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Transmittal

Date:	August 10, 2015	Reference No.:	240523

To: Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Subject: 4212 First Street, Pleasanton

No. of Copies	Description/Title	Drawing No./ Document Ref.	Issue
1	Second Quarter 2015 Groundwater Monitoring Report and Closure Request		

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Remarks:
If you have any questions regarding the contents of this document, please call the GHD project manager Peter Schaefer at (510) 420-3319 or the Shell program manager Perry Pineda at (425) 413-1164.

Copy to:
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Completed by: Peter Schaefer [Please Print]

Signed: Peter Schaefer

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Mr. Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: **4212 First Street, Pleasanton, California**
PlaNet Site ID 10008151
PlaNet Project ID 34796
ACEH Case No. RO0000360

Dear Mr. Wickham:

The attached document is provided for your review and comment. Upon information and belief, I declare, under penalty of perjury, that the information contained in the attached document is true and correct.

As always, please feel free to contact me directly at (425) 413-1164 with any questions or concerns.

Sincerely,
Shell Oil Products US

Perry Pineda
Senior Environmental Program Manager

Second Quarter 2015 Groundwater Monitoring Report and Closure Request

Shell-branded Service Station
4212 First Street
Pleasanton, California

PlaNet Site ID	10008151
PlaNet Project ID	34796
Agency No.	RO0000360

Shell Oil Products US

August 10, 2015

5900 Hollis Street Suite A Emeryville California 94608 USA

240523 | 15.03 | Report No 29

Executive Summary

- Historical groundwater monitoring data adequately define COC impacts in groundwater to below applicable RWQCB ESLs and demonstrate that the plume is not migrating.
- Petroleum hydrocarbons in soils have been adequately delineated to below RWQCB ESLs.
- Residual COC concentrations do not appear to pose a threat to human health or the environment. Residual COC concentrations in groundwater are decreasing or stable.
- This Site meets SWRCB's *Low-Threat Underground Storage Tank Case Closure Policy* criteria. Therefore we request closure of this case and that ACEH suspend the groundwater monitoring program during the closure review.

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1. Introduction

GHD Services Inc. (GHD) prepared this report on behalf of Equilon Enterprises LLC dba Shell Oil Products US (Shell) for the Shell-branded Service Station located at 4212 First Street, Pleasanton, California (Site). This report provides the second quarter 2015 groundwater monitoring report and an evaluation of Site data against the State Water Resources Control Board's (SWRCB's) *Low-Threat Underground Storage Tank Case Closure Policy* (the Policy) as requested in Alameda County Environmental Health's (ACEH's) March 26, 2015 letter.

2. Site Background

The subject Site is an active Shell-branded Service Station located on the southeastern corner of the First Street and Vineyard Avenue intersection in a mixed residential and commercial area of Pleasanton, California (Figure 1). The Site layout includes three current fuel underground storage tanks (USTs), a former fuel UST complex, two fuel dispenser islands, a former waste oil UST, and a station building (Figure 2).

A summary of previous work performed at the Site and additional background information is presented in Appendix A. Groundwater data from Site wells are presented in Table 1, historical soil data are presented in Table 2, and historical soil vapor data are presented in Table 3.

3. Second Quarter 2015 Groundwater Monitoring Report

3.1 Current Quarter's Activities

Blaine Tech Services, Inc. (Blaine) gauged and sampled the wells according to the established monitoring program for this Site. GHD prepared a groundwater contour and chemical concentration map (Figure 3), and a groundwater data table (Table 1). Blaine's field notes are presented in Appendix B, and the laboratory report is presented in Appendix C.

3.2 Current Quarter's Findings

Groundwater Flow Direction	Northerly to northeasterly
Hydraulic Gradient	0.06
Depth to Water	33.53 to 102.42 feet below top of well casing

3.3 Proposed Activities

Blaine will gauge and sample wells according to the established monitoring program for this Site. This Site is monitored semiannually during the second and fourth quarters, and GHD will issue groundwater monitoring reports semiannually following the sampling events.

Unless directed otherwise, CRA will discontinue analysis for monitored natural attenuation parameters nitrate as nitrogen, sulfate, alkalinity as calcium carbonate, and ferrous iron in well MW-3.

4. Evaluation Against the Policy

Current Site data demonstrates that Site conditions meet the SWRCB Policy general and media-specific groundwater, vapor, and direct exposure and outdoor air criteria. These criteria are addressed below.

4.1 General Criteria

4.1.1 Unauthorized Release is Located Within the Area of a Public Water System

The Site and surrounding area are located within the City of Pleasanton Water Division public water system service area.

4.1.2 Unauthorized Release Consists Only of Petroleum

The Site is a Shell-branded Service Station. Soil and groundwater impacts identified in Site investigations since 1985 consist only of petroleum hydrocarbons and fuel additives.

4.1.3 The Unauthorized ("Primary") Release From the UST System Has Been Stopped

The USTs were replaced in 1986, the waste oil UST was removed in 2006, the fuel system was upgraded in 1995, 1998, and 2005, and a faulty dispenser pan was replaced in 2009.

4.1.4 Free Product Has Been Removed to the Maximum Extent Practicable

No separate-phase hydrocarbons have been reported at the Site since groundwater monitoring began in 1999.

4.1.5 A Conceptual Site Model (CSM) That Assessed the Nature, Extent, and Mobility of the Release Has Been Developed

Delta Consultants (Delta) submitted CSMs in 2005 and 2006. The 2006 CSM and investigation and remediation reports submitted since 2006 constitute a complete CSM for the Site.

4.1.6 The Secondary Source Has Been Removed to the Extent Practicable

Following a gasoline spill in 1988, impacted soil was removed to a depth of 1 to 2 feet below grade (fbg) in the area of the pump islands. During dispenser replacement in 1995, approximately 40 cubic yards of soil were over-excavated at the direction of the Pleasanton Fire Department. From June to August 2007, Delta conducted monthly mobile dual-phase extraction (DPE) from well MW-4, which removed approximately 4,226 gallons of groundwater. During a DPE pilot test in 2009, Delta removed an estimated that 286 pounds of vapor-phase hydrocarbons and an estimated 0.23 pound of dissolved hydrocarbons were removed along with 2,748 gallons of groundwater. In 2013, Conestoga-Rovers & Associates conducted an air sparging, soil vapor extraction (SVE), and

DPE mass removal event (MRE). The SVE and DPE MRE removed approximately 1,550 gallons of groundwater and an estimated 144 pounds of volatile organic carbon mass.

4.1.7 Soil and Groundwater Have been Tested for Methyl tertiary-Butyl Ether (MTBE)

Soil samples collected since April 1999 (Table 2) and groundwater samples collected since May 2000 (Table 1) have been analyzed for MTBE.

4.1.8 Nuisance as Defined by Water Code Section 13050 Does Not Exist

Site conditions do not interfere with enjoyment of life or property, affect an entire community or neighborhood, or present a nuisance during or as a result of the treatment or disposal of wastes.

4.2 Media-Specific Criteria

4.2.1 Groundwater

The contaminant plume that exceeds water quality objectives is stable or decreasing in areal extent, and this Site meets the groundwater requirements specified for class 5 in the low-threat document.

Constituents of concern (COCs) in groundwater are adequately defined down gradient horizontally to the north and northwest by historical groundwater data from wells and borings at Union Oil Station No. 7376, located at 4191 First Street, Pleasanton (shown on Figure 4), and vertically by on-Site well MW-1B. The plume is less than 450 feet long.

As shown in Figures 5 through 7, residual COC concentrations in groundwater are decreasing, with the exceptions of benzene and tertiary-butyl alcohol (TBA) in well MW-1 and MTBE and TBA in well MW-2, which are stable. All other COCs are predicted to reach San Francisco Regional Water Quality Control Board environmental screening levels[1] by April 2037. Since TBA is a breakdown product of MTBE, TBA concentrations can be expected to drop as MTBE concentrations become lower.

In May 2004, Toxichem Management Systems, Inc. (Toxichem) conducted a well survey which identified a municipal well (3S/1E-21B1) and a well of unknown use (3S/1E-21B) approximately 900 feet northeast of the Site and another municipal well (3S/1E-16P1) approximately 1,200 feet north of the Site. The locations of the wells could not be field verified.

In September 2005, Delta conducted a well survey which located an old water tower in the area of the wells identified in Toxichem's 2004 well survey and identified a water-supply well (3S/1E-21C1) and an irrigation well (3S/1E-21C4) approximately 1,000 feet northwest of the Site and another irrigation well in Kottinger Park, approximately 800 feet east of the Site.

Given the distance from the Site to the water-supply wells, it is unlikely that hydrocarbons originating from the Site will reach these wells.

Arroyo del Valle, a creek located approximately 1,130 feet north of the Site, is the closest potential surface water receptor to the Site. Surface water in Arroyo del Valle flows to the west at a depth of

[1] *User's Guide: Derivation and Application of Environmental Screening Levels*, RWQCB, Interim Final 2013

approximately 20 feet below the surrounding grade. Based on the typical depth to water which ranges between 31 to 34 fbg and the distance to Arroyo del Valle, it is unlikely that the creek will be impacted.

Class 5 of the Policy states "*The regulatory agency determines, based on analysis of site specific conditions that under current and reasonably anticipated near-future term scenarios, the contaminant plume poses a low threat to human health and safety and the environment and WQOs will be achieved within a reasonable time frame*". No likely receptors have been identified and this Site meets the criteria for Class 5 in the Policy.

4.2.2 Vapor

The Site is an active fueling facility, and there is no reasonable concern that subsurface contamination poses unacceptable indoor inhalation health risk.

Historical soil vapor data (Table 3) also demonstrate that all COC concentrations are below ESLs and oxygen concentrations are at least 7.66 percent. The maximum total petroleum hydrocarbon as gasoline soil concentration at less than 5 fbg is 2.5 milligrams per kilogram (mg/kg), which demonstrates that there is a bioattenuation zone to at least 5 fbg. Benzene and ethylbenzene concentrations are also below residential screening levels listed in scenario 4 of the Policy.

- *Benzene is less than 85,000 micrograms per cubic meter ($\mu g/m^3$) and ethylbenzene concentrations are less than 1,100,000 $\mu g/m^3$:* Benzene and ethylbenzene have not been detected in soil vapor samples.

4.2.3 Direct Contact and Outdoor Air Exposure

As stated above, this Site meets the direct contact and outdoor air requirements for benzene and ethylbenzene in residential soil specified in scenario 1 in the Policy:

- *Benzene and ethylbenzene concentrations at 0 to 5 fbg are less than 1.9 mg/kg and 21 mg/kg, respectively:* Soil samples collected from 0 to 5 fbg have contained up to 0.0080 mg/kg benzene and 0.038 mg/kg ethylbenzene.
- *Benzene and ethylbenzene concentrations at 5 to 10 fbg are less than 2.8 mg/kg and 32 mg/kg, respectively:* Benzene and ethylbenzene have not been detected in soil samples collected from 5 to 10 fbg.

5. Conclusions and Recommendations

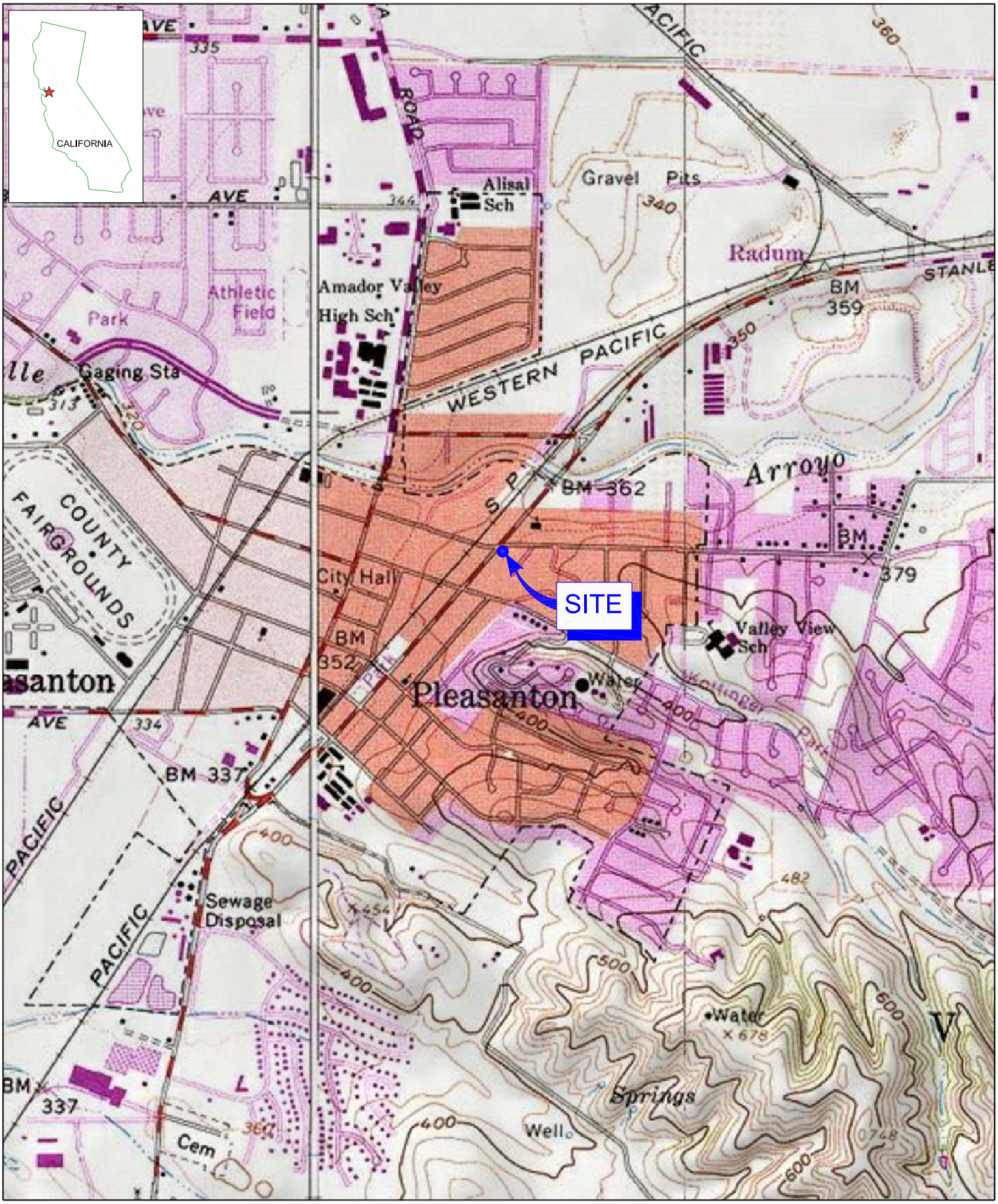
GHD concludes that this Site meets Policy general criteria and media-specific groundwater, vapor, and direct exposure and outdoor air criteria. Therefore, on behalf of Shell, we respectfully request closure of this case. GHD requests that ACEH suspend the groundwater monitoring program during the closure review.

All of Which is Respectfully Submitted,

GHD

Peter Schaefer, CEG, CHG

Aubrey K. Cool, PG



Source: TOPO! MAPS

0 660 1320ft

SHELL-BRANDED SERVICE STATION
4212 FIRST STREET
PLEASANTON, CALIFORNIA

240523-15.03

Jul 30, 2015

VICINITY MAP

FIGURE 1

CAD File: I:\Shell\6-chars\2405--\240523-Pleasanton 4212 First\240523-FIGURES\240523-29-FIGURES\240523-15.03(029)GN-EM001.DWG

RAY STREET

VINEYARD AVENUE

FIRST STREET

Planter

Island

Island

Planter

Planter

Planter

SV-7

MW-1

MW-1B

SVE-3

SB-7

SB-4

SVE-1

SB-5

S-1
(WA-1)

EW-1

S-B

P-2

CPT-3

OBS-1

P-1

AS-10

EW-2

SV-2

MW-2

SV-1

SB-2

B-2

TB-2

B-3

SVE-2

S-C

B-5

MW-4

SVE-5

SVE-4

SV-3

S-D

S-E

B-4

TB-3

B-1

AS-1

SB-1

Former
USTs

USTs

DP-1 (3.0)

DP-1 (6.0)

PT-1 (4.0)

TB-1

SV-8

DP-4 (8.5)

Dispenser
Islands

PT-2 (4.5)

TB-4

SV-4

Former
Waste Oil
UST

Residential

Under
Dispenser
#1

DP-2 (7.5)

DP2-SW (4.0)

WO-2

WO-1

Station
Building

SV-5

S-A

DP-3 (8.0)

SB-3

Shell Station
4212 First St.

Hydrant

MW-3

House/Office

SV-6

Planter

N

W

E

S

Historical Groundwater
Flow Direction
(4Q06 through 2Q15)

EXPLANATION

SV-1	Soil vapor probe
EW-1	Groundwater extraction well location
P-1	Piezometer well location
MW-1	Monitoring well location
MW-1B	Deeper monitoring well location
OBS-1	Observation well location
SVE-1	Soil vapor extraction well location
AS-1	Air sparge well location
TB-1	Destroyed observation well location
S-1	Destroyed well location
B-1	Soil boring location (Delta, 2007)
CPT-2	CPT boring location (Delta, 2006)
WO-2	Soil sample location (2006)
WO-1	Soil boring location (Delta, 2005)
SB-7	Soil boring location (Cambria, 1999)
Under Dispenser #1	Soil sample location (Cambria, 1999)
DP-1 (6.0)	Confirmation soil sample location (Weiss, 1995)
DP-1 (3.0)	Soil sample location (Weiss, 1995)
SB-1	Soil boring location (Hart Crowser, 1990)
S-A	Soil boring location (EMCON, 1985-6)

0 15 30ft

Coordinate System:
CA ZONE 6 STATE PLANE
COORD SYSTEM NAD 83

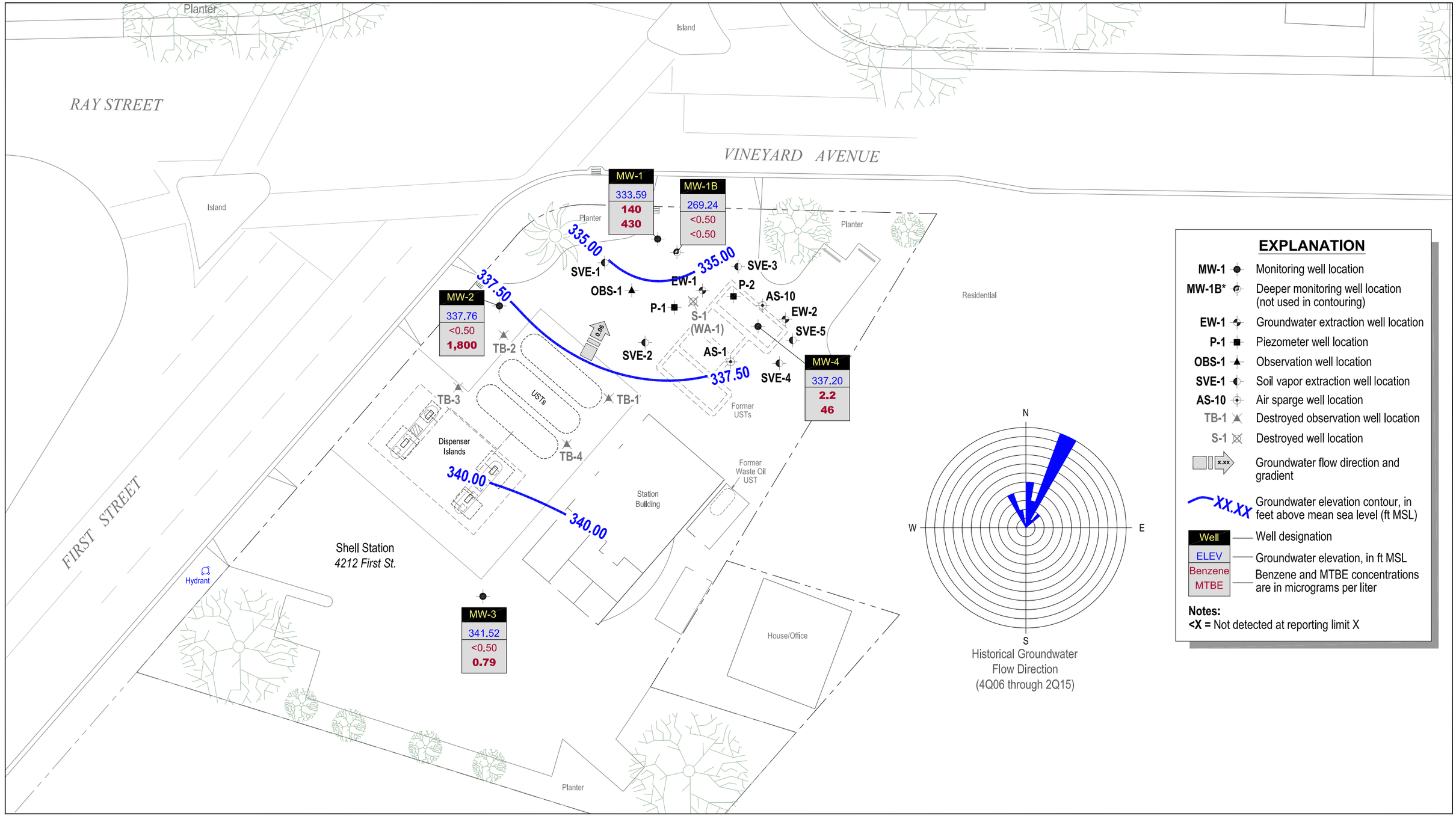
SHELL-BRANDED SERVICE STATION
4212 FIRST STREET
PLEASANTON, CALIFORNIA

SITE PLAN

240523-15.03
Jul 30, 2015

FIGURE 2

CAD File: I:\Shell\6-chars\2405-\240523-Pleasanton 4212 First\240523-FIGURES\240523-29-FIGURES\240523-15.03(029)GN-EM002.dwg



0 15 30ft

Coordinate System:
CA ZONE 6 STATE PLANE
COORD SYSTEM NAD 83

SHELL-BRANDED SERVICE STATION
4212 FIRST STREET
PLEASANTON, CALIFORNIA

GROUNDWATER CONTOUR AND CHEMICAL CONCENTRATION MAP - APRIL 23, 2015

240523-15.03
Jul 30, 2015

FIGURE 3

CAD File: I:\Shell\6-chars\2405-\240523-Pleasanton 4212 First\240523-FIGURES\240523-29-FIGURES\240523-15.03(029)GN-EM003.dwg

EXPLANATION

- MW-1 — Monitoring well location (Shell)
- MW-2 — Monitoring well location (76)
- MW-1 — Destroyed well location (76)
- OBS-1 — Observation well location (Shell)
- SVE-1 — Soil vapor extraction well location (Shell)
- AS-10 — Air sparge well location (Shell)
- TB-1 — Destroyed observation well location
- S-1 — Destroyed well location (Shell)
- CPT-2 — CPT boring location (Delta, 2006)

MW-8
MW-7
MW-5
MW-6
MW-10
MW-2B
MW-2
MW-2C
MW-3
MW-3B
MW-1
MW-1B
MW-4
CPT-2
MW-3
Building
Parking Lot
Ramp
Planter
76 Station
4191 First St.
USTs
Santa Fe Pacific Petroleum Pipeline Easement
Kiosk
Dispenser Islands
Planter
Planter
Planter
Island
Residential
Residential
FIRST STREET
RAY STREET
VINEYARD AVENUE
Island
Planter
Planter
SVE-1
OBS-1
EW-1
SVE-3
P-2
AS-10
EW-2
CPT-3
P-1
S-1 (WA-1)
SVE-2
MW-4
SVE-5
SVE-4
AS-1
MW-2
TB-2
TB-3
TB-1
TB-4
USTs
Former USTs
Former Waste Oil UST
Dispenser Islands
Station Building
Residential
Shell Station
4212 First St.
Hydrant
House/Office
Planter
FIRST STREET

N
W
E
S

Historical Groundwater Flow Direction
(4Q06 through 2Q15)

0 20 40ft

Coordinate System:
CA ZONE 6 STATE PLANE
COORD SYSTEM NAD 83

SHELL-BRANDED SERVICE STATION
4212 FIRST STREET
PLEASANTON, CALIFORNIA

EXTENDED SITE PLAN

240523-15.03
Jul 30, 2015

FIGURE 4

CAD File: I:\Shell\6-chars\2405--\240523-Pleasanton 4212 First\240523-FIGURES\240523-29-FIGURES\240523-15.03(029)GN-EM002.dwg

Predicted Time to Reach Environmental Screening Levels (ESL) in Well MW-1

Shell-branded Service Station, 4212 First Street, Pleasanton, California

$y = b\,e^{ax}$ ===> $x = \ln(y/b) / a$

where: y = concentration in µg/L; a = decay constant
b = concentration at time (x); x = time (x) in days

	Constituent	Total Petroleum Hydrocarbons as Gasoline (TPHg)	Benzene	Methyl tert-Butyl Ether (MTBE)	Tert-Butyl Alcohol (TBA)
Given					
ESL :	y	100	1.0	5.0	12
Constant:	b	1.87E+74	NA	1.55E+21	NA
Constant:	a	-3.92E-03	NA	-9.99E-04	NA
Starting date for current trend:		5/14/2013	NA	5/13/2010	NA
Calculate					
Attenuation Half Life (years):	(-ln(2)/a)/365.25	0.48	NA	1.90	NA
Estimated Date to Reach ESL:	(x = ln(y/b) / a)	Mar 2016	Stable	Apr 2029	Stable

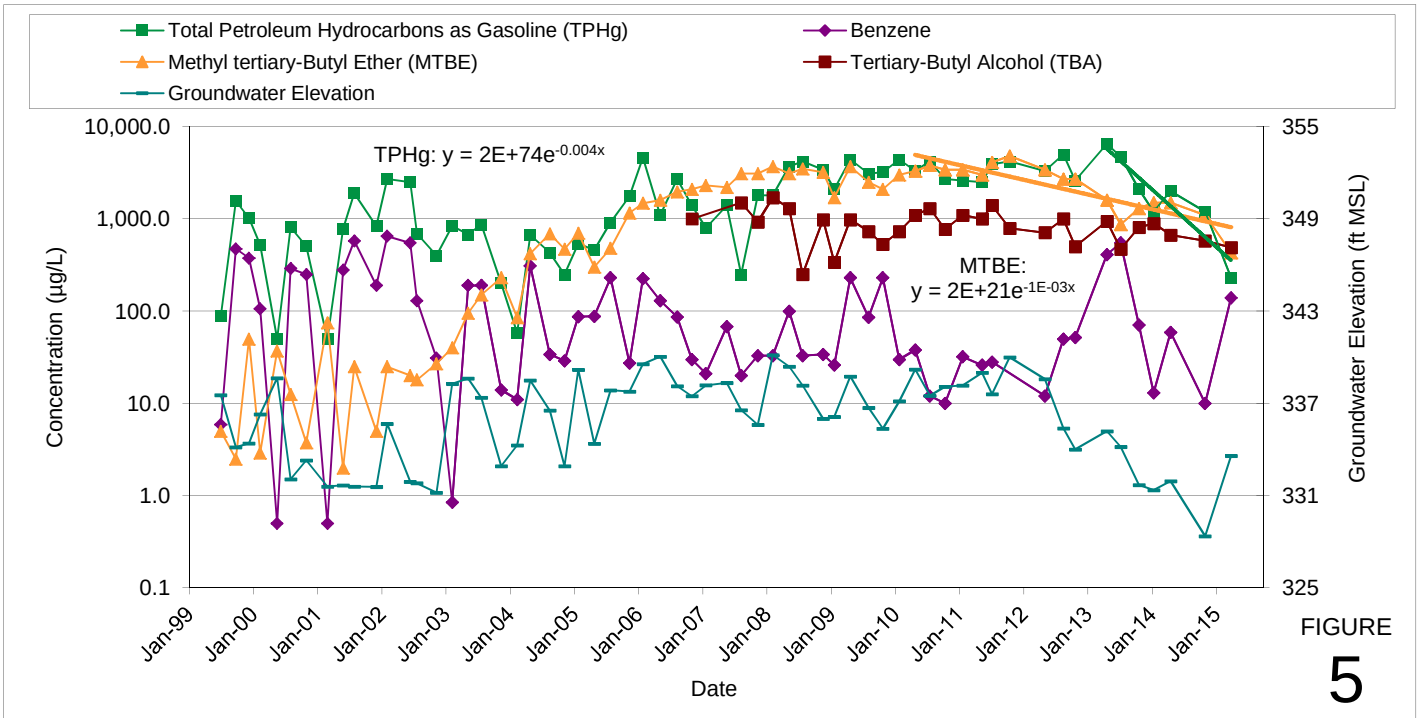


FIGURE 5

Shell-branded Service Station
4212 First Street
Pleasanton, California

MW-1:
TPHg, Benzene, MTBE, and TBA Concentrations and Groundwater Elevations versus Time

Predicted Time to Reach Environmental Screening Levels (ESL) in Well MW-2

Shell-branded Service Station, 4212 First Street, Pleasanton, California

$y = b\,e^{ax}$ ===> $x = \ln(y/b) / a$

where: y = concentration in µg/L, a = decay constant
b = concentration at time (x), x = time (x) in days

	Constituent	Total Petroleum Hydrocarbons as Gasoline (TPHg)	Methyl tert-Butyl Ether (MTBE)	Tert-Butyl Alcohol (TBA)
Given				
ESL :	y	100	5.0	12
Constant:	b	6.74E+08	NA	NA
Constant:	a	-3.14E-04	NA	NA
Starting date for current trend:		2/11/2010	NA	NA
Calculate				
Attenuation Half Life (years):	(-ln(2)/a)/365.25	6.05	NA	NA
Estimated Date to Reach ESL:	(x = ln(y/b) / a)	Apr 2037	Stable	Stable

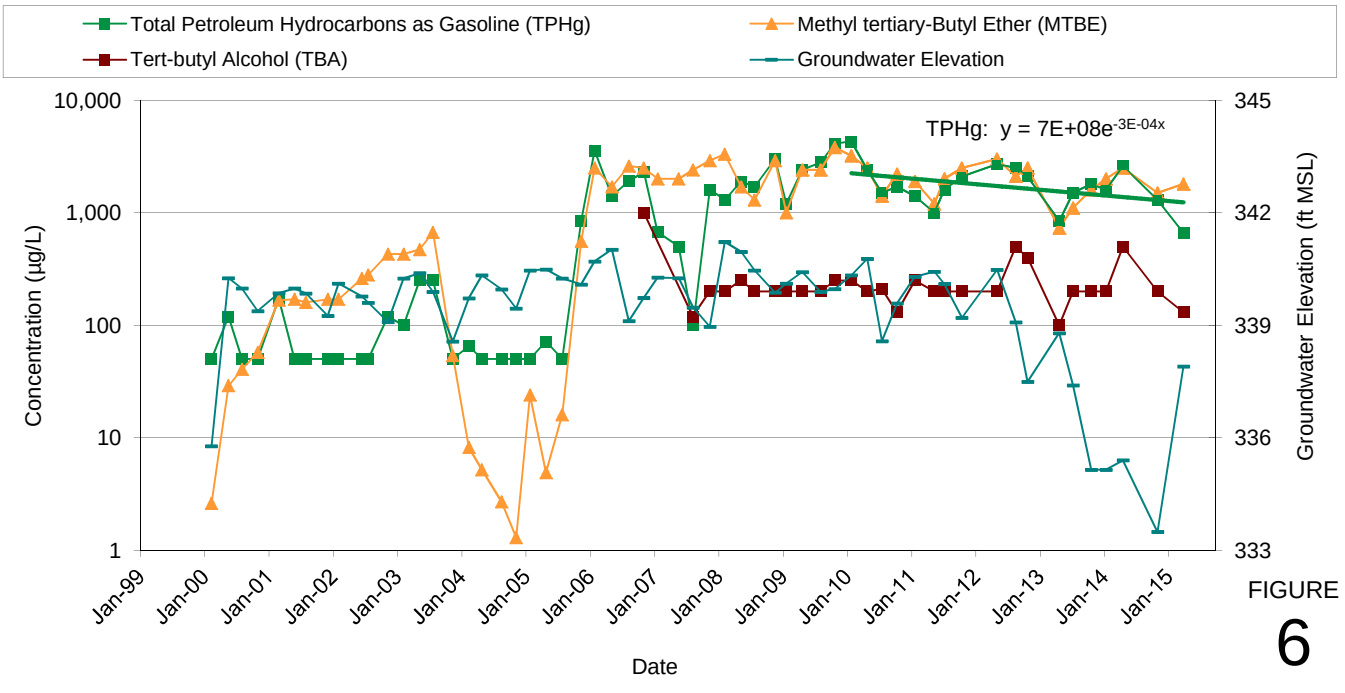


FIGURE 6

Shell-branded Service Station
4212 First Street
Pleasanton, California

MW-2:
TPHg, MTBE, and TBA Concentrations and Groundwater Elevations versus Time

Predicted Time to Reach Environmental Screening Levels (ESL) in Well MW-4

Shell-branded Service Station, 4212 First Street, Pleasanton, California

$y = b\,e^{ax}$ ===> $x = \ln(y/b) / a$

where: y = concentration in µg/L; a = decay constant
b = concentration at time (x); x = time (x) in days

	Constituent	Total Petroleum Hydrocarbons as Gasoline (TPHg)	Benzene	Methyl tert-Butyl Ether (MTBE)	Tert-Butyl Alcohol (TBA)
Given					
ESL :	y	100	1.0	5.0	12
Constant:	b	1.27E+25	4.16E+46	6.04E+51	7.52E+30
Constant:	a	-1.22E-03	-2.57E-03	-2.74E-03	-1.57E-03
Starting date for current trend:		8/7/2008	2/5/2009	11/26/2007	2/11/2010
Calculate					
Attenuation Half Life (years):	(-ln(2)/a)/365.25	1.56	0.74	0.69	1.21
Estimated Date to Reach ESL:	(x = ln(y/b) / a)	Sep 2019	May 2014	May 2017	Nov 2019

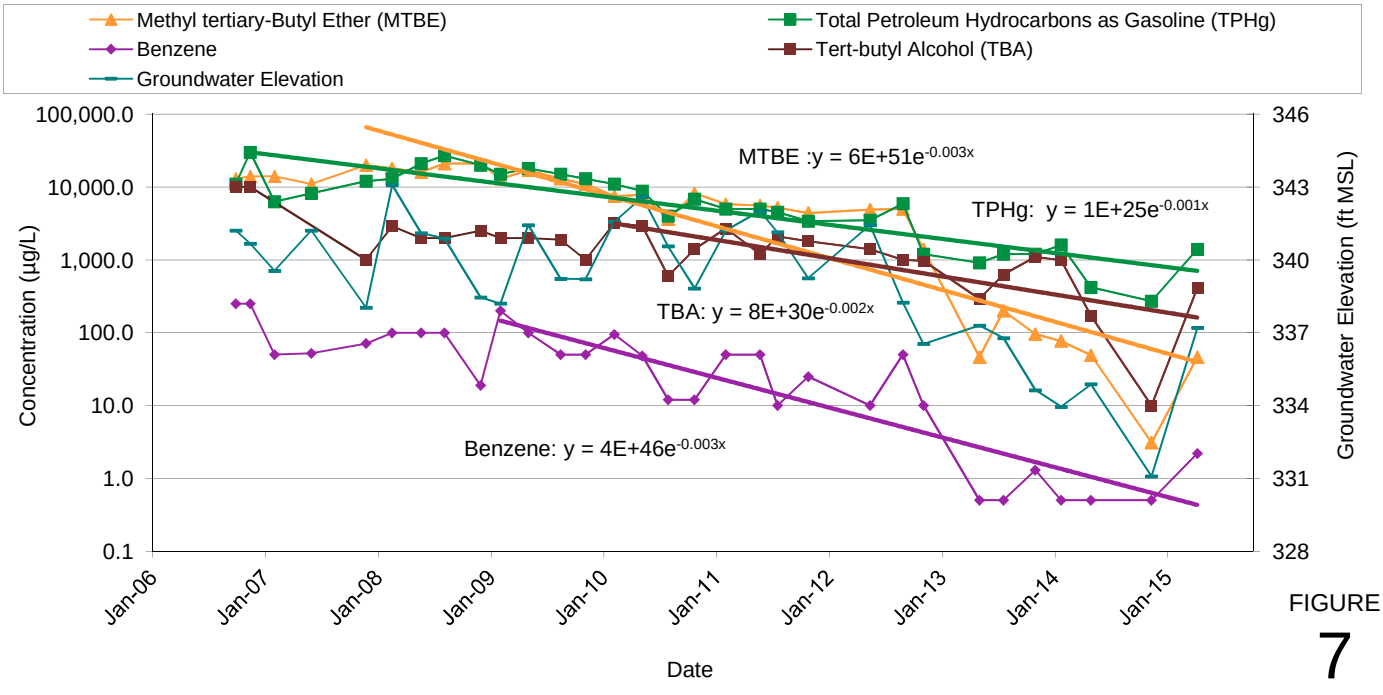


FIGURE 7

Shell-branded Service Station
4212 First Street
Pleasanton, California

MW-4:
TPHg, Benzene, MTBE, and TBA
Concentrations and Groundwater Elevations

Table 1

Groundwater Data
Shell-branded Service Station
4212 First Street, Pleasanton, California

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Nitrate as N (µg/L)	Sulfate (µg/L)	Alkalinity as $CaCO_3$ (µg/L)	Ferrous Iron (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
MW-1	06/16/1999	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	371.20	37.81	333.39	---	---
MW-1	06/30/1999	89.0	5.89	<0.500	<0.500	0.652	<5.00	---	---	---	---	---	---	---	---	---	371.20	33.65	337.55	---	---
MW-1	09/24/1999	1,560	473	<10.0	<10.0	22.8	<2.50	---	---	---	---	---	---	---	---	---	371.20	37.04	334.16	---	---
MW-1	12/08/1999	1,020	375	<5.00	<5.00	15.2	<50.0	---	---	---	---	---	---	---	---	---	371.20	36.79	334.41	---	---
MW-1	02/10/2000	523	106	<5.00	<5.00	31.8	2.9	---	---	---	---	---	---	---	---	---	371.20	34.90	336.30	---	---
MW-1	05/17/2000	<50.0	<0.500	<0.500	<0.500	<0.500	37	29.5	---	---	---	---	---	---	---	---	371.20	32.55	338.65	---	---
MW-1	08/03/2000	808	290	<2.50	<2.50	8.9	<12.5	---	---	---	---	---	---	---	---	---	371.20	39.13	332.07	---	---
MW-1	10/31/2000	507	250	0.962	<0.500	23.5	3.76	---	---	---	---	---	---	---	---	---	371.20	37.91	333.29	---	---
MW-1	03/01/2001	<50.0	<0.500	<0.500	<0.500	<0.500	74.6	---	---	---	---	---	---	---	---	---	371.20	39.60	331.60	---	---
MW-1	05/30/2001	780	280	<2.0	<2.0	11	---	<2.0	---	---	---	---	---	---	---	---	371.20	39.53	331.67	---	---
MW-1	08/02/2001	1,900	580	<2.5	<2.5	12	---	<25	---	---	---	---	---	---	---	---	371.20	39.61	331.59	---	---
MW-1	12/06/2001	840	190	<0.50	<0.50	13	---	<5.0	---	---	---	---	---	---	---	---	371.20	39.63	331.57	---	---
MW-1	02/05/2002	2,700	650	<2.5	<2.5	7.2	---	<25	---	---	---	---	---	---	---	---	371.20	35.53	335.67	---	---
MW-1	06/17/2002	2,500	550	<2.0	<2.0	5.9	---	<20	---	---	---	---	---	---	---	---	371.20	39.29	331.91	---	---
MW-1	07/25/2002	690	130	<0.50	<0.50	4.4	---	18	---	---	---	---	---	---	---	---	371.20	39.39	331.81	---	---
MW-1	11/14/2002	400	31	<0.50	<0.50	2.7	---	27	---	---	---	---	---	---	---	---	371.20	40.00	331.20	---	---
MW-1	02/12/2003	840	0.85	<0.50	<0.50	<0.50	---	40	---	---	---	---	---	---	---	---	371.20	32.92	338.28	---	---
MW-1	05/14/2003	680	190	<2.5	<2.5	<5.0	---	95	---	---	---	---	---	---	---	---	371.20	32.57	338.63	---	---
MW-1	07/29/2003	870	190	<2.5	<2.5	<5.0	---	150	---	---	---	---	---	---	---	---	371.20	33.82	337.38	---	---
MW-1	11/19/2003	<200	14	<2.0	<2.0	<4.0	---	230	---	---	---	---	---	---	---	---	371.20	38.28	332.92	---	---
MW-1	02/19/2004	58 c	11	<0.50	<0.50	<1.0	---	85	---	---	---	---	---	---	---	---	371.20	36.93	334.27	---	---
MW-1	05/03/2004	670	310	<2.5	<2.5	<5.0	---	420	---	---	---	---	---	---	---	---	371.20	32.70	338.50	---	---
MW-1	08/24/2004	430 c	34	<2.5	<2.5	<5.0	---	690	---	---	---	---	---	---	---	---	371.20	34.66	336.54	---	---
MW-1	11/15/2004	<250	29	<2.5	<2.5	<5.0	---	470	---	---	---	---	---	---	---	---	371.20	38.27	332.93	---	---
MW-1	02/02/2005	540 e	87	<2.5	<2.5	<5.0	---	700	---	---	---	---	---	---	---	---	371.20	32.02	339.18	---	---
MW-1	05/05/2005	460 e	88	<2.5	<2.5	<5.0	---	300	---	---	---	---	---	---	---	---	371.20	36.82	334.38	---	---
MW-1	08/05/2005	910	230	<2.5	<2.5	<5.0	---	480	---	---	---	---	---	---	---	---	371.20	33.35	337.85	---	---
MW-1	11/22/2005	1,760	27	<0.500	<0.500	1.18	---	1,160	---	---	---	---	---	---	---	---	371.20	33.42	337.78	---	---
MW-1	02/07/2006	4,620	225	<0.500	<0.500	<0.500	---	1,480	---	---	---	---	---	---	---	---	371.20	31.63	339.57	---	---
MW-1	05/16/2006	1,100	130	<0.50	2.0	2.1	---	1,600	---	---	---	---	---	---	---	---	371.20	31.16	340.04	---	---
MW-1	08/21/2006	2,700	86	<0.500	0.79	0.81	---	1,960	---	---	---	---	---	---	---	---	371.20	33.07	338.13	---	---
MW-1	11/14/2006	1,400 c	30	<25	<25	<25	---	2,100	<1,000	<25	<25	<25	---	---	---	---	371.20	33.73	337.47	---	---
MW-1	02/01/2007	800	21	<0.50	<0.50	<1.0	---	2,300	---	---	---	---	---	---	---	---	371.20	33.02	338.18	---	---
MW-1	06/01/2007	1,400 d,e	68	<20	<20	4.4 f	---	2,200	---	---	---	---	---	---	---	---	371.20	32.87	338.33	---	---
MW-1	08/22/2007	250 d	20	<20	<20	<20	---	3,100	1,500	---	---	---	---	---	---	---	371.20	34.64	336.56	---	---
MW-1	11/26/2007	1,800 d	33	<20	<20	<20	---	3,100	930	<40	<40	<40	---	---	---	---	371.20	35.59	335.61	---	---
MW-1	02/19/2008	1,800 d	33	<20	<20	<20	---	3,700	1,700	---	---	---	---	---	---	---	371.20	31.05	340.15	---	---
MW-1	05/23/2008	3,700	100	<25	<25	<25	---	3,100	1,300	---	---	---	---	---	---	---	371.20	31.80	339.40	---	---
MW-1	08/07/2008	4,200	33	<25	<25	<25	---	3,500	<250	---	---	---	---	---	---	---	371.20	33.03	338.17	---	---

Groundwater Data
Shell-branded Service Station
4212 First Street, Pleasanton, California

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Nitrate as N (µg/L)	Sulfate (µg/L)	Alkalinity as $CaCO_3$ (µg/L)	Ferrous Iron (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
MW-1	12/03/2008	3,400	34	<25	<25	<25	---	3,200	980	---	---	---	---	---	---	---	371.20	35.19	336.01	---	---
MW-1	02/05/2009	2,100	26	<25	<25	<25	---	1,700	340	---	---	---	---	---	---	---	371.20	35.07	336.13	---	---
MW-1	05/07/2009	4,400	230	<25	<25	<25	---	3,700	980	---	---	---	---	---	---	---	371.20	32.45	338.75	---	---
MW-1	08/20/2009	3,100	86	<25	<25	<25	---	2,500	730	---	---	---	---	---	---	---	371.20	34.48	336.72	---	---
MW-1	11/09/2009	3,200	230	<20	<20	33	---	2,100	530	<40	<40	<40	---	---	---	---	371.20	35.84	335.36	---	---
MW-1	02/11/2010	4,400	30	<20	<20	<20	---	3,000	730	---	---	---	---	---	---	---	371.20	34.06	337.14	---	---
MW-1	05/13/2010	3,300	38	<20	<20	<20	---	3,300	1,100	---	---	---	---	---	---	---	371.20	31.99	339.21	---	---
MW-1	08/05/2010	4,200	12	<20	<20	<20	---	3,800	1,300	---	---	---	---	---	---	---	371.20	33.70	337.50	---	---
MW-1	10/30/2010	2,700	<10	<20	<20	<20	---	3,400	770	<40	<40	<40	---	---	---	---	371.20	33.12	338.08	---	---
MW-1	02/09/2011	2,600	32	<12	<12	<25	---	3,400	1,100	---	---	---	---	---	---	---	371.20	33.03	338.17	---	---
MW-1	05/31/2011	<2,500	26	<25	<25	<50	---	3,000	1,000	---	---	---	---	---	---	---	371.20	32.21	338.99	---	---
MW-1	07/27/2011	3,900 c	28	<10	<10	<20	---	4,100	1,400	---	---	---	---	---	---	---	371.20	33.60	337.60	---	---
MW-1	11/04/2011	4,200	<25	<25	<25	<50	---	4,800	790	<50	<50	<50	---	---	---	---	371.20	31.20	340.00	---	---
MW-1	05/23/2012	3,300	12	<10	<10	<20	---	3,400	710	---	---	---	5,000 g	19,000	630,000	<100	371.20	32.61	338.59	2.28	63
MW-1	08/31/2012	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	371.20	34.72	336.48	---	---
MW-1	09/04/2012	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	371.20	31.31	339.89	---	---
MW-1	09/07/2012	<5,000	<50	<50	<50	<100	---	2,700	<1,000	---	---	---	4,500 a	20,000	640,000	---	371.20	35.82	335.38	1.21	96
MW-1	11/13/2012	2,600	52	<25	<25	<50	---	2,700	<500	<25	<25	<25	4,700	21,000	630,000	---	371.20	37.19	334.01	1.93	54
MW-1	05/14/2013	6,500	410	<5.0	<5.0	<10	---	1,600	940	---	---	---	1,900	17,000	670,000	---	371.20	36.01	335.19	1.25	112
MW-1	07/31/2013	4,700	550	<5.0	<5.0	59	---	870	470	---	---	---	350	42,000	530,000	---	371.20	37.02	334.18	1.75	-10
MW-1	11/12/2013	2,100	71	<5.0	<5.0	<10	---	1,300	810	---	---	---	970	19,000	710,000	---	371.20	39.50	331.70	1.68	88
MW-1	02/04/2014	1,200	13	<0.50	<0.50	<1.0	---	1,500	890	---	---	---	2,200	18,000	700,000	---	371.20	39.84	331.36	1.19	140
MW-1	05/12/2014	2,000	59	<10	<10	<20	---	1,500	670	---	---	---	280	21,000	650,000	---	371.20	39.26	331.94	1.44	72
MW-1	11/25/2014	1,200 i	<10	<10	<10	<20	---	1,100	580	14	<10	<10	1,000	16,000	630,000	---	371.20	42.84	328.36	---	---
MW-1	**04/23/2015**	**230**	**140**	**<2.5**	**<2.5**	**<5.0**	**---**	**430**	**490**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**371.20**	**37.61**	**333.59**	**0.97**	**168**
MW-1B	09/21/2006	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	371.67	76.94	294.73	---	---
MW-1B	09/28/2006	<50	<0.50	<0.50	<0.50	<0.50	---	21	<20	---	---	---	---	---	---	---	371.67	77.15	294.52	---	---
MW-1B	11/14/2006	320 c	<5.0	<5.0	<5.0	<5.0	---	310	<200	<5.0	<5.0	<5.0	---	---	---	---	371.67	69.38	302.29	---	---
MW-1B	02/01/2007	77	0.53	<0.50	<0.50	<1.0	---	150	---	---	---	---	---	---	---	---	371.67	60.92	310.75	---	---
MW-1B	06/01/2007	<50 d,e	0.25 f	<1.0	<1.0	<1.0	---	74	---	---	---	---	---	---	---	---	371.67	61.07	310.60	---	---
MW-1B	08/22/2007	<50 d	0.25 f	<1.0	<1.0	<1.0	---	35	7.1 f	---	---	---	---	---	---	---	371.67	77.54	294.13	---	---
MW-1B	11/26/2007	<50 d	<0.50	<1.0	<1.0	<1.0	---	1.7	<10	<2.0	<2.0	<2.0	---	---	---	---	371.67	68.50	303.17	---	---
MW-1B	02/19/2008	65 d	2.6	4.2	<1.0	1.1	---	58	<10	---	---	---	---	---	---	---	371.67	57.21	314.46	---	---
MW-1B	05/23/2008	<50	<0.50	<1.0	<1.0	<1.0	---	3.6	<10	---	---	---	---	---	---	---	371.67	57.53	314.14	---	---
MW-1B	08/07/2008	<50	<0.50	<1.0	<1.0	<1.0	---	1.1	<10	---	---	---	---	---	---	---	371.67	72.51	299.16	---	---
MW-1B	12/03/2008	<50	<0.50	<1.0	<1.0	<1.0	---	3.4	<10	---	---	---	---	---	---	---	371.67	80.84	290.83	---	---
MW-1B	02/05/2009	<50	<0.50	<1.0	<1.0	<1.0	---	4.4	<10	---	---	---	---	---	---	---	371.67	76.11	295.56	---	---
MW-1B	05/07/2009	<50	<0.50	<1.0	<1.0	<1.0	---	2.5	13	---	---	---	---	---	---	---	371.67	66.97	304.70	---	---

Groundwater Data
Shell-branded Service Station
4212 First Street, Pleasanton, California

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Nitrate as N (µg/L)	Sulfate (µg/L)	Alkalinity as $CaCO_3$ (µg/L)	Ferrous Iron (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
MW-1B	08/20/2009	<50	<0.50	<1.0	<1.0	<1.0	---	1.7	<10	---	---	---	---	---	---	---	371.67	97.32	274.35	---	---
MW-1B	11/09/2009	<50	<0.50	<1.0	<1.0	<1.0	---	<1.0	<10	<2.0	<2.0	<2.0	---	---	---	---	371.67	98.90	272.77	---	---
MW-1B	02/11/2010	<50	<0.50	<1.0	<1.0	<1.0	---	1.1	<10	---	---	---	---	---	---	---	371.67	90.72	280.95	---	---
MW-1B	05/13/2010	<50	<0.50	<1.0	<1.0	<1.0	---	2.0	<10	---	---	---	---	---	---	---	371.67	80.56	291.11	---	---
MW-1B	08/05/2010	<50	<0.50	<1.0	<1.0	<1.0	---	<1.0	<10	---	---	---	---	---	---	---	371.67	90.10	281.57	---	---
MW-1B	10/30/2010	<50	<0.50	<1.0	<1.0	<1.0	---	<1.0	<10	<2.0	<2.0	<2.0	---	---	---	---	371.67	102.21	269.46	---	---
MW-1B	02/09/2011	<50	<0.50	<0.50	<0.50	<1.0	---	<1.0	<10	---	---	---	---	---	---	---	371.67	90.24	281.43	---	---
MW-1B	05/31/2011	<50	<0.50	<0.50	<0.50	<1.0	---	<1.0	<10	---	---	---	---	---	---	---	371.67	73.83	297.84	---	---
MW-1B	07/27/2011	<50	<0.50	<0.50	<0.50	<1.0	---	<1.0	<10	---	---	---	---	---	---	---	371.67	82.90	288.77	---	---
MW-1B	11/04/2011	<50	<0.50	<0.50	<0.50	<1.0	---	<1.0	<10	<1.0	<1.0	<1.0	---	---	---	---	371.67	89.19	282.48	---	---
MW-1B	05/23/2012	<50	<0.50	<0.50	<0.50	<1.0	---	1.2	<10	---	---	---	18,000	51,000	270,000	<100	371.67	82.10	289.57	2.67	207
MW-1B	09/07/2012	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	<10	---	---	---	19,000 a	49,000	260,000	---	371.66	102.45	269.21	1.54	204
MW-1B	11/13/2012	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	<10	<0.50	<0.50	<0.50	21,000	70,000	270,000	---	371.66	102.33	269.33	2.25	121
MW-1B	05/14/2013	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	<10	---	---	---	25,000	53,000	280,000	---	371.66	99.32	272.35	1.41	96
MW-1B	07/31/2013	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	<10	---	---	---	20,000	50,000	270,000	---	371.66	102.77	268.90	1.98	20
MW-1B	11/12/2013	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	<10	---	---	---	19,000	49,000	300,000	---	371.66	102.83	268.83	1.96	92
MW-1B	02/04/2014	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	<10	---	---	---	22,000	54,000	330,000	---	371.66	102.89	268.77	1.09	154
MW-1B	05/12/2014	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	<10	---	---	---	22,000	54,000	290,000	---	371.66	102.50	269.16	1.77	83
MW-1B	11/25/2014	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	<10	<0.50	<0.50	<0.50	22,000	47,000	280,000	---	371.66	102.96	268.70	---	---
MW-1B	**04/23/2015**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**---**	**<0.50**	**<10**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**371.66**	**102.42**	**269.24**	**2.69**	**94**
MW-2	02/03/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	372.40	32.65	339.75	---	---
MW-2	02/07/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	372.40	35.51	336.89	---	---
MW-2	02/10/2000	<50.0	<0.500	<0.500	<0.500	<0.500	2.61	---	---	---	---	---	---	---	---	---	372.40	36.62	335.78	---	---
MW-2	05/17/2000	120	4.09	<0.500	<0.500	<0.500	29	---	---	---	---	---	---	---	---	---	372.40	32.14	340.26	---	---
MW-2	08/03/2000	<50.0	0.692	<0.500	<0.500	<0.500	40.5	36.6 b	---	---	---	---	---	---	---	---	372.40	32.42	339.98	---	---
MW-2	10/31/2000	<50.0	<0.500	<0.500	<0.500	<0.500	57.4	44.8 a	---	---	---	---	---	---	---	---	372.40	33.02	339.38	---	---
MW-2	03/01/2001	173	1.64	1.65	2.86	3.97	127	167	---	---	---	---	---	---	---	---	372.40	32.54	339.86	---	---
MW-2	05/30/2001	<50	<0.50	<0.50	<0.50	<0.50	---	170	---	---	---	---	---	---	---	---	372.40	32.42	339.98	---	---
MW-2	08/02/2001	<50	<0.50	<0.50	<0.50	<0.50	---	160	---	---	---	---	---	---	---	---	372.40	32.55	339.85	---	---
MW-2	12/06/2001	<50	<0.50	<0.50	<0.50	<0.50	---	170	---	---	---	---	---	---	---	---	372.40	33.15	339.25	---	---
MW-2	02/05/2002	<50	0.72	<0.50	<0.50	1.7	---	170	---	---	---	---	---	---	---	---	372.40	32.29	340.11	---	---
MW-2	06/17/2002	<50	<0.50	<0.50	<0.50	<0.50	---	260	---	---	---	---	---	---	---	---	372.40	32.63	339.77	---	---
MW-2	07/25/2002	<50	<0.50	<0.50	<0.50	<0.50	---	280	---	---	---	---	---	---	---	---	372.40	32.80	339.60	---	---
MW-2	11/14/2002	120	13	9.0	3.8	14	---	430	---	---	---	---	---	---	---	---	372.40	33.31	339.09	---	---
MW-2	02/12/2003	<100	<1.0	<1.0	<1.0	<1.0	---	430	---	---	---	---	---	---	---	---	372.40	32.15	340.25	---	---
MW-2	05/14/2003	<250	<2.5	<2.5	<2.5	<5.0	---	470	---	---	---	---	---	---	---	---	372.40	32.01	340.39	---	---
MW-2	07/29/2003	<250	<2.5	<2.5	<2.5	<5.0	---	670	---	---	---	---	---	---	---	---	372.40	32.51	339.89	---	---
MW-2	11/19/2003	<50	<0.50	<0.50	<0.50	<1.0	---	54	---	---	---	---	---	---	---	---	372.40	33.83	338.57	---	---

Groundwater Data
Shell-branded Service Station
4212 First Street, Pleasanton, California

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Nitrate as N (µg/L)	Sulfate (µg/L)	Alkalinity as $CaCO_3$ (µg/L)	Ferrous Iron (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
MW-2	02/19/2004	65	<0.50	3.4	1.4	6.5	---	8.2	---	---	---	---	---	---	---	---	372.40	32.68	339.72	---	---
MW-2	05/03/2004	<50	<0.50	<0.50	<0.50	<1.0	---	5.2	---	---	---	---	---	---	---	---	372.40	32.07	340.33	---	---
MW-2	08/24/2004	<50	<0.50	<0.50	<0.50	<1.0	---	2.7	---	---	---	---	---	---	---	---	372.40	32.44	339.96	---	---
MW-2	11/15/2004	<50	<0.50	<0.50	<0.50	<1.0	---	1.3	---	---	---	---	---	---	---	---	372.40	32.95	339.45	---	---
MW-2	02/02/2005	<50	<0.50	<0.50	<0.50	<1.0	---	24	---	---	---	---	---	---	---	---	372.40	31.94	340.46	---	---
MW-2	05/05/2005	72 c	<0.50	<0.50	<0.50	<1.0	---	4.9	---	---	---	---	---	---	---	---	372.40	31.91	340.49	---	---
MW-2	08/05/2005	<50	<0.50	<0.50	<0.50	<1.0	---	16	---	---	---	---	---	---	---	---	372.40	32.15	340.25	---	---
MW-2	11/22/2005	840	0.80	<0.500	<0.500	0.87	---	556	---	---	---	---	---	---	---	---	372.40	32.31	340.09	---	---
MW-2	02/07/2006	3,550	<0.500	<0.500	<0.500	<0.500	---	2,500	---	---	---	---	---	---	---	---	372.40	31.70	340.70	---	---
MW-2	05/16/2006	1,400	<5.0	<5.0	<5.0	<10	---	1,700	---	---	---	---	---	---	---	---	372.40	31.38	341.02	---	---
MW-2	08/21/2006	1,910	<0.500	<0.500	<0.500	<0.500	---	2,590	---	---	---	---	---	---	---	---	372.40	33.29	339.11	---	---
MW-2	11/14/2006	2,300 c	<25	<25	<25	<25	---	2,500	<1,000	<25	<25	<25	---	---	---	---	372.40	32.67	339.73	---	---
MW-2	02/01/2007	670	<0.50	<0.50	<0.50	<1.0	---	2,000	---	---	---	---	---	---	---	---	372.40	32.13	340.27	---	---
MW-2	06/01/2007	500 d,e	<10	<20	<20	<20	---	2,000	---	---	---	---	---	---	---	---	372.40	32.14	340.26	---	---
MW-2	08/22/2007	100 d,e	<10	<20	<20	<20	---	2,400	120 f	---	---	---	---	---	---	---	372.40	32.93	339.47	---	---
MW-2	11/26/2007	1,600 d,e	<10	<20	<20	<20	---	2,900	<200	<40	<40	<40	---	---	---	---	372.40	33.44	338.96	---	---
MW-2	02/19/2008	1,300 d,e	<10	<20	<20	<20	---	3,300	<200	---	---	---	---	---	---	---	372.40	31.18	341.22	---	---
MW-2	05/23/2008	1,900	<12	<25	<25	<25	---	1,700	<250	---	---	---	---	---	---	---	372.40	31.44	340.96	---	---
MW-2	08/07/2008	1,700	<10	<20	<20	<20	---	1,300	<200	---	---	---	---	---	---	---	372.40	31.94	340.46	---	---
MW-2	12/03/2008	3,000	<10	<20	<20	<20	---	2,900	<200	---	---	---	---	---	---	---	372.40	32.53	339.87	---	---
MW-2	02/05/2009	1,200	<10	<20	<20	<20	---	1,000	<200	---	---	---	---	---	---	---	372.40	32.29	340.11	---	---
MW-2	05/07/2009	2,400	<10	<20	<20	<20	---	2,400	<200	---	---	---	---	---	---	---	372.40	31.98	340.42	---	---
MW-2	08/20/2009	2,800	<10	<20	<20	<20	---	2,400	<200	---	---	---	---	---	---	---	372.40	32.51	339.89	---	---
MW-2	11/09/2009	4,100	<12	<25	<25	<25	---	3,800	<250	<50	<50	<50	---	---	---	---	372.40	32.43	339.97	---	---
MW-2	02/11/2010	4,300	<12	<25	<25	<25	---	3,200	<250	---	---	---	---	---	---	---	372.40	32.07	340.33	---	---
MW-2	05/13/2010	2,400	<10	<20	<20	<20	---	2,500	<200	---	---	---	---	---	---	---	372.40	31.63	340.77	---	---
MW-2	08/05/2010	1,500	<5.0	<10	<10	<10	---	1,400	210	---	---	---	---	---	---	---	372.40	33.82	338.58	---	---
MW-2	10/30/2010	1,700	<5.0	<10	<10	<10	---	2,200	130	<20	<20	<20	---	---	---	---	372.40	32.82	339.58	---	---
MW-2	02/09/2011	1,400	<12	<12	<12	<25	---	1,900	<250	---	---	---	---	---	---	---	372.40	32.11	340.29	---	---
MW-2	05/31/2011	<1,000	<10	<10	<10	<20	---	1,200	<200	---	---	---	---	---	---	---	372.40	31.97	340.43	---	---
MW-2	07/27/2011	1,600 c	<10	<10	<10	<20	---	2,000	<200	---	---	---	---	---	---	---	372.40	32.30	340.10	---	---
MW-2	11/04/2011	2,100	<10	<10	<10	<20	---	2,500	<200	<20	<20	<20	---	---	---	---	372.40	33.20	339.20	---	---
MW-2	05/23/2012	2,700	<10	<10	<10	<20	---	3,000	<200	---	---	---	7,500	70,000	300,000	300	372.40	31.92	340.48	1.51	42
MW-2	09/07/2012	2,500 c	<25	<25	<25	<50	---	2,100	<500	---	---	---	5,800 a	80,000	300,000	---	372.40	33.32	339.08	1.75	68
MW-2	11/13/2012	2,100	<20	<20	<20	<40	---	2,500	<400	<20	<20	<20	8,400	77,000	310,000	---	372.40	34.91	337.49	1.27	22
MW-2	05/14/2013	840 i	<5.0	<5.0	<5.0	<10	---	730	<100	---	---	---	5,800	55,000	420,000	---	372.40	33.61	338.79	0.53	78
MW-2	07/31/2013	1,500	<10	<10	<10	<20	---	1,100	<200	---	---	---	9,500	79,000	300,000	---	372.40	35.00	337.40	1.07	1
MW-2	11/12/2013	1,800	<10	<10	<10	<20	---	1,600	<200	---	---	---	7,300	77,000	340,000	---	372.40	37.25	335.15	1.03	28
MW-2	02/04/2014	1,600	<10	<10	<10	<20	---	2,000	<200	---	---	---	9,200	72,000	170,000	---	372.40	37.25	335.15	1.18	129

Groundwater Data
Shell-branded Service Station
4212 First Street, Pleasanton, California

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Nitrate as N (µg/L)	Sulfate (µg/L)	Alkalinity as $CaCO_3$ (µg/L)	Ferrous Iron (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
MW-2	05/12/2014	2,600 i	<25	<25	<25	<50	---	2,500	<500	---	---	---	230	71,000	340,000	---	372.40	37.00	335.40	1.12	36
MW-2	06/10/2014	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	372.26	**---**	**---**	**---**	**---**
MW-2	11/25/2014	1,300 i	<10	<10	<10	<20	---	1,500	<200	<10	<10	<10	6,400	74,000	300,000	---	372.26	38.77	333.49	---	---
MW-2	**04/23/2015**	**660 i**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**---**	**1,800**	**130**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**372.26**	**34.50**	**337.76**	**1.37**	**44**
MW-3	02/03/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	375.05	32.06	342.99	---	---
MW-3	02/07/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	375.05	32.57	342.48	---	---
MW-3	02/10/2000	180	5.12	<0.500	<0.500	0.714	26.8	21.5a	---	---	---	---	---	---	---	---	375.05	32.77	342.28	---	---
MW-3	05/17/2000	1,360	414	<5.00	<5.00	17.6	<25.0	---	---	---	---	---	---	---	---	---	375.05	31.00	344.05	---	---
MW-3	08/03/2000	<50.0	0.536	<0.500	<0.500	<0.500	22	---	---	---	---	---	---	---	---	---	375.05	31.03	344.02	---	---
MW-3	10/31/2000	<50.0	<0.500	<0.500	<0.500	<0.500	31.1	---	---	---	---	---	---	---	---	---	375.05	31.28	343.77	---	---
MW-3	03/01/2001	384	172	0.815	<0.500	8.0	5.16	---	---	---	---	---	---	---	---	---	375.05	31.21	343.84	---	---
MW-3	05/30/2001	<50	<0.50	<0.50	<0.50	<0.50	---	110	---	---	---	---	---	---	---	---	375.05	31.02	344.03	---	---
MW-3	08/02/2001	<50	<0.50	<0.50	<0.50	<0.50	---	93	---	---	---	---	---	---	---	---	375.05	30.94	344.11	---	---
MW-3	12/06/2001	110	<0.50	<0.50	<0.50	2.3	---	180	---	---	---	---	---	---	---	---	375.05	31.28	343.77	---	---
MW-3	02/05/2002	<50	0.89	0.60	<0.50	2.1	---	130	---	---	---	---	---	---	---	---	375.05	31.12	343.93	---	---
MW-3	06/17/2002	<50	<0.50	<0.50	<0.50	<0.50	---	72	---	---	---	---	---	---	---	---	375.05	31.21	343.84	---	---
MW-3	07/25/2002	<50	<0.50	<0.50	<0.50	<0.50	---	81	---	---	---	---	---	---	---	---	375.05	30.96	344.09	---	---
MW-3	11/14/2002	<50	<0.50	<0.50	<0.50	<0.50	---	60	---	---	---	---	---	---	---	---	375.05	31.44	343.61	---	---
MW-3	02/12/2003	<50	<0.50	<0.50	<0.50	<0.50	---	43	---	---	---	---	---	---	---	---	375.05	31.28	343.77	---	---
MW-3	05/14/2003	<50	<0.50	<0.50	<0.50	<1.0	---	24	---	---	---	---	---	---	---	---	375.05	31.20	343.85	---	---
MW-3	07/29/2003	<50	<0.50	<0.50	<0.50	<1.0	---	21	---	---	---	---	---	---	---	---	375.05	31.29	343.76	---	---
MW-3	11/19/2003	<50	<0.50	<0.50	<0.50	<1.0	---	8.2	---	---	---	---	---	---	---	---	375.05	31.86	343.19	---	---
MW-3	02/19/2004	81	0.67	4.4	1.8	8.6	---	13	---	---	---	---	---	---	---	---	375.05	31.66	343.39	---	---
MW-3	05/03/2004	<50	<0.50	<0.50	<0.50	<1.0	---	13	---	---	---	---	---	---	---	---	375.05	31.72	343.33	---	---
MW-3	08/24/2004	<50	<0.50	<0.50	<0.50	<1.0	---	10	---	---	---	---	---	---	---	---	375.05	32.09	342.96	---	---
MW-3	11/15/2004	<50	<0.50	<0.50	<0.50	<1.0	---	6.6	---	---	---	---	---	---	---	---	375.05	31.50	343.55	---	---
MW-3	02/02/2005	<50	<0.50	<0.50	<0.50	<1.0	---	3.1	---	---	---	---	---	---	---	---	375.05	31.28	343.77	---	---
MW-3	05/05/2005	<50	<0.50	<0.50	<0.50	<1.0	---	2.3	---	---	---	---	---	---	---	---	375.05	31.42	343.63	---	---
MW-3	08/05/2005	<50	<0.50	<0.50	<0.50	<1.0	---	2.4	---	---	---	---	---	---	---	---	375.05	31.35	343.70	---	---
MW-3	11/22/2005	<50	<0.500	<0.500	<0.500	<0.500	---	3.84	---	---	---	---	---	---	---	---	375.05	31.98	343.07	---	---
MW-3	02/07/2006	<50.0	<0.500	<0.500	<0.500	<0.500	---	<0.500	---	---	---	---	---	---	---	---	375.05	31.24	343.81	---	---
MW-3	05/16/2006	<50	<0.50	<0.50	<0.50	<1.0	---	4.5	---	---	---	---	---	---	---	---	375.05	31.37	343.68	---	---
MW-3	08/21/2006	<50.0	<0.500	<0.500	<0.500	<0.500	---	4.04	---	---	---	---	---	---	---	---	375.05	31.95	343.10	---	---
MW-3	11/14/2006	<50	<0.50	<0.50	<0.50	<0.50	---	3.8	<20	<0.50	<0.50	<0.50	---	---	---	---	375.05	32.24	342.81	---	---
MW-3	02/01/2007	<50	<0.50	<0.50	<0.50	<1.0	---	2.8	---	---	---	---	---	---	---	---	375.05	32.17	342.88	---	---
MW-3	06/01/2007	<50 d	<0.50	<1.0	<1.0	<1.0	---	3.1	---	---	---	---	---	---	---	---	375.05	31.86	343.19	---	---
MW-3	08/22/2007	<50 d	<0.50	<1.0	<1.0	<1.0	---	4.6	<10	---	---	---	---	---	---	---	375.05	32.18	342.87	---	---
MW-3	11/26/2007	<50 d	<0.50	<1.0	<1.0	<1.0	---	3.5	<10	<2.0	<2.0	<2.0	---	---	---	---	375.05	32.69	342.36	---	---

Groundwater Data
Shell-branded Service Station
4212 First Street, Pleasanton, California

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Nitrate as N (µg/L)	Sulfate (µg/L)	Alkalinity as $CaCO_3$ (µg/L)	Ferrous Iron (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
MW-3	02/19/2008	<50 d	<0.50	1.2	<1.0	<1.0	---	2.6	<10	---	---	---	---	---	---	---	375.05	30.94	344.11	---	---
MW-3	05/23/2008	<50	<0.50	<1.0	<1.0	<1.0	---	3.6	<10	---	---	---	---	---	---	---	375.05	31.45	343.60	---	---
MW-3	08/07/2008	<50	<0.50	<1.0	<1.0	<1.0	---	3.0	<10	---	---	---	---	---	---	---	375.05	31.40	343.65	---	---
MW-3	12/03/2008	<50	<0.50	<1.0	<1.0	<1.0	---	2.1	<10	---	---	---	---	---	---	---	375.05	32.12	342.93	---	---
MW-3	02/05/2009	<50	<0.50	<1.0	<1.0	<1.0	---	1.1	<10	---	---	---	---	---	---	---	375.05	32.74	342.31	---	---
MW-3	05/07/2009	<50	<0.50	<1.0	<1.0	<1.0	---	<1.0	<10	---	---	---	---	---	---	---	375.05	31.69	343.36	---	---
MW-3	08/20/2009	<50	<0.50	<1.0	<1.0	<1.0	---	2.0	<10	---	---	---	---	---	---	---	375.05	32.42	342.63	---	---
MW-3	11/09/2009	<50	<0.50	<1.0	<1.0	<1.0	---	1.7	<10	<2.0	<2.0	<2.0	---	---	---	---	375.05	32.54	342.51	---	---
MW-3	02/11/2010	<50	<0.50	<1.0	<1.0	<1.0	---	2.1	<10	---	---	---	---	---	---	---	375.05	31.81	343.24	---	---
MW-3	05/13/2010	<50	<0.50	<1.0	<1.0	<1.0	---	1.7	<10	---	---	---	---	---	---	---	375.05	31.25	343.80	---	---
MW-3	08/05/2010	<50	<0.50	<1.0	<1.0	<1.0	---	1.2	<10	---	---	---	---	---	---	---	375.05	32.00	343.05	---	---
MW-3	10/30/2010	<50	<0.50	<1.0	<1.0	<1.0	---	1.4	<10	<2.0	<2.0	<2.0	---	---	---	---	375.05	32.18	342.87	---	---
MW-3	02/09/2011	<50	<0.50	<0.50	<0.50	<1.0	---	1.7	<10	---	---	---	---	---	---	---	375.05	31.80	343.25	---	---
MW-3	05/31/2011	<50	<0.50	<0.50	<0.50	<1.0	---	1.9	<10	---	---	---	---	---	---	---	375.05	31.60	343.45	---	---
MW-3	07/27/2011	<50	<0.50	<0.50	<0.50	<1.0	---	1.8	<10	---	---	---	---	---	---	---	375.05	32.00	343.05	---	---
MW-3	11/04/2011	<50	<0.50	<0.50	<0.50	<1.0	---	2.1	<10	<1.0	<1.0	<1.0	---	---	---	---	375.05	32.55	342.50	---	---
MW-3	05/23/2012	<50	0.67	<0.50	<0.50	1.9	---	0.91	<10	---	---	---	1,400	36,000	250,000	5,000	375.05	31.52	343.53	1.81	-5
MW-3	09/07/2012	<50	<0.50	<0.50	<0.50	<1.0	---	1.6	<10	---	---	---	<110 a	28,000	270,000	---	375.05	32.66	342.39	1.06	-10
MW-3	11/13/2012	<50	<0.50	<0.50	<0.50	<1.0	---	1.8	<10	<0.50	<0.50	<0.50	<110	7,300	330,000	---	375.05	33.35	341.70	1.44	-26
MW-3	05/14/2013	<50	<0.50	<0.50	<0.50	<1.0	---	1.2	<10	---	---	---	<110	17,000	280,000	---	375.05	32.92	342.13	1.10	78
MW-3	07/31/2013	<50	<0.50	<0.50	<0.50	<1.0	---	2.5	<10	---	---	---	<110	2,400	370,000	---	375.05	33.56	341.49	1.56	-82
MW-3	11/12/2013	<50	<0.50	<0.50	<0.50	<1.0	---	1.2	<10	---	---	---	---	---	---	---	375.05	34.20	340.85	1.26	-8
MW-3	02/04/2014	Insufficient water		---	---	---	---	---	---	---	---	---	---	---	---	---	375.05	34.12	340.93	---	---
MW-3	05/12/2014	<50	<0.50	<0.50	<0.50	<1.0	---	0.94	<10	---	---	---	<110	150,000	250,000	---	375.05	33.30	341.75	1.19	-31
MW-3	11/25/2014	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	<10	<0.50	<0.50	<0.50	---	---	---	---	375.05	34.18	340.87	---	---
MW-3	**04/23/2015**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**---**	**0.79**	**<10**	**---**	**---**	**---**	**<110 a**	**19,000**	**360,000**	**---**	**375.05**	**33.53**	**341.52**	**1.76**	**21**
MW-4	09/21/2006	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	372.78	31.58	341.20	---	---
MW-4	09/28/2006	11,000	<250	<250	<250	<250	---	13,000	<10,000	---	---	---	---	---	---	---	372.78	31.57	341.21	---	---
MW-4	11/14/2006	30,000	<250	<250	<250	<250 a	---	14,000	<10,000	<250	<250	<250	---	---	---	---	372.78	32.11	340.67	---	---
MW-4	02/01/2007	6,300	50	<5.0	19	120	---	14,000	---	---	---	---	---	---	---	---	372.78	33.23	339.55	---	---
MW-4	06/01/2007	8,200 d	52	<25	26	150	---	11,000	---	---	---	---	---	---	---	---	372.78	31.57	341.21	---	---
MW-4	08/22/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	372.78	33.40	339.38	---	---
MW-4	11/26/2007	12,000 d	71	<100	<100	<100	---	20,000	<1,000	<200	<200	<200	---	---	---	---	372.78	34.74	338.04	---	---
MW-4	02/19/2008	13,000 d	<100	<200	<200	<200	---	18,000	2,900	---	---	---	---	---	---	---	372.78	29.70	343.08	---	---
MW-4	05/23/2008	21,000	<100	<200	<200	<200	---	16,000	<2,000	---	---	---	---	---	---	---	372.78	31.67	341.11	---	---
MW-4	08/07/2008	27,000	<100	<200	<200	<200	---	21,000	<2,000	---	---	---	---	---	---	---	372.78	31.90	340.88	---	---
MW-4	12/03/2008	20,000	19	<25	<25	29	---	21,000	2,500	---	---	---	---	---	---	---	372.78	34.32	338.46	---	---
MW-4	02/05/2009	15,000	200	<200	<200	<200	---	13,000	<2,000	---	---	---	---	---	---	---	372.78	34.58	338.20	---	---

Groundwater Data
Shell-branded Service Station
4212 First Street, Pleasanton, California

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Nitrate as N (µg/L)	Sulfate (µg/L)	Alkalinity as $CaCO_3$ (µg/L)	Ferrous Iron (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
MW-4	05/07/2009	18,000	<100	<200	<200	<200	---	17,000	<2,000	---	---	---	---	---	---	---	372.78	31.34	341.44	---	---
MW-4	08/20/2009	15,000	<50	<100	<100	<100	---	13,000	1,900	---	---	---	---	---	---	---	372.78	33.56	339.22	---	---
MW-4	11/09/2009	13,000	<50	<100	<100	<100	---	11,000	<1000	<200	<200	<200	---	---	---	---	372.78	33.57	339.21	---	---
MW-4	02/11/2010	11,000	95	<100	<100	110	---	7,500	3,200	---	---	---	---	---	---	---	372.78	31.21	341.57	---	---
MW-4	05/13/2010	8,800	48	<50	57	96	---	7,800	2,900	---	---	---	---	---	---	---	372.78	30.19	342.59	---	---
MW-4	08/05/2010	4,000	<12	<25	<25	<25	---	3,600	600	---	---	---	---	---	---	---	372.78	32.22	340.56	---	---
MW-4	10/30/2010	6,800	<12	<25	<25	<25	---	8,200	1,400	<50	<50	<50	---	---	---	---	372.78	33.95	338.83	---	---
MW-4	02/09/2011	<5,000	<50	<50	<50	<100	---	5,800	2,700	---	---	---	---	---	---	---	372.78	31.56	341.22	---	---
MW-4	05/31/2011	<5,000	<50	<50	<50	<100	---	5,600	1,200	---	---	---	---	---	---	---	372.78	30.78	342.00	---	---
MW-4	07/27/2011	4,500 c	<10	<10	18	21	---	5,200	2,100	---	---	---	---	---	---	---	372.78	31.64	341.14	---	---
MW-4	11/04/2011	3,400 c	<25	<25	<25	<50	---	4,400	1,800	<50	<50	<50	---	---	---	---	372.78	33.53	339.25	---	---
MW-4	05/23/2012	3,500	<10	<10	13	<20	---	4,900	1,400	---	---	---	5,300	69,000	300,000	1,000	372.78	31.12	341.66	1.44	-6
MW-4	08/31/2012	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	372.79	33.77	339.02	---	---
MW-4	09/04/2012	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	372.79	34.18	338.61	---	---
MW-4	09/07/2012	5,900 c	<50	<50	<50	<100	---	5,000	<1,000	---	---	---	4,300 a	71,000	320,000	---	372.79	34.55	338.24	1.21	66
MW-4	11/13/2012	1,200	<10	<10	<10	<20	---	1,400	970	<10	<10	<10	2,100	53,000	300,000	---	372.79	36.25	336.54	1.38	85
MW-4	04/01/2013	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	372.79	28.95	343.83	---	---
MW-4	05/14/2013	910	<0.50	<0.50	1.4	7.5	---	46	290	---	---	---	1,700	130,000	80,000	---	372.79	35.48	337.30	1.34	70
MW-4	07/31/2013	1,200	<0.50	<0.50	2.0	2.8	---	200	630	---	---	---	1,900	81,000	100,000	---	372.79	36.00	336.78	1.43	31
MW-4	11/12/2013	1,200	1.3	<0.50	2.3	2.2	---	96	1,100	---	---	---	470	55,000	170,000	---	372.79	38.15	334.64	1.70	38
MW-4	02/04/2014	1,600	<0.50	<0.50	2.1	<1.0	---	77	990	---	---	---	1,300	48,000	340,000	---	372.79	38.84	333.95	0.74	136
MW-4	05/12/2014	420	<0.50	<0.50	<0.50	<1.0	---	49	170	---	---	---	790	62,000	140,000	---	372.79	37.91	334.88	1.62	44
MW-4	11/25/2014	270	<0.50	<0.50	<0.50	<1.0	---	3.1	<10	<0.50	<0.50	<0.50	4,600	76,000	70,000	---	372.79	41.70	331.09	---	---
MW-4	**04/23/2015**	**1,400**	**2.2**	**<0.50**	**6.4**	**13**	**---**	**46**	**410**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**372.79**	**35.59**	**337.20**	**1.56**	**12**
TB-1	02/12/2003	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TB-1	02/28/2003	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	12.54	---	---	---
TB-1	05/14/2003	<50	<0.50	<0.50	<0.50	<1.0	---	<5.0	---	---	---	---	---	---	---	---	---	12.31	---	---	---
TB-2	02/12/2003	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TB-2	02/28/2003	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	12.56	---	---	---
TB-2	05/14/2003	Insufficient water		---	---	---	---	---	---	---	---	---	---	---	---	---	---	12.54	---	---	---
TB-3	02/12/2003	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TB-3	02/28/2003	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TB-3	05/14/2003	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TB-4	02/12/2003	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TB-4	02/28/2003	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Groundwater Data
Shell-branded Service Station
4212 First Street, Pleasanton, California

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Nitrate as N (µg/L)	Sulfate (µg/L)	Alkalinity as $CaCO_3$ (µg/L)	Ferrous Iron (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
TB-4	05/14/2003	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
AS-1	08/31/2012	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	373.39	34.55	338.84	---	---
AS-1	09/04/2012	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	373.39	35.08	338.31	---	---
AS-1	09/07/2012	8,500	<50	<50	<50	<100	---	10,000	---	---	---	---	---	---	---	---	373.39	34.55	338.84	1.17	187
EW-1	08/31/2012	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	---	---	372.14	---	---	---	---
EW-1	09/07/2012	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	---	---	372.14	---	---	---	---
EW-1	09/14/2012	<50	<0.50	<0.50	<0.50	<1.0	---	3.9	<10	---	---	---	---	---	---	---	372.14	19.03	353.11	---	---
EW-1	09/14/2012	1,600 h	3.8 h	0.84 h	20 h	76 h	---	36 h	1,200 h	---	---	---	---	---	---	---	372.14	---	---	---	---
EW-2	08/31/2012	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	372.74	33.61	339.13	---	---
EW-2	09/04/2012	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	372.74	34.16	338.58	---	---
EW-2	09/07/2012	3,600	<25	<25	<25	<50	---	4,100	---	---	---	---	---	---	---	---	372.74	35.02	337.72	1.83	166
EW-2	09/14/2012	3,800	<25	<25	<25	<50	---	3,400	670	---	---	---	---	---	---	---	372.74	---	---	---	---
OBS-1	08/31/2012	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	372.28	33.50	338.78	---	---
OBS-1	09/04/2012	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	372.28	35.18	337.10	---	---
P-1	08/31/2012	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	---	---	372.51	---	---	---	---
P-1	09/07/2012	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	---	---	372.51	---	---	---	---
P-2	08/31/2012	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	372.39	33.42	338.97	---	---
P-2	09/04/2012	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	372.39	34.00	338.39	---	---
P-2	09/07/2012	7,700	580	<10	30	<20	---	1,800	---	---	---	---	---	---	---	---	372.39	34.61	337.78	1.62	193
SVE-5	08/31/2012	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	372.93	33.83	339.10	---	---
SVE-5	09/04/2012	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	372.93	35.30	337.63	---	---
SVE-5	09/07/2012	4,200	<25	<25	<25	<50	---	4,900	---	---	---	---	---	---	---	---	372.93	36.20	336.73	1.49	180

Notes:

TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method 8260B; prior to 5/30/2001, analyzed by EPA Method 8015 unless otherwise noted.

BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed by EPA Method 8260B; prior to 5/30/2001, analyzed by EPA Method 8020.

MTBE = Methyl tertiary-butyl ether analyzed as noted

TBA = Tertiary-butyl alcohol analyzed by EPA Method 8260B

DIPE = Di-isopropyl ether analyzed by EPA Method 8260B

ETBE = Ethyl tertiary-butyl ether analyzed by EPA Method 8260B

TAME = Tertiary-amyl methyl ether analyzed by EPA Method 8260B

Nitrate as N and sulfate analyzed by EPA Method 300.0

Table 1

Groundwater Data
Shell-branded Service Station
4212 First Street, Pleasanton, California

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Nitrate as N (µg/L)	Sulfate (µg/L)	Alkalinity as $CaCO_3$ (µg/L)	Ferrous Iron (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)

Alkalinity as CaCO3 analyzed by SM 2320 B
Ferrous iron analyzed by SM 3500 Fe B
TOC = Top of casing elevation, in feet relative to mean sea level
GW = Groundwater
DO = Dissolved oxygen
ORP = Oxidation reduction potential
µg/L = Micrograms per liter
ft = Feet
MSL = Mean sea level
mg/L = Milligrams per liter
mV = Millivolts
<x = Not detected at reporting limit x
--- = Not analyzed or available

a = Sample was analyzed outside the EPA recommended holding time.
b = Concentration is an estimate value above the linear quantitation range.
c = Hydrocarbon result partly due to individual peak(s) in quantitation range.
d = Analyzed by EPA Method 8015B (M).
e = The sample chromatographic pattern for TPH does not match the chromatographic pattern of the specified standard.
Quantitation of the unknown hydrocarbon(s) in the sample was based upon the specified standard.
f = Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
g = Result exceeded calibration range
h = Post pilot test samples
i = Concentration reported is due to the presence of discrete peak of MTBE.

Well MW-1 surveyed on May 4, 1999 by Virgil Chavez Land Surveying
Site wells surveyed on March 19, 2000 by Virgil Chavez Land Surveying
Site wells surveyed on January 15, 2002 by Virgil Chavez Land Surveying
Site wells surveyed on September 5, 2012 by Virgil Chavez Land Surveying
September 21, 2006 survey data for wells MW-1B and MW-4 provided by Delta Environmental Consultants, Inc.

Table 2

Historical Soil Analytical Data - Petroleum Hydrocarbons, Fuel Oxygenates, and Ethanol
Shell-branded Service Station
4212 First Street, Pleasanton, California

Sample ID	Date	Depth (fbg)	O&G (mg/kg)	TPHmo (mg/kg)	TPHd (mg/kg)	TPHg (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	E & X (mg/kg)	MTBE (mg/kg)	TBA (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	Ethanol (mg/kg)
S-A	09/24/1985	7-8.5	---	<20	---	---	---	---	---	---	---	---	---	---	---	---	---
S-B	09/27/1985	3.5-5	---	---	---	2.0	<0.10 a	<0.10 a	---	---	<0.40 a	---	---	---	---	---	---
S-B	09/27/1985	7-8.5	---	---	---	460	<2.0 a	2.0 a	---	---	32 a	---	---	---	---	---	---
S-B	09/27/1985	10.5-12	---	---	---	610	<2.0 a	**3.5 a**	---	---	63 a	---	---	---	---	---	---
S-B	09/27/1985	14-15.5	---	---	---	**1,300**	<2.5 a	**9.6 a**	---	---	260 a	---	---	---	---	---	---
S-B	09/27/1985	19-20	---	---	---	<2.0	<0.10 a	<0.10 a	---	---	<0.40 a	---	---	---	---	---	---
S-C	09/27/1985	10.5-12	---	---	---	<2.0	<0.10 a	<0.10 a	---	---	<0.40 a	---	---	---	---	---	---
S-D	09/27/1985	10.5-12	---	---	---	<2.0	<0.10 a	<0.10 a	---	---	<0.40 a	---	---	---	---	---	---
S-E	03/1986	5.5	---	---	---	ND	ND	ND	---	---	ND	---	---	---	---	---	---
S-E	03/1986	10.5	---	---	---	ND	ND	ND	---	---	ND	---	---	---	---	---	---
S-E	03/1986	15.5	---	---	---	ND	ND	ND	---	---	ND	---	---	---	---	---	---
SB-1	03/05/1990	15	---	---	---	4.2	<0.050	<0.10	<0.10	<0.10	---	---	---	---	---	---	---
SB-1	03/05/1990	35	---	---	---	18	<0.050	<0.10	<0.10	<0.10	---	---	---	---	---	---	---
SB-1	03/05/1990	50	---	---	---	<1.0	<0.050	<0.10	<0.10	<0.10	---	---	---	---	---	---	---
SB-2	03/05/1990	15	---	---	---	<1.0	<0.050	<0.10	<0.10	<0.10	---	---	---	---	---	---	---
SB-2	03/05/1990	30	---	---	---	7.2	<0.050	0.17	<0.10	<0.10	---	---	---	---	---	---	---
SB-3	03/05/1990	10	---	---	---	<1.0	<0.050	<0.10	<0.10	<0.10	---	---	---	---	---	---	---
SB-3	03/05/1990	30	---	---	---	<1.0	<0.050	<0.10	<0.10	<0.10	---	---	---	---	---	---	---
WA-1 (S-1)	03/06/1990	30	---	---	---	**380**	**2.2**	2.7	**5.3**	**32**	---	---	---	---	---	---	---
WA-1 (S-1)	03/06/1990	35	---	---	---	**290**	**1.8**	0.35	0.24	1.5	---	---	---	---	---	---	---
WA-1 (S-1)	03/06/1990	40	---	---	---	<1.0	<0.050	<0.10	<0.10	<0.10	---	---	---	---	---	---	---
WA-1 (S-1)	03/06/1990	50	---	---	---	<1.0	<0.050	<0.10	<0.10	<0.10	---	---	---	---	---	---	---

Table 2

Historical Soil Analytical Data - Petroleum Hydrocarbons, Fuel Oxygenates, and Ethanol
Shell-branded Service Station
4212 First Street, Pleasanton, California

Sample ID	Date	Depth (fbg)	O&G (mg/kg)	TPHmo (mg/kg)	TPHd (mg/kg)	TPHg (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	E & X (mg/kg)	MTBE (mg/kg)	TBA (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	Ethanol (mg/kg)
SB-4-15	07/17/1990	15	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---
SB-4-35	07/17/1990	35	---	---	---	<1.0	0.023	0.0071	<0.0050	0.0055	---	---	---	---	---	---	---
SB-4-50	07/17/1990	50	---	---	---	<1.0	0.030	0.0059	<0.0050	<0.0050	---	---	---	---	---	---	---
SB-5-35	07/17/1990	35	---	---	---	**820**	**65**	**3.7**	**6.5**	**65**	---	---	---	---	---	---	---
SB-5-40	07/17/1990	40	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---
SB-5-50	07/17/1990	50	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---
DP-1	09/08/1995	3	---	---	---	1.3	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---
DP-1	09/11/1995	6	---	---	---	2.5	<0.0050	<0.0050	0.020	0.035	---	---	---	---	---	---	---
DP-2	09/08/1995	7.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---
DP-2-SW	09/08/1995	4	---	---	---	1.7	<0.0050	<0.0050	0.0075	0.017	---	---	---	---	---	---	---
DP-3	09/08/1995	8	---	---	---	120	<0.12	<0.12	<0.12	<0.12	---	---	---	---	---	---	---
DP-4	09/08/1995	8.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---
PT-1	09/08/1995	4	---	---	---	2.5	0.0080	<0.0050	0.038	0.19	---	---	---	---	---	---	---
PT-2	09/08/1995	4.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---
SB-6-15.5' (MW-1)	04/09/1999	15.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.025	---	---	---	---	---
SB-6-19.5' (MW-1)	04/09/1999	19.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.025	---	---	---	---	---
SB-6-25.0' (MW-1)	04/09/1999	25	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.025	---	---	---	---	---
SB-6-30.0' (MW-1)	04/09/1999	30	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.025	---	---	---	---	---
SB-6-35.0' (MW-1)	04/09/1999	35	---	---	---	<1.0	0.0069	<0.0050	<0.0050	<0.0050	---	<0.025	---	---	---	---	---
SB-6-40.0' (MW-1)	04/09/1999	40	---	---	---	<1.0	<0.0050	0.28	<0.0050	<0.0050	---	<0.025	---	---	---	---	---
SB-6-45.0' (MW-1)	04/09/1999	45	---	---	---	<1.0	**0.10**	<0.0050	<0.0050	<0.0050	---	<0.025	---	---	---	---	---

Table 2

Historical Soil Analytical Data - Petroleum Hydrocarbons, Fuel Oxygenates, and Ethanol
Shell-branded Service Station
4212 First Street, Pleasanton, California

Sample ID	Date	Depth (fbg)	O&G (mg/kg)	TPHmo (mg/kg)	TPHd (mg/kg)	TPHg (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	E & X (mg/kg)	MTBE (mg/kg)	TBA (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	Ethanol (mg/kg)
SB-7-15.0'	04/07/1999	15	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.025	---	---	---	---	---
SB-7-19.5'	04/07/1999	19.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.025	---	---	---	---	---
SB-7-24.5'	04/07/1999	24.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.025	---	---	---	---	---
SB-7-29.3'	04/07/1999	29.3	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.025	---	---	---	---	---
SB-7-34.3'	04/07/1999	34.3	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.025	---	---	---	---	---
SB-7-40.0'	04/07/1999	40	---	---	---	83	<0.0050	0.37	0.26	0.26	---	<0.025	---	---	---	---	---
SB-7-44.5'	04/07/1999	44.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.025	---	---	---	---	---
SB-7-59.5'	04/07/1999	59.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.050	---	---	---	---	---
SB-7-64.5'	04/07/1999	64.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.050	---	---	---	---	---
MW-2-6.3'	01/18/2000	6.3	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	---	<0.050	---	---	---	---	---
MW-2-16.5'	01/18/2000	16.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	---	<0.050	---	---	---	---	---
MW-2-21.5'	01/18/2000	21.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	---	<0.050	---	---	---	---	---
MW-2-26.0'	01/18/2000	26	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	---	<0.050	---	---	---	---	---
MW-2-30.5'	01/18/2000	30.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	---	<0.050	---	---	---	---	---
MW-2-35.0'	01/18/2000	35	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	---	<0.050	---	---	---	---	---
MW-3-5.0'	01/18/2000	5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	---	<0.050	---	---	---	---	---
MW-3-10.5'	01/18/2000	10.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	---	<0.050	---	---	---	---	---
MW-3-15.5'	01/18/2000	15.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	---	<0.050	---	---	---	---	---
MW-3-20.5'	01/18/2000	20.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	---	<0.050	---	---	---	---	---
MW-3-25.5'	01/18/2000	25.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	---	<0.050	---	---	---	---	---
WO-1@10	06/10/2005	10	<100	---	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	---	---	---	---	---
WO-1@20	06/10/2005	20	<100	---	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	---	---	---	---	---
WO-1@30	06/10/2005	30	<100	---	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	---	---	---	---	---
WO-2-14	07/20/2006	14	26	---	5.5 b	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	0.021	<0.0050	<0.0050	<0.0050	<0.0050	---
MW-1B@65'	08/23/2006	65	---	---	---	<2.5	<0.025	<0.025	<0.025	<0.050	---	<0.025	<0.250	---	---	---	---
MW-1B@69.5'	08/23/2006	69.5	---	---	---	<2.5	<0.025	<0.025	<0.025	<0.050	---	<0.025	<0.250	---	---	---	---

Table 2

Historical Soil Analytical Data - Petroleum Hydrocarbons, Fuel Oxygenates, and Ethanol
Shell-branded Service Station
4212 First Street, Pleasanton, California

Sample ID	Date	Depth (fbg)	O&G (mg/kg)	TPHmo (mg/kg)	TPHd (mg/kg)	TPHg (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	E & X (mg/kg)	MTBE (mg/kg)	TBA (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	Ethanol (mg/kg)
MW-1B@95'	08/23/2006	95	---	---	---	<2.5	<0.025	<0.025	<0.025	<0.050	---	<0.025	<0.250	---	---	---	---
MW-4@35'	08/24/2006	35	---	---	---	51	<0.025	<0.025	<0.025	<0.050	---	**0.17**	<0.250	---	---	---	---
MW-4@36.5'	08/24/2006	36.5	---	---	---	380	<0.025	<0.025	1.2	1.6	---	**0.092**	<0.250	---	---	---	---
MW-4@39.5'	08/24/2006	39.5	---	---	---	6.7	<0.025	<0.025	0.050	0.064	---	**0.038**	<0.250	---	---	---	---
MW-4@44.5'	08/24/2006	44.5	---	---	---	<2.5	<0.025	<0.025	<0.025	<0.050	---	**0.59**	<0.250	---	---	---	---
MW-4@50'	08/24/2006	50	---	---	---	<2.5	<0.025	<0.025	<0.025	<0.050	---	**0.56**	<0.250	---	---	---	---
B-1@5	03/27/2007	5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.020	---	---	---	---
B-1@9.5	03/29/2007	9.5	---	---	---	5.4	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.020	---	---	---	---
B-1@14.5	03/29/2007	14.5	---	---	---	0.13 d	<0.0050	<0.0050	<0.0050	<0.0050	---	**0.046**	0.068	---	---	---	---
B-1@19.5	03/29/2007	19.5	---	---	---	0.57 d	<0.010	<0.010	<0.010	<0.010	---	**0.60**	**0.80**	---	---	---	---
B-1@24.5	03/29/2007	24.5	---	---	---	0.92 d	<0.050	<0.050	<0.050	<0.050	---	**0.78**	**0.20**	---	---	---	---
B-1@29.5	03/29/2007	29.5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	**0.059**	<0.020	---	---	---	---
B-1@34.5	03/29/2007	34.5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	**0.12**	0.033	---	---	---	---
B-2@5	03/27/2007	5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.020	---	---	---	---
B-2@9.5	03/29/2007	9.5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.020	---	---	---	---
B-2@14.5	03/29/2007	14.5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.020	---	---	---	---
B-2@19.5	03/29/2007	19.5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	**0.082**	---	---	---	---
B-2@24.5	03/29/2007	24.5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	**0.11**	0.030	---	---	---	---
B-2@29	03/29/2007	29	---	---	---	0.25	<0.0050	<0.0050	<0.0050	<0.0050	---	**0.22**	**0.14**	---	---	---	---
B-2@34.5	03/29/2007	34.5	---	---	---	0.32 d	<0.0050	<0.0050	<0.0050	<0.0050	---	**0.45**	**0.75**	---	---	---	---
B-3@5	03/27/2007	5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.020	---	---	---	---
B-3@9.5	03/28/2007	9.5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.020	---	---	---	---
B-3@14.5	03/28/2007	14.5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	**0.080**	<0.020	---	---	---	---
B-3@19.5	03/28/2007	19.5	---	---	---	0.11 d	<0.0050	<0.0050	<0.0050	<0.0050	---	**0.14**	0.021	---	---	---	---
B-3@24.5	03/28/2007	24.5	---	---	---	0.45	<0.0050	<0.0050	<0.0050	<0.0050	---	**0.083**	<0.020	---	---	---	---
B-3@29	03/28/2007	29	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	0.016	0.073	---	---	---	---
B-3@34.5	03/28/2007	34.5	---	---	---	710	**0.096**	<0.05	2.3	**16**	---	<0.025	<5.0	---	---	---	---

Table 2

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Shell-branded Service Station
4212 First Street, Pleasanton, California

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B-4@5	03/27/2007	5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.020	---	---	---	---
B-4@9.5	03/28/2007	9.5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.020	---	---	---	---
B-4@14.5	03/28/2007	14.5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.020	---	---	---	---
B-4@20	03/28/2007	20	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	**0.040**	<0.020	---	---	---	---
B-4@24.5	03/28/2007	24.5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	**0.026**	<0.020	---	---	---	---
B-4@29.5	03/28/2007	29.5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	0.0063	0.071	---	---	---	---
B-4@35	03/28/2007	35	---	---	---	0.54 d	<0.025	<0.025	<0.025	<0.025	---	**0.80**	**0.63**	---	---	---	---
B-5@5	03/27/2007	5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.020	---	---	---	---
B-5@10.5	03/28/2007	10.5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.020	---	---	---	---
B-5@15.5	03/28/2007	15.5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.020	---	---	---	---
B-5@20.5	03/28/2007	20.5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	0.0054	<0.020	---	---	---	---
B-5@25.5	03/28/2007	25.5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.020	---	---	---	---
B-5@30	03/28/2007	30	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	**0.065**	**0.10**	---	---	---	---
B-5@35	03/28/2007	35	---	---	---	<0.50	<0.025	<0.025	<0.025	<0.025	---	**0.30**	**0.46**	---	---	---	---
Under Dispenser #1	01/22/2009	3	---	---	<9.0	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.050	<0.010	<0.010	<0.010	---
AS-10@30'	01/14/2010	30	---	---	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.050	<0.010	<0.010	<0.010	<0.50
AS-10@35'	01/14/2010	35	---	---	---	140	<0.50	<0.50	0.50	0.90	---	<0.50	<5.0	<1.0	<1.0	<1.0	<50
AS-10@40'	01/14/2010	40	---	---	---	<50	<0.50 e	<0.50 e	<0.50 e	<0.50 e	---	<0.50 e	<5.0 e	<1.0 e	<1.0 e	<1.0 e	<50
AS-10@45'	01/14/2010	45	---	---	---	0.90	<0.0050	<0.0050	<0.0050	<0.0050	---	**0.62**	**0.19**	<0.010	<0.010	<0.010	<0.50
AS-10@50'	01/14/2010	50	---	---	---	1.4	<0.0050	<0.0050	<0.0050	<0.0050	---	**0.36 f**	**0.14**	<0.010	<0.010	<0.010	<0.50
OBS-1@30'	01/13/2010	30	---	---	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.050	<0.010	<0.010	<0.010	<0.50
OBS-1@35'	01/13/2010	35	---	---	---	350	<1.0	<1.0	<1.0	<1.0	---	<1.0	<10	<2.0	<2.0	<2.0	<100
OBS-1@40'	01/13/2010	40	---	---	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	---	0.0089	<0.050	<0.010	<0.010	<0.010	<0.50
SVE-1@30'	01/14/2010	30	---	---	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.050	<0.010	<0.010	<0.010	<0.50

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AS-1-5'	08/22/2012	5	---	---	---	<0.099	<0.00099	<0.00099	<0.00099	<0.0020	---	<0.0020	<0.050	---	---	---	---
AS-1-10'	08/22/2012	10	---	---	---	<0.10	<0.0010	<0.0010	<0.0010	<0.0020	---	<0.0020	<0.050	---	---	---	---
AS-1-15'	08/22/2012	15	---	---	---	<0.099	<0.00099	<0.00099	<0.00099	<0.0020	---	0.0035	<0.050	---	---	---	---
AS-1-20'	08/22/2012	20	---	---	---	<0.10	<0.0010	<0.0010	<0.0010	<0.0020	---	<0.0020	<0.050	---	---	---	---
AS-1-25'	08/22/2012	25	---	---	---	<0.10	<0.0010	<0.0010	<0.0010	<0.0020	---	<0.0020	<0.050	---	---	---	---
AS-1-30'	08/22/2012	30	---	---	---	<0.099	<0.00099	<0.00099	<0.00099	<0.0020	---	0.0038	<0.050	---	---	---	---
AS-1-33'	08/22/2012	33	---	---	---	<0.099	<0.00099	<0.00099	<0.00099	<0.0020	---	<0.0020	<0.050	---	---	---	---
AS-1-35'	08/22/2012	35	---	---	---	<0.099	<0.00099	<0.00099	<0.00099	<0.0020	---	0.0040	<0.050	---	---	---	---
AS-1-40'	08/22/2012	40	---	---	---	<0.099	<0.00099	<0.00099	<0.00099	<0.0020	---	0.012	**0.61**	---	---	---	---
AS-1-45'	08/22/2012	45	---	---	---	0.55	<0.0024	<0.0024	<0.0024	<0.0049	---	**0.76**	**0.24**	---	---	---	---
EW-1-5.5'	08/20/2012	5.5	---	---	---	<0.10	<0.0010	<0.0010	<0.0010	<0.0020	---	<0.0020	<0.050	---	---	---	---
EW-1-10'	08/20/2012	10	---	---	---	<0.10	<0.0010	<0.0010	<0.0010	<0.0020	---	<0.0020	<0.050	---	---	---	---
EW-1-12.5'	08/20/2012	12.5	---	---	---	<0.10	<0.0010	<0.0010	<0.0010	<0.0020	---	<0.0020	<0.050	---	---	---	---
EW-1-15.5'	08/20/2012	15.5	---	---	---	<0.10	<0.0010	<0.0010	<0.0010	<0.0020	---	<0.0020	<0.050	---	---	---	---
EW-1-17.5'	08/20/2012	17.5	---	---	---	<0.099	<0.00099	<0.00099	<0.00099	<0.0020	---	<0.0020	<0.050	---	---	---	---
EW-1-20.5'	08/20/2012	20.5	---	---	---	0.12	<0.00099	<0.00099	<0.00099	<0.0020	---	<0.0020	**0.083**	---	---	---	---
EW-1-22.5'	08/20/2012	22.5	---	---	---	0.33	<0.0010	<0.0010	<0.0010	<0.0020	---	0.0035	**0.39**	---	---	---	---
EW-2-5.5'	08/20/2012	5.5	---	---	---	<0.099	<0.00099	<0.00099	<0.00099	<0.0020	---	<0.0020	<0.050	---	---	---	---
EW-2-10'	08/20/2012	10	---	---	---	<0.099	<0.00099	<0.00099	<0.00099	<0.0020	---	<0.0020	<0.050	---	---	---	---
EW-2-15'	08/20/2012	15	---	---	---	<0.10	<0.0010	<0.0010	<0.0010	<0.0020	---	<0.0020	<0.050	---	---	---	---
EW-2-20'	08/20/2012	20	---	---	---	<0.099	<0.00099	<0.00099	<0.00099	<0.0020	---	<0.0020	<0.049	---	---	---	---
EW-2-25'	08/20/2012	25	---	---	---	<0.098	<0.00098	<0.00098	<0.00098	<0.0020	---	<0.0020	<0.049	---	---	---	---

Table 2

Historical Soil Analytical Data - Petroleum Hydrocarbons, Fuel Oxygenates, and Ethanol
Shell-branded Service Station
4212 First Street, Pleasanton, California

Sample ID	Date	Depth (fbg)	O&G (mg/kg)	TPHmo (mg/kg)	TPHd (mg/kg)	TPHg (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	E & X (mg/kg)	MTBE (mg/kg)	TBA (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	Ethanol (mg/kg)
EW-2-30'	08/20/2012	30	---	---	---	<0.10	<0.0010	<0.0010	<0.0010	<0.0020	---	<0.0020	<0.050	---	---	---	---
EW-2-35'	08/20/2012	35	---	---	---	110	<0.20	<0.20	<0.20	<0.40	---	<0.50	<10	---	---	---	---
EW-2-40'	08/20/2012	40	---	---	---	0.30	<0.00098	<0.00098	<0.00098	<0.0020	---	**0.094**	<0.049	---	---	---	---
P-1-1.5	08/21/2012	1.5	---	---	---	<0.098	<0.00098	<0.00098	<0.00098	<0.0020	---	<0.0020	<0.049	---	---	---	---
P-1-10	08/21/2012	10	---	---	---	<0.10	<0.0010	<0.0010	<0.0010	<0.0020	---	<0.0020	<0.050	---	---	---	---
P-1-14.5	08/21/2012	14.5	---	---	---	<0.10	<0.0010	<0.0010	<0.0010	<0.0020	---	<0.0020	<0.050	---	---	---	---
P-1-16.5	08/21/2012	16.5	---	---	---	0.85	<0.00099	<0.00099	<0.00099	<0.0020	---	<0.0020	<0.050	---	---	---	---
P-1-20	08/21/2012	20	---	---	---	1.0	<0.0010	<0.0010	<0.0010	<0.0020	---	0.0020	**0.21**	---	---	---	---
P-1-21.5	08/21/2012	21.5	---	---	---	0.49	<0.00099	<0.00099	<0.00099	<0.0020	---	0.0029	**0.42**	---	---	---	---
P-2-5.5'	08/22/2012	5.5	---	---	---	<0.099	<0.00099	<0.00099	<0.00099	<0.0020	---	<0.0020	<0.050	---	---	---	---
P-2-10'	08/22/2012	10	---	---	---	<0.099	<0.00099	<0.00099	<0.00099	<0.0020	---	<0.0020	<0.050	---	---	---	---
P-2-15'	08/22/2012	15	---	---	---	<0.099	<0.00099	<0.00099	<0.00099	<0.0020	---	<0.0020	<0.050	---	---	---	---
P-2-20'	08/22/2012	20	---	---	---	<0.10	<0.0010	<0.0010	<0.0010	<0.0020	---	<0.0020	<0.050	---	---	---	---
P-2-25'	08/22/2012	25	---	---	---	<0.099	<0.00099	<0.00099	<0.00099	<0.0020	---	<0.0020	**0.24**	---	---	---	---
P-2-30'	08/22/2012	30	---	---	---	<0.10	<0.0010	<0.0010	<0.0010	<0.0020	---	0.0030	0.066	---	---	---	---
P-2-35'	08/22/2012	35	---	---	---	0.24	0.0098	<0.0010	<0.0010	<0.0020	---	**0.080**	**0.29**	---	---	---	---
P-2-40'	08/22/2012	40	---	---	---	0.21	<0.0010	<0.0010	0.0020	<0.0020	---	0.016	**0.20**	---	---	---	---
SVE-5-5.5	08/21/2012	5.5	---	---	---	<0.098	<0.00098	<0.00098	<0.00098	<0.0020	---	<0.0020	<0.049	---	---	---	---
SVE-5-10	08/21/2012	10	---	---	---	<0.10	<0.0010	<0.0010	<0.0010	<0.0020	---	<0.0020	<0.050	---	---	---	---
SVE-5-15	08/21/2012	15	---	---	---	<0.099	<0.00099	<0.00099	<0.00099	<0.0020	---	<0.0020	<0.050	---	---	---	---
SVE-5-20	08/21/2012	20	---	---	---	<0.099	<0.00099	<0.00099	<0.00099	<0.0020	---	<0.0020	<0.050	---	---	---	---
SVE-5-25	08/21/2012	25	---	---	---	<0.099	<0.00099	<0.00099	<0.00099	<0.0020	---	<0.0020	<0.050	---	---	---	---
SVE-5-30	08/21/2012	30	---	---	---	<0.10	<0.0010	<0.0010	<0.0010	<0.0020	---	0.0025	<0.050	---	---	---	---
SVE-5-35	08/21/2012	35	---	---	---	<0.099	<0.00099	<0.00099	<0.00099	<0.0020	---	0.0028	<0.049	---	---	---	---
SVE-5-40	08/21/2012	40	---	---	---	0.21	<0.0019	<0.0019	<0.0019	<0.0039	---	**0.13**	<0.097	---	---	---	---
Shallow Soil (≤10 fbg) ESL [g] :			***NA***	***500***	***110***	***500***	***0.044***	***2.9***	***3.3***	***2.3***	***NA***	***0.023***	***0.075***	***NA***	***NA***	***NA***	***NA***
Deep Soil (>10 fbg) ESL [g] :			***NA***	***1,000***	***110***	***770***	***0.044***	***2.9***	***3.3***	***2.3***	***NA***	***0.023***	***0.075***	***NA***	***NA***	***NA***	***NA***

Table 2

Historical Soil Analytical Data - Petroleum Hydrocarbons, Fuel Oxygenates, and Ethanol
Shell-branded Service Station
4212 First Street, Pleasanton, California

Sample ID	Date	Depth (fbg)	O&G (mg/kg)	TPHmo (mg/kg)	TPHd (mg/kg)	TPHg (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	E & X (mg/kg)	MTBE (mg/kg)	TBA (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	Ethanol (mg/kg)

Notes:
O&G = Oil and grease analyzed by EPA Method 1664 A (Modified)
TPHmo = Total petroleum hydrocarbons as motor oil analyzed by EPA Method 8015 (Modified)
TPHd = Total petroleum hydrocarbons as diesel analyzed by EPA Method 8015 (Modified)
TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method 8260B; before July 6, 2006, analyzed by EPA Method 8015
BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed by EPA Method 8260B; before July 6, 2006, analyzed by EPA Method 8020 unless otherwise noted
MTBE = Methyl tertiary-butyl ether analyzed by EPA Method 8260B; before July 6, 2006, analyzed by EPA Method 8020
TBA = Tertiary-butyl alcohol analyzed by EPA Method 8260B
DIPE = Di-isopropyl ether analyzed by EPA Method 8260B
ETBE = Ethyl tertiary-butyl ether analyzed by EPA Method 8260B
TAME = Tertiary-amyl methyl ether analyzed by EPA Method 8260B
Ethanol analyzed by EPA Method 8260B
fbg = Feet below grade
mg/kg = Milligrams per kilogram
ND = Not detected; detection limit unknown
<x = Not detected at reporting limit x
--- = Not analyzed
NA = No applicable ESL
Results in **bold** equal or exceed applicable ESL

a = Analyzed by EPA Method 8015
b = Hydrocarbons reported as TPHd do not exhibit a typical Diesel chromatographic pattern. These hydrocarbons are higher boiling than typical diesel fuel.
d = Hydrocarbon result partly due to individual peak(s) in quantitation range
e = The reporting limit is elevated resulting from matrix interference.
f = Results were evaluated to the MDL, and concentration was >= to the MDL but < RL
g = San Francisco Bay Regional Water Quality Control Board commercial/industrial ESL for soil where groundwater is a potential source of drinking water (Tables A and C of *User's Guide: Derivation and Application of Environmental Screening Levels* , RWQCB, Interim Final 2013).

Table 3

Historical Soil Vapor Analytical Data
Shell-branded Service Station
4212 First Street, Pleasanton, California

Sample ID	Date	Depth (fbg)	TPHg ($\mu g/m^3$)	B ($\mu g/m^3$)	T ($\mu g/m^3$)	E ($\mu g/m^3$)	X ($\mu g/m^3$)	MTBE ($\mu g/m^3$)	TBA ($\mu g/m^3$)	DIPE ($\mu g/m^3$)	ETBE ($\mu g/m^3$)	TAME ($\mu g/m^3$)	Naph-thalene ($\mu g/m^3$)	Ethanol ($\mu g/m^3$)	Methane (%v)	Carbon Dioxide (%v)	Oxygen + Argon (%v)	Helium (%v)
SV-1	09/05/2012	5	<3,800	<16	53	<22	<43	<36	---	---	---	---	---	---	<0.500	12.9	7.66	<0.0100
SV-1	04/08/2014	5	<3,800	<16	<19	<22	<43	<36	<30	<42	<42	<42	<52	<94	<0.500	6.4	8.83	0.144
SV-2	09/05/2012	5	<3,800	<16	23	<22	<43	<36	---	---	---	---	---	---	<0.500	6.85	15.5	<0.0100
SV-2	04/13/2013	5	<100,000	<2,000	<2,000	<2,000	<6,000	<2,000	0	---	---	---	---	---	---	---	---	---
SV-2	04/08/2014	5	<3,800	<16	<19	<22	<43	<36	<30	<42	<42	<42	<52	<94	<0.500	4.42	15.8	0.116
SV-3	09/05/2012	5	<3,800	<16	24	<22	<43	<36	---	---	---	---	---	---	<0.500	7.44	11.8	<0.0100
SV-3	04/08/2014	5	<3,800	<16	<19	<22	<43	<36	<30	<42	<42	<42	<52	<94	<0.500	3.40	14.9	0.0553
SV-4	09/05/2012	5	<3,800	<16	33	<22	<43	<36	---	---	---	---	---	---	<0.500	5.22	15.1	<0.0100
SV-4	04/08/2014	5	<3,800	<16	<19	<22	<43	<36	<30	<42	<42	<42	<52	<94	<0.500	2.50	14.2	0.0328
SV-5	09/05/2012	5	<3,800	<16	21	<22	<43	<36	---	---	---	---	---	---	<0.500	2.44	19.4	<0.0100
SV-5	04/08/2014	5	Unable to sample, water in probe			---	---	---	---	---	---	---	---	---	---	---	---	---
SV-6	09/05/2012	5	<3,800	<16	24	<22	<43	<36	---	---	---	---	---	---	<0.500	4.08	18.7	<0.0100
SV-6	04/08/2014	5	Unable to sample, water in probe			---	---	---	---	---	---	---	---	---	---	---	---	---
SV-7	09/05/2012	5	<3,800	<16	24	<22	<43	<36	---	---	---	---	---	---	<0.500	11.4	9.66	<0.0100
SV-7	04/08/2014	5	<3,800	<16	<19	<22	<43	<36	<30	<42	<42	<42	<52	<94	<0.500	7.10	10.1	0.0396
SV-8	09/05/2012	5	<3,800	<16	26	<22	<43	<36	---	---	---	---	---	---	<0.500	5.50	15.5	<0.0100
SV-8	04/08/2014	5	<3,800	<16	<19	<22	<43	<36	<30	<42	<42	<42	<52	<94	<0.500	3.32	13.0	0.0449
Residential land use ESLs [a]			***300,000***	***42***	***160,000***	***490***	***52,000***	***4,700***	***NA***	***NA***	***NA***	***NA***	***36***	***NA***	***NA***	***NA***	***NA***	***NA***
Commercial land use ESLs [a]			***250,000***	***420***	***1,300,000***	***4,900***	***440,000***	***47,000***	***NA***	***NA***	***NA***	***NA***	***360***	***NA***	***NA***	***NA***	***NA***	***NA***

Notes:

TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method TO-3M

BTEX = Benzene, toluene, ethylbenzene, and total xylenes by EPA Method 8260B (M)

MTBE = Methyl tertiary-butyl ether analyzed by EPA Method 8260B (M)

TBA = Tertiary-butyl alcohol analyzed by EPA Method 8260B (M)

DIPE = Di-isopropyl ether analyzed by EPA Method 8260B (M)

Table 3

Historical Soil Vapor Analytical Data
Shell-branded Service Station
4212 First Street, Pleasanton, California

ETBE = Ethyl tertiary-butyl ether analyzed by EPA Method 8260B (M)
TAME = Tertiary-amyl methyl ether analyzed by EPA Method 8260B (M)
Naphthalene and ethanol analyzed by EPA Method 8260B (M)
Methane, carbon dioxide, and oxygen + argon analyzed by ASTM D-1946
Helium analyzed by ASTM D-1946 (M)
fbg = Feet below grade
$\mu g/m^3$ = Micrograms per cubic meter
%*v* = Percent by volume
<x = Not detected at reporting limit x
--- = Not analyzed
ESL = Environmental screening level
NA = No applicable ESL

a = San Francisco Bay Regional Water Quality Control Board (RWQCB) shallow soil gas screening level for evaluation of potential vapor intrusion concerns from RWQCB's *User's Guide: Derivation and Application of Environmental Screening Levels,* RWQCB, Interim Final 2013.

Appendices

Appendix A
Site History

Site History

1985 Subsurface Investigation: In September 1985, Emcon Associates (Emcon) drilled one soil boring (S-A) adjacent to the waste oil underground storage tank (UST), and drilled three soil borings (S-B through S-D) and installed one groundwater monitoring well (S-1) adjacent to the gasoline USTs. Soil samples contained up to 1,300 milligrams per kilogram (mg/kg) total petroleum hydrocarbons as gasoline (TPHg), 9.6 mg/kg toluene, and 260 mg/kg total xylenes and ethylbenzene. Benzene was not detected in the soil samples. The monitoring well was dry. Emcon's November 12, 1985 letter presents investigation details.

1986 Subsurface Investigation: In March 1986, one soil boring (S-E) was drilled adjacent to product lines. No TPHg, benzene, toluene, ethylbenzene, or total xylenes (BTEX) were detected in soil samples.

1986 ***UST Removal:*** In May 1986, Blaine Tech Services (Blaine) collected soil samples following removal of four gasoline USTs and one waste oil UST. Soil samples from the gasoline UST excavation contained up to 240 mg/kg TPHg. Hydrocarbons were not detected in a soil sample collected from the waste oil tank excavation. Three 10,000-gallon, double-walled, fiberglass tanks were installed at a location closer to the dispenser islands.

1988 Gasoline Spill: In August 1988, approximately 40 gallons of gasoline were spilled in the area of the pump islands. Impacted soil was removed to a depth of 1 to 2 feet below grade (fbg).

1990 Subsurface Investigations: In March 1990, Hart Crowser, Inc. (Hart) drilled three soil borings (SB-1 through SB-3) and destroyed one groundwater monitoring well (S-1). Following the well destruction, Hart continued drilling a boring (WA-1) below the depth of the monitoring well. Soil samples contained up to 380 mg/kg TPHg, 2.2 mg/kg benzene, 2.7 mg/kg toluene, 5.3 mg/kg ethylbenzene, and 32 mg/kg total xylenes. Hart's April 23, 1990 *Report of Supplemental Site Assessment* provides details of this investigation.

In July 1990, Hart drilled two additional soil borings (SB-4 and SB-5) down gradient from the former UST complex. Soil samples contained up to 820 mg/kg TPHg, 65 mg/kg benzene, 3.7 mg/kg toluene, 6.5 mg/kg ethylbenzene, and 65 mg/kg total xylenes (SB-5 at 35 fbg). Hart's December 11, 1990 *Supplemental Site Assessment* presents the soil boring investigation details.

1995 Dispenser and Piping Replacement: In September 1995, Paradiso Mechanical of San Leandro, California removed the product lines and replaced the dispensers and piping. Weiss Associates (Weiss) collected soil samples from beneath the gasoline product piping (PT-1 and PT-2) and dispensers (DP-1 through DP-4). Soil samples contained up to 120 mg/kg TPHg, 0.038 mg/kg ethylbenzene, and 0.19 mg/kg total xylenes. Benzene and toluene were not detected in the soil samples. Approximately 40 cubic yards of soil were over-excavated at the direction of the Pleasanton Fire Department. Weiss' December 21, 1995 *Dispenser Replacement Sampling* report presents soil sampling locations and results.

1998 Facility Upgrade: In July 1998, Cambria Environmental Technology, Inc. (Cambria) inspected the waste oil tank remote-fill piping during its removal by Gettler-Ryan of Dublin, California. No hydrocarbon impact was observed during the site visit, and, therefore, no sampling was required. A pea gravel sample contained 27 mg/kg total petroleum hydrocarbons as diesel (TPHd). Cambria's September 2, 1998 *1998 Upgrade Site Inspection Report* provides inspection details.

1999 Subsurface Investigation: In April 1999, Cambria drilled two soil borings (SB-6 and SB-7) and converted SB-6 to monitoring well MW-1. Soil samples contained up to 83 mg/kg TPHg, 0.10 mg/kg benzene, 0.37 mg/kg toluene, 0.26 mg/kg ethylbenzene, and 0.26 mg/kg total xylenes. Methyl tertiary-butyl ether (MTBE) was not detected in soil samples. Grab groundwater samples contained up to 10,000 micrograms per liter (μg/L) TPHg, 4,500 μg/L benzene, 3.4 μg/L ethylbenzene, and 2.9 μg/L total xylenes. Toluene and MTBE were not detected in the grab groundwater samples. Cambria's August 12, 1999 *Subsurface Investigation Report* presents investigation details.

2000 Subsurface Investigation: In January 2000, Cambria installed two wells (MW-2 and MW-3) to determine whether groundwater had been impacted by petroleum hydrocarbons. No petroleum hydrocarbons or MTBE were detected in soil samples. Cambria's June 23, 2000 *Subsurface Investigation Report* presents well installation details.

2004 Well Survey: In May 2004, Toxichem Management Systems, Inc. (Toxichem) conducted a well survey, which identified a municipal well (3S/1E-21B1) and a well of unknown use (3S/1E-21B) approximately 900 feet northeast of the site and another municipal well (3S/1E-16P1) approximately 1,200 feet north of the site. The locations of the wells could not be field verified.

2005 UST Upgrades: In January 2005, Town and Country Contractors, Inc. (T & C) upgraded the gasoline USTs.

2005 Tank Backfill Well Destructions: In January 2005, T & C destroyed four tank backfill wells (TB-1 through TB-4).

2005 Waste Oil UST Investigation: In January 2005, an unknown liquid was likely poured into a port on the waste oil UST which led directly into the pea gravel surrounding the UST. Based on this observation, Shell submitted a UST Unauthorized Release (Leak)/Site Contamination Report on January 19, 2005. Able Maintenance (Able) and Service Station Systems sealed the UST port with epoxy and excavated pea gravel around the UST. Toxichem collected pea gravel samples which contained 1.4 mg/kg TPHg, 1,400 mg/kg TPHd, and 10,000 mg/kg total petroleum hydrocarbons as oil and grease. In June 2005, Delta Consultants (Delta) drilled one soil boring (WO-1) adjacent to the waste oil UST to determine if the liquid poured into the pea gravel had impacted soils. Petroleum hydrocarbons were not detected in the soil samples. Delta's July 11, 2005 *Soil and Water Investigation Report* provides investigation details.

2005 Receptor Survey: In September 2005, Delta conducted a well survey which located an old water tower in the area of the wells identified in Toxichem's 2004 well survey, identified a water supply well (3S/1E-21C1) and an irrigation well (3S/1E-21C4) approximately 1,000 feet northwest of the site, and identified another irrigation well in Kottinger Park, approximately 800 feet east of the site. Delta identified the nearest surface water as Arroyo del Valle Creek located approximately 1,130 feet northwest of the site.

2006 Waste Oil UST Removal: In July 2006, Wayne Perry Inc. removed a 550-gallon waste oil UST. Cambria collected a soil sample (WO-2) from the bottom of the UST excavation which contained 26 mg/kg oil and grease, 5.5 mg/kg TPHd, 0.021 mg/kg MTBE, 40.7 mg/kg chromium, 6.00 mg/kg lead, 46.9 mg/kg nickel, and 52.5 mg/kg zinc. Based on these concentrations, Shell submitted a UST Unauthorized Release (Leak)/Site Contamination Report on July 28, 2006. Cambria's September 21, 2006 *UST Removal Report* details the UST removal and sampling.

2006 Subsurface Investigation: In August and September 2006, Delta installed two monitoring wells (MW-1B and MW-4) and drilled two cone penetrometer test (CPT) borings (CPT-2 and CPT-3). Well MW-4 was installed in first-encountered groundwater, and well MW-1B was installed in a deeper water-bearing zone. Soil samples from well boring MW-4 contained up to 380 mg/kg TPHg, 1.2 mg/kg ethylbenzene, 1.6 mg/kg total xylenes, and 0.59 mg/kg MTBE. TPHg, BTEX, MTBE, and tertiary-butyl alcohol (TBA) were not detected in soil samples from MW-1B, and benzene, toluene, and TBA were not detected in soil samples from MW-4. Grab groundwater samples from off-site CPT boring CPT-2 contained up to 0.99 μg/L benzene, 47 μg/L MTBE, and 27 μg/L TBA. Grab groundwater samples from on-site CPT boring CPT-3 contained up to 700 μg/L TPHg, 0.78 μg/L ethylbenzene, 2.1 μg/L total xylenes, 79 μg/L MTBE, and 2,000 μg/L TBA. Delta's October 31, 2006 *Soil and Groundwater Investigation Report* provides well installation and CPT investigation details.

2007 Subsurface Investigation: In March 2007, Delta drilled five soil borings (B-1 through B-5) in or near on-site source areas. Soil samples from the soil borings contained up to 710 mg/kg TPHg, 2.3 mg/kg ethylbenzene, 16 mg/kg total xylenes, 0.78 mg/kg MTBE, and 0.80 mg/kg TBA. Delta's June 25, 2007 *Site Investigation and Interim Remediation Report* provides details of this investigation.

2007 Mobile Groundwater Extraction (GWE): From June through August 2007, Delta extracted approximately 4,226 gallons of groundwater from MW-4. Delta's June 25, 2007 *Site Investigation and Interim Remediation Report* and November 2, 2007 *Draft Corrective Action Plan (CAP)* provide remediation details.

2009 Dual-Phase Extraction (DPE) Pilot Test: In January 2009, Delta conducted a 5-day DPE pilot test on MW-4 and 4-hour DPE pilot tests on MW-1 and MW-2. Prior to conducting the DPE pilot tests, Delta conducted step drawdown tests in MW-1 and MW-4. Delta calculated hydraulic conductivities of 3.59×10^{-5} centimeters per second (cm/sec) in MW-1 at a pumping rate of 0.48 gallons per minute (gpm) and 3.17×10^{-5} cm/sec in MW-4 at a pumping rate of 0.40 gpm. Based on the results of the DPE pilot test, Delta calculated a theoretical radius of influence of 26 feet for soil vapor extraction and estimated that 286.3 pounds of hydrocarbons were removed from the vadose zone. An estimated 0.23 pounds of dissolved hydrocarbons were removed along with 2,748 gallons of groundwater. Delta concluded that while GWE results indicated it was likely not a viable remediation strategy, soil vapor extraction (SVE) could be a viable remediation alternative. Delta's February 12, 2009 *DPE Pilot Test Report* provides pilot test data.

2009 Dispenser Repairs*:* In January 2009, Able replaced the faulty pan beneath the south dispenser on the pump island closest to the station building. Delta collected a soil sample (Under Dispenser #1) from the dispenser excavation. No TPHg, TPHd, BTEX, fuel oxygenates, or lead scavengers were detected in the soil sample. Delta's March 6, 2009 *Dispenser Repair Report* presents details of the repair and soil sampling.

2010 Subsurface Investigation: In January 2010, Delta installed one observation well (OBS-1), one air sparging (AS) well (AS-1), and four SVE wells (SVE-1 through SVE-4). Delta's June 7, 2010 *2010 AS Pilot Test Report* provides well installation details.

2010 AS Pilot Test*:* In January 2010, Delta conducted an AS pilot test using well AS-10. Delta calculated an air sparging radius of influence of 31 feet; however, Conestoga-Rovers & Associates' (CRA)'s subsequent analysis of the pilot test data determined that the test was flawed and therefore inconclusive. Delta's June 7, 2010 *2010 AS Pilot Test Report* details pilot testing results.

2011 Subsurface Investigation: In June 2011, CRA attempted to install two off-site wells across Vineyard Avenue from the site. CRA abandoned the well installation attempts because there were no other locations in the sidewalk where the wells could be installed safely due to the interference of underground utilities. CRA's July 28, 2011 letter provides investigation details.

2012 Subsurface Investigation and AS, SVE, and DPE Pilot Tests: In August 2012, CRA installed to one AS well (AS-1) and one SVE well (SVE-5), two extraction wells (EW-1 and EW-2), and two piezometers (P-1 and P-2) to facilitate pilot testing. In September 2012, CRA conducted AS, SVE and DPE pilot tests. CRA's October 30, 2012 *Air Sparge and Soil Vapor Extraction and Dual-Phase Extraction Reports* presents pilot testing results.

2012 Subsurface Investigation: In August and September 2012, CRA installed and sampled eight soil vapor probes (SV-1 through SV-8) were installed. No constituents of concern (COCs) were detected in any soil vapor samples, with the exception of up to 53 micrograms per cubic meter toluene. CRA's October 3, 2012 *Subsurface Investigation Report* summarizes probe installation and sampling details.

2013 Petroleum Hydrocarbon Mass Removal Event (MRE): In March and April 2013, CRA conducted AS into wells AS-1 and AS-10, and conducted an SVE MRE from wells EW-1 and SVE-1 through SVE-4, and a DPE MRE from wells EW-2, MW-1, MW-2, MW-4, and SVE-5. AS injected approximately 5,363 pounds of air. The SVE and DPE MRE removed approximately 1,550 gallons of groundwater and an estimated 144 pounds of volatile organic carbon mass. To evaluate potential health-based vapor intrusion risks associated with AS, a soil vapor sample was collected from SV-2 (being located closest to the residences east of the site). No constituents of concern were detected in the soil vapor sample. CRA's December 23, 2013 *Petroleum Hydrocarbon Mass Removal Event Report* presents MRE results.

2014 Soil Vapor Sampling: In April 2014, CRA sampled soil vapor probes SV-1 through SV-4, SV-7, and SV-8 (all 5 fbg). Soil vapor probes SV-5 and SV-6 could not be sampled due to water in the sampling tubing. No COCs were detected in soil vapor samples. All of the probes contained at least 8.83%*v* oxygen + argon. Oxygen concentrations indicate good potential for aerobic decay of hydrocarbons in soil vapor. CRA's May 28, 2015 *Soil Vapor Sampling Report* provides investigation results.

Groundwater Monitoring Program: Groundwater monitoring and sampling began in June 1999. The depth to first-encountered groundwater typically ranges between 31 to 34 fbg. Shallow groundwater flow is generally northwesterly.

Appendix B
Blaine Tech Services – Field Notes

WELL GAUGING DATA

Project # 150423-101 Date 4-23-15 Client Shell

Site 424 First St Pleasanton CA

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
MW-1	1140	2					37.61	57.10		
MW-1B	1130	4					102.42	107.94		
MW-2	1137	4					34.50	45.77		
MW-3	1123	4					33.53	34.56		
MW-4	1133	4					35.91	46.75		

SHELL WELL MONITORING DATA SHEET

BTS #: 150423-JD1	Site: 7809 5840
Sampler: JD	Date: 4-23-15
Well I.D.: MW-1	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 57.10	Depth to Water (DTW): 37.61
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]: 41.51	

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: _____

3.1 (Gals.) X 3 = 9.3 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	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1247	68.2	6.21	1972	>1000	3.1	
		Well dewatered @ 4.0				
1525	67.1	6.46	1989	126	—	

Did well dewater? (Yes) No Gallons actually evacuated: 4.0

Sampling Date: 4-23-15 Sampling Time: 1525 Depth to Water: 42.29 (final)

Sample I.D.: MW-1 Laboratory: (Test America) Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: see COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	. mg/L	Post-purge:	0.97 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	168 mV

SHELL WELL MONITORING DATA SHEET

BTS #: 150423-101	Site: 99195846
Sampler: SD	Date: 4-23-15
Well I.D.: MW - 1B	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): ~~MW~~ 107.94	Depth to Water (DTW): 102.42
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]: 103.52	

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: _____

3.5 (Gals.) X 3 = 10.5 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	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1154	68.4	7.04	1272	>1000	3.5	
			well dewatered 4.0			
1520	68.3	7.02	1286	>1000	—	

Did well dewater? (Yes) No Gallons actually evacuated: 4.0

Sampling Date: 4-23-15 Sampling Time: 1520 Depth to Water: 104.97 (2hr)

Sample I.D.: MW-1B Laboratory: (Test America) Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: see COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	.2.01 mg/L	Post-purge:	2.69 mg/L
O.R.P. (if req'd):	Pre-purge:	88 mV	Post-purge:	94 mV

SHELL WELL MONITORING DATA SHEET

BTS #: 150423-SD1	Site: 9819 5840
Sampler: SD	Date: 4-23-15
Well I.D.: MW-2	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 49.77	Depth to Water (DTW): 34.50
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]: 36.75	

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: _____

7.3 (Gals.) X 3 = 21.9 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1235	68.4	~~6.02~~ ~~6.72~~	(856)	121	7.3	
			Well dewatered @ 8.0 gallons			
1550	69.0	6.30	877	39	1	

Did well dewater? (Yes) ~~No~~ Gallons actually evacuated: 8.0

Sampling Date: 4-23-15 Sampling Time: 1550 Depth to Water: 37.21 (24hr)

Sample I.D.: MW-2 Laboratory: (Test America) Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: See COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	1.37 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	44 mV

SHELL WELL MONITORING DATA SHEET

BTS #: 150423-JD	Site: 98995940
Sampler: JD	Date: 4-23-15
Well I.D.: MW-3	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth (TD): 34.56	Depth to Water (DTW): 33.53
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]: 33.72	

Purge Method: (Bailer) Waterra — Sampling Method: (Bailer)
Disposable Bailer — Peristaltic — Disposable Bailer
Positive Air Displacement — Extraction Pump — Extraction Port
Electric Submersible — Other_____ — Dedicated Tubing
Other: _____

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

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1204	68.7	6.79	873	281	0.6	
			well dewatered @		0.7 gals	
1504	68.4	6.80	844	366	—	
						Fe^{2+} = 1.0 mg/L

Did well dewater? (Yes) No — Gallons actually evacuated: 0.7

Sampling Date: 4-23-15 — Sampling Time: 1504 — Depth to Water: 34.20 (ZH)

Sample I.D.: MW-3 — Laboratory: (Test America) Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: see coc

EB I.D. (if applicable): @ Time — Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	. mg/L	Post-purge:	1.76 mg/L	
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	21 mV	

SHELL WELL MONITORING DATA SHEET

BTS #: 150423-SJ01	Site: 9899504O
Sampler: SO	Date: 4-23-15
Well I.D.: MW-4	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 46.75	Depth to Water (DTW): 35.59
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]: 37.85	

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: _____

7.2 (Gals.) X 3 = 21.6 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1216	67.1	6.21	602	77	7.2	
		Well dewatered @ 8.0 gallons				
1535	67.8	6.27	609	31	"	

Did well dewater? (Yes) No Gallons actually evacuated: 8.0

Sampling Date: 4-23-15 Sampling Time: 1535 Depth to Water: 38.26 (24hr)

Sample I.D.: MW-4 Laboratory: (Test America) Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: See COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	. mg/L	Post-purge:	1.56 mg/L	
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	12 mV	

ENVIRONMENTAL WELL, REMEDIATION COMPOUND, AND SITE INSPECTION FORM

INCIDENT # 98995846

DATE: 4-23-15

ADDRESS 4212 First St

CITY & STATE Pleasanton Ca

Well ID	Observations Upon Arrival: Manway Cover, Type, Condition & Size					Well Labeled / Painted Properly*		Well Cap (Gripper) Condition		Well Lock Condition			Well Pad / Surface Condition		Note Repairs Made Detailed Explanation of Maintenance Recommended and Performed	Photos of Well Condition		Repair Date and PM Initials
MW-1	Standpipe	**Flush**	**G**	P	Size (inch) 12	**Y**	N	**G**	R	**G**	R	NL	**G**	P		Y	**N**	
MW-1B	Standpipe	**Flush**	**G**	P	Size (inch) 12	**Y**	N	**G**	R	**G**	R	NL	**G**	P		Y	**N**	
MW-2	Standpipe	**Flush**	**G**	P	Size (inch) 12	**Y**	N	**G**	R	**G**	R	NL	**G**	P		Y	**N**	
MW-3	Standpipe	**Flush**	**G**	P	Size (inch) 12	**Y**	N	**G**	R	**G**	R	NL	**G**	P		Y	**N**	
MW-4	Standpipe	**Flush**	**G**	P	Size (inch) 12	**Y**	N	**G**	R	**G**	R	NL	**G**	P		Y	**N**	
	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N	
	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N	
	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N	
	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N	
	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N	
	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N	

TOTAL # CAPS REPLACED = 0 | 0 = TOTAL # OF LOCKS REPLACED

Condition of Soil Boring Patches or Abandoned Monitoring Wells:	G	P	**N/A**	If POOR, Borings/Well IDs or Location Description:		Y	N	

Remediation Compound Type (Check boxes that apply)	Condition of Enclosure			Condition of Area Inside Enclosure			Compound Security			Emergency Contact Info Visible			Cleaning / Repairs Recommended and Conducted	Photos of Condition		Repair Date and PM Initials
NA Building / Building w/ Fence Comp. / Fenced Compound / Trailer	G	P	N/A	G	P	N/A	G	P	N/A	Y	N	N/A		Y	N	

Number of Drums On-site	Does the Label Reveal the Source of the Contents			Labeled Correctly and Writing Legible			Drum Condition			Confirm Drums Related to Environmental		Drums Located to Min Business Interference			Detailed Explanation of Any Issues Resolved	Photos of Drum Condition		Date Drums Removed from Site and PM Initials
0	Y	N	N/A	Y	N	N/A	G	P	N/A	Y	N	Y	N	N/A		Y	N	

G = Good (Acceptable) R = Replaced
P = Poor (needs attention) NL = No Lock Required

Note: All repairs other than locks and grippers require Shell PM approval prior to repair.

All environmental wells and the remediation compound were in good condition, locked, and secured upon my departure (unless otherwise noted above).

Jose Ortiz Blaine Tech

Print or type Name of Field Personnel & Consultant Company

* = Groundwater monitoring well covers must be painted and labeled in accordance with applicable regulations.

Version 2.4, March 2008

Appendix C
TestAmerica Laboratories, Inc. – Analytical Report

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: 440-108031-1
Client Project/Site: 4212 First St., Pleasanton, CA

For:
Conestoga-Rovers & Associates, Inc.
5900 Hollis Street
Suite A
Emeryville, California 94608

Attn: Peter Schaefer

Heather Clark

Authorized for release by:
5/4/2015 2:57:02 PM

Heather Clark, Project Manager I
(949)261-1022
heather.clark@testamericainc.com

Table of Contents

Sample Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 4212 First St., Pleasanton, CA

TestAmerica Job ID: 440-108031-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-108031-1	MW-1	Ground Water	04/23/15 15:25	04/24/15 09:45
440-108031-2	MW-1B	Ground Water	04/23/15 15:20	04/24/15 09:45
440-108031-3	MW-2	Ground Water	04/23/15 15:50	04/24/15 09:45
440-108031-4	MW-3	Ground Water	04/23/15 15:04	04/24/15 09:45
440-108031-5	MW-4	Ground Water	04/23/15 15:35	04/24/15 09:45

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 4212 First St., Pleasanton, CA

TestAmerica Job ID: 440-108031-1

Job ID: 440-108031-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-108031-1

Comments
No additional comments.

Receipt
The samples were received on 4/24/2015 9:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.7º C.

GC/MS VOA
Method(s) 8260B/CA_LUFTMS: The Gasoline Range Organics (GRO) concentration reported for the following sample is due to the presence of discrete peaks: MW-2 (440-108031-3). Methyl tert-butyl ether

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

HPLC/IC
Method(s) 300.0: Due to the high concentration of sulfate, the matrix spike / matrix spike duplicate (MS/MSD) for batch 251154 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method(s) 300.0: The following sample was analyzed outside of analytical holding time for Nitrate due to employee oversight: MW-3 (440-108031-4). Client was notified & instucted lab to run past hold & qualify

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample ID: MW-1

Lab Sample ID: 440-108031-1

Date Collected: 04/23/15 15:25

Matrix: Ground Water

Date Received: 04/24/15 09:45

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	**230**		50		ug/L			04/29/15 09:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*110*		*76 - 132*		*04/29/15 09:37*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*04/29/15 09:37*	*1*
Toluene-d8 (Surr)	*110*		*80 - 128*		*04/29/15 09:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**140**		2.5		ug/L			04/29/15 09:37	5
Ethylbenzene	ND		2.5		ug/L			04/29/15 09:37	5
Methyl-t-Butyl Ether (MTBE)	**430**		2.5		ug/L			04/29/15 09:37	5
tert-Butyl alcohol (TBA)	**490**		50		ug/L			04/29/15 09:37	5
Toluene	ND		2.5		ug/L			04/29/15 09:37	5
Xylenes, Total	ND		5.0		ug/L			04/29/15 09:37	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*04/29/15 09:37*	*5*
Dibromofluoromethane (Surr)	*110*		*76 - 132*		*04/29/15 09:37*	*5*
Toluene-d8 (Surr)	*110*		*80 - 128*		*04/29/15 09:37*	*5*

Client Sample ID: MW-1B

Lab Sample ID: 440-108031-2

Date Collected: 04/23/15 15:20

Matrix: Ground Water

Date Received: 04/24/15 09:45

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			04/29/15 06:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*103*		*76 - 132*		*04/29/15 06:33*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*04/29/15 06:33*	*1*
Toluene-d8 (Surr)	*103*		*80 - 128*		*04/29/15 06:33*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			04/29/15 06:33	1
Ethylbenzene	ND		0.50		ug/L			04/29/15 06:33	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			04/29/15 06:33	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			04/29/15 06:33	1
Toluene	ND		0.50		ug/L			04/29/15 06:33	1
Xylenes, Total	ND		1.0		ug/L			04/29/15 06:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*04/29/15 06:33*	*1*
Dibromofluoromethane (Surr)	*103*		*76 - 132*		*04/29/15 06:33*	*1*
Toluene-d8 (Surr)	*103*		*80 - 128*		*04/29/15 06:33*	*1*

Client Sample ID: MW-2

Lab Sample ID: 440-108031-3

Date Collected: 04/23/15 15:50

Matrix: Ground Water

Date Received: 04/24/15 09:45

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	660		50		ug/L			05/02/15 00:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*104*		*76 - 132*		*05/02/15 00:35*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*05/02/15 00:35*	*1*
Toluene-d8 (Surr)	*114*		*80 - 128*		*05/02/15 00:35*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			05/02/15 00:35	1
Ethylbenzene	ND		0.50		ug/L			05/02/15 00:35	1
tert-Butyl alcohol (TBA)	130		10		ug/L			05/02/15 00:35	1
Toluene	ND		0.50		ug/L			05/02/15 00:35	1
Xylenes, Total	ND		1.0		ug/L			05/02/15 00:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*05/02/15 00:35*	*1*
Dibromofluoromethane (Surr)	*104*		*76 - 132*		*05/02/15 00:35*	*1*
Toluene-d8 (Surr)	*114*		*80 - 128*		*05/02/15 00:35*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl-t-Butyl Ether (MTBE)	1800		5.0		ug/L			05/02/15 16:25	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*05/02/15 16:25*	*10*
Dibromofluoromethane (Surr)	*106*		*76 - 132*		*05/02/15 16:25*	*10*
Toluene-d8 (Surr)	*110*		*80 - 128*		*05/02/15 16:25*	*10*

Client Sample ID: MW-3

Lab Sample ID: 440-108031-4

Date Collected: 04/23/15 15:04

Matrix: Ground Water

Date Received: 04/24/15 09:45

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			05/01/15 23:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*106*		*76 - 132*		*05/01/15 23:39*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*05/01/15 23:39*	*1*
Toluene-d8 (Surr)	*110*		*80 - 128*		*05/01/15 23:39*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			05/01/15 23:39	1
Ethylbenzene	ND		0.50		ug/L			05/01/15 23:39	1
Methyl-t-Butyl Ether (MTBE)	0.79		0.50		ug/L			05/01/15 23:39	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			05/01/15 23:39	1
Toluene	ND		0.50		ug/L			05/01/15 23:39	1
Xylenes, Total	ND		1.0		ug/L			05/01/15 23:39	1

Client Sample ID: MW-3

Lab Sample ID: 440-108031-4

Date Collected: 04/23/15 15:04

Matrix: Ground Water

Date Received: 04/24/15 09:45

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*05/01/15 23:39*	*1*
Dibromofluoromethane (Surr)	*106*		*76 - 132*		*05/01/15 23:39*	*1*
Toluene-d8 (Surr)	*110*		*80 - 128*		*05/01/15 23:39*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND	H	110		ug/L			04/25/15 15:34	1
Sulfate	**19000**		500		ug/L			04/25/15 15:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	**360000**		4000		ug/L			04/26/15 09:52	1

Client Sample ID: MW-4

Lab Sample ID: 440-108031-5

Date Collected: 04/23/15 15:35

Matrix: Ground Water

Date Received: 04/24/15 09:45

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	**1400**		50		ug/L			05/02/15 00:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*112*		*76 - 132*		*05/02/15 00:07*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*05/02/15 00:07*	*1*
Toluene-d8 (Surr)	*109*		*80 - 128*		*05/02/15 00:07*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**2.2**		0.50		ug/L			05/02/15 00:07	1
Ethylbenzene	**6.4**		0.50		ug/L			05/02/15 00:07	1
Methyl-t-Butyl Ether (MTBE)	**46**		0.50		ug/L			05/02/15 00:07	1
tert-Butyl alcohol (TBA)	**410**		10		ug/L			05/02/15 00:07	1
Toluene	ND		0.50		ug/L			05/02/15 00:07	1
Xylenes, Total	**13**		1.0		ug/L			05/02/15 00:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*05/02/15 00:07*	*1*
Dibromofluoromethane (Surr)	*112*		*76 - 132*		*05/02/15 00:07*	*1*
Toluene-d8 (Surr)	*109*		*80 - 128*		*05/02/15 00:07*	*1*

Method Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 4212 First St., Pleasanton, CA

TestAmerica Job ID: 440-108031-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
8260B/CA_LUFTMS	Volatile Organic Compounds by GC/MS	SW846	TAL IRV
300.0	Anions, Ion Chromatography	MCAWW	TAL IRV
SM 2320B	Alkalinity	SM	TAL IRV

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 4212 First St., Pleasanton, CA

TestAmerica Job ID: 440-108031-1

Client Sample ID: MW-1

Date Collected: 04/23/15 15:25
Date Received: 04/24/15 09:45

Lab Sample ID: 440-108031-1

Matrix: Ground 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	251777	04/29/15 09:37	HR	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	251778	04/29/15 09:37	WC	TAL IRV

Client Sample ID: MW-1B

Date Collected: 04/23/15 15:20
Date Received: 04/24/15 09:45

Lab Sample ID: 440-108031-2

Matrix: Ground 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	251712	04/29/15 06:33	AA	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	251713	04/29/15 06:33	AA	TAL IRV

Client Sample ID: MW-2

Date Collected: 04/23/15 15:50
Date Received: 04/24/15 09:45

Lab Sample ID: 440-108031-3

Matrix: Ground 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	252491	05/02/15 00:35	WK	TAL IRV
Total/NA	Analysis	8260B	DL	10	10 mL	10 mL	252555	05/02/15 16:25	AL	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	252492	05/02/15 00:35	WK	TAL IRV

Client Sample ID: MW-3

Date Collected: 04/23/15 15:04
Date Received: 04/24/15 09:45

Lab Sample ID: 440-108031-4

Matrix: Ground 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	252491	05/01/15 23:39	WK	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	252492	05/01/15 23:39	WK	TAL IRV
Total/NA	Analysis	300.0		1	5 mL		251153	04/25/15 15:34	NN	TAL IRV
Total/NA	Analysis	300.0		1	5 mL		251154	04/25/15 15:34	NN	TAL IRV
Total/NA	Analysis	SM 2320B		1			251247	04/26/15 09:52	YZ	TAL IRV

Client Sample ID: MW-4

Date Collected: 04/23/15 15:35
Date Received: 04/24/15 09:45

Lab Sample ID: 440-108031-5

Matrix: Ground 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	252491	05/02/15 00:07	WK	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	252492	05/02/15 00:07	WK	TAL IRV

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 4212 First St., Pleasanton, CA

TestAmerica Job ID: 440-108031-1

Laboratory References:

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

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

Lab Sample ID: MB 440-251712/4
Matrix: Water
Analysis Batch: 251712

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			04/28/15 21:11	1
Ethylbenzene	ND		0.50		ug/L			04/28/15 21:11	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			04/28/15 21:11	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			04/28/15 21:11	1
Toluene	ND		0.50		ug/L			04/28/15 21:11	1
Xylenes, Total	ND		1.0		ug/L			04/28/15 21:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*04/28/15 21:11*	*1*
Dibromofluoromethane (Surr)	*102*		*76 - 132*		*04/28/15 21:11*	*1*
Toluene-d8 (Surr)	*104*		*80 - 128*		*04/28/15 21:11*	*1*

Lab Sample ID: LCS 440-251712/5
Matrix: Water
Analysis Batch: 251712

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	22.3		ug/L		89	68 - 130
Ethylbenzene	25.0	21.2		ug/L		85	70 - 130
m,p-Xylene	25.0	23.9		ug/L		96	70 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	22.7		ug/L		91	63 - 131
o-Xylene	25.0	24.0		ug/L		96	70 - 130
tert-Butyl alcohol (TBA)	250	264		ug/L		106	70 - 130
Toluene	25.0	21.3		ug/L		85	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*
Dibromofluoromethane (Surr)	*104*		*76 - 132*
Toluene-d8 (Surr)	*100*		*80 - 128*

Lab Sample ID: 440-108057-D-1 MS
Matrix: Water
Analysis Batch: 251712

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		25.0	21.5		ug/L		86	66 - 130
Ethylbenzene	ND		25.0	20.9		ug/L		83	70 - 130
m,p-Xylene	ND		25.0	23.7		ug/L		95	70 - 133
Methyl-t-Butyl Ether (MTBE)	1.5		25.0	22.7		ug/L		85	70 - 130
o-Xylene	ND		25.0	23.9		ug/L		96	70 - 133
tert-Butyl alcohol (TBA)	ND		250	259		ug/L		102	70 - 130
Toluene	ND		25.0	21.2		ug/L		85	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*
Dibromofluoromethane (Surr)	*103*		*76 - 132*
Toluene-d8 (Surr)	*101*		*80 - 128*

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

Lab Sample ID: 440-108057-D-1 MSD
Matrix: Water
Analysis Batch: 251712

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		25.0	22.0		ug/L		88	66 - 130	2	20
Ethylbenzene	ND		25.0	21.1		ug/L		85	70 - 130	1	20
m,p-Xylene	ND		25.0	24.0		ug/L		96	70 - 133	1	25
Methyl-t-Butyl Ether (MTBE)	1.5		25.0	23.0		ug/L		86	70 - 130	1	25
o-Xylene	ND		25.0	23.9		ug/L		96	70 - 133	0	20
tert-Butyl alcohol (TBA)	ND		250	267		ug/L		105	70 - 130	3	25
Toluene	ND		25.0	21.5		ug/L		86	70 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*
Dibromofluoromethane (Surr)	*104*		*76 - 132*
Toluene-d8 (Surr)	*102*		*80 - 128*

Lab Sample ID: MB 440-251777/4
Matrix: Water
Analysis Batch: 251777

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			04/29/15 08:07	1
Ethylbenzene	ND		0.50		ug/L			04/29/15 08:07	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			04/29/15 08:07	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			04/29/15 08:07	1
Toluene	ND		0.50		ug/L			04/29/15 08:07	1
Xylenes, Total	ND		1.0		ug/L			04/29/15 08:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*04/29/15 08:07*	*1*
Dibromofluoromethane (Surr)	*114*		*76 - 132*		*04/29/15 08:07*	*1*
Toluene-d8 (Surr)	*110*		*80 - 128*		*04/29/15 08:07*	*1*

Lab Sample ID: LCS 440-251777/5
Matrix: Water
Analysis Batch: 251777

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			25.0	22.6		ug/L		90	68 - 130		
Ethylbenzene			25.0	22.3		ug/L		89	70 - 130		
m,p-Xylene			25.0	22.1		ug/L		88	70 - 130		
Methyl-t-Butyl Ether (MTBE)			25.0	22.8		ug/L		91	63 - 131		
o-Xylene			25.0	22.2		ug/L		89	70 - 130		
tert-Butyl alcohol (TBA)			250	267		ug/L		107	70 - 130		
Toluene			25.0	21.9		ug/L		87	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Dibromofluoromethane (Surr)	*114*		*76 - 132*
Toluene-d8 (Surr)	*106*		*80 - 128*

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

Lab Sample ID: 440-108017-B-8 MS
Matrix: Water
Analysis Batch: 251777

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	73		25.0	93.3		ug/L		80	66 - 130
Ethylbenzene	47	F1	25.0	58.2	E F1	ug/L		44	70 - 130
m,p-Xylene	230	E	25.0	207	E 4	ug/L		-104	70 - 133
Methyl-t-Butyl Ether (MTBE)	ND		25.0	26.1		ug/L		104	70 - 130
o-Xylene	81	F1	25.0	85.5	F1	ug/L		20	70 - 133
tert-Butyl alcohol (TBA)	110		250	401		ug/L		114	70 - 130
Toluene	100	E	25.0	106	E 4	ug/L		18	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*
Dibromofluoromethane (Surr)	*112*		*76 - 132*
Toluene-d8 (Surr)	*104*		*80 - 128*

Lab Sample ID: 440-108017-B-8 MSD
Matrix: Water
Analysis Batch: 251777

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	73		25.0	90.4		ug/L		69	66 - 130	3	20
Ethylbenzene	47	F1	25.0	55.2	E F1	ug/L		32	70 - 130	5	20
m,p-Xylene	230	E	25.0	196	E 4	ug/L		-148	70 - 133	5	25
Methyl-t-Butyl Ether (MTBE)	ND		25.0	25.1		ug/L		100	70 - 130	4	25
o-Xylene	81	F1	25.0	81.2	F1	ug/L		2	70 - 133	5	20
tert-Butyl alcohol (TBA)	110		250	372		ug/L		103	70 - 130	7	25
Toluene	100	E	25.0	101	E 4	ug/L		-1	70 - 130	5	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*
Dibromofluoromethane (Surr)	*113*		*76 - 132*
Toluene-d8 (Surr)	*104*		*80 - 128*

Lab Sample ID: MB 440-252491/4
Matrix: Water
Analysis Batch: 252491

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			05/01/15 18:06	1
Ethylbenzene	ND		0.50		ug/L			05/01/15 18:06	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			05/01/15 18:06	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			05/01/15 18:06	1
Toluene	ND		0.50		ug/L			05/01/15 18:06	1
Xylenes, Total	ND		1.0		ug/L			05/01/15 18:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*05/01/15 18:06*	*1*
Dibromofluoromethane (Surr)	*104*		*76 - 132*		*05/01/15 18:06*	*1*
Toluene-d8 (Surr)	*112*		*80 - 128*		*05/01/15 18:06*	*1*

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

Lab Sample ID: LCS 440-252491/5
Matrix: Water
Analysis Batch: 252491

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	23.7		ug/L		95	68 - 130
Ethylbenzene	25.0	24.3		ug/L		97	70 - 130
m,p-Xylene	25.0	25.4		ug/L		102	70 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	25.2		ug/L		101	63 - 131
o-Xylene	25.0	24.3		ug/L		97	70 - 130
tert-Butyl alcohol (TBA)	250	257		ug/L		103	70 - 130
Toluene	25.0	24.2		ug/L		97	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
Dibromofluoromethane (Surr)	*106*		*76 - 132*
Toluene-d8 (Surr)	*109*		*80 - 128*

Lab Sample ID: 440-108024-A-1 MS
Matrix: Water
Analysis Batch: 252491

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		25.0	23.6		ug/L		94	66 - 130
Ethylbenzene	ND		25.0	24.1		ug/L		96	70 - 130
m,p-Xylene	ND		25.0	25.4		ug/L		102	70 - 133
Methyl-t-Butyl Ether (MTBE)	ND		25.0	24.8		ug/L		99	70 - 130
o-Xylene	ND		25.0	24.7		ug/L		99	70 - 133
tert-Butyl alcohol (TBA)	ND		250	250		ug/L		100	70 - 130
Toluene	ND		25.0	24.0		ug/L		96	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*107*		*76 - 132*
Toluene-d8 (Surr)	*110*		*80 - 128*

Lab Sample ID: 440-108024-A-1 MSD
Matrix: Water
Analysis Batch: 252491

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		25.0	23.5		ug/L		94	66 - 130	0	20
Ethylbenzene	ND		25.0	24.6		ug/L		98	70 - 130	2	20
m,p-Xylene	ND		25.0	25.4		ug/L		102	70 - 133	0	25
Methyl-t-Butyl Ether (MTBE)	ND		25.0	23.7		ug/L		95	70 - 130	4	25
o-Xylene	ND		25.0	24.3		ug/L		97	70 - 133	2	20
tert-Butyl alcohol (TBA)	ND		250	262		ug/L		105	70 - 130	5	25
Toluene	ND		25.0	24.0		ug/L		96	70 - 130	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*
Dibromofluoromethane (Surr)	*105*		*76 - 132*

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

Lab Sample ID: 440-108024-A-1 MSD
Matrix: Water
Analysis Batch: 252491

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

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Toluene-d8 (Surr)	108		80 - 128

Lab Sample ID: MB 440-252555/4
Matrix: Water
Analysis Batch: 252555

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			05/02/15 10:46	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		80 - 120		05/02/15 10:46	1
Dibromofluoromethane (Surr)	103		76 - 132		05/02/15 10:46	1
Toluene-d8 (Surr)	112		80 - 128		05/02/15 10:46	1

Lab Sample ID: LCS 440-252555/5
Matrix: Water
Analysis Batch: 252555

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methyl-t-Butyl Ether (MTBE)			25.0	26.2		ug/L		105	63 - 131		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		80 - 120
Dibromofluoromethane (Surr)	107		76 - 132
Toluene-d8 (Surr)	109		80 - 128

Lab Sample ID: 440-108183-E-3 MS
Matrix: Water
Analysis Batch: 252555

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methyl-t-Butyl Ether (MTBE)	ND		25.0	23.9		ug/L		96	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	109		76 - 132
Toluene-d8 (Surr)	107		80 - 128

Lab Sample ID: 440-108183-E-3 MSD
Matrix: Water
Analysis Batch: 252555

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl-t-Butyl Ether (MTBE)	ND		25.0	24.2		ug/L		97	70 - 130	1	25

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		80 - 120

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

Lab Sample ID: 440-108183-E-3 MSD
Matrix: Water
Analysis Batch: 252555

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

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*108*		*76 - 132*
Toluene-d8 (Surr)	*103*		*80 - 128*

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 440-251713/4
Matrix: Water
Analysis Batch: 251713

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			04/28/15 21:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*102*		*76 - 132*		*04/28/15 21:11*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*04/28/15 21:11*	*1*
Toluene-d8 (Surr)	*104*		*80 - 128*		*04/28/15 21:11*	*1*

Lab Sample ID: LCS 440-251713/6
Matrix: Water
Analysis Batch: 251713

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Volatile Fuel Hydrocarbons (C4-C12)	500	372		ug/L		74	55 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*103*		*76 - 132*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 128*

Lab Sample ID: 440-108057-D-1 MS
Matrix: Water
Analysis Batch: 251713

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Volatile Fuel Hydrocarbons (C4-C12)	ND		1730	1350		ug/L		76	50 - 145

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*103*		*76 - 132*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 128*

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

Lab Sample ID: 440-108057-D-1 MSD
Matrix: Water
Analysis Batch: 251713

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Volatile Fuel Hydrocarbons (C4-C12)	ND		1730	1310		ug/L		74	50 - 145	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*104*		*76 - 132*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*
Toluene-d8 (Surr)	*102*		*80 - 128*

Lab Sample ID: MB 440-251778/4
Matrix: Water
Analysis Batch: 251778

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			04/29/15 08:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*114*		*76 - 132*		*04/29/15 08:07*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*04/29/15 08:07*	*1*
Toluene-d8 (Surr)	*110*		*80 - 128*		*04/29/15 08:07*	*1*

Lab Sample ID: LCS 440-251778/6
Matrix: Water
Analysis Batch: 251778

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Volatile Fuel Hydrocarbons (C4-C12)	500	453		ug/L		91	55 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*114*		*76 - 132*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Toluene-d8 (Surr)	*109*		*80 - 128*

Lab Sample ID: 440-108017-B-8 MS
Matrix: Water
Analysis Batch: 251778

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Volatile Fuel Hydrocarbons (C4-C12)	21000	E	1730	7160	E 4	ug/L		-814	50 - 145

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*112*		*76 - 132*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*
Toluene-d8 (Surr)	*104*		*80 - 128*

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

Lab Sample ID: 440-108017-B-8 MSD
Matrix: Water
Analysis Batch: 251778

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Volatile Fuel Hydrocarbons (C4-C12)	21000	E	1730	6340	E 4	ug/L		-862	50 - 145	12	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*113*		*76 - 132*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*
Toluene-d8 (Surr)	*104*		*80 - 128*

Lab Sample ID: MB 440-252492/4
Matrix: Water
Analysis Batch: 252492

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			05/01/15 18:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*104*		*76 - 132*		*05/01/15 18:06*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*05/01/15 18:06*	*1*
Toluene-d8 (Surr)	*112*		*80 - 128*		*05/01/15 18:06*	*1*

Lab Sample ID: LCS 440-252492/6
Matrix: Water
Analysis Batch: 252492

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Volatile Fuel Hydrocarbons (C4-C12)	500	438		ug/L		88	55 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*106*		*76 - 132*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
Toluene-d8 (Surr)	*112*		*80 - 128*

Lab Sample ID: 440-108024-A-1 MS
Matrix: Water
Analysis Batch: 252492

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Volatile Fuel Hydrocarbons (C4-C12)	ND		1730	1600		ug/L		93	50 - 145

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*107*		*76 - 132*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Toluene-d8 (Surr)	*110*		*80 - 128*

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

Lab Sample ID: 440-108024-A-1 MSD
Matrix: Water
Analysis Batch: 252492

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Volatile Fuel Hydrocarbons (C4-C12)	ND		1730	1530		ug/L		89	50 - 145	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*105*		*76 - 132*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*
Toluene-d8 (Surr)	*108*		*80 - 128*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 440-251153/4
Matrix: Water
Analysis Batch: 251153

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		110		ug/L			04/25/15 12:13	1

Lab Sample ID: LCS 440-251153/2
Matrix: Water
Analysis Batch: 251153

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	1130	1090		ug/L		96	90 - 110

Lab Sample ID: 440-108041-A-3 MS
Matrix: Water
Analysis Batch: 251153

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	ND		11300	12300		ug/L		109	80 - 120

Lab Sample ID: 440-108041-A-3 MSD
Matrix: Water
Analysis Batch: 251153

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	ND		11300	13200		ug/L		117	80 - 120	8	20

Lab Sample ID: MB 440-251154/4
Matrix: Water
Analysis Batch: 251154

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		500		ug/L			04/25/15 12:13	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 440-251154/2
Matrix: Water
Analysis Batch: 251154

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5000	4670		ug/L		93	90 - 110

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 440-251247/3
Matrix: Water
Analysis Batch: 251247

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	ND		4000		ug/L			04/26/15 08:15	1

Lab Sample ID: LCS 440-251247/2
Matrix: Water
Analysis Batch: 251247

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity as CaCO3	85400	85300		ug/L		100	80 - 120

Lab Sample ID: 440-107855-A-3 DU
Matrix: Water
Analysis Batch: 251247

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity as CaCO3	32000		31600		ug/L		0.1	20

GC/MS VOA

Analysis Batch: 251712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-108031-2	MW-1B	Total/NA	Ground Water	8260B	
440-108057-D-1 MS	Matrix Spike	Total/NA	Water	8260B	
440-108057-D-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 440-251712/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-251712/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 251713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-108031-2	MW-1B	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-108057-D-1 MS	Matrix Spike	Total/NA	Water	8260B/CA_LUFT MS	
440-108057-D-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B/CA_LUFT MS	
LCS 440-251713/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
MB 440-251713/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

Analysis Batch: 251777

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-108017-B-8 MS	Matrix Spike	Total/NA	Water	8260B	
440-108017-B-8 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
440-108031-1	MW-1	Total/NA	Ground Water	8260B	
LCS 440-251777/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-251777/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 251778

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-108017-B-8 MS	Matrix Spike	Total/NA	Water	8260B/CA_LUFT MS	
440-108017-B-8 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B/CA_LUFT MS	
440-108031-1	MW-1	Total/NA	Ground Water	8260B/CA_LUFT MS	
LCS 440-251778/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
MB 440-251778/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

Analysis Batch: 252491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-108024-A-1 MS	Matrix Spike	Total/NA	Water	8260B	
440-108024-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
440-108031-3	MW-2	Total/NA	Ground Water	8260B	
440-108031-4	MW-3	Total/NA	Ground Water	8260B	
440-108031-5	MW-4	Total/NA	Ground Water	8260B	
LCS 440-252491/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-252491/4	Method Blank	Total/NA	Water	8260B	

GC/MS VOA (Continued)

Analysis Batch: 252492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-108024-A-1 MS	Matrix Spike	Total/NA	Water	8260B/CA_LUFT MS	
440-108024-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B/CA_LUFT MS	
440-108031-3	MW-2	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-108031-4	MW-3	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-108031-5	MW-4	Total/NA	Ground Water	8260B/CA_LUFT MS	
LCS 440-252492/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
MB 440-252492/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

Analysis Batch: 252555

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-108031-3 - DL	MW-2	Total/NA	Ground Water	8260B	
440-108183-E-3 MS	Matrix Spike	Total/NA	Water	8260B	
440-108183-E-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 440-252555/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-252555/4	Method Blank	Total/NA	Water	8260B	

HPLC/IC

Analysis Batch: 251153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-108031-4	MW-3	Total/NA	Ground Water	300.0	
440-108041-A-3 MS	Matrix Spike	Total/NA	Water	300.0	
440-108041-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
LCS 440-251153/2	Lab Control Sample	Total/NA	Water	300.0	
MB 440-251153/4	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 251154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-108031-4	MW-3	Total/NA	Ground Water	300.0	
LCS 440-251154/2	Lab Control Sample	Total/NA	Water	300.0	
MB 440-251154/4	Method Blank	Total/NA	Water	300.0	

General Chemistry

Analysis Batch: 251247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107855-A-3 DU	Duplicate	Total/NA	Water	SM 2320B	
440-108031-4	MW-3	Total/NA	Ground Water	SM 2320B	
LCS 440-251247/2	Lab Control Sample	Total/NA	Water	SM 2320B	
MB 440-251247/3	Method Blank	Total/NA	Water	SM 2320B	

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
E	Result exceeded calibration range.
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

HPLC/IC

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time

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
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
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)

Certification Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 4212 First St., Pleasanton, CA

TestAmerica Job ID: 440-108031-1

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	06-30-15
Arizona	State Program	9	AZ0671	10-13-15
California	LA Cty Sanitation Districts	9	10256	01-31-16 *
California	State Program	9	2706	06-30-16
Guam	State Program	9	Cert. No. 12.002r	01-23-16
Hawaii	State Program	9	N/A	01-29-16
Nevada	State Program	9	CA015312007A	07-31-15
New Mexico	State Program	6	N/A	01-29-15 *
Northern Mariana Islands	State Program	9	MP0002	01-29-15 *
Oregon	NELAP	10	4005	01-29-16
USDA	Federal		P330-09-00080	06-06-15

* Certification renewal pending - certification considered valid.

Shell Oil Products Chain Of Custody Record

LAB (LOCATION)
- ☐ CALSCIENCE (_____)
- ☐ SPL Houston (_____)
- ☐ KENCO (_____)
- ☑ TEST AMERICA (IRVINE)
- ☐ OTHER (_____)

Please Check Appropriate Box:
☐ ENV. SERVICES | ☐ MOTIVA RETAIL | ☐ SHELL RETAIL
☐ MOTIVA SD&CM | ☑ CONSULTANT | ☐ LUBES
☐ SHELL PIPELINE | ☐ OTHER _____

Print Bill To Contact Name: 240523 Peter Schaefer
PO #:
INCIDENT # (ENV SERVICES): 9 8 9 9 5 8 4 0
SAP #: 1 3 5 7 8 2
☐ CHECK IF NO INCIDENT # APPLIES
DATE: 4-23-15
PAGE: 1 of 1

SAMPLING COMPANY: Blaine Tech Services
LOG CODE: BTSS
ADDRESS: 1680 Rogers Avenue, San Jose, CA
PROJECT CONTACT (Hardcopy or PDF Report to): Bart Gebbie
TELEPHONE: (310) 885-4455 x 103
FAX: (310) 637-5802
E-MAIL: bgebbie@blainetech.com

SITE ADDRESS: Street and City: 4212 First Street, Pleasanton
State: CA
GLOBAL ID NO.: T0600101259
EDF DELIVERABLE TO (Name, Company, Office Location): Anni Kreml, CRA, Emeryville, CA
PHONE NO.: 510-420-3335
E-MAIL: ShellEDF@CRAWorld.com; Shell-US-LabDataManagement@CRAworld.co
CONSULTANT PROJECT NO.: 240523-85-11.04
SAMPLER NAME(S) (Print): J. Ortiz
LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS):
☒ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND
☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

SPECIAL INSTRUCTIONS OR NOTES:
1) Please upload the "CRA EQuIS 4-file EDD" to the CRA Website (http://cralabedduplod.craworld.com/equis/default.aspx) and/or send it to the Shell-US-LabDataManagement@CRAworld.com email folder. 2) Please indicate that you have uploaded the EDD by including "EDD Uploaded to CRA website" in the body of the email used to deliver the final PDF report to the Shell-US-LabDataManagement@CRAworld.com email folder.

Copy final report to Shell.Lab.Billing@craworld.com, ShellEDF@craworld.com,Shell-US-LabDataManagement@CRAworld.com, and pschaefer@CRAWorld.com

Email invoice to Shell.Lab.Billing@craworld.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED

Matrix Codes - WG (groundwater), WS (surface water), WP (drinking water source), W (Trip or Temp Blank)

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	PROJECT NUMBER	DATE (MMDDYY)	SAMPLER INITIALS	WELL ID	TIME	MATRIX	PRESERVATIVE: HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	TPH-GRO, Purgeable (8260B)	TPH-DRO, Extractable (8015M)	BTEX (8260B)	BTEX + MTBE (8260B)	BTEX + MTBE + TBA (8260B)	BTEX + 5 OXYs (MTBE, TBA, DIPE, TAME, ETBE) 8260B	VOCs Full list (8260B)	Single Compound: _____ (8260B)	1,2 DCA (8260B)	EDB (8260B)	Ethanol (8260B)	Methanol (8015B)		Nitrate	Sulfate	Alkalinity	Ferrous Iron			Container PID Readings or Laboratory Notes
	WG	150423-301	042315	JO	MW-1	1525	WG	3					3	X	-	X		X															
					MW-1B	1520		3					3	X				X															
					MW-2	1556		3					3	X				X															
					MW-3	1504		3			1		4	X				X									X	X	X				
					MW-4	1535		3					3	X				X															

TEMPERATURE ON RECEIPT, °C: (CS) 2.4/1.7 IR-72

Relinquished by: (Signature) — Received by: (Signature) TAP — Date: 4-23-15 — Time: 1625
Relinquished by: (Signature) 4/23/15 1638 — Received by: (Signature) — Date: 4/24/15 — Time: 9:45
Relinquished by (Signature) — Received by: (Signature) — Date: — Time:

Fed: 6329 1552 8841

4, 6°C

440-108031 Chain of Custody

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5/4/2015

Login Sample Receipt Checklist

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 440-108031-1

Login Number: 108031

List Source: TestAmerica Irvine

List Number: 1

Creator: Jackson, Brent E

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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?	True	
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.	N/A	
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.	True	
Residual Chlorine Checked.	N/A	