected: 12/28/12 09:58

Date Received: 12/29/12 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			01/05/13 00:48	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			01/05/13 00:48	1
Ethanol	ND *		150		ug/L			01/05/13 00:48	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			01/05/13 00:48	1
Ethylbenzene	ND		0.50		ug/L			01/05/13 00:48	1
m,p-Xylene	ND		1.0		ug/L			01/05/13 00:48	1
Methyl-t-Butyl Ether (MTBE)	43		0.50		ug/L			01/05/13 00:48	1
o-Xylene	ND		0.50		ug/L			01/05/13 00:48	1
Tert-amyl-methyl ether (TAME)	1.1		0.50		ug/L			01/05/13 00:48	1
tert-Butyl alcohol (TBA)	16		10		ug/L			01/05/13 00:48	1
Toluene	ND		0.50		ug/L			01/05/13 00:48	1
Xylenes, Total	ND		1.0		ug/L			01/05/13 00:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		80 - 120		01/05/13 00:48	1
Dibromofluoromethane (Surr)	94		80 - 120		01/05/13 00:48	1
Toluene-d8 (Surr)	104		80 - 120		01/05/13 00:48	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	D	01/02/13 17:56		1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		65 - 140		01/02/13 17:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C28)	0.088		0.048		mg/L	D	01/03/13 08:29	01/03/13 16:38	1

TestAmerica Irvine

Client Sample Results

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

TestAmerica Job ID: 440-33829-1

Client Sample ID: MW-9

Lab Sample ID: 440-33829-5

Date Collected: 12/28/12 09:58

Matrix: Water

Date Received: 12/29/12 10:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	87		45 - 120	01/03/13 08:29	01/03/13 16:38	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		0.048		mg/L	D	01/02/13 08:35	01/02/13 20:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	78		45 - 120	01/02/13 08:35	01/02/13 20:40	1

Client Sample ID: MW-10

Lab Sample ID: 440-33829-6

Date Collected: 12/28/12 12:46

Matrix: Water

Date Received: 12/29/12 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			01/05/13 01:15	1

Isopropyl Ether (DIPE)	ND		0.50		ug/L			01/05/13 01:15	1
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Ethanol	ND	*	150		ug/L			01/05/13 01:15	1
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Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			01/05/13 01:15	1
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Ethylbenzene	ND		0.50		ug/L			01/05/13 01:15	1
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m,p-Xylene	ND		1.0		ug/L			01/05/13 01:15	1
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Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			01/05/13 01:15	1
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o-Xylene	ND		0.50		ug/L			01/05/13 01:15	1
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Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			01/05/13 01:15	1
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tert-Butyl alcohol (TBA)	ND		10		ug/L			01/05/13 01:15	1
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Toluene	ND		0.50		ug/L			01/05/13 01:15	1
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Xylenes, Total	ND		1.0		ug/L			01/05/13 01:15	1
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Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120		01/05/13 01:15	1
Dibromofluoromethane (Surr)	92		80 - 120		01/05/13 01:15	1
Toluene-d8 (Surr)	103		80 - 120		01/05/13 01:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	340		50		ug/L			01/02/13 19:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		65 - 140		01/02/13 19:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C28)	0.15		0.048		mg/L	D	01/03/13 08:29	01/03/13 16:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	77		45 - 120	01/03/13 08:29	01/03/13 16:58	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)	0.26		0.048		mg/L	D	01/02/13 08:35	01/02/13 21:00	1
DRO (C13-C28)	0.10		0.048		mg/L	D	01/03/13 08:29	01/16/13 13:20	1

TestAmerica Irvine

Client Sample Results

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

TestAmerica Job ID: 440-33829-1

Client Sample ID: MW-10
Date Collected: 12/28/12 12:46
Date Received: 12/29/12 10:30

Lab Sample ID: 440-33829-6
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits
n-Octacosane	73		45 - 120
n-Octacosane	63		45 - 120

Prepared	Analyzed	Dil Fac
01/02/13 08:35	01/02/13 21:00	1
01/03/13 08:29	01/16/13 13:20	1

Client Sample ID: MW-11
Date Collected: 12/28/12 12:10
Date Received: 12/29/12 10:30

Lab Sample ID: 440-33829-7
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			01/05/13 01:42	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			01/05/13 01:42	1
Ethanol	ND *		150		ug/L			01/05/13 01:42	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			01/05/13 01:42	1
Ethylbenzene	ND		0.50		ug/L			01/05/13 01:42	1
m,p-Xylene	ND		1.0		ug/L			01/05/13 01:42	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			01/05/13 01:42	1
o-Xylene	ND		0.50		ug/L			01/05/13 01:42	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			01/05/13 01:42	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			01/05/13 01:42	1
Toluene	ND		0.50		ug/L			01/05/13 01:42	1
Xylenes, Total	ND		1.0		ug/L			01/05/13 01:42	1

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120
Toluene-d8 (Surr)	103		80 - 120

Prepared	Analyzed	Dil Fac
01/05/13 01:42		1
01/05/13 01:42		1
01/05/13 01:42		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			01/02/13 19:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

4-Bromofluorobenzene (Surr)	103		65 - 140
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Prepared	Analyzed	Dil Fac
01/02/13 19:48		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		01/03/13 08:29	01/03/13 17:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

n-Octacosane	91		45 - 120
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Prepared	Analyzed	Dil Fac
01/03/13 08:29	01/03/13 17:39	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		0.048		mg/L		01/02/13 08:35	01/02/13 21:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

n-Octacosane	80		45 - 120
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Prepared	Analyzed	Dil Fac
01/02/13 08:35	01/02/13 21:20	1

TestAmerica Irvine

Client Sample Results

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

TestAmerica Job ID: 440-33829-1

Client Sample ID: MW-12
Date Collected: 12/28/12 10:46
Date Received: 12/29/12 10:30

Lab Sample ID: 440-33829-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	850		5.0		ug/L			01/05/13 02:36	10
Isopropyl Ether (DIPE)	ND		5.0		ug/L			01/05/13 02:36	10
Ethanol	ND *		1500		ug/L			01/05/13 02:36	10
Ethyl-t-butyl ether (ETBE)	ND		5.0		ug/L			01/05/13 02:36	10
Ethylbenzene	34		5.0		ug/L			01/05/13 02:36	10
m,p-Xylene	29		10		ug/L			01/05/13 02:36	10
Methyl-t-Butyl Ether (MTBE)	ND		5.0		ug/L			01/05/13 02:36	10
o-Xylene	ND		5.0		ug/L			01/05/13 02:36	10
Tert-amyl-methyl ether (TAME)	ND		5.0		ug/L			01/05/13 02:36	10
tert-Butyl alcohol (TBA)	ND		100		ug/L			01/05/13 02:36	10
Toluene	38		5.0		ug/L			01/05/13 02:36	10
Xylenes, Total	29		10		ug/L			01/05/13 02:36	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		80 - 120					01/05/13 02:36	10
Dibromofluoromethane (Surr)	98		80 - 120					01/05/13 02:36	10
Toluene-d8 (Surr)	104		80 - 120					01/05/13 02:36	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	3900		500		ug/L			01/03/13 11:34	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	65		65 - 140					01/03/13 11:34	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C28)	0.24		0.048		mg/L		01/03/13 08:29	01/03/13 17:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane	90		45 - 120				01/03/13 08:29	01/03/13 17:59	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)	0.12		0.048		mg/L		01/02/13 08:35	01/02/13 21:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane	84		45 - 120				01/02/13 08:35	01/02/13 21:40	1

Client Sample ID: TB-20121228

Lab Sample ID: 440-33829-9

Date Collected: 12/28/12 08:00
Date Received: 12/29/12 10:30

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			01/05/13 02:08	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			01/05/13 02:08	1
Ethanol	ND *		150		ug/L			01/05/13 02:08	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			01/05/13 02:08	1
Ethylbenzene	ND		0.50		ug/L			01/05/13 02:08	1
m,p-Xylene	ND		1.0		ug/L			01/05/13 02:08	1

TestAmerica Irvine

Client Sample Results

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

TestAmerica Job ID: 440-33829-1

Client Sample ID: TB-20121228
Date Collected: 12/28/12 08:00
Date Received: 12/29/12 10:30

Lab Sample ID: 440-33829-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			01/05/13 02:08	1
o-Xylene	ND		0.50		ug/L			01/05/13 02:08	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			01/05/13 02:08	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			01/05/13 02:08	1
Toluene	ND		0.50		ug/L			01/05/13 02:08	1
Xylenes, Total	ND		1.0		ug/L			01/05/13 02:08	1

Surrogate **%Recovery** **Qualifier** **Limits**

					Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120			01/05/13 02:08	1
Dibromofluoromethane (Surr)	99		80 - 120			01/05/13 02:08	1
Toluene-d8 (Surr)	103		80 - 120			01/05/13 02:08	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			01/02/13 20:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		65 - 140					01/02/13 20:44	1

Lab Chronicle

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

TestAmerica Job ID: 440-33829-1

Client Sample ID: MW-4

Date Collected: 12/28/12 09:20
Date Received: 12/29/12 10:30

Lab Sample ID: 440-33829-1

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	77179	01/04/13 22:06	AT	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	76483	01/02/13 16:05	PH	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			1045 mL	1 mL	76520	01/02/13 08:35	KW	TAL IRV
Silica Gel Cleanup	Analysis	8015B		1			76522	01/02/13 22:00	RR	TAL IRV
Total/NA	Prep	3510C			1050 mL	1 mL	76724	01/02/13 19:02	EC	TAL IRV
Total/NA	Analysis	8015B		1			76522	01/03/13 00:59	RR	TAL IRV

Client Sample ID: MW-5B

Date Collected: 12/28/12 11:30
Date Received: 12/29/12 10:30

Lab Sample ID: 440-33829-2

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	77179	01/04/13 23:27	AT	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	76483	01/02/13 16:33	PH	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			1045 mL	1 mL	76520	01/02/13 08:35	KW	TAL IRV
Silica Gel Cleanup	Analysis	8015B		1			76522	01/02/13 22:20	RR	TAL IRV
Total/NA	Prep	3510C			1050 mL	1 mL	76760	01/03/13 08:29	KW	TAL IRV
Total/NA	Analysis	8015B		1			76787	01/04/13 09:32	RR	TAL IRV

Client Sample ID: MW-6

Date Collected: 12/28/12 13:15
Date Received: 12/29/12 10:30

Lab Sample ID: 440-33829-3

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		5	10 mL	10 mL	77229	01/05/13 19:41	TN	TAL IRV
Total/NA	Analysis	8015B		10	10 mL	10 mL	76765	01/03/13 11:06	SC	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			1040 mL	1 mL	76520	01/02/13 08:35	KW	TAL IRV
Silica Gel Cleanup	Analysis	8015B		1			76522	01/02/13 22:40	RR	TAL IRV
Total/NA	Prep	3510C			1040 mL	1 mL	76760	01/03/13 08:29	KW	TAL IRV
Total/NA	Analysis	8015B		1			76786	01/03/13 15:58	JR	TAL IRV

Client Sample ID: MW-7

Date Collected: 12/28/12 10:34
Date Received: 12/29/12 10:30

Lab Sample ID: 440-33829-4

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	77179	01/05/13 00:21	AT	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	76483	01/02/13 17:28	PH	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			1045 mL	1 mL	76520	01/02/13 08:35	KW	TAL IRV
Silica Gel Cleanup	Analysis	8015B		1			76522	01/02/13 23:00	RR	TAL IRV
Total/NA	Prep	3510C			1050 mL	1 mL	76760	01/03/13 08:29	KW	TAL IRV
Total/NA	Analysis	8015B		1			76786	01/03/13 16:18	JR	TAL IRV

TestAmerica Irvine

Lab Chronicle

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

TestAmerica Job ID: 440-33829-1

Client Sample ID: MW-9

Date Collected: 12/28/12 09:58
Date Received: 12/29/12 10:30

Lab Sample ID: 440-33829-5

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	77179	01/05/13 00:48	AT	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	76483	01/02/13 17:56	PH	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			1050 mL	1 mL	76520	01/02/13 08:35	KW	TAL IRV
Silica Gel Cleanup	Analysis	8015B		1		76523	01/02/13 20:40	RR	TAL IRV	
Total/NA	Prep	3510C			1050 mL	1 mL	76760	01/03/13 08:29	KW	TAL IRV
Total/NA	Analysis	8015B		1		76786	01/03/13 16:38	JR	TAL IRV	

Client Sample ID: MW-10

Date Collected: 12/28/12 12:46
Date Received: 12/29/12 10:30

Lab Sample ID: 440-33829-6

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	77179	01/05/13 01:15	AT	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	76483	01/02/13 19:20	PH	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			1050 mL	1 mL	76520	01/02/13 08:35	KW	TAL IRV
Silica Gel Cleanup	Analysis	8015B		1		76523	01/02/13 21:00	RR	TAL IRV	
Total/NA	Prep	3510C			1045 mL	1 mL	76760	01/03/13 08:29	KW	TAL IRV
Total/NA	Analysis	8015B		1		76786	01/03/13 16:58	JR	TAL IRV	
Silica Gel Cleanup	Prep	3510C SGC			1045 mL	1 mL	79320	01/03/13 08:29	LA	TAL IRV
Silica Gel Cleanup	Analysis	8015B		1		78944	01/16/13 13:20	RR	TAL IRV	

Client Sample ID: MW-11

Date Collected: 12/28/12 12:10
Date Received: 12/29/12 10:30

Lab Sample ID: 440-33829-7

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	77179	01/05/13 01:42	AT	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	76483	01/02/13 19:48	PH	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			1050 mL	1 mL	76520	01/02/13 08:35	KW	TAL IRV
Silica Gel Cleanup	Analysis	8015B		1		76523	01/02/13 21:20	RR	TAL IRV	
Total/NA	Prep	3510C			1045 mL	1 mL	76760	01/03/13 08:29	KW	TAL IRV
Total/NA	Analysis	8015B		1		76786	01/03/13 17:39	JR	TAL IRV	

Client Sample ID: MW-12

Date Collected: 12/28/12 10:46
Date Received: 12/29/12 10:30

Lab Sample ID: 440-33829-8

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		10	10 mL	10 mL	77179	01/05/13 02:36	AT	TAL IRV
Total/NA	Analysis	8015B		10	10 mL	10 mL	76765	01/03/13 11:34	SC	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			1045 mL	1 mL	76520	01/02/13 08:35	KW	TAL IRV
Silica Gel Cleanup	Analysis	8015B		1		76523	01/02/13 21:40	RR	TAL IRV	

TestAmerica Irvine

Lab Chronicle

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

TestAmerica Job ID: 440-33829-1

Client Sample ID: MW-12

Date Collected: 12/28/12 10:46
Date Received: 12/29/12 10:30

Lab Sample ID: 440-33829-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			1045 mL	1 mL	76760	01/03/13 08:29	KW	TAL IRV
Total/NA	Analysis	8015B		1			76786	01/03/13 17:59	JR	TAL IRV

Client Sample ID: TB-20121228

Date Collected: 12/28/12 08:00
Date Received: 12/29/12 10:30

Lab Sample ID: 440-33829-9

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	77179	01/05/13 02:08	AT	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	76483	01/02/13 20:44	PH	TAL IRV

Laboratory References:

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

QC Sample Results

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

TestAmerica Job ID: 440-33829-1

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

Lab Sample ID: MB 440-77179/7

Matrix: Water

Analysis Batch: 77179

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	ND		0.50		ug/L			01/04/13 21:12	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			01/04/13 21:12	1
Ethanol	ND		150		ug/L			01/04/13 21:12	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			01/04/13 21:12	1
Ethylbenzene	ND		0.50		ug/L			01/04/13 21:12	1
m,p-Xylene	ND		1.0		ug/L			01/04/13 21:12	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			01/04/13 21:12	1
o-Xylene	ND		0.50		ug/L			01/04/13 21:12	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			01/04/13 21:12	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			01/04/13 21:12	1
Toluene	ND		0.50		ug/L			01/04/13 21:12	1
Xylenes, Total	ND		1.0		ug/L			01/04/13 21:12	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	100		80 - 120		01/04/13 21:12	1
Dibromofluoromethane (Surr)	93		80 - 120		01/04/13 21:12	1
Toluene-d8 (Surr)	105		80 - 120		01/04/13 21:12	1

Lab Sample ID: LCS 440-77179/8

Matrix: Water

Analysis Batch: 77179

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS	LCS	%Rec.		
	Added	Result	Qualifier	Unit	D	%Rec
Benzene	25.0	21.5		ug/L	86	70 - 120
Isopropyl Ether (DIPE)	25.0	21.9		ug/L	87	60 - 135
Ethanol	250	394	*	ug/L	158	40 - 155
Ethyl-t-butyl ether (ETBE)	25.0	17.3		ug/L	69	65 - 135
Ethylbenzene	25.0	22.5		ug/L	90	75 - 125
m,p-Xylene	50.0	45.6		ug/L	91	75 - 125
Methyl-t-Butyl Ether (MTBE)	25.0	20.3		ug/L	81	60 - 135
o-Xylene	25.0	23.4		ug/L	94	75 - 125
Tert-amyl-methyl ether (TAME)	25.0	19.1		ug/L	76	60 - 135
tert-Butyl alcohol (TBA)	125	149		ug/L	119	70 - 135
Toluene	25.0	23.5		ug/L	94	70 - 120

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	97		80 - 120
Toluene-d8 (Surr)	106		80 - 120

Lab Sample ID: 440-33829-1 MS

Matrix: Water

Analysis Batch: 77179

Client Sample ID: MW-4

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	%Rec.		
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec
Benzene	ND		25.0	23.3		ug/L	93	65 - 125
Isopropyl Ether (DIPE)	ND		25.0	25.2		ug/L	101	60 - 140

TestAmerica Irvine

QC Sample Results

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

TestAmerica Job ID: 440-33829-1

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

Lab Sample ID: 440-33829-1 MS

Matrix: Water

Analysis Batch: 77179

**Client Sample ID: MW-4
Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Ethanol	ND	*	250	400	F	ug/L		160	40 - 155
Ethyl-t-butyl ether (ETBE)	ND		25.0	20.9		ug/L		84	60 - 135
Ethylbenzene	ND		25.0	24.3		ug/L		97	65 - 130
m,p-Xylene	ND		50.0	49.0		ug/L		98	65 - 130
Methyl-t-Butyl Ether (MTBE)	0.55		25.0	25.7		ug/L		101	55 - 145
o-Xylene	ND		25.0	25.4		ug/L		102	65 - 125
Tert-amyl-methyl ether (TAME)	ND		25.0	23.4		ug/L		94	60 - 140
tert-Butyl alcohol (TBA)	ND		125	159		ug/L		128	65 - 140
Toluene	ND		25.0	25.9		ug/L		104	70 - 125
Surrogate									
4-Bromofluorobenzene (Surr)	99			Limits					
Dibromofluoromethane (Surr)	99			80 - 120					
Toluene-d8 (Surr)	104			80 - 120					

Lab Sample ID: 440-33829-1 MSD

Matrix: Water

Analysis Batch: 77179

**Client Sample ID: MW-4
Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Benzene	ND		25.0	24.2		ug/L		97	65 - 125
Isopropyl Ether (DIPE)	ND		25.0	24.7		ug/L		99	60 - 140
Ethanol	ND	*	250	439	F	ug/L		176	40 - 155
Ethyl-t-butyl ether (ETBE)	ND		25.0	19.8		ug/L		79	60 - 135
Ethylbenzene	ND		25.0	24.5		ug/L		98	65 - 130
m,p-Xylene	ND		50.0	49.7		ug/L		99	65 - 130
Methyl-t-Butyl Ether (MTBE)	0.55		25.0	23.7		ug/L		93	55 - 145
o-Xylene	ND		25.0	25.8		ug/L		103	65 - 125
Tert-amyl-methyl ether (TAME)	ND		25.0	22.5		ug/L		90	60 - 140
tert-Butyl alcohol (TBA)	ND		125	162		ug/L		129	65 - 140
Toluene	ND		25.0	25.9		ug/L		103	70 - 125
Surrogate									
4-Bromofluorobenzene (Surr)	99			Limits					
Dibromofluoromethane (Surr)	99			80 - 120					
Toluene-d8 (Surr)	106			80 - 120					

Lab Sample ID: MB 440-77229/4

Matrix: Water

Analysis Batch: 77229

**Client Sample ID: Method Blank
Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	ND		0.50		ug/L			01/05/13 12:12	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			01/05/13 12:12	1
Ethanol	ND		150		ug/L			01/05/13 12:12	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			01/05/13 12:12	1
Ethylbenzene	ND		0.50		ug/L			01/05/13 12:12	1
m,p-Xylene	ND		1.0		ug/L			01/05/13 12:12	1

TestAmerica Irvine

QC Sample Results

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

TestAmerica Job ID: 440-33829-1

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

Lab Sample ID: MB 440-77229/4

Matrix: Water

Analysis Batch: 77229

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Methyl-t-Butyl Ether (MTBE)	ND				0.50		ug/L			01/05/13 12:12	1
o-Xylene	ND				0.50		ug/L			01/05/13 12:12	1
Tert-amyl-methyl ether (TAME)	ND				0.50		ug/L			01/05/13 12:12	1
tert-Butyl alcohol (TBA)	ND				10		ug/L			01/05/13 12:12	1
Toluene	ND				0.50		ug/L			01/05/13 12:12	1
Xylenes, Total	ND				1.0		ug/L			01/05/13 12:12	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
4-Bromofluorobenzene (Surr)	107		80 - 120				01/05/13 12:12	1
Dibromofluoromethane (Surr)	107		80 - 120				01/05/13 12:12	1
Toluene-d8 (Surr)	106		80 - 120				01/05/13 12:12	1

Lab Sample ID: LCS 440-77229/5

Matrix: Water

Analysis Batch: 77229

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spikes	LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits	%Rec.
	Added	Result	Qualifier							
Benzene	25.0	25.6				ug/L		102	70 - 120	
Isopropyl Ether (DIPE)	25.0	31.9				ug/L		128	60 - 135	
Ethanol	250	322				ug/L		129	40 - 155	
Ethyl-t-butyl ether (ETBE)	25.0	27.3				ug/L		109	65 - 135	
Ethylbenzene	25.0	25.7				ug/L		103	75 - 125	
m,p-Xylene	50.0	48.7				ug/L		97	75 - 125	
Methyl-t-Butyl Ether (MTBE)	25.0	28.4				ug/L		114	60 - 135	
o-Xylene	25.0	25.3				ug/L		101	75 - 125	
Tert-amyl-methyl ether (TAME)	25.0	28.3				ug/L		113	60 - 135	
tert-Butyl alcohol (TBA)	125	138				ug/L		110	70 - 135	
Toluene	25.0	25.3				ug/L		101	70 - 120	

Surrogate	LCS	LCS	%Recovery	Qualifier	Limits
	Result	Qualifier			
4-Bromofluorobenzene (Surr)	108		80 - 120		
Dibromofluoromethane (Surr)	111		80 - 120		
Toluene-d8 (Surr)	109		80 - 120		

Lab Sample ID: 440-33830-E-2 MS

Matrix: Water

Analysis Batch: 77229

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Result	Qualifier	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier						
Benzene	ND		25.0	24.8				ug/L		99	65 - 125
Isopropyl Ether (DIPE)	ND		25.0	31.9				ug/L		128	60 - 140
Ethanol	ND		250	290				ug/L		116	40 - 155
Ethyl-t-butyl ether (ETBE)	ND		25.0	27.8				ug/L		111	60 - 135
Ethylbenzene	4.1		25.0	29.1				ug/L		100	65 - 130
m,p-Xylene	9.4		50.0	57.5				ug/L		96	65 - 130
Methyl-t-Butyl Ether (MTBE)	ND		25.0	29.9				ug/L		118	55 - 145
o-Xylene	1.4		25.0	26.6				ug/L		101	65 - 125
Tert-amyl-methyl ether (TAME)	ND		25.0	28.6				ug/L		114	60 - 140

TestAmerica Irvine

QC Sample Results

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

TestAmerica Job ID: 440-33829-1

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

Lab Sample ID: 440-33830-E-2 MS

Matrix: Water

Analysis Batch: 77229

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec.	%Limits
	Result	Qualifier	Added	Result	Qualifier				
tert-Butyl alcohol (TBA)	ND		125	129		ug/L		103	65 - 140
Toluene	0.58		25.0	25.0		ug/L		98	70 - 125
Surrogate									
4-Bromofluorobenzene (Surr)	110			80 - 120					
Dibromofluoromethane (Surr)	110			80 - 120					
Toluene-d8 (Surr)	109			80 - 120					

Lab Sample ID: 440-33830-E-2 MSD

Matrix: Water

Analysis Batch: 77229

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Benzene	ND		25.0	24.6		ug/L		98	65 - 125	1	20
Isopropyl Ether (DIPE)	ND		25.0	31.7		ug/L		127	60 - 140	1	25
Ethanol	ND		250	296		ug/L		119	40 - 155	2	30
Ethyl-t-butyl ether (ETBE)	ND		25.0	27.4		ug/L		110	60 - 135	2	25
Ethylbenzene	4.1		25.0	28.2		ug/L		96	65 - 130	3	20
m,p-Xylene	9.4		50.0	55.2		ug/L		92	65 - 130	4	25
Methyl-t-Butyl Ether (MTBE)	ND		25.0	28.9		ug/L		114	55 - 145	3	25
o-Xylene	1.4		25.0	25.3		ug/L		96	65 - 125	5	20
Tert-amyl-methyl ether (TAME)	ND		25.0	27.9		ug/L		112	60 - 140	2	30
tert-Butyl alcohol (TBA)	ND		125	132		ug/L		106	65 - 140	2	25
Toluene	0.58		25.0	25.2		ug/L		98	70 - 125	0	20
Surrogate											
4-Bromofluorobenzene (Surr)	103			80 - 120							
Dibromofluoromethane (Surr)	111			80 - 120							
Toluene-d8 (Surr)	108			80 - 120							

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

Lab Sample ID: MB 440-76483/4

Matrix: Water

Analysis Batch: 76483

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			01/02/13 08:31	1
Surrogate									
4-Bromofluorobenzene (Surr)	90		65 - 140				Prepared	Analyzed	Dil Fac
							01/02/13 08:31		1

TestAmerica Irvine

QC Sample Results

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

TestAmerica Job ID: 440-33829-1

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

Lab Sample ID: LCS 440-76483/3

Matrix: Water

Analysis Batch: 76483

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	641		ug/L		80	80 - 120
Surrogate								
Surrogate		LCS	LCS	Limits	Unit	D	%Rec	%Rec.
		%Recovery	Qualifier					
4-Bromofluorobenzene (Surr)		130		65 - 140				

Lab Sample ID: 440-33676-A-3 MS

Matrix: Water

Analysis Batch: 76483

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
GRO (C4-C12)	ND		800	694		ug/L		83	65 - 140
Surrogate									
Surrogate		MS	MS	Limits	Unit	D	%Rec	Limits	RPD
		%Recovery	Qualifier						
4-Bromofluorobenzene (Surr)		144	X	65 - 140					

Lab Sample ID: 440-33676-A-3 MSD

Matrix: Water

Analysis Batch: 76483

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
GRO (C4-C12)	ND		800	713		ug/L		85	65 - 140
Surrogate									
Surrogate		MSD	MSD	Limits	Unit	D	%Rec	Limits	RPD
		%Recovery	Qualifier						
4-Bromofluorobenzene (Surr)		149	X	65 - 140					

Lab Sample ID: MB 440-76765/3

Matrix: Water

Analysis Batch: 76765

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			01/03/13 09:21	1
Surrogate									
Surrogate		MB	MB	Limits	Unit	D	Prepared	Analyzed	Dil Fac
		%Recovery	Qualifier						
4-Bromofluorobenzene (Surr)		108		65 - 140				01/03/13 09:21	1

Lab Sample ID: LCS 440-76765/2

Matrix: Water

Analysis Batch: 76765

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	731		ug/L		91	80 - 120	
Surrogate								
Surrogate		LCS	LCS	Limits	Unit	D	Prepared	Analyzed
		%Recovery	Qualifier					
4-Bromofluorobenzene (Surr)		134		65 - 140				

QC Sample Results

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

TestAmerica Job ID: 440-33829-1

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

Lab Sample ID: 440-33883-B-1 MS

Matrix: Water

Analysis Batch: 76765

**Client Sample ID: Matrix Spike
Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec.	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
GRO (C4-C12)	2200		8000	9320		ug/L		89	65 - 140
Surrogate									
4-Bromofluorobenzene (Surr)	126			65 - 140					

Lab Sample ID: 440-33883-B-1 MSD

Matrix: Water

Analysis Batch: 76765

**Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier						
GRO (C4-C12)	2200		8000	9430		ug/L		90	65 - 140	1	20
Surrogate											
4-Bromofluorobenzene (Surr)	134			65 - 140							

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

Lab Sample ID: MB 440-76724/1-A

Matrix: Water

Analysis Batch: 76522

**Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 76724**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
DRO (C13-C28)	ND		0.050		mg/L		01/02/13 19:02	01/03/13 00:00	1
Surrogate									
n-Octacosane	83		45 - 120				Prepared	Analyzed	Dil Fac

Lab Sample ID: LCS 440-76724/2-A

Matrix: Water

Analysis Batch: 76522

**Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76724**

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	Limits
	Added	Result	Qualifier				
EFH (C10-C28)	1.00	0.844		mg/L		84	40 - 115
Surrogate							
n-Octacosane	85		45 - 120				Dil Fac

Lab Sample ID: LCSD 440-76724/3-A

Matrix: Water

Analysis Batch: 76522

**Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 76724**

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec.	Limits	RPD	RPD
	Added	Result	Qualifier						
EFH (C10-C28)	1.00	0.834		mg/L		83	40 - 115	1	25
Surrogate									
n-Octacosane	87		45 - 120				Dil Fac		

TestAmerica Irvine

QC Sample Results

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

TestAmerica Job ID: 440-33829-1

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

Lab Sample ID: MB 440-76760/1-A

Matrix: Water

Analysis Batch: 76785

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 76760

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
DRO (C13-C28)	ND		0.050		mg/L		01/03/13 08:29	01/03/13 17:39	1
Surrogate									
n-Octacosane	MB	MB	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
	97				45 - 120				
Lab Sample ID: LCS 440-76760/2-A									

Matrix: Water

Analysis Batch: 76785

Analyte	Spike		LCS	LCS	Unit	D	%Rec.	Limits	
	Added	Result							
EFH (C10-C28)		1.00	0.881		mg/L		88	40 - 115	
Surrogate									
n-Octacosane	LCS	LCS	%Recovery	Qualifier	Limits				
	95				45 - 120				

Lab Sample ID: LCSD 440-76760/3-A

Matrix: Water

Analysis Batch: 76785

Analyte	Spike		LCSD	LCSD	Unit	D	%Rec.	Limits	RPD
	Added	Result							
EFH (C10-C28)		1.00	0.875		mg/L		87	40 - 115	1
Surrogate									
n-Octacosane	LCSD	LCSD	%Recovery	Qualifier	Limits				
	91				45 - 120				

Lab Sample ID: MB 440-76520/1-A

Matrix: Water

Analysis Batch: 76522

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
DRO (C13-C28)	ND		0.050		mg/L		01/02/13 08:35	01/02/13 19:19	1
Surrogate									
n-Octacosane	MB	MB	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
	79				45 - 120				

Lab Sample ID: LCS 440-76520/2-A

Matrix: Water

Analysis Batch: 76522

Analyte	Spike		LCS	LCS	Unit	D	%Rec.	Limits	
	Added	Result							
EFH (C10-C28)		1.00	0.789		mg/L		79	40 - 115	
Surrogate									
n-Octacosane	LCS	LCS	%Recovery	Qualifier	Limits				
	86				45 - 120				

QC Sample Results

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

TestAmerica Job ID: 440-33829-1

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

Lab Sample ID: LCSD 440-76520/3-A

Matrix: Water

Analysis Batch: 76522

Analyte		Spike	LCSD	LCSD	Unit	D	%Rec.	RPD	Limit
		Added	Result	Qualifier					
EFH (C10-C28)		1.00	0.780		mg/L				
Surrogate									
Surrogate		LCSD	LCSD	Limits					
		%Recovery	Qualifier						
n-Octacosane		85		45 - 120					

Lab Sample ID: MB 440-79320/1-A

Matrix: Water

Analysis Batch: 78944

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
DRO (C13-C28)	ND		0.050		mg/L				
Surrogate									
Surrogate	MB	MB	Limits				Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
n-Octacosane	91		45 - 120				01/03/13 08:29	01/16/13 12:18	1

Lab Sample ID: LCS 440-79320/2-A

Matrix: Water

Analysis Batch: 78944

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec.	Limits	
	Added	Result	Qualifier					
EFH (C10-C28)	1.00	0.748		mg/L				
Surrogate								
Surrogate	LCSD	LCSD	Limits					
	%Recovery	Qualifier						
n-Octacosane	83		45 - 120					

Lab Sample ID: LCSD 440-79320/3-A

Matrix: Water

Analysis Batch: 78944

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec.	Limits		
	Added	Result	Qualifier						
EFH (C10-C28)	1.00	0.676		mg/L					
Surrogate									
Surrogate	LCSD	LCSD	Limits						
	%Recovery	Qualifier							
n-Octacosane	76		45 - 120						

QC Association Summary

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

TestAmerica Job ID: 440-33829-1

GC/MS VOA

Analysis Batch: 77179

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-33829-1	MW-4	Total/NA	Water	8260B	
440-33829-1 MS	MW-4	Total/NA	Water	8260B	
440-33829-1 MSD	MW-4	Total/NA	Water	8260B	
440-33829-2	MW-5B	Total/NA	Water	8260B	
440-33829-4	MW-7	Total/NA	Water	8260B	
440-33829-5	MW-9	Total/NA	Water	8260B	
440-33829-6	MW-10	Total/NA	Water	8260B	
440-33829-7	MW-11	Total/NA	Water	8260B	
440-33829-8	MW-12	Total/NA	Water	8260B	
440-33829-9	TB-20121228	Total/NA	Water	8260B	
LCS 440-77179/8	Lab Control Sample	Total/NA	Water	8260B	
MB 440-77179/7	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 77229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-33829-3	MW-6	Total/NA	Water	8260B	
440-33830-E-2 MS	Matrix Spike	Total/NA	Water	8260B	
440-33830-E-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 440-77229/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-77229/4	Method Blank	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 76483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-33676-A-3 MS	Matrix Spike	Total/NA	Water	8015B	
440-33676-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	
440-33829-1	MW-4	Total/NA	Water	8015B	
440-33829-2	MW-5B	Total/NA	Water	8015B	
440-33829-4	MW-7	Total/NA	Water	8015B	
440-33829-5	MW-9	Total/NA	Water	8015B	
440-33829-6	MW-10	Total/NA	Water	8015B	
440-33829-7	MW-11	Total/NA	Water	8015B	
440-33829-9	TB-20121228	Total/NA	Water	8015B	
LCS 440-76483/3	Lab Control Sample	Total/NA	Water	8015B	
MB 440-76483/4	Method Blank	Total/NA	Water	8015B	

Analysis Batch: 76765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-33829-3	MW-6	Total/NA	Water	8015B	
440-33829-8	MW-12	Total/NA	Water	8015B	
440-33883-B-1 MS	Matrix Spike	Total/NA	Water	8015B	
440-33883-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	
LCS 440-76765/2	Lab Control Sample	Total/NA	Water	8015B	
MB 440-76765/3	Method Blank	Total/NA	Water	8015B	

QC Association Summary

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

TestAmerica Job ID: 440-33829-1

GC Semi VOA

Prep Batch: 76520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-33829-1	MW-4	Silica Gel Cleanup	Water	3510C SGC	5
440-33829-2	MW-5B	Silica Gel Cleanup	Water	3510C SGC	6
440-33829-3	MW-6	Silica Gel Cleanup	Water	3510C SGC	7
440-33829-4	MW-7	Silica Gel Cleanup	Water	3510C SGC	8
440-33829-5	MW-9	Silica Gel Cleanup	Water	3510C SGC	9
440-33829-6	MW-10	Silica Gel Cleanup	Water	3510C SGC	10
440-33829-7	MW-11	Silica Gel Cleanup	Water	3510C SGC	11
440-33829-8	MW-12	Silica Gel Cleanup	Water	3510C SGC	12
LCS 440-76520/2-A	Lab Control Sample	Silica Gel Cleanup	Water	3510C SGC	
LCSD 440-76520/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	3510C SGC	
MB 440-76520/1-A	Method Blank	Silica Gel Cleanup	Water	3510C SGC	

Analysis Batch: 76522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-33829-1	MW-4	Silica Gel Cleanup	Water	8015B	76520
440-33829-1	MW-4	Total/NA	Water	8015B	76724
440-33829-2	MW-5B	Silica Gel Cleanup	Water	8015B	76520
440-33829-3	MW-6	Silica Gel Cleanup	Water	8015B	76520
440-33829-4	MW-7	Silica Gel Cleanup	Water	8015B	76520
LCS 440-76520/2-A	Lab Control Sample	Silica Gel Cleanup	Water	8015B	76520
LCS 440-76724/2-A	Lab Control Sample	Total/NA	Water	8015B	76724
LCSD 440-76520/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	8015B	76520
LCSD 440-76724/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	76724
MB 440-76520/1-A	Method Blank	Silica Gel Cleanup	Water	8015B	76520
MB 440-76724/1-A	Method Blank	Total/NA	Water	8015B	76724

Analysis Batch: 76523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-33829-5	MW-9	Silica Gel Cleanup	Water	8015B	76520
440-33829-6	MW-10	Silica Gel Cleanup	Water	8015B	76520
440-33829-7	MW-11	Silica Gel Cleanup	Water	8015B	76520
440-33829-8	MW-12	Silica Gel Cleanup	Water	8015B	76520

Prep Batch: 76724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-33829-1	MW-4	Total/NA	Water	3510C	
LCS 440-76724/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 440-76724/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 440-76724/1-A	Method Blank	Total/NA	Water	3510C	

Prep Batch: 76760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-33829-2	MW-5B	Total/NA	Water	3510C	
440-33829-3	MW-6	Total/NA	Water	3510C	
440-33829-4	MW-7	Total/NA	Water	3510C	
440-33829-5	MW-9	Total/NA	Water	3510C	
440-33829-6	MW-10	Total/NA	Water	3510C	
440-33829-7	MW-11	Total/NA	Water	3510C	
440-33829-8	MW-12	Total/NA	Water	3510C	
LCS 440-76760/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 440-76760/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

TestAmerica Irvine

QC Association Summary

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

TestAmerica Job ID: 440-33829-1

GC Semi VOA (Continued)

Prep Batch: 76760 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 440-76760/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 76785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 440-76760/2-A	Lab Control Sample	Total/NA	Water	8015B	76760
LCSD 440-76760/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	76760
MB 440-76760/1-A	Method Blank	Total/NA	Water	8015B	76760

Analysis Batch: 76786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-33829-3	MW-6	Total/NA	Water	8015B	76760
440-33829-4	MW-7	Total/NA	Water	8015B	76760
440-33829-5	MW-9	Total/NA	Water	8015B	76760
440-33829-6	MW-10	Total/NA	Water	8015B	76760
440-33829-7	MW-11	Total/NA	Water	8015B	76760
440-33829-8	MW-12	Total/NA	Water	8015B	76760

Analysis Batch: 76787

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-33829-2	MW-5B	Total/NA	Water	8015B	76760

Analysis Batch: 78944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-33829-6	MW-10	Silica Gel Cleanup	Water	8015B	79320
LCS 440-79320/2-A	Lab Control Sample	Silica Gel Cleanup	Water	8015B	79320
LCSD 440-79320/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	8015B	79320
MB 440-79320/1-A	Method Blank	Silica Gel Cleanup	Water	8015B	79320

Prep Batch: 79320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-33829-6	MW-10	Silica Gel Cleanup	Water	3510C SGC	
LCS 440-79320/2-A	Lab Control Sample	Silica Gel Cleanup	Water	3510C SGC	
LCSD 440-79320/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	3510C SGC	
MB 440-79320/1-A	Method Blank	Silica Gel Cleanup	Water	3510C SGC	

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Definitions/Glossary

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

TestAmerica Job ID: 440-33829-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
F	MS or MSD exceeds the control limits
ID	Analyte identified by RT & presence of single mass ion

GC VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

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
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDA	Minimum detectable activity
MDC	Minimum detectable concentration
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
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

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Certification Summary

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

TestAmerica Job ID: 440-33829-1

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-13
Arizona	State Program	9	AZ0671	10-13-13
California	LA Cty Sanitation Districts	9	10256	01-31-13
California	NELAP	9	1108CA	01-31-13
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	01-23-13
Hawaii	State Program	9	N/A	01-31-13
Nevada	State Program	9	CA015312007A	07-31-13
New Mexico	State Program	6	N/A	01-31-13
Northern Mariana Islands	State Program	9	MP0002	01-31-13
Oregon	NELAP	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-13

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Irvine

17461 Derian Ave

Suite 100

Irvine, CA 92614

phone 949.261.1022 fax 949.260.3299

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Chain of Custody Record**TestAmerica Laboratories, Inc.**

Client Contact		Project Manager: Toni DeMayo Tel/Fax: (916) 985-2079			Site Contact:		Date: 12/28/12	COC No: <u>1</u> of <u>1</u> COCs
Arcadis - U.S., Inc. - Irvine 320 Commerce, Suite 200 Irvine, CA 92602 714-508-2657 Phone 714-730-9345 FAX Project Name: 3810 Broadway Terrace, Oakland, CA Site: 21-1283 P.O. Global ID: T0600101108		Analysis Turnaround Time Calendar (C) or Work Days (W) TAT if different from Below <input checked="" type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day			Lab Contact: Sushmitha Reddy Carrier:		Job No. <u>440-33829</u>	SDG No.
								Sample Specific Notes:
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Entered Sample	ERR0 by EPA 8015 NID00 BTEX & MTHFR 8260(B)	Entered by 8260(B) DIO with Silica Gel Clean Up by 8015
MW-4	12/26/12 0920	<u>Gel</u>	W	9	X	X X X X X	X	
MW-5B	11/30	<u>Gel</u>	W	9	X	X X X X X	X	
MW-6	13/15		W	9	X	X X X X X	X	
MW-7	10/31		W	9	X	X X X X X	X	
MW-9	09/58		W	9	X	X X X X X	X	
MW-10	12/46		W	9	X	X X X X X	X	
MW-11	12/10		W	9	X	X X X X X	X	
MW-12	10/46		W	9	X	X X X X X	X	
TB-20121228	0800			4	X X			
Preservation Used: 1= Ice, 2= HCl; 3= H ₂ SO ₄ ; 4= HNO ₃ ; 5= NaOH; 6= Other					1,2	1,2	1,1	1
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Unknown					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <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: <u>Dee</u>	Company: <u>TS</u>	Date/Time: <u>12/28/12 1515</u>	Received by: <u>Dee</u>	Company: <u>TA</u>	Date/Time: <u>12/28/12 1530</u>			
Relinquished by: <u>Dee</u>	Company: <u>TA</u>	Date/Time: <u>12/28/12 1800</u>	Received by: <u>Dee</u>	Company: <u>TA</u>	Date/Time: <u>12/29/12 1030</u>			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:			

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 440-33829-1

Login Number: 33829

List Source: TestAmerica Irvine

List Number: 1

Creator: Escalante, Maria

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are 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?	False	NOT ON COC
There are no discrepancies between the containers received 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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	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*	DTW	GWE	SPHT	TPH-DRO ($\mu\text{g/L}$)	TPH-GRO					MTBE by 8021†	MTBE by 8260	ETHANOL ($\mu\text{g/L}$)
						GRO ($\mu\text{g/L}$)	B ($\mu\text{g/L}$)	T ($\mu\text{g/L}$)	E ($\mu\text{g/L}$)	X ($\mu\text{g/L}$)			
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 [‡]	-
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	-	- [§]	204	10.7	<0.500	<0.500	<0.500	-	-	-
06/19/01 [¶]	86.92	21.78	65.14	-	330	<50	<0.50	<0.50	<0.50	<0.50	-	0.87	-
09/05/01 [¶]	86.92	24.37	62.55	-	400	74	<0.50	0.63	<0.50	2.7	-	<5.0	-
12/20/01 [¶]	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 [§]	<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 [¶]	86.69	21.34	65.35	0.00	310	<50	<0.5	<0.5	<0.5	<0.5	-	<0.5	-
09/22/03 [¶]	86.69	22.46	64.23	0.00	150	<50	<0.5	<0.5	<0.5	<0.5	-	<0.5	<50
12/22/03 [¶]	86.69	22.10	64.59	0.00	350	<50	<0.5	<0.5	<0.5	<0.5	-	<0.5	<50
03/22/04 [¶]	86.69	20.42	66.27	0.00	270	<50	<0.5	<0.5	<0.5	<0.5	-	2	<50
06/21/04 [¶]	86.69	21.93	64.76	0.00	130	<50	<0.5	<0.5	<0.5	<0.5	-	<0.5	<50
09/20/04 [¶]	86.69	22.99	63.70	0.00	240	<50	<0.5	<0.5	<0.5	<0.5	-	<0.5	<50
12/20/04 [¶]	86.69	21.78	64.91	0.00	320 [§]	<50	<0.5	<0.5	<0.5	<0.5	-	<0.5	<50
03/28/05 [¶]	86.69	19.28	67.41	0.00	400 [§]	<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*	DTW	GWE	SPHT	TPH-	TPH-	B	T	E	X	MTBE by	MTBE by
					DRO	GRO					8021†	8260
(ft)	(ft)	(msl)	(ft)	(ft)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(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
09/19/05 ¹⁰	86.69	22.17	64.52	0.00	62	<50	<0.5	<0.5	<0.5	<0.5	-	<0.5
12/19/05 ¹⁰	86.69	22.06	64.63	0.00	360 ¹⁶	<50	<0.5	0.8	<0.5	<0.5	-	<0.5
03/27/06 ¹⁰	86.69	18.27	68.42	0.00	320	77	<0.5	0.5	2	4	-	<0.5
06/26/06 ¹⁰	86.69	20.20	66.49	0.00	290	<50	<0.5	<0.5	<0.5	<0.5	-	<0.5
09/25/06 ¹⁰	86.69	21.86	64.83	0.00	270	<50	<0.5	<0.5	<0.5	<0.5	-	<0.5
12/18/06	86.69	21.60	65.09	UNABLE TO SAMPLE - DUE TO BENT WELL CASING					--	--	-	-
03/19/07 ¹⁰	NP ¹⁸	20.82	65.87	0.00	630	<50	<0.5	<0.5	<0.5	<0.5	-	<0.5
06/25/07 ¹⁰	NP ¹⁸	28.62	58.07	0.00	4,100 ¹⁹	<50	<0.5	<0.5	<0.5	<0.5	-	<0.5
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	25.87	60.82	0.00	2,200	760	<0.5	<0.5	<0.5	<0.5	-	<0.5
09/22/08 ¹⁰	NP ¹⁸	24.18	62.51	0.00	700	190	<0.5	<0.5	<0.5	<0.5	-	<0.5
12/22/08 ¹⁰	86.69	23.30	63.39	0.00	290	65	<0.5	<0.5	<0.5	<0.5	-	<0.5
03/23/09 ¹⁰	NP ¹⁸	21.35	65.34	0.00	1,500	<50	<0.5	<0.5	<0.5	<0.5	-	0.9
06/22/09 ¹⁰	NP ¹⁸	22.06	64.63	0.00	87	<50	<0.5	<0.5	<0.5	<0.5	-	<0.5
12/02/09 ¹⁰	86.69	25.02	61.67	0.00	530	<50	<0.5	<0.5	<0.5	<0.5	-	<0.5
06/26/10 ¹⁰	NP ¹⁸	24.83	61.86	0.00	340	<50	<0.5	<0.5	<0.5	<0.5	-	<0.5
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*	DTW (ft)	GWE (msl)	SPHT (ft)	TPH-	TPH-	B ($\mu\text{g/L}$)	T ($\mu\text{g/L}$)	E ($\mu\text{g/L}$)	X ($\mu\text{g/L}$)	MTBE by	MTBE by	
					DRG ($\mu\text{g/L}$)	GRO ($\mu\text{g/L}$)					8021♦ ($\mu\text{g/L}$)	8260 ($\mu\text{g/L}$)	ETHANOL ($\mu\text{g/L}$)
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- DRQ ($\mu\text{g/L}$)	TPH-					MTBE by 8021† ($\mu\text{g/L}$)	MTBE by 8260 ($\mu\text{g/L}$)	ETHANOL ($\mu\text{g/L}$)
						GRO ($\mu\text{g/L}$)	B ($\mu\text{g/L}$)	T ($\mu\text{g/L}$)	E ($\mu\text{g/L}$)	X ($\mu\text{g/L}$)			
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

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

WELL ID/ DATE	TOC*	DTW	GWE	SPHT	TPH- DRG ($\mu\text{g/L}$)	TPH- GRO ($\mu\text{g/L}$)					MTBE by 8021♦ ($\mu\text{g/L}$)	MTBE by 8260 ($\mu\text{g/L}$)	ETHANOL ($\mu\text{g/L}$)
						B ($\mu\text{g/L}$)	T ($\mu\text{g/L}$)	E ($\mu\text{g/L}$)	X ($\mu\text{g/L}$)				
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	-	-

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

WELL ID/ DATE	TOC*	DTW	GWE	SPHT	TPH-	TPH-	B	T	E	X	MTBE by	MTBE by
					DRO	GRO					8021♦	8260
(ft.)	(ft.)	(mst)	(ft.)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)
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
12/22/03 ¹⁰	86.09	21.63	64.46	0.00	2,300	9,700	1,700	240	450	1,000	-	6
03/22/04 ¹⁰	86.09	20.31	65.78	0.00	2,700	23,000	1,500	1,400	830	2,800	-	4
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
09/20/04 ¹⁰	86.09	22.29	63.80	0.00	1,300	4,600	480	65	200	260	-	4
12/20/04 ¹⁰	86.09	21.33	64.76	0.00	1,500	9,500	1,500	220	450	840	-	5
03/28/05 ¹⁰	86.09	19.65	66.44	0.00	2,400 ⁹	13,000	1,100	550	600	1,600	-	3
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
09/19/05 ¹⁰	86.09	20.49	65.60	0.00	2,300	18,000	1,300	1,200	800	2,500	-	3
12/19/05 ¹⁰	86.09	21.49	64.60	0.00	1,900 ¹⁴	13,000	1,900	190	620	890	-	5
03/27/06 ¹⁰	86.09	18.28	67.81	0.00	1,300	14,000	740	420	600	1,400	-	2
06/26/06 ¹⁰	86.09	19.08	67.01	0.00	2,300	23,000	660	1,700	870	3,000	-	<3
09/25/06 ¹⁰	86.09	20.02	66.07	0.00	2,100	18,000	580	1,200	760	2,600	-	1
12/18/06 ¹⁰	86.09	20.57	65.52	0.00	2,700	14,000	1,200	370	680	1,300	-	4
03/19/07 ¹⁰	86.09	20.56	65.53	0.00	2,700	17,000	990	560	840	2,100	-	3
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
09/22/08 ¹⁰	86.09	23.51	62.58	0.00	780	1,400	52	<0.5	6	1	-	6
12/22/08 ¹⁰	86.09	22.75	63.34	0.00	880	1,100	39	<0.5	1	<0.5	-	6
03/23/09 ¹⁰	86.09	20.48	65.61	0.00	2,100	7,900	460	140	470	1,200	-	3
06/22/09 ¹⁰	86.09	21.40	64.69	0.00	1,900	7,300	370	210	330	810	-	4
12/02/09 ¹⁰	86.09	24.48	61.61	0.00	1,200	3,200	170	10	39	42	-	3
06/26/10 ¹⁰	86.09	24.14	61.95	0.00	1,300	2,800	230	14	110	120	-	3

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

WELL ID/ DATE	TOC* (%)	DTW (ft.)	GWE (msl)	SPHT (ft.)	TPH-	TPH-	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE by	MTBE by	ETHANOL (µg/L)
					DRG (µg/L)	GRO (µg/L)					8021♦ (µg/L)	8260 (µg/L)	
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	--	-- ^s	<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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3810 Broadway
Oakland, California

WELL ID/ DATE	TOC*	DTW	GWE	SPHT	TPH-	TPH-	B	T	E	X	MTBE by	MTBE by	ETHANOL
					DRO	GRO					8021♦	8260	
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	<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 ¹⁸	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	-	-

Table 1
Groundwater Monitoring Data and Analytical Results
Former Texaco Service Station (Site #211283)
3810 Broadway
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WELL ID/ DATE	TOC*	DTW	GWE	SPHT	TPH-	TPH-						MTBE by	MTBE by
					DRO	GRO	B	T	E	X	8021♦	8260	ETHANOL
(%)	(ft)	(msl)	(ft)	(ft)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(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 ^b	82.52	17.83	64.69	—	<50	<50	<0.50	<0.50	<0.50	<0.50	—	<0.50	—
09/05/01 ^b	82.52	17.98	64.54	—	<50	<50	<0.50	<0.50	<0.50	1.6	—	<5.0	—
12/20/01 ^b	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
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Former Texaco Service Station (Site #211283)
3810 Broadway
Oakland, California

WELL ID/ DATE	TOC*	DTW	GWE	SPHT	TPH-DRO ($\mu\text{g/L}$)	TPH-GRO ($\mu\text{g/L}$)	MTBE by					
							B	T	E	X	8021♦	8260
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
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
12/02/09 ¹⁰	82.17	20.44	61.73	0.00	90	<50	<0.5	<0.5	<0.5	<0.5	-	21
06/26/10 ¹⁰	82.17	20.38	61.79	0.00	120	<50	<0.5	<0.5	<0.5	<0.5	-	13
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

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3810 Broadway
Oakland, California

WELL ID/ DATE	TOC*	DTW	GWE	SPHT	TPH-DRO ($\mu\text{g/L}$)	TPH-GRO					MTBE by 8021♦	MTBE by 8260	ETHANOL ($\mu\text{g/L}$)
						GRO ($\mu\text{g/L}$)	B ($\mu\text{g/L}$)	T ($\mu\text{g/L}$)	E ($\mu\text{g/L}$)	X ($\mu\text{g/L}$)			
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 ¹¹	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*	DTW	GWE (msl)	SPHT (ft)	TPH-	TPH-	B ($\mu\text{g/L}$)	T ($\mu\text{g/L}$)	E ($\mu\text{g/L}$)	X ($\mu\text{g/L}$)	MTBE by	MTBE by	
					DRQ ($\mu\text{g/L}$)	GRO ($\mu\text{g/L}$)					8021♦	8260 ($\mu\text{g/L}$)	ETHANOL ($\mu\text{g/L}$)
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
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	TPH- GRO	B	T	E	X	MTBE by 8021*	MTBE by 8260	ETHANOL ($\mu\text{g/L}$)
					($\mu\text{g/L}$)								
MW-11 (cont)													
03/23/09 ¹⁰	- ⁸	25.03	- ⁸	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	-	<0.5	<50
06/22/09 ¹⁰	- ⁸	25.84	- ⁸	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	-	<0.5	<50
12/02/09 ¹⁰	- ⁸	28.54	- ⁸	0.00	<50	<50	<0.5	<0.5	<0.5	0.8	-	<0.5	<50
06/26/10 ¹⁰	- ⁸	28.58	- ⁸	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*	DTW	GWE	SPHT	TPH-	TPH-	B	T	E	X	MTBE by	MTBE by	
					DRO	GRO					8021†	8260	ETHANOL
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
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Former Texaco Service Station (Site #211283)
3810 Broadway
Oakland, California

WELL ID/ DATE	TOC* (%)	DTW (ft.)	GWE (msl)	SPHT (ft.)	TPH- DRQ	TPH- GRO	B	T	E	X	MTBE by 8021♦	MTBE by 8260	ETHANOL
					($\mu\text{g/L}$)								
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													

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Former Texaco Service Station (Site #211283)

3810 Broadway
Oakland, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	SPHT (ft.)	TPH- DRO	TPH- GRO	B	T	E	X	MTBE by 8621†	MTBE by 8260	ETHANOL
					($\mu\text{g/L}$)								
MW-8													
10/10/96	84.01	20.82	63.19	-	110	17,000	1,300	1,200	64	1,300	110	<5.0 ^j	-
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	-

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3810 Broadway
Oakland, California

WELL ID/ DATE	TOC* (ft)	DTW (ft)	GWE (msl)	SPHT (ft)	TPH-DRO ($\mu\text{g/L}$)	TPH-GRO					MTBE by 8021♦ ($\mu\text{g/L}$)	MTBE by 8260 ($\mu\text{g/L}$)	ETHANOL ($\mu\text{g/L}$)
						B	T	E	X				
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

(ft.) = Feet

DTW = Depth to Water

GWE = Groundwater Elevation

(msl) = Mean Sea Level

SPH = Separate-phase hydrocarbons

SPHT = Separate-phase hydrocarbon thickness

TPH = Total Petroleum Hydrocarbons

DRO = Diesel Range Organics

GRO = Gasoline Range Organics

B = Benzene

T = Toluene

E = Ethylbenzene

X = Xylenes

MTBE = Methyl Tertiary Butyl Ether

(ppb) = Parts per billion

(μ g/L) = Micrograms per liter

-- = Not Measured/Not Analyzed

QA = Quality Assurance/Trip Blank

NP = No Purge

* 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 Purging (mg/L)	Pre Purging (mV)	Mid-Purging (mg/L)	Mid-Purging (mV)	Post Purging (mg/L)	Post Purging (mV)
MW-7	06/19/01	3.80	--	--	--	4.20	--
	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
	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 Toxicem 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.