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September 14, 2017

Ms. Dilan Roe
ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Subject: Groundwater Monitoring Report 3rd Quarter 2017
1800 ½ Powell Street, Emeryville, California, APN 049 -1495-001-12
Case No. RO0000254; GeoTracker Global ID: T0600101231

Dear Ms. Roe:

Au Energy, LLC (Au Energy, the *responsible party*), is submitting the enclosed report summarizing the groundwater sampling results as requested. This report was prepared by Bureau Veritas North America, Inc. (BVNA) on behalf of AU Energy, LLC.

I declare, under penalty of perjury, that the information contained in the attached enclosed Work Plan is true and correct to the best of my knowledge. If you have any comments or questions regarding this report, please do not hesitate to contact Mark Williams or Don Ashton of BVNA. Their contact information is provided in the attached report.

Sincerely,

Sunny Goyal
Au Energy Director

September 15, 2017

Mr. Sunny Goyal
AU ENERGY
41805 Albrae Street, 2nd Floor
Fremont, California 94538

Project No. 33113-013181.00

Subject: Groundwater Monitoring Report - Third Quarter 2017
1800 ½ Powell Street, Emeryville, Alameda County, California
Fuel Leak Case No. RO0000254 and GeoTracker Global ID T0600101231

Dear Mr. Goyal:

Bureau Veritas North America, Inc. is pleased to present the attached Groundwater Monitoring Report for the Third Quarter 2017 for the site referenced above.

If you have any comments or questions regarding the report, please do not hesitate to contact me at 925-426-2676 or at mark.williams@us.bureauveritas.com.

Sincerely,

Mark Williams, P.G.
Senior Project Manager
Health, Safety, and Environmental Services

Enclosure

Bureau Veritas North America, Inc.
Health, Safety, and Environmental Services
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Groundwater Monitoring Report Third Quarter – 2017

1800 ½ Powell Street
Emeryville, California

September 15, 2017
Project Number 33113-013181.00

Prepared for
Au Energy LLC
41805 Albrae Street, 2nd Floor
Fremont, California

For the benefit of business and people

Bureau Veritas North America, Inc.
2430 Camino Ramon, Suite 122
San Ramon, California 94583
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1.0 INTRODUCTION

This report presents the results of the Third Quarter – 2017 groundwater monitoring event for the property located at 1800 ½ Powell Street, Emeryville, California (the "Site," Figure 1).

The Site is currently an operational fueling station serving Shell-branded products.

2.0 OBJECTIVE

The objective of this investigation is to document the baseline groundwater conditions beneath the Site at the request of the Alameda County Health Care Services Agency (ACHSA). The Site is currently a leaking underground storage tank (LUST) – Open Case (ACHSA Case No. RO0000254, assigned State Water Resources Control Board (RWQCB) GeoTracker Global ID T0600101231).

3.0 SCOPE OF WORK

Groundwater monitoring activities for were performed on July 31, 2017. Tasks included obtaining groundwater level measurements, purging groundwater collecting a representative groundwater sample from each well, and submitting groundwater samples obtained from wells S-8, S-10, S-12, and S-14 to a California certified laboratory for the required chemical analysis.

Well S-9 was found to be dry as in previous sampling events. Well S-13 was not found as it had been covered up by a new sidewalk. The approximate location of the well is known to BVNA based on previous site surveys and was marked in the field.

3.1 FIELD ACTIVITIES

3.1.1 Groundwater Level Measurements

Depth to groundwater measurements were obtained using an electronic water level sounder capable of recording measurements to the nearest +/- 0.01 foot. Each measurement was referenced to an established reference point (V-notch) at the top of each well casing. Groundwater elevations were calculated by subtracting the depth to water from the top of well casing elevation. Groundwater elevations were used to determine the apparent flow direction and hydraulic gradient.

3.1.2 Well Purging

Well purging was performed to remove standing water from each well casing and to allow fresh groundwater to enter the well casing. Well purge volume measurements were calculated based upon the differences of measurements between the depth to water from the top of well casing and the well depth in each well.

At least three (3) volumes of groundwater were purged from each well using new disposable bailers. Field parameter measurements, including pH, temperature, conductivity, dissolved oxygen (DO), oxidation reduction potential (ORP), and turbidity, were monitored during purging and recorded on Field Sampling Data Sheets until those parameters stabilized to acceptable levels. The appearance of the

purged water, such as color and odor was noted on the Field Sampling Data Sheets, which are presented in Appendix A. After purging, the wells were allowed to recover adequately prior to sample collection.

3.1.3 Groundwater Sampling

Groundwater samples were obtained using clean, disposable sample bailers. Groundwater samples were poured from the bailers into laboratory-supplied containers that were appropriate for each of the requested analytical methods. The sample containers were labeled with the project name, project number, well number, sampling date, and sampler's initials. The samples were then placed on ice in a pre-chilled cooler for transportation to the analytical laboratory under formal chain-of-custody (COC) documentation.

3.1.4 Decontamination and Waste Containerization

Non-disposable field equipment used for the monitoring of groundwater quality parameters was decontaminated using a triple rinse method with an Alconox and water solution for the first rinse and tap water for the second and final rinsing. Decontamination wastewater and purge water were placed in a 55-gallon drum, which was sealed, labeled and stored onsite pending proper disposal. The drum was labeled with the project name, project number, monitoring well number, matrix type (i.e., groundwater), and date of generation.

3.2 LABORATORY ANALYSES

Laboratory analyses were performed by Test America Laboratories, Inc. of Pleasanton, California, a California-state certified analytical laboratory. The samples were analyzed for the following parameters:

- TPH as diesel (TPH-d) as C8 through C20 using USEPA Method 8015B using the silica gel cleanup procedure
- Benzene, toluene, ethyl benzene, and total xylenes by USEA Method 8260B.

Laboratory analyses were performed on a standard turnaround time.

4.0 FINDINGS

4.1 GROUNDWATER FLOW

Groundwater flow was determined based on contouring groundwater levels using the calculated groundwater elevation at each of the measured wells (S-8, S-10, S-12, and S-14). The depth measured depths to groundwater ranged from 6.66 to 9.84 feet. Calculated groundwater elevations ranged from 2.74 to 6.10 feet above mean sea level (msl). Groundwater elevations were found to be approximately 0.1 feet lower than the previous event findings on February 27, 2015.

Groundwater elevations for each of the measured wells are presented in Table 1, and are depicted along with interpreted elevation contour lines on Figure 2. Based on the measurements obtained during this sampling event, groundwater flow direction is variable and likely influenced by the heterogeneity of the fill materials in the subsurface at the Site.

4.2 GROUNDWATER ANALYTICAL RESULTS

Table 2 provides a summary of the analytical data from water samples collected in July 2017. Appendix C includes the previous groundwater monitoring report for comparison of data. Laboratory reported TPH-d concentrations were lower in each well than the previous sampling event results in 2015. The BTEX concentrations were below the laboratory reporting limits in samples S-10, S-12 and S-14. BTEX concentrations reported in sample S-8 were above the concentrations observed during the last sampling event conducted in 2015, but were similar or lower than concentrations in previous events as shown in Table 2.

5.0 CONCLUSIONS

The focus of this investigation was to evaluate the groundwater quality trends at the site and to confirm that TPH-d concentration trends in the groundwater samples were consistent with results prior to the 2013 diesel pipeline release. Based on the data collected from the available monitoring wells, the TPH-d concentrations observed in the wells still appear to be trending downward and decreasing. The diesel release reported in 2013 does not appear to have migrated in groundwater to the sampled and downgradient wells that were sampled during this monitoring event. As noted in the 2015 ground water monitoring report, historical groundwater data indicate that total petroleum hydrocarbons as gasoline and fuel oxygenate concentrations in site wells are stable to declining. Conestoga-Rovers & Associates (CRA, 2015) also concluded that following AU Energy's September 2013 diesel release, there has been no appreciable change in total petroleum hydrocarbons in the diesel range concentrations in groundwater samples. The data collected during this July 2017 sampling event further support this conclusion.

In conclusion, the TPH-d concentrations noted in the wells appear to be stable and decreasing as historically observed. Based on the results of this sampling event and prior sampling events since the 2013 diesel release, it is recommended that these wells be considered for closure and properly abandoned.

If well closure and case closure is granted by Alameda County Health Care Services Agency, then a well closure permit will be obtained from Alameda County Department of Public Works in pursuit of a case closure.

6.0 SIGNATURES

This report prepared by:

Mark Williams, P.G.
Senior Project Manager
Health, Safety, and Environmental Services

This report reviewed by:

Don Ashton, P.G.
Senior Project Manager
Health, Safety, and Environmental Services

September 15, 2017
Project No. 33113-013181.00

PROFESSIONAL GEOLOGIST
MARK WILLIAMS
No. 8641
Exp. 4/30/19
STATE OF CALIFORNIA

TABLES

TABLE 1
Groundwater Elevation Data
1800 1/2 Powell Street
Emeryville, CA

Well ID	Measurement Date	TOC Elevation (feet msl)	DTW (feet btoc)	Groundwater Elevation (feet msl)
S-8	2/27/2015	12.76	6.81	5.95
	7/31/2017	12.76	6.66	6.10
S-10	2/27/2015	12.58	9.65	2.93
	7/31/2017	12.58	9.84	2.74
S-12	2/27/2015	12.84	7.91	4.93
	7/31/2017	12.84	8.36	4.48
S-14	2/27/2015	12.69	9.91	2.78
	7/31/2017	12.69	9.81	2.88

Notes:

MW = Monitoring Well

DTW = Depth to Water

TOC = Top of Casing

btoc = Below top of casing

msl = mean sea level datum

Elevations are referenced to 1988 North American Vertical Datum (NAVD 88).

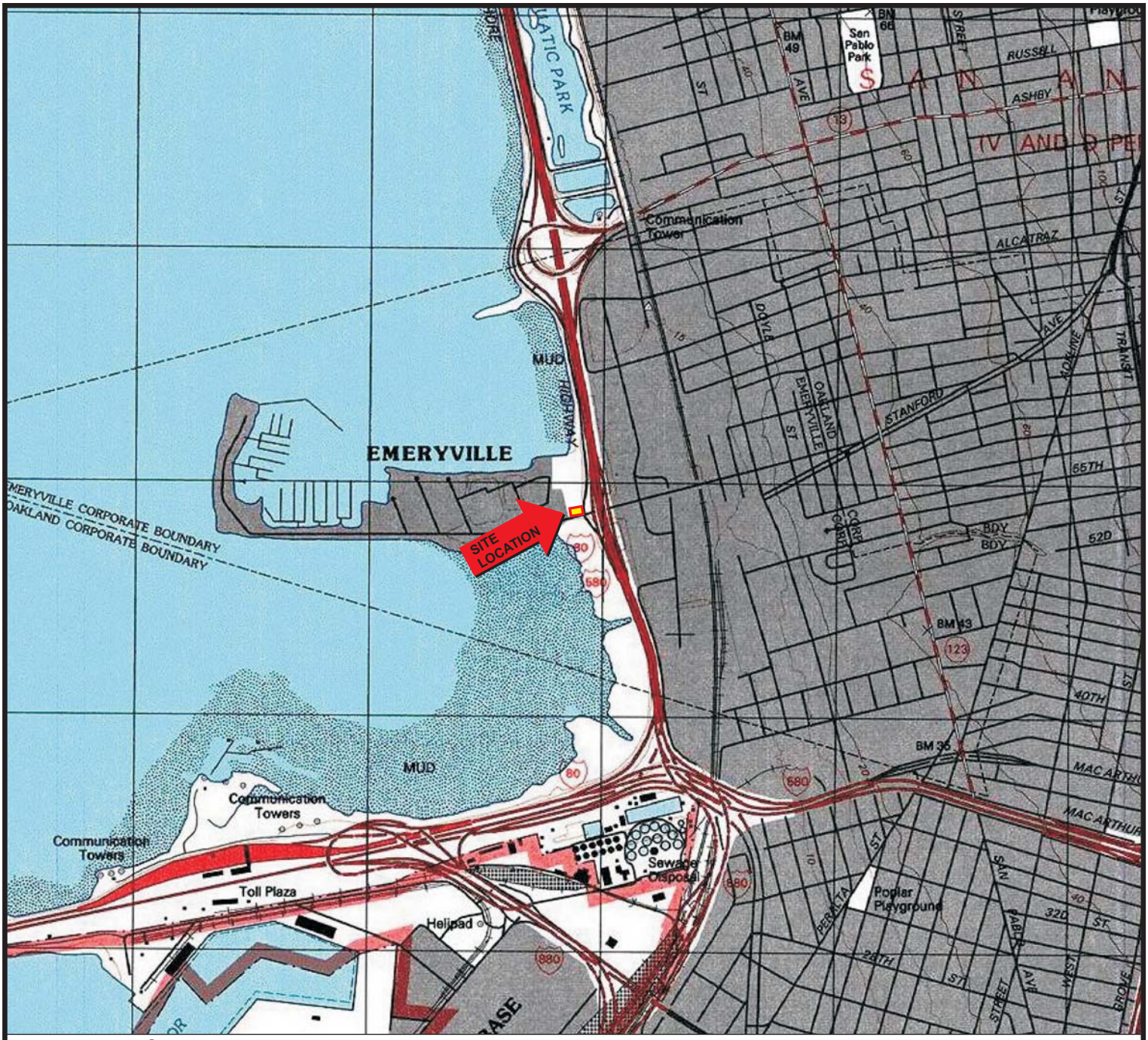
TABLE 2
Groundwater Analytical Results
1800 1/2 Powell Street
Emeryville, CA

Sample ID	Sample Date	TPH-d (ug/L) (C9-40) Extractable Range	TPH-d (ug/L) (C10-28) diesel range	Benzene (ug/L)	Toluene (ug/L)	Ethyl benzene (ug/L)	Xylenes (ug/L)
S-8	1/14/1991	NA	760	190	5.8	<0.5	19
	1/16/2012	NA	1,400	NA	NA	NA	NA
	2/27/2015	NA	NA	<0.5	<0.5	<0.5	1.3
	7/31/2017	600	50	16	1.2	2.1	2.3
S-10	1/16/2012	NA	5,700	NA	NA	NA	NA
	10/5/2012	NA	510	10	2.9	<0.5	19
	12/9/2013	NA	2,100	2	0.61	<0.5	6
	2/27/2015	NA	2,100	<0.5	<0.5	<0.5	<1.0
	7/31/2017	5200	1300	<0.5	<0.5	<0.5	<1.0
S-12	12/1/2011	NA	15,600	<0.5	<0.5	<0.5	0.97
	1/16/2012	NA	1,800	NA	NA	NA	NA
	10/5/2012	NA	280	<0.5	<0.5	<0.5	<1.0
	12/9/2013	NA	250	<0.5	<0.5	<0.5	<1.0
	2/27/2015	NA	630	<0.5	<0.5	<0.5	<1.0
	7/31/2017	5100	230	<0.5	<0.5	<0.5	<1.0
S-14	12/1/2011	NA	7,610	<0.5	<0.5	<0.5	<0.5
	1/16/2012	NA	1,400	NA	NA	NA	NA
	10/5/2012	NA	1,300	<0.5	<0.5	<0.5	<1.0
	2/27/2015	NA	770	0.94	0.55	<0.5	<1.0
	7/31/2017	3200	180	<0.5	<0.5	<0.5	<1.0
RWQCB ESL		100	100	1	40	13	20

Notes:

Results are reported in micrograms per liter (ug/L)
TPH = total petroleum hydrocarbons
TPH-mo = TPH quantified as motor oil
TPH-g analyzed by USEPA Method 8260B
TPH-d = TPH quantified as diesel
TPH-g = TPH quantified as gasoline
TPH-d and TPH-mo analyzed by USEPA Method 8015B with silica gel clean-up
USEPA = United States Environmental Protection Agency
<50 = not detected below the laboratory reporting limit for this compound
a = unmodified or weakly modified diesel is significant
b = diesel range compounds are significant; no recognizable pattern.
-- = not established for this analyte
RWQCB ESL = Regional Water Quality Control Board - San Francisco Bay Region, Environmental Screening Level (Tier 1 ESLs, February 2016, revision 3).
Bolded values indicate a constituent was detected above the laboratory reporting limit.

FIGURES



Source: TOPO! © 2000 National Geographic Holdings

Note: Location Information is Approximate

1 0 1/2 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

Portion of the 7.5-Minute Series, Oakland West, California
Quadrangle Topographic Map (Datum: NAD 83)
United States Department of the Interior
Geological Survey
1997 Photorevised from 1993

N

CALIF

QUADRANGLE LOCATION

SITE LOCATION MAP	FIGURE
1800 ½ Powell Street Emeryville, California	1

BUREAU VERITAS

EXPLANATION

(6.10) Groundwater Elevation (ft msl)

Groundwater Elevation Contour (ft msl)

ft msl Feet above mean sea level

NM Not Measured

Soil sample location (9/23/04)

Soil sample location (3/19/98)

Soil boring location (5/20/96)

Soil boring location (4/18-19/06)

Monitoring well location

Destroyed monitoring well location

Tank backfill well location

Soil Boring Location (Bureau Veritas, 9/30/13)

Electrical line (E)

Storm drain line (SD)

Water line (W)

Gas line (G)

Telecommunications line (T)

Storm drain catch basin

Holiday Inn
Hotel Building
1800 Powell

parking lot

planter

Car Wash

Air/ water

MPD-1 MPD-2 MPD-3 MPD-4

Service islands

MPD-10 (4.48)

S-12

SB-9

SB-7

SB-8

S-1/A

Shell Station
1800 1/2 Powell

trash encl.

MPD-6

D-6

BV-4

Marketeer Building

Service islands

D-5

MPD-5

USTs

S-11/F

S-2/E

S-3/B

S-6

SB-11

S-14 (2.88)

canopy

BV-3

service islands

D-9 D-7

MPD-9 MPD-8 MPD-7

SB-10

SB-12

S-4/C

S-7

S-13

S-8 (6.10)

S-9 (NM)

S-10 (2.74)

BV-2

BV-1

(NM) S-5

3.0 4.0 5.0

FRONTAGE ROAD

POWELL STREET

traffic island

N

0 30

SCALE: feet

REFERENCE: CAMBRIA, "SITE PLAN". DATED 6/2/2006.

SITE PLAN SHOWING GROUNDWATER ELEVATIONS, JULY 31, 2017

SHELL-BRANDED SERVICE STATION
1800 1/2 POWELL STREET
EMERYVILLE, CALIFORNIA

Project No. 33113-013181.00

Figure **2**

09/06/17
SITE0917.DWG

BUREAU VERITAS

APPENDIX A

FIELD SAMPLING DATA SHEETS

WELL GAUGING DATA

Project # 170731-DH1 Date 7/31/17 Client Burlew Veritas

Site 1900 Powell St, Emeryville, CA

Well ID	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	Time
S-7	*	Parked over, unable to access							0848
S-8	3					6.66	~~17.47~~		0856
S-9	3	odor	Check w/ disposable bailer, well is dry			DRY	—		0918
S-10	6					9.84	19.27		0902
S-12	3					8.36	23.64		0911
S-13	*	Unable to locate							
S-14	3					9.81	21.91		0923

WELL MONITORING DATA SHEET

Project #: 170731-DH1	Client: Bureau Veritas
Sampler: DH	Date: 7/31/17
Well I.D.: 55	Well Diameter: 2 3 4 6 8 ____
Total Well Depth (TD):	Depth to Water (DTW):
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer, Disposable Bailer, Positive Air Displacement, Electric Submersible, Waterra, Peristaltic, Extraction Pump, Other_____

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

_____(Gals.) X _____ = _____ 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 or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
* well	purged	over	, unable	to access		
* No sample	taken					

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: Sampling Time: Depth to Water:

Sample I.D.: Laboratory: Kiff CalScience Other_____

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

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

WELL MONITORING DATA SHEET

Project #: 170731-DH1	Client: Burns Veritas
Sampler: DH	Date: 7/31/17
Well I.D.: S-8	Well Diameter: 2 (3) 4 6 8 ___
Total Well Depth (TD): 17.47	Depth to Water (DTW): 6.66
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]: 8.82	

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: _____

4.0 (Gals.) X	3	=	12.0 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 or °C)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1026	70.4	7.17	4087	104	4.0	
1031	70.1	7.01	3587	69	8.0	
1036	69.7	6.97	3319	31	12.0	

Did well dewater? Yes (No) Gallons actually evacuated: 12.0

Sampling Date: 7/31/17 Sampling Time: 1040 Depth to Water: 7.18

Sample I.D.: S-8 Laboratory: Kiff CalScience Other TA

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

WELL MONITORING DATA SHEET

Project #: 170131-OH1	Client: Bureau Veritas
Sampler: OH	Date: 7/31/17
Well I.D.: S-9	Well Diameter: 2 (3) 4 6 8 ____
Total Well Depth (TD): /	Depth to Water (DTW): Dry
Depth to Free Product: /	Thickness of Free Product (feet): /
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer, Disposable Bailer, Positive Air Displacement, Electric Submersible, Waterra, Peristaltic, Extraction Pump, Other_____

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

_____(Gals.) X _____ = _____ 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 or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
* Checked well w/disposable bailer, well is dry.						
* No sample taken						

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: Sampling Time: Depth to Water:

Sample I.D.: Laboratory: Kiff CalScience Other_____

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

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

WELL MONITORING DATA SHEET

Project #: 170731-OH1	Client: OH Shell Bucca Vorks
Sampler: OH	Date: 7/31/17
Well I.D.: S-10	Well Diameter: 2 3 4 (6) 8 ____
Total Well Depth (TD): 19.27	Depth to Water (DTW): 9.84
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]: 11.73	

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: _____

13.9 (Gals.) X 3 = 41.7 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 or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
0944	Well dewatered			Q	12	
1200	67.6	6.76	1476	7 NTU	Grab	

Did well dewater? (Yes) No Gallons actually evacuated: 12

Sampling Date: 7/31/17 Sampling Time: 1200 Depth to Water: 16.05

Sample I.D.: S-10 Laboratory: Kiff CalScience Other TA

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

WELL MONITORING DATA SHEET

Project #: 170731-DH1	Client: Burns Veritas
Sampler: DH	Date: 7/31/17
Well I.D.: S-12	Well Diameter: 2 (3) 4 6 8 ____
Total Well Depth (TD): 23.64	Depth to Water (DTW): 8.36
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]: 11.42	

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: _____

5.7 (Gals.) X	3	=	17.1 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 or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1112	65.6	6.34	5136	217	5.7	
1122	64.9	6.41	5361	268	11.4	
1132	64.6	6.49	5401	274	17.1	

Did well dewater? Yes (No) Gallons actually evacuated: 17.1

Sampling Date: 7/31/17 Sampling Time: 1140 Depth to Water: 9.16

Sample I.D.: S-12 Laboratory: Kiff CalScience Other TA

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

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

WELL MONITORING DATA SHEET

Project #: 170731-DH1	Client:
Sampler: DH	Date: 7/31/17
Well I.D.: S-13	Well Diameter: 2 3 4 6 8
Total Well Depth (TD):	Depth to Water (DTW):
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer, Disposable Bailer, Positive Air Displacement, Electric Submersible, Waterra, Peristaltic, Extraction Pump, Other_____

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

_____(Gals.) X _____ = _____ 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 or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
* Unable to locate well						
* No sample taken						

Did well dewater? Yes No		Gallons actually evacuated:	
Sampling Date:	Sampling Time:	Depth to Water:	
Sample I.D.:		Laboratory: Kiff CalScience Other_____	
Analyzed for: TPH-G BTEX MTBE TPH-D		Oxygenates (5) Other:	
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:	mg/L
O.R.P. (if req'd): Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 1707 31-SH1	Client: Bureau Veritas
Sampler: DH	Date: 7/31/17
Well I.D.: S-14	Well Diameter: 2 (3) 4 6 8 ___
Total Well Depth (TD): 21.91	Depth to Water (DTW): 9.81
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]: 12.23	

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: _____

4.5 (Gals.) X 3 = 13.5 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 or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
0958	67.8	7.09	18.17	88	4.5	
1007	68.1	7.12	7.11	61	9.0	
1015	68.3	7.19	7.04	42	13.5	

Did well dewater? Yes (No) Gallons actually evacuated: 13.5

Sampling Date: 7/31/17 Sampling Time: 1020 Depth to Water: 11.97

Sample I.D.: S-14 Laboratory: Kiff CalScience Other TA

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

BLAINE
TECH SERVICES, INC.

1680 ROGERS AVENUE
SAN JOSE, CALIFORNIA 95112-1105
FAX (408) 573-7771
PHONE (408) 573-0555

CHAIN OF CUSTODY BTS # 170731-BH1

CLIENT: Bureau Veritas

SITE: 1800 1/2 Powell St.
Emeryville, CA

CONDUCT ANALYSIS TO DETECT

LAB: Test America - Pleasanton | DHS #

Invoice to: | Geotracker ID: T0600101231
mark.williams@us.bureauveritas.com

Report to:
mark.williams@us.bureauveritas.com

Project # B0048249.0000.00001

SAMPLE I.D.	DATE	TIME	MATRIX (S = Soil, W = H2O)	CONTAINERS TOTAL	C = COMPOSITE ALL CONTAINERS	TPH (C8-C44) by 8015B Mod	TPHd by 8015B	BTEX by 8021B	Dissolved Arsenic 6010B (Field Filtered)	Total Arsenic 6010B	Field Point ID (Sample ID = Field Point ID unless noted)	
S-8	7/31/17	1040	W	5		X	X	X				* Run TPHd w/ Silica Gel Clean up
S-10	↓	1200	W	5		X	X	X				
S-12		1140	W	5		X	X	X				
S-14	↓	1020	W	5		X	X	X				

SAMPLING COMPLETED: DATE 7/31/17 TIME 1205
SAMPLING PERFORMED BY: David Vasquez-Hunt

RESULTS NEEDED NO LATER THAN: Standard

RELEASED BY		DATE 7/31/17	TIME 1345	RECEIVED BY (sample custodian)	DATE 7/31/17 TIME 1345
RELEASED BY		DATE	TIME	RECEIVED BY	DATE TIME
RELEASED BY		DATE	TIME	RECEIVED BY	DATE TIME
SHIPPED VIA		DATE SENT	TIME SENT	COOLER #	Page ____ of ____

WELLHEAD INSPECTION CHECKLIST

Client Shell (QW) Bureau Veritas Date 7/31/17

Site Address 1540 Powell St, Emeryville, CA

Job Number 170731-DH1 Technician DH

Well ID	Well Inspected - No Corrective Action Required	WELL IS SECURABLE BY DESIGN (12"or less)	WELL IS MARKED WITH THE WORDS "MONITORING WELL" (12"or less)	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
S-7										
S-8	X									
S-9		X	X					X		
S-10	X									
S-12	X									
S-13		UNABLE TO LOCATE								
S-14	X									

NOTES: S-9 = ~2 1/2 tubs

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME	1900 ½ Powell St, Emeryville, CA	PROJECT NUMBER	170731-DH1

EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	Standard Lot# / Exp. Date /
Myron L Ultrameter II	G242107	7/31/17	pH 7.0 10.0 4.0	7.00 10.00 4.00	y	21.8	57187 8/18 48903 8/17
"	"	"	Cond 3900uS	3900uS	y	23.1	49673 10/18

SPH or Purge Water Drum Log

Client: Bureau Veritas

Site Address: 1510 Powell St, Emeryville, CA

STATUS OF DRUM(S) UPON ARRIVAL						
Date	7/31/17					
Number of drum(s) empty:						
Number of drum(s) 1/4 full:						
Number of drum(s) 1/2 full:						
Number of drum(s) 3/4 full:	~~1~~					
Number of drum(s) full:						
Total drum(s) on site:	0					
Are the drum(s) properly labeled?	—					
Drum ID & Contents:	—					
If any drum(s) are partially or totally filled, what is the first use date:	—					

- If you add any SPH to an empty or partially filled drum, drum must have at least 20 gals. of Purgewater or DI Water.

-If drum contains SPH, the drum MUST be steel AND labeled with the appropriate label.

-All BTS drums MUST be labeled appropriately.

STATUS OF DRUM(S) UPON DEPARTURE						
Date	7/31/17					
Number of drums empty:						
Number of drum(s) 1/4 full:						
Number of drum(s) 1/2 full:						
Number of drum(s) 3/4 full:	1					
Number of drum(s) full:						
Total drum(s) on site:	1					
Are the drum(s) properly labeled?	yes					
Drum ID & Contents:	purge H_2O					

LOCATION OF DRUM(S)	
Describe location of drum(s):	Left side of trash enclosure

FINAL STATUS						
Number of new drum(s) left on site this event	1					
Date of inspection:	7/31/17					
Drum(s) labelled properly:	yes					
Logged by BTS Field Tech:	DH					
Office reviewed by:						

APPENDIX B

SAMPLE CHAIN-OF-CUSTODY DOCUMENTATION AND CERTIFIED ANALYTICAL REPORT

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-81015-1
Client Project/Site: 1800 1/2 Powell St

For:
Bureau Veritas North America, Inc.
Bishop Ranch 6
2430 Camino Ramon Suite 122
San Ramon, California 94583

Attn: Mark Williams

Authorized for release by:
8/7/2017 3:55:40 PM

Paloma Duong, Project Manager I
(925)484-1919
paloma.duong@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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)

Job ID: 720-81015-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-81015-1

Comments
No additional comments.

Receipt
The samples were received on 8/1/2017 6:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.5º C.

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

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

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

Detection Summary

Client: Bureau Veritas North America, Inc.
Project/Site: 1800 1/2 Powell St

TestAmerica Job ID: 720-81015-1

Client Sample ID: S-8 — Lab Sample ID: 720-81015-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	16		0.50		ug/L	1		8260B	Total/NA
Ethylbenzene	2.1		0.50		ug/L	1		8260B	Total/NA
Toluene	1.2		0.50		ug/L	1		8260B	Total/NA
Xylenes, Total	2.3		1.0		ug/L	1		8260B	Total/NA
C9-C40	600		93		ug/L	1		8015B	Total/NA
Diesel Range Organics [C10-C28]	50		46		ug/L	1		8015B	Silica Gel Cleanup

Client Sample ID: S-10 — Lab Sample ID: 720-81015-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C9-C40	5200		290		ug/L	3		8015B	Total/NA
Diesel Range Organics [C10-C28]	1300		48		ug/L	1		8015B	Silica Gel Cleanup

Client Sample ID: S-12 — Lab Sample ID: 720-81015-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C9-C40	5100		94		ug/L	1		8015B	Total/NA
Diesel Range Organics [C10-C28]	230		47		ug/L	1		8015B	Silica Gel Cleanup

Client Sample ID: S-14 — Lab Sample ID: 720-81015-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C9-C40	3200		97		ug/L	1		8015B	Total/NA
Diesel Range Organics [C10-C28]	180		48		ug/L	1		8015B	Silica Gel Cleanup

This Detection Summary does not include radiochemical test results.

Client: Bureau Veritas North America, Inc.
Project/Site: 1800 1/2 Powell St

TestAmerica Job ID: 720-81015-1

Client Sample ID: S-8
Date Collected: 07/31/17 10:40
Date Received: 08/01/17 18:30

Lab Sample ID: 720-81015-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	16		0.50		ug/L			08/04/17 04:17	1
Ethylbenzene	2.1		0.50		ug/L			08/04/17 04:17	1
Toluene	1.2		0.50		ug/L			08/04/17 04:17	1
Xylenes, Total	2.3		1.0		ug/L			08/04/17 04:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*67 - 130*		*08/04/17 04:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*72 - 130*		*08/04/17 04:17*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*08/04/17 04:17*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C9-C40	600		93		ug/L		08/03/17 16:21	08/04/17 13:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*101*		*23 - 156*	*08/03/17 16:21*	*08/04/17 13:14*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	50		46		ug/L		08/03/17 16:25	08/05/17 13:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.0003*		*0 - 5*	*08/03/17 16:25*	*08/05/17 13:47*	*1*
p-Terphenyl	*61*		*31 - 150*	*08/03/17 16:25*	*08/05/17 13:47*	*1*

Client: Bureau Veritas North America, Inc.
Project/Site: 1800 1/2 Powell St

TestAmerica Job ID: 720-81015-1

Client Sample ID: S-10
Date Collected: 07/31/17 17:00
Date Received: 08/01/17 18:30

Lab Sample ID: 720-81015-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			08/04/17 04:46	1
Ethylbenzene	ND		0.50		ug/L			08/04/17 04:46	1
Toluene	ND		0.50		ug/L			08/04/17 04:46	1
Xylenes, Total	ND		1.0		ug/L			08/04/17 04:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*67 - 130*		*08/04/17 04:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*72 - 130*		*08/04/17 04:46*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/04/17 04:46*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C9-C40	**5200**		290		ug/L		08/03/17 16:21	08/04/17 13:38	3

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*79*		*23 - 156*	*08/03/17 16:21*	*08/04/17 13:38*	*3*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**1300**		48		ug/L		08/03/17 16:25	08/05/17 14:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.004*		*0 - 5*	*08/03/17 16:25*	*08/05/17 14:11*	*1*
p-Terphenyl	*73*		*31 - 150*	*08/03/17 16:25*	*08/05/17 14:11*	*1*

Client: Bureau Veritas North America, Inc.
Project/Site: 1800 1/2 Powell St

TestAmerica Job ID: 720-81015-1

Client Sample ID: S-12
Date Collected: 07/31/17 11:40
Date Received: 08/01/17 18:30

Lab Sample ID: 720-81015-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			08/04/17 05:14	1
Ethylbenzene	ND		0.50		ug/L			08/04/17 05:14	1
Toluene	ND		0.50		ug/L			08/04/17 05:14	1
Xylenes, Total	ND		1.0		ug/L			08/04/17 05:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*67 - 130*		*08/04/17 05:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*72 - 130*		*08/04/17 05:14*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/04/17 05:14*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C9-C40	**5100**		94		ug/L		08/03/17 16:21	08/04/17 11:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*28*		*23 - 156*	*08/03/17 16:21*	*08/04/17 11:36*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**230**		47		ug/L		08/03/17 16:25	08/05/17 14:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.07*		*0 - 5*	*08/03/17 16:25*	*08/05/17 14:36*	*1*
p-Terphenyl	*50*		*31 - 150*	*08/03/17 16:25*	*08/05/17 14:36*	*1*

Client Sample Results

Client: Bureau Veritas North America, Inc.
Project/Site: 1800 1/2 Powell St

TestAmerica Job ID: 720-81015-1

Client Sample ID: S-14
Date Collected: 07/31/17 10:20
Date Received: 08/01/17 18:30

Lab Sample ID: 720-81015-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			08/04/17 05:43	1
Ethylbenzene	ND		0.50		ug/L			08/04/17 05:43	1
Toluene	ND		0.50		ug/L			08/04/17 05:43	1
Xylenes, Total	ND		1.0		ug/L			08/04/17 05:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*67 - 130*		*08/04/17 05:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*72 - 130*		*08/04/17 05:43*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/04/17 05:43*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C9-C40	**3200**		97		ug/L		08/03/17 16:21	08/04/17 12:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*51*		*23 - 156*	*08/03/17 16:21*	*08/04/17 12:01*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**180**		48		ug/L		08/03/17 16:25	08/05/17 15:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.08*		*0 - 5*	*08/03/17 16:25*	*08/05/17 15:00*	*1*
p-Terphenyl	*75*		*31 - 150*	*08/03/17 16:25*	*08/05/17 15:00*	*1*

Client: Bureau Veritas North America, Inc.
Project/Site: 1800 1/2 Powell St

TestAmerica Job ID: 720-81015-1

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

Lab Sample ID: MB 720-227817/4
Matrix: Water
Analysis Batch: 227817

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			08/03/17 20:14	1
Ethylbenzene	ND		0.50		ug/L			08/03/17 20:14	1
Toluene	ND		0.50		ug/L			08/03/17 20:14	1
Xylenes, Total	ND		1.0		ug/L			08/03/17 20:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*67 - 130*		*08/03/17 20:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*72 - 130*		*08/03/17 20:14*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/03/17 20:14*	*1*

Lab Sample ID: LCS 720-227817/5
Matrix: Water
Analysis Batch: 227817

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	27.1		ug/L		108	79 - 130
Ethylbenzene	25.0	27.4		ug/L		110	80 - 120
Toluene	25.0	27.3		ug/L		109	78 - 120
m-Xylene & p-Xylene	25.0	27.3		ug/L		109	70 - 142
o-Xylene	25.0	27.4		ug/L		110	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*92*		*72 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 720-227817/6
Matrix: Water
Analysis Batch: 227817

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	25.0	27.1		ug/L		108	79 - 130	0	20
Ethylbenzene	25.0	27.5		ug/L		110	80 - 120	0	20
Toluene	25.0	27.4		ug/L		110	78 - 120	0	20
m-Xylene & p-Xylene	25.0	27.0		ug/L		108	70 - 142	1	20
o-Xylene	25.0	27.3		ug/L		109	70 - 130	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*94*		*72 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

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

Lab Sample ID: MB 720-227809/1-A
Matrix: Water
Analysis Batch: 227834

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 227809

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C9-C40	ND		99		ug/L		08/03/17 16:21	08/04/17 11:12	1
Diesel Range Organics [C10-C28]	ND		50		ug/L		08/03/17 16:21	08/04/17 11:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*95*		*23 - 156*	*08/03/17 16:21*	*08/04/17 11:12*	*1*

Lab Sample ID: LCS 720-227809/2-A
Matrix: Water
Analysis Batch: 227834

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 227809

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			2500	2330		ug/L		93	34 - 115		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*119*		*23 - 156*

Lab Sample ID: LCSD 720-227809/3-A
Matrix: Water
Analysis Batch: 227834

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 227809

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			2500	2300		ug/L		92	34 - 115	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
p-Terphenyl	*120*		*23 - 156*

Lab Sample ID: MB 720-227810/1-A
Matrix: Water
Analysis Batch: 227923

Client Sample ID: Method Blank
Prep Type: Silica Gel Cleanup
Prep Batch: 227810

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50		ug/L		08/03/17 16:25	08/05/17 12:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.003*		*0 - 5*	*08/03/17 16:25*	*08/05/17 12:33*	*1*
p-Terphenyl	*76*		*31 - 150*	*08/03/17 16:25*	*08/05/17 12:33*	*1*

Lab Sample ID: LCS 720-227810/2-A
Matrix: Water
Analysis Batch: 227923

Client Sample ID: Lab Control Sample
Prep Type: Silica Gel Cleanup
Prep Batch: 227810

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			2500	1200		ug/L		48	32 - 119		

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

Lab Sample ID: LCS 720-227810/2-A
Matrix: Water
Analysis Batch: 227923

Client Sample ID: Lab Control Sample
Prep Type: Silica Gel Cleanup
Prep Batch: 227810

Surrogate	LCS %Recovery	LCS Qualifier	Limits
p-Terphenyl	*86*		*31 - 150*

Lab Sample ID: LCSD 720-227810/3-A
Matrix: Water
Analysis Batch: 227923

Client Sample ID: Lab Control Sample Dup
Prep Type: Silica Gel Cleanup
Prep Batch: 227810

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			2500	1180		ug/L		47	32 - 119	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
p-Terphenyl	*86*		*31 - 150*

QC Association Summary

Client: Bureau Veritas North America, Inc.
Project/Site: 1800 1/2 Powell St

TestAmerica Job ID: 720-81015-1

GC/MS VOA

Analysis Batch: 227817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-81015-1	S-8	Total/NA	Water	8260B	
720-81015-2	S-10	Total/NA	Water	8260B	
720-81015-3	S-12	Total/NA	Water	8260B	
720-81015-4	S-14	Total/NA	Water	8260B	
MB 720-227817/4	Method Blank	Total/NA	Water	8260B	
LCS 720-227817/5	Lab Control Sample	Total/NA	Water	8260B	
LCSD 720-227817/6	Lab Control Sample Dup	Total/NA	Water	8260B	

GC Semi VOA

Prep Batch: 227809

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-81015-1	S-8	Total/NA	Water	3510C	
720-81015-2	S-10	Total/NA	Water	3510C	
720-81015-3	S-12	Total/NA	Water	3510C	
720-81015-4	S-14	Total/NA	Water	3510C	
MB 720-227809/1-A	Method Blank	Total/NA	Water	3510C	
LCS 720-227809/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 720-227809/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Prep Batch: 227810

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-81015-1	S-8	Silica Gel Cleanup	Water	3510C SGC	
720-81015-2	S-10	Silica Gel Cleanup	Water	3510C SGC	
720-81015-3	S-12	Silica Gel Cleanup	Water	3510C SGC	
720-81015-4	S-14	Silica Gel Cleanup	Water	3510C SGC	
MB 720-227810/1-A	Method Blank	Silica Gel Cleanup	Water	3510C SGC	
LCS 720-227810/2-A	Lab Control Sample	Silica Gel Cleanup	Water	3510C SGC	
LCSD 720-227810/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	3510C SGC	

Analysis Batch: 227834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-81015-1	S-8	Total/NA	Water	8015B	227809
720-81015-2	S-10	Total/NA	Water	8015B	227809
720-81015-3	S-12	Total/NA	Water	8015B	227809
720-81015-4	S-14	Total/NA	Water	8015B	227809
MB 720-227809/1-A	Method Blank	Total/NA	Water	8015B	227809
LCS 720-227809/2-A	Lab Control Sample	Total/NA	Water	8015B	227809
LCSD 720-227809/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	227809

Analysis Batch: 227923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-81015-1	S-8	Silica Gel Cleanup	Water	8015B	227810
720-81015-2	S-10	Silica Gel Cleanup	Water	8015B	227810
720-81015-3	S-12	Silica Gel Cleanup	Water	8015B	227810
720-81015-4	S-14	Silica Gel Cleanup	Water	8015B	227810
MB 720-227810/1-A	Method Blank	Silica Gel Cleanup	Water	8015B	227810
LCS 720-227810/2-A	Lab Control Sample	Silica Gel Cleanup	Water	8015B	227810
LCSD 720-227810/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	8015B	227810

Lab Chronicle

Client: Bureau Veritas North America, Inc.
Project/Site: 1800 1/2 Powell St

TestAmerica Job ID: 720-81015-1

Client Sample ID: S-8
Date Collected: 07/31/17 10:40
Date Received: 08/01/17 18:30

Lab Sample ID: 720-81015-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	227817	08/04/17 04:17	BAJ	TAL PLS
Silica Gel Cleanup	Prep	3510C SGC			227810	08/03/17 16:25	BRR	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	227923	08/05/17 13:47	DCH	TAL PLS
Total/NA	Prep	3510C			227809	08/03/17 16:21	BRR	TAL PLS
Total/NA	Analysis	8015B		1	227834	08/04/17 13:14	DCH	TAL PLS

Client Sample ID: S-10
Date Collected: 07/31/17 17:00
Date Received: 08/01/17 18:30

Lab Sample ID: 720-81015-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	227817	08/04/17 04:46	BAJ	TAL PLS
Silica Gel Cleanup	Prep	3510C SGC			227810	08/03/17 16:25	BRR	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	227923	08/05/17 14:11	DCH	TAL PLS
Total/NA	Prep	3510C			227809	08/03/17 16:21	BRR	TAL PLS
Total/NA	Analysis	8015B		3	227834	08/04/17 13:38	DCH	TAL PLS

Client Sample ID: S-12
Date Collected: 07/31/17 11:40
Date Received: 08/01/17 18:30

Lab Sample ID: 720-81015-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	227817	08/04/17 05:14	BAJ	TAL PLS
Silica Gel Cleanup	Prep	3510C SGC			227810	08/03/17 16:25	BRR	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	227923	08/05/17 14:36	DCH	TAL PLS
Total/NA	Prep	3510C			227809	08/03/17 16:21	BRR	TAL PLS
Total/NA	Analysis	8015B		1	227834	08/04/17 11:36	DCH	TAL PLS

Client Sample ID: S-14
Date Collected: 07/31/17 10:20
Date Received: 08/01/17 18:30

Lab Sample ID: 720-81015-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	227817	08/04/17 05:43	BAJ	TAL PLS
Silica Gel Cleanup	Prep	3510C SGC			227810	08/03/17 16:25	BRR	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	227923	08/05/17 15:00	DCH	TAL PLS
Total/NA	Prep	3510C			227809	08/03/17 16:21	BRR	TAL PLS
Total/NA	Analysis	8015B		1	227834	08/04/17 12:01	DCH	TAL PLS

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

Client: Bureau Veritas North America, Inc.
Project/Site: 1800 1/2 Powell St

TestAmerica Job ID: 720-81015-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-18

Analysis Method	Prep Method	Matrix	Analyte

Method Summary

Client: Bureau Veritas North America, Inc.
Project/Site: 1800 1/2 Powell St

TestAmerica Job ID: 720-81015-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS

Protocol References:

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

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Bureau Veritas North America, Inc.
Project/Site: 1800 1/2 Powell St

TestAmerica Job ID: 720-81015-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-81015-1	S-8	Water	07/31/17 10:40	08/01/17 18:30
720-81015-2	S-10	Water	07/31/17 17:00	08/01/17 18:30
720-81015-3	S-12	Water	07/31/17 11:40	08/01/17 18:30
720-81015-4	S-14	Water	07/31/17 10:20	08/01/17 18:30

Duong, Paloma

From: mark.williams@us.bureauveritas.com
Sent: Thursday, August 03, 2017 10:53 AM
To: Duong, Paloma
Subject: Re: TestAmerica report files from 720-81015-1 1800 1/2 Powell St

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Confirmed - please proceed with the analysis c9-c40

Let me know when the data will be ready for review

-mark

Mark Williams, CAC, P.G.
Environmental Site Investigation and Remediation Manager
Bureau Veritas North America, Inc.
Health, Safety, and Environmental Services
2430 Camino Ramon, Suite 122, San Ramon, California 94583
p: 925.426.2676, c: 925.858.5990, f: 925.426.0106
mark.williams@us.bureauveritas.com
www.us.bureauveritas.com

Management Systems Global Certifications:
ISO 9001:2008 – Quality ● ISO 14001:2004 – Environmental ●HSAS 18001:2007 –Health & Safety

Please consider the environment before printing this e-mail

"Duong, Paloma" ---08/03/2017 10:40:51 AM---Hi Mark, I spoke with the analyst and he mentioned that the difference between C40 and C44 is just

"Duong, Paloma" ---08/03/2017 10:40:51 AM---Hi Mark, I spoke with the analyst and he mentioned that the difference between C40 and C44 is just

From: "Duong, Paloma" <paloma.duong@testamericainc.com>
To: Mark Williams/USA/VERITAS@VERITAS
Date: 08/03/2017 10:40 AM
Subject: TestAmerica report files from 720-81015-1 1800 1/2 Powell St

---

Hi Mark,
I spoke with the analyst and he mentioned that the difference between C40 and C44 is just the longer carbon range but if Diesel is your concern then C40 and C44 should not be much of a difference.
PLease confirm if analyzing C9-C40 would suffice,

Thank you

Please let us know if we met your expectations by rating the service you received from TestAmerica on this project by visiting our website at: Project Feedback

PALOMA R DUONG
Project Manager

TestAmerica Pleasanton
THE LEADER IN ENVIRONMENTAL TESTING

Tel: 925.484,1919
www.testamericainc.com

Reference: [253126]
Attachments: 1

[attachment "COC 720-81015 (201708020104).pdf" deleted by Mark Williams/USA/VERITAS]

"This message contains confidential information. To know more, please click on the following link:"http://disclaimer.bureauveritas.com"

ref # 177405 16 of 1

BLAINE
TECH SERVICES, INC

1680 ROGERS AVENUE
SAN JOSE, CALIFORNIA 95112-1105
FAX (408) 573-7771
PHONE (408) 573-0555

CHAIN OF CUSTODY BTS # 120731-DH1

CLIENT: Bureau Veritas

SITE: 1800 1/2 Powell St.
Emeryville, CA

CONDUCT ANALYSIS TO DETECT

LAB: Test America - Pleasanton | DHS #

Invoice to: mark williams@us.bureauveritas com

Geotracker ID T0600101231

Report to: mark.williams@us.bureauveritas.com

720 - 81015

Project # B0048249.0000 00001

SAMPLE I D	DATE	TIME	MATRIX S = Soil W = H2O	CONTAINERS TOTAL	C = COMPOSITE ALL CONTAINERS	TPH (C8-C44) by 8015B Mod	TPHd by 8015B	BTEX by 8021B	Dissolved Arsenic 6010B (Field Filtered)	Total Arsenic 6010B	Field Point ID (Sample ID = Field Point ID unless noted)	
S-8	7/31/17	1040	W	5		X	X	X				* Run TPHd w/ Silica
S-10		1140	W	5		X	X	X				Gel Clean up
S-12		1140	W	5		X	X	X				
S-14		1020	W	5		X	X	X				

720-81015 Chain of Custody

SAMPLING COMPLETED: DATE 7/31/17 TIME 1205

SAMPLING PERFORMED BY: David Vasquez-Haas

RESULTS NEEDED NO LATER THAN: Standard

		DATE	TIME		DATE	TIME
RELEASED BY		7/31/17	1345	RECEIVED BY	7/31/17	1345
RELEASED BY		8.1.17	1650	RECEIVED BY	8/1/17	1650
RELEASED BY		8.1.17	1830	RECEIVED BY	8/1/17	1830

SHIPPED VIA | DATE SENT | TIME SENT | COOLER # | Page ____ of ____ 3.5°C

8/7/2017

Login Sample Receipt Checklist

Client: Bureau Veritas North America, Inc.

Job Number: 720-81015-1

Login Number: 81015
List Number: 1
Creator: Bullock, Tracy

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
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 (excluding tests with immediate HTs)	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	

APPENDIX C

FIRST QUARTER 2015 GROUNDWATER MONITORING REPORT

CONESTOGA-ROVERS & ASSOCIATES

5900 Hollis Street, Suite A
Emeryville, California 94608
Telephone: (510) 420-0700 Fax: (510) 420-9170
www.CRAworld.com

TRANSMITTAL

DATE: April 27, 2015

REFERENCE NO.: 240894

PROJECT NAME: 1800½ Powell Street, Emeryville

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

Please find enclosed:
- ☐ Draft
- ☐ Originals
- ☐ Prints
- ☒ Final
- ☐ Other

Sent via:
- ☐ Mail
- ☐ Overnight Courier
- ☐ Same Day Courier
- ☒ Other GeoTracker and Alameda County FTP

QUANTITY	DESCRIPTION
1	Groundwater Monitoring Report – First Quarter 2015

- ☐ As Requested
- ☐ For Your Use
- ☒ For Review and Comment
- ☐
- ☐

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

Copy to: Perry Pineda, Shell Oil Products US (electronic copy)
Au Energy LLC (property owner, electronic copy)

Completed by: Peter Schaefer Signed: Peter Schaefer

Filing: Correspondence File

Shell Oil Products US
Soil and Groundwater Focus Delivery Group
20945 S. Wilmington Avenue
Carson, CA 90810
Tel (425) 413 1164
Fax (425) 413 0988
Email perry.pineda@shell.com
Internet http://www.shell.com

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

Re: 1800½ Powell Street
Emeryville, California
SAP Code 135266
Incident No. 98995349
ACEH Case No. RO0000254

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

GROUNDWATER MONITORING REPORT – FIRST QUARTER 2015

SHELL-BRANDED SERVICE STATION
1800½ POWELL STREET
EMERYVILLE, CALIFORNIA

SAP CODE 135266
INCIDENT NO. 98995349
AGENCY NO. RO0000254

Prepared by:
Conestoga-Rovers & Associates

5900 Hollis Street, Suite A
Emeryville, California
U.S.A. 94608

Office: (510) 420-0700
Fax: (510) 420-9170

web: http://www.CRAworld.com

APRIL 27, 2015
REF. NO. 240894 (10)
This report is printed on recycled paper.

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LIST OF FIGURES
(Following Text)

FIGURE 1 VICINITY MAP

FIGURE 2 GROUNDWATER CONTOUR AND CHEMICAL CONCENTRATION MAP

LIST OF TABLES
(Following Text)

TABLE 1 GROUNDWATER DATA

LIST OF APPENDICES

APPENDIX A BLAINE TECH SERVICES, INC. – FIELD NOTES

APPENDIX B TESTAMERICA LABORATORIES, INC. – ANALYTICAL REPORT

1.0 INTRODUCTION

Conestoga-Rovers & Associates (CRA) prepared this report on behalf of Equilon Enterprises LLC dba Shell Oil Products US (Shell).

1.1 SITE INFORMATION

Site Address	1800½ Powell Street, Emeryville
Site Use	Shell-branded Service Station
Shell Project Manager	Perry Pineda
CRA Project Manager	Peter Schaefer
Lead Agency and Contact	ACEH, Jerry Wickham
Agency Case No.	RO0000254
Shell SAP Code	135266
Shell Incident No.	98995349

Date of most recent agency correspondence was April 6, 2015.

2.0 SITE ACTIVITIES, FINDINGS, AND DISCUSSION

2.1 CURRENT ACTIVITIES

During station remodeling, on May 20, 2014, AU Energy, LLC (AU Energy) removed four underground storage tanks. During a November 13, 2014 meeting with CRA and Shell, Alameda County Environmental Health (ACEH) reported that AU Energy subsequently excavated the area of their September 2013 diesel release. Also during this meeting with ACEH, ACEH confirmed that AU Energy is now the primary responsible party for the site. We agreed that Shell would discontinue annual groundwater monitoring following this event and transfer wells to AU Energy that they need to monitor their diesel release.

Due to service station remodeling, Blaine Tech Services, Inc. (Blaine) could not gauge and sample the wells during fourth quarter 2014 according to the established monitoring program for this site. Available wells were gauged and sampled during the first quarter 2015. Well S-13 could not be located during the sampling event. As it was likely

covered during the station remodel, we recommend that AU Energy locate the well and repair it, if needed.

CRA prepared a vicinity map (Figure 1), a groundwater contour and chemical concentration map (Figure 2), and a groundwater data table (Table 1). Blaine's field notes are presented in Appendix A, and the laboratory report is presented in Appendix B.

2.2 CURRENT FINDINGS

Groundwater Flow Direction	Variable
Hydraulic Gradient	Variable
Depth to Water	6.81 to 9.91 feet below top of well casing

2.3 DISCUSSION

Historical groundwater data indicate that total petroleum hydrocarbons as gasoline and fuel oxygenate concentrations in site wells are stable to declining. Following AU Energy's September 2013 diesel release, there has been no appreciable change in total petroleum hydrocarbons as diesel concentrations in groundwater samples; however, well S-13, located directly down gradient from the area of the diesel release, appears to have been paved over during station remodeling and could not be accessed for the first quarter 2015 sampling event.

Historically, well S-9 has contained up to 2.8 feet of separate-phase hydrocarbons, which consisted of 18 percent gasoline-range hydrocarbons with the remaining fraction of petroleum hydrocarbons in heavier fractions, which can include tar and other heavy residues. Since 1996, the screened interval in well S-9 has apparently been coated with a tar-like substance, which prevented the well from being used for monitoring. CRA attempted to reinstall the well in 2011, but was unable to due to underground utility conflicts. Additional delineation south of the subject site cannot be completed because the State of California Department of Parks and Recreation will not issue an encroachment permit for the area south of Powell Street.

A land use survey detailed in Geostrategies Inc.'s April 29, 1991 *Site Update* states that the site is built on fill. Filling began in 1884 on waterfront property owned by the Paraffine Company (Paraffine) and was terminated in 1969. Based on available log data,

the fill material at the subject site extends to an approximate depth of at least 12 to 15 feet below grade and appears to be continuous across the site. The fill materials reportedly include industrial refuse, rip-rap, concrete blocks, and imported clayey and sandy soil. Products manufactured by Paraffine included linoleum and other hard floor coverings, roofing and building materials, paints, varnishes, lacquers, and enamels. Paraffine's facilities included aboveground storage tanks that were removed when they closed the facility in the 1960s. These previous site uses are likely the source of the heavier hydrocarbons observed in groundwater.

2.4 PROPOSED ACTIVITIES

As discussed above, CRA will suspend the groundwater monitoring program on behalf of Shell. No further groundwater monitoring events are scheduled and no further reports will be submitted by CRA on behalf of Shell.

CRA requests that ACEH confirm no further action is required by Shell to address the previous release at the subject property. In their April 6, 2015 letter, ACEH notes that AU Energy is the sole responsible party for the September 2013 diesel fuel release, that Shell is not a responsible party for that release, and that AU Energy is responsible for implementing the investigation and cleanup associated with that release.

Shell offers to transfer the wells to AU to monitor groundwater conditions following the 2013 diesel release.

All of Which is Respectfully Submitted,
CONESTOGA-ROVERS & ASSOCIATES

Peter Schaefer, CHG, CEG

Aubrey K. Cool, PG

FIGURES

01/13/09

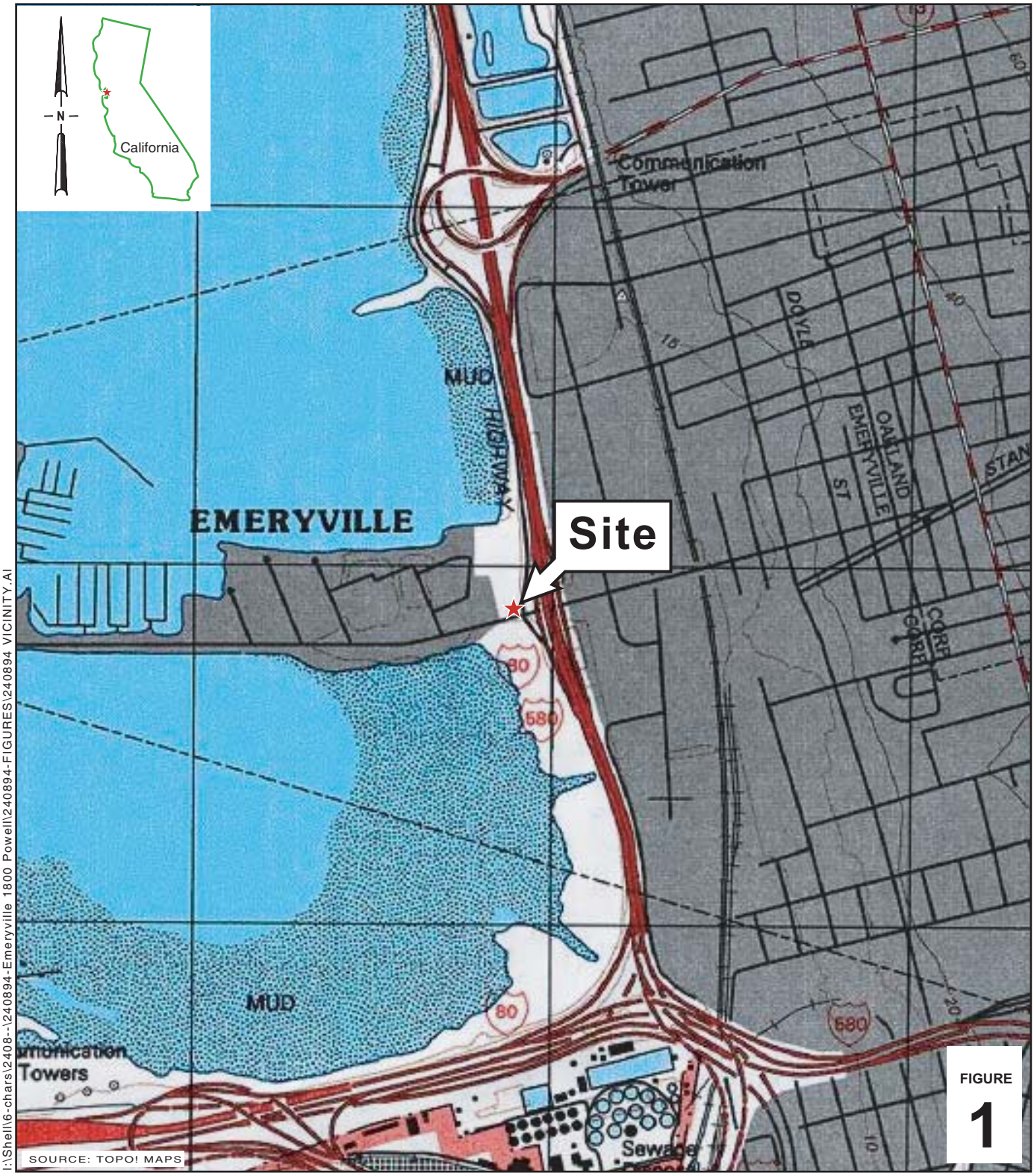

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FIGURE
1

0 1/8 1/4 1/2 1

SCALE : 1" = 1/4 MILE

Shell-branded Service Station

1800 1/2 Powell Street

Emeryville, California

CONESTOGA-ROVERS & ASSOCIATES

Vicinity Map

04/27/2015

Groundwater Contour and Chemical Concentration Map

February 27, 2015

EXPLANATION

- S-5 — Monitoring well location
- S-6 — Destroyed monitoring well location
- S-1/A — Tank backfill well location
- XX.XX — Groundwater elevation contour, in feet above mean sea level (ft MSL); dashed where inferred

Notes:
<X = Not detected at reporting limit X
NM = Not monitored; well inaccessible
NS = Not sampled

Well — Well designation
ELEV — Groundwater elevation, in ft MSL
Benz. / MTBE — Benzene and MTBE concentrations are in micrograms per liter

N

0 15 30 60

Scale (ft)

Holiday Inn
Hotel Building
1800 Powell

Hotel
Parking Lot

Hotel
Parking Lot

Shell Station
1800 1/2 Powell St.

Car
Wash

Marketeer
Building

Canopy

Dispenser
Islands

Dispenser
Islands

Dispenser
Islands

USTs

Trash

Planter

Planter

Planter

Planter

Planter

Sidewalk

Driveway

Driveway

Driveway

Driveway

Sidewalk

Traffic Island

FRONTAGE ROAD

POWELL STREET

S-5	S-6	S-7	S-8	S-9	S-10	S-11/D	S-12	S-13	S-14
6.31			8.19	Dry	5.28		6,96	NM	4.60
3.8			<0.50	NS	<0.50		<0.50	NS	**0.94**
<0.50			**1.8**		**0.89**		**33**		**1.5**

S-1/A
S-2/E
S-3/B
S-4/C

5.50
6.50
7.50

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CONESTOGA-ROVERS & ASSOCIATES

Shell-branded Service Station
1800 1/2 Powell Street
Emeryville, California

FIGURE
2

TABLE

TABLE 1

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1800½ POWELL STREET, EMERYVILLE, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	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)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)
S-5	10/27/1988	---	---	3,000	660	20	20	70	---	---	---	---	---	---	11.72	---	---	---
S-5	02/10/1989	---	---	2,800	740	20	20	140	---	---	---	---	---	---	11.72	---	---	---
S-5	04/28/1989	---	---	4,300	750	10	20	<30	---	---	---	---	---	---	11.72	---	---	---
S-5	07/07/1989	---	---	1,500	300	8.0	7.0	9.0	---	---	---	---	---	---	11.72	---	---	---
S-5	10/25/1989	---	---	2,100	760	10	40	50	---	---	---	---	---	---	11.72	---	---	---
S-5	01/04/1990	---	---	1,300	520	9.0	8.0	10	---	---	---	---	---	---	11.72	---	---	---
S-5	07/06/1990	---	---	1,400	500	10	4.0	<10	---	---	---	---	---	---	11.72	8.36	---	3.36
S-5	10/19/1990	---	---	4,200	1,100	9.0	14	7.0	---	---	---	---	---	---	11.72	---	---	---
S-5	01/14/1991	---	6,100	4,500	1,100	15	30	25	---	---	---	---	---	---	11.72	---	---	---
S-5	04/23/1991	---	---	2,800	500	8.0	14	10	---	---	---	---	---	---	11.72	---	---	---
S-5	07/08/1991	---	---	3,200	1,000	16	9.0	12	---	---	---	---	---	---	11.72	9.15	---	2.57
S-5	10/11/1991	---	---	1,700	16	5.7	5.2	8.9	---	---	---	---	---	---	11.72	9.67	---	2.05
S-5	02/12/1992	---	---	1,300	300	5.0	<5	<5	---	---	---	---	---	---	11.72	9.00	---	2.72
S-5	05/11/1992	---	---	1,900	490	<0.5	<5	<5	---	---	---	---	---	---	11.72	8.61	---	3.11
S-5	09/01/1992	---	---	6,700	760	26	<25	<25	---	---	---	---	---	---	11.72	9.61	---	2.11
S-5	12/04/1992	---	---	2,900	890	5.3	7.3	13	---	---	---	---	---	---	11.72	9.47	---	2.25
S-5	02/17/1993	---	---	1,300	280	3.0	3.4	9.4	---	---	---	---	---	---	11.72	8.29	---	3.43
S-5	05/29/1993	---	---	460	130	<0.5	<0.5	2.9	---	---	---	---	---	---	11.72	9.16	---	2.56
S-5	08/11/1993	---	---	1,700	530	5.5	<5	5.8	---	---	---	---	---	---	11.72	9.30	---	2.42
S-5	11/12/1993	---	---	---	---	---	---	---	---	---	---	---	---	---	11.72	9.42	---	2.30
S-5	02/21/1994	---	---	1,000	250	<5	<5	<5	---	---	---	---	---	---	11.72	7.95	---	3.77
S-5 (D)	02/21/1994	---	---	1,300	220	<5	<5	11	---	---	---	---	---	---	11.72	7.95	---	3.77
S-5	05/16/1994	---	---	1,200	230	<5	<5	<5	---	---	---	---	---	---	11.72	8.00	---	3.72
S-5	08/09/1994	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	11.72	---	---	---
S-5	11/09/1994	---	---	1,600	220	3.2	1.8	5.0	---	---	---	---	---	---	11.72	8.32	---	3.40
S-5 (D)	11/09/1994	---	---	1,600	250	3.3	1.9	5.9	---	---	---	---	---	---	11.72	8.32	---	---
S-5	02/22/1995	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	11.72	---	---	---
S-5	05/02/1995	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	11.72	---	---	---
S-5	05/10/1995	---	---	910	170	1.5	1.3	5.2	---	---	---	---	---	---	11.72	---	---	---
S-5	08/24/1995	---	---	620	210	<0.5	1.2	5.3	---	---	---	---	---	---	11.72	8.78	---	2.94
S-5	12/08/1995	---	---	1,600	510	3.3	1.5	6.6	---	---	---	---	---	---	11.72	9.78	---	1.94
S-5 (D)	12/08/1995	---	---	1,600	530	1.8	1.1	5.4	---	---	---	---	---	---	11.72	9.78	---	1.94
S-5	02/29/1996	---	---	1,900	470	5.8	<5.0	<5.0	46	---	---	---	---	---	11.72	7.64	---	4.08
S-5 (D)	02/29/1996	---	---	1,700	440	5.4	<5.0	<5.0	40	---	---	---	---	---	11.72	7.64	---	4.08
S-5	05/22/1996	---	---	1,200	490	<10	<10	<10	<50	---	---	---	---	---	11.72	8.60	---	3.12
S-5	07/30/1996	---	---	1,100	400	<5.0	<5.0	6.9	<25	---	---	---	---	---	11.72	9.40	---	2.32

TABLE 1

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1800½ POWELL STREET, EMERYVILLE, CALIFORNIA

Well ID	*Date*	*TPHmo (µg/L)*	*TPHd (µg/L)*	*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)*	*TOC (ft MSL)*	*Depth to Water (ft TOC)*	*SPH Thickness (ft)*	*GW Elevation (ft MSL)*
S-5	11/11/1996	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	11.72	---	---	---
S-5	11/03/1997	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	11.72	---	---	---
S-5	11/06/1998	---	---	620	91	<0.50	0.64	4.0	<2.5	---	---	---	---	---	11.72	8.25	---	3.47
S-5	12/07/1999	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	11.72	---	---	---
S-5	11/02/2000	---	---	1,120	191	2.78	<2.50	3.56	<12.5	---	---	---	---	---	11.72	8.55	---	3.17
S-5	12/27/2001	---	---	760	110	2.4	<0.50	5.8	---	<5.0	---	---	---	---	11.72	7.64	---	4.08
S-5	11/26/2002	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	14.07	---	---	---
S-5	12/06/2002	---	---	860	130	2.3	<0.50	6.0	---	<5.0	---	---	---	---	14.07	8.62	---	5.45
S-5	11/25/2003	---	---	920	180	3.0	<1.0	6.2	---	<1.0	---	---	---	---	14.07	9.32	---	4.75
S-5	11/10/2004	---	---	530	2.4	0.68	<0.50	6.3	---	<0.50	---	---	---	---	14.07	9.35	---	4.72
S-5	11/23/2005	---	---	1,630	102	2.42	0.540	5.71	---	<0.500	<10.0	<0.500	<0.500	<0.500	14.07	9.62	---	4.45
S-5	11/21/2006	---	---	1,100	91	2.4	<0.50	5.3	---	<0.50	<5.0	<2.0	<2.0	<2.0	14.07	9.60	---	4.47
S-5	11/14/2007	---	---	1,700 m	92	2.9	0.33 n	6.2	---	<1.0	<10	<2.0	<2.0	<2.0	14.07	8.60	---	5.47
S-5	11/17/2008	---	---	810	30	1.6	<1.0	4.4	---	<1.0	<10	<2.0	<2.0	<2.0	14.07	8.10	---	5.97
S-5	11/12/2009	---	---	1,000	24	1.5	<1.0	3.8	---	<1.0	<10	<2.0	<2.0	<2.0	14.07	8.52	---	5.55
S-5	12/03/2010	---	---	790	16	<1.0	<1.0	4.2	---	<1.0	<10	<2.0	<2.0	<2.0	14.07	8.04	---	6.03
S-5	12/01/2011	---	---	280	<0.500	<0.500	<0.500	2.23	---	<0.500	<10.0	<0.500	<0.500	<0.500	14.07	8.80	---	5.27
S-5	01/16/2012	---	7,300 l	---	---	---	---	---	---	---	---	---	---	---	14.07	8.87	---	5.20
S-5	10/05/2012	---	---	550	14	<0.50	<0.50	4.4	---	<0.50	<10	<0.50	<0.50	<0.50	14.07	9.60	---	4.47
S-5	12/09/2013	---	---	690	7.4	<0.50	<0.50	2.8	---	<0.50	<10	<0.50	<0.50	<0.50	14.07	8.15	---	5.92
S-5	**02/27/2015**	**---**	**---**	**510**	**3.8**	**<0.50**	**<0.50**	**2.2**	**---**	**<0.50**	**<10**	**<0.50**	**<0.50**	**<0.50**	**14.07**	**7.76**	**---**	**6.31**
S-6	10/27/1988	---	---	6,000	1,700	50	80	420	---	---	---	---	---	---	---	---	---	---
S-6	02/10/1989	---	---	2,800	740	20	20	140	---	---	---	---	---	---	---	---	---	---
S-6	04/28/1989	---	---	6,500	2,400	30	50	210	---	---	---	---	---	---	---	---	---	---
S-6	07/07/1989	---	---	3,700	1,700	34	55	200	---	---	---	---	---	---	---	---	---	---
S-6	10/25/1989	---	---	<50	23	<5.0	<5.0	10	---	---	---	---	---	---	---	---	---	---
S-6	11/10/1989	Well abandoned		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-7	10/27/1988	---	---	50	1.1	<1	<1	4.0	---	---	---	---	---	---	---	---	---	---
S-7	02/10/1989	---	---	---	0.90	<1	<1	<3	---	---	---	---	---	---	---	---	---	---
S-7	04/28/1989	---	---	<50	<1	<1	<1	<3	---	---	---	---	---	---	---	---	---	---
S-7	07/07/1989	---	---	70	2.2	<1	<1	<3	---	---	---	---	---	---	---	---	---	---
S-7	10/25/1989	---	---	6,200	2,200	130	190	660	---	---	---	---	---	---	---	---	---	---
S-7	11/10/1989	Well abandoned		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 1

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1800½ POWELL STREET, EMERYVILLE, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	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)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)
S-8	10/27/1988	---	---	1,000	610	9.0	1.0	42	---	---	---	---	---	---	12.76	---	---	---
S-8	02/10/1989	---	---	500	160	5.0	<2	17	---	---	---	---	---	---	12.76	---	---	---
S-8	04/28/1989	---	---	2,700	1,500	20	10	40	---	---	---	---	---	---	12.76	---	---	---
S-8	07/07/1989	---	---	440	180	5.0	2.0	12	---	---	---	---	---	---	12.76	---	---	---
S-8	10/25/1989	---	---	2,000	1,100	17	5.0	70	---	---	---	---	---	---	12.76	---	---	---
S-8	01/04/1990	---	---	1,900	1,300	20	<10	70	---	---	---	---	---	---	12.76	---	---	---
S-8	07/06/1990	---	---	1,600	920	30	<10	60	---	---	---	---	---	---	12.76	9.50	---	3.26
S-8	10/19/1990	---	---	1,400	640	<10	<10	30	---	---	---	---	---	---	12.76	---	---	---
S-8	01/14/1991	600	760	670	190	5.8	<0.5	19	---	---	---	---	---	---	12.76	---	---	---
S-8	04/23/1991	---	---	2,400	740	54	5.7	59	---	---	---	---	---	---	12.76	---	---	---
S-8	07/08/1991	---	---	1,100	450	15	<2.5	42	---	---	---	---	---	---	12.76	10.45	---	2.31
S-8	10/11/1991	---	---	340	4.0	0.60	<0.5	17	---	---	---	---	---	---	12.76	10.83	---	1.93
S-8	02/12/1992	---	---	<1,000	260	<10	<10	11	---	---	---	---	---	---	12.76	10.44	---	2.32
S-8	05/11/1992	---	---	1,800	700	14	<5	46	---	---	---	---	---	---	12.76	10.17	---	2.59
S-8	09/01/1992	---	---	---	---	---	---	---	---	---	---	---	---	---	12.76	10.81	a	1.95
S-8	12/04/1992	---	---	960	250	4.3	<2.5	14	---	---	---	---	---	---	12.76	10.81	---	1.95
S-8	02/17/1993	---	---	2,700	800	35	10	83	---	---	---	---	---	---	12.76	9.65	---	3.11
S-8	05/29/1993	---	---	960	710	25	84	80	---	---	---	---	---	---	12.76	10.46	---	2.30
S-8	08/11/1993	---	---	1,300	630	17	<5	46	---	---	---	---	---	---	12.76	10.59	---	2.17
S-8	11/12/1993	---	---	910	180	8.0	<2.5	15	---	---	---	---	---	---	12.76	10.29	---	2.47
S-8	02/21/1994	---	---	3,200	480	52	<5	130	---	---	---	---	---	---	12.76	9.52	---	3.24
S-8	05/16/1994	---	---	1,000	220	7.3	<5	28	---	---	---	---	---	---	12.76	9.49	---	3.27
S-8 (D)	05/16/1994	---	---	1,000	280	10	<5	29	---	---	---	---	---	---	12.76	9.49	---	3.27
S-8	08/09/1994	---	---	400	27	6.6	<0.5	18	---	---	---	---	---	---	12.76	10.37	---	2.39
S-8	11/09/1994	---	---	650	170	5.3	<0.5	17	---	---	---	---	---	---	12.76	9.58	---	3.18
S-8	02/22/1995	---	---	650	210	10	1.2	22	---	---	---	---	---	---	12.76	9.02	---	3.74
S-8	05/02/1995	---	---	1,000	280	17	1.4	32	---	---	---	---	---	---	12.76	8.45	---	4.31
S-8	08/24/1995	---	---	480	180	11	1.0	19	---	---	---	---	---	---	12.76	10.02	---	2.74
S-8 (D)	08/24/1995	---	---	700	180	6.5	<0.5	17	---	---	---	---	---	---	12.76	10.02	---	2.74
S-8	12/08/1995	---	---	740	230	6.9	0.70	15	---	---	---	---	---	---	12.76	10.65	---	2.11
S-8	02/29/1996	---	---	740	260	8.1	<5.0	19	58	---	---	---	---	---	12.76	9.10	---	3.66
S-8	05/22/1996	---	---	1,200	350	10	<5.0	23	74	---	---	---	---	---	12.76	10.14	---	2.62
S-8	07/30/1996	---	---	530	220	20	6.3	36	69	---	---	---	---	---	12.76	10.51	---	2.25
S-8	11/11/1996	---	---	540	140	3.7	<2.0	17	42	---	---	---	---	---	12.76	10.23	---	2.53
S-8	11/03/1997	---	---	480	54	3.5	<0.50	12	40	---	---	---	---	---	12.76	9.40	---	3.36
S-8	11/06/1998	---	---	740	110	10	2.8	26	31	---	---	---	---	---	12.76	9.78	---	2.98

TABLE 1

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1800½ POWELL STREET, EMERYVILLE, CALIFORNIA

Well ID	*Date*	*TPHmo (µg/L)*	*TPHd (µg/L)*	*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)*	*TOC (ft MSL)*	*Depth to Water (ft TOC)*	*SPH Thickness (ft)*	*GW Elevation (ft MSL)*
S-8	12/07/1999	---	---	770	270	16	<2.0	33	75	---	---	---	---	---	12.76	10.14	---	2.62
S-8	11/02/2000	---	---	436	75.8	6.18	0.549	14.9	81.5	---	---	---	---	---	12.76	9.45	---	3.31
S-8	12/27/2001	---	---	1,300	62	11	1.8	31	---	86	---	---	---	---	12.76	9.19	---	3.57
S-8	11/26/2002	---	---	970	58	3.8	0.51	15	---	35	---	---	---	---	15.00	10.10	---	4.90
S-8	11/25/2003	---	---	400	19	4.4	<0.50	15	---	34	---	---	---	---	15.00	10.49	---	4.51
S-8	11/10/2004	---	---	430	28	3.4	<0.50	11	---	25	---	---	---	---	15.00	10.45	---	4.55
S-8	11/23/2005	---	---	476	8.72	3.15	1.03	12.6	---	35.2	20.1	<0.500	<0.500	<0.500	15.00	10.46	---	4.54
S-8	11/21/2006	---	---	280	5.9	1.9	4.9	7.9	---	27	47	<2.0	<2.0	<2.0	15.00	10.61	---	4.39
S-8	11/14/2007	---	---	520 m	2.2	0.66 n	<1.0	4.9	---	29	38	<2.0	<2.0	<2.0	15.00	10.01	---	4.99
S-8	11/17/2008	---	---	550	6.9	1.8	<1.0	8.0	---	36	23	<2.0	<2.0	<2.0	15.00	9.64	---	5.36
S-8	11/12/2009	---	---	640	8.1	3.5	<1.0	9.8	---	72	23	<2.0	<2.0	<2.0	15.00	10.00	---	5.00
S-8	12/03/2010	---	---	810	5.3	4.2	<1.0	14	---	37	23	<2.0	<2.0	<2.0	15.00	9.32	---	5.68
S-8	12/01/2011	---	---	150	1.05	<0.500	<0.500	3.94	---	24.7	<10.0	<0.500	<0.500	<0.500	15.00	9.90	---	5.10
S-8	01/16/2012	---	1,400 l	---	---	---	---	---	---	---	---	---	---	---	15.00	8.34	---	6.66
S-8	10/05/2012	---	---	610	4.8	1.9	<0.50	6.5	---	4.5	<10	<0.50	<0.50	<0.50	15.00	10.39	---	4.61
S-8	12/09/2013	---	---	600	6.3	0.97	<0.50	2.5	---	1.3	<10	<0.50	<0.50	<0.50	15.00	5.85	---	9.15
S-8	**02/27/2015**	**---**	**---**	**250**	**<0.50**	**<0.50**	**<0.50**	**1.3**	**---**	**1.8**	**<10**	**<0.50**	**<0.50**	**<0.50**	**15.00**	**6.81**	**---**	**8.19**
S-9	10/27/1988	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	---	a	---
S-9	02/10/1989	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	---	1.30	---
S-9	04/28/1989	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	---	1.25	---
S-9	07/07/1989	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	---	1.20	---
S-9	10/25/1989	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	---	a	---
S-9	01/04/1990	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	---	a	---
S-9	04/12/1990	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	---	a	---
S-9	07/06/1990	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	9.67	a	3.08
S-9	10/19/1990	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	---	a	---
S-9	01/14/1991	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	---	a	---
S-9	04/23/1991	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	---	a	---
S-9	07/08/1991	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	---	a	---
S-9	10/11/1991	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	22.30	a	-9.55
S-9	02/24/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	---	a	---
S-9	05/16/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	---	1.50	---
S-9	08/09/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	11.80	2.00	---
S-9	11/09/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	---	a	---
S-9	02/22/1995	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	11.40	2.38	---

TABLE 1

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1800½ POWELL STREET, EMERYVILLE, CALIFORNIA

Well ID	*Date*	*TPHmo (µg/L)*	*TPHd (µg/L)*	*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)*	*TOC (ft MSL)*	*Depth to Water (ft TOC)*	*SPH Thickness (ft)*	*GW Elevation (ft MSL)*
S-9	05/02/1995	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	11.83	2.12	---
S-9	12/08/1995	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	11.92	1.06	---
S-9	02/29/1996	Tar-like substance in well, probably from previous landfill activities; not gasoline.									---	---	---	---	12.75	12.10	2.79	2.88
S-9	05/22/1996	Tar-like substance in well, probably from previous landfill activities; not gasoline.									---	---	---	---	12.75	11.71	1.75	2.44
S-9	07/30/1996	Tar-like substance in well, probably from previous landfill activities; not gasoline.									---	---	---	---	12.75	---	a	---
S-9	11/11/1996	Tar-like substance in well, probably from previous landfill activities; not gasoline.									---	---	---	---	12.75	---	9.00	---
S-9	11/03/1997	Tar-like substance in well, probably from previous landfill activities; not gasoline.									---	---	---	---	12.75	---	a	---
S-9	11/06/1998	Tar-like substance in well, probably from previous landfill activities; not gasoline.									---	---	---	---	12.75	---	a	---
S-9	12/07/1999	Tar-like substance in well, probably from previous landfill activities; not gasoline.									---	---	---	---	12.75	---	---	---
S-9	11/02/2000	Tar-like substance in well, probably from previous landfill activities; not gasoline.									---	---	---	---	12.75	---	---	---
S-9	12/27/2001	Tar-like substance in well, probably from previous landfill activities; not gasoline.									---	---	---	---	12.75	---	---	---
S-9	11/26/2002	Tar-like substance in well, probably from previous landfill activities; not gasoline.									---	---	---	---	14.83	---	---	---
S-9	11/25/2003	Tar-like substance in well, probably from previous landfill activities; not gasoline.									---	---	---	---	14.83	---	---	---
S-9	11/25/2003	Tar-like substance in well, probably from previous landfill activities; not gasoline.									---	---	---	---	14.98 i	---	---	---
S-9	11/23/2005	Tar-like substance in well, probably from previous landfill activities; not gasoline.									---	---	---	---	14.98	---	---	---
S-9	11/21/2006	Tar-like substance in well, probably from previous landfill activities; not gasoline.									---	---	---	---	14.98	---	---	---
S-9	11/14/2007	Tar-like substance in well, probably from previous landfill activities; not gasoline.									---	---	---	---	14.98	---	---	---
S-9	11/17/2008	Tar-like substance in well, probably from previous landfill activities; not gasoline.									---	---	---	---	14.98	---	---	---
S-9	11/12/2009	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	14.98	---	---	---
S-9	12/03/2010	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	14.98	---	---	---
S-9	12/01/2011	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	14.98	---	---	---
S-9	10/05/2012	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	14.98	---	---	---
S-9	12/09/2013	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	14.98	---	---	---
S-9	**02/27/2015**	**Well dry**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**14.98**	**---**	**---**	**---**
S-10	10/27/1988	---	---	700,000	37,000	100,000	20,000	110,000	---	---	---	---	---	---	12.58	---	---	---
S-10	02/10/1989	---	---	6,500	480	700	100	1,800	---	---	---	---	---	---	12.58	---	---	---
S-10	04/28/1989	---	---	13,000	1,300	500	600	3,700	---	---	---	---	---	---	12.58	---	---	---
S-10	07/07/1989	---	---	14,000	1,300	310	270	2,400	---	---	---	---	---	---	12.58	---	---	---
S-10	10/25/1989	---	---	4,200	580	34	4.0	440	---	---	---	---	---	---	12.58	---	---	---
S-10	01/04/1990	---	---	1,700	360	10	7.8	170	---	---	---	---	---	---	12.58	---	---	---
S-10	04/12/1990	---	---	---	---	---	---	---	---	---	---	---	---	---	12.58	---	0.01	---
S-10	07/06/1990	---	---	---	---	---	---	---	---	---	---	---	---	---	12.58	9.16	0.01	3.42
S-10	10/19/1990	---	---	---	---	---	---	---	---	---	---	---	---	---	12.58	---	0.03	---
S-10	01/14/1991	---	---	---	---	---	---	---	---	---	---	---	---	---	12.58	---	0.03	---
S-10	04/23/1991	---	---	---	---	---	---	---	---	---	---	---	---	---	12.58	---	0.01	---

TABLE 1

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1800½ POWELL STREET, EMERYVILLE, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	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)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)
S-10	07/08/1991	---	---	---	---	---	---	---	---	---	---	---	---	---	12.58	9.41	0.03	3.17
S-10	10/11/1991	---	---	---	---	---	---	---	---	---	---	---	---	---	12.58	7.77	a	4.81
S-10	02/12/1992	---	---	1,200	470	16	<5	14	---	---	---	---	---	---	12.58	6.41	---	6.17
S-10	05/11/1992	---	---	1,100	100	6.0	4.0	19	---	---	---	---	---	---	12.58	9.04	---	3.54
S-10	09/01/1992	---	---	---	---	---	---	---	---	---	---	---	---	---	12.58	9.38	0.01	3.20
S-10	12/04/1992	---	---	---	---	---	---	---	---	---	---	---	---	---	12.58	6.89	a	5.69
S-10	02/17/1993	---	---	530	89	8.5	1.6	4.5	---	---	---	---	---	---	12.58	7.34	---	5.24
S-10	05/29/1993	---	---	240	65	3.8	2.2	8.6	---	---	---	---	---	---	12.58	6.60	---	5.98
S-10	08/11/1993	---	---	250	23	4.1	<1	6.4	---	---	---	---	---	---	12.58	9.09	---	3.49
S-10	11/12/1993	---	---	320	1.6	1.3	1.4	6.2	---	---	---	---	---	---	12.58	6.58	---	6.00
S-10	02/21/1994	---	---	1,400	190	9.9	<2.5	19	---	---	---	---	---	---	12.58	8.32	---	4.26
S-10	05/16/1994	---	---	300	45	8.6	6.2	19	---	---	---	---	---	---	12.58	8.35	---	4.23
S-10	08/08/1994	---	---	700	57	14	<0.5	9.3	---	---	---	---	---	---	12.58	8.66	---	3.92
S-10	11/09/1994	---	---	640	130	2.0	1.6	4.1	---	---	---	---	---	---	12.58	6.68	---	5.90
S-10	02/22/1995	---	---	500	65	5.9	1.0	8.2	---	---	---	---	---	---	12.58	9.12	---	3.46
S-10	05/02/1995	---	---	530	59	2.3	0.80	8.2	---	---	---	---	---	---	12.58	9.50	---	3.08
S-10	08/24/1995	---	---	350	35	4.6	<0.5	6.7	---	---	---	---	---	---	12.58	10.06	---	2.52
S-10	12/08/1995	---	---	690	28	4.6	0.90	8.6	---	---	---	---	---	---	12.58	10.08	---	2.50
S-10	02/29/1996	---	---	430	32	1.8	0.50	5.8	16	---	---	---	---	---	12.58	5.32	---	7.26
S-10	05/22/1996	---	1,200	100	19	0.63	<0.5	1.4	5.3	---	---	---	---	---	12.58	6.04	---	6.54
S-10	07/30/1996	---	13,000	240	17	<1.2	<1.2	7.8	11	---	---	---	---	---	12.58	10.48	---	2.10
S-10	11/11/1996	---	4,800	370	16	1.1	<0.5	7.0	94	---	---	---	---	---	12.58	10.31	---	2.27
S-10	11/03/1997	---	1,100	340	6.7	2.1	<0.50	3.3	19	---	---	---	---	---	12.58	9.53	---	3.05
S-10 (D)	11/03/1997	---	1,100	310	7.8	1.3	<0.50	3.1	19	---	---	---	---	---	12.58	9.53	---	3.05
S-10	11/06/1998	---	2,000	<250	<2.5	<2.5	<2.5	6.5	900	---	---	---	---	---	12.58	5.12	---	7.46
S-10	12/07/1999	---	2,230	400	47	33	10	29	90	---	---	---	---	---	12.58	7.95	---	4.63
S-10	11/02/2000	---	14,500	536	32.0	3.08	<0.500	2.98	42.3	---	---	---	---	---	12.58	7.05	---	5.53
S-10	12/27/2001	---	6,600	870	61	4.9	2.5	15	---	26	---	---	---	---	12.58	7.43	---	5.15
S-10	11/26/2002	---	9,800	720	56	3.5	<0.50	8.4	---	52	---	---	---	---	15.11	9.75	---	5.36
S-10	11/25/2003	---	530 k	550	29	2.7	<0.50	8.4	---	49	---	---	---	---	15.11	9.00	---	6.11
S-10	11/10/2004	---	1,500 k	660	64	5.0	0.61	14	---	54	---	---	---	---	14.93 i	9.50	---	5.43
S-10	11/23/2005	---	---	866	47.0	3.44	0.600	12.6	---	61.9	<10.0	<0.500	<0.500	<0.500	14.93	10.23	---	4.70
S-10	11/21/2006	---	12,000	490	21	2.3	5.8	9.6	---	48	34	<2.0	<2.0	<2.0	14.93	10.04	---	4.89
S-10	11/14/2007	---	1,300 k,l	740 m	19	2.1	<1.0	8.0	---	44	20	<2.0	<2.0	<2.0	14.93	9.49	---	5.44
S-10	11/17/2008	---	2,000 l	630	7.3	1.0	<1.0	7.0	---	32	11	<2.0	<2.0	<2.0	14.93	10.03	---	4.90
S-10	11/12/2009	---	2,100 l	600	7.9	1.1	<1.0	5.7	---	23	12	<2.0	<2.0	<2.0	14.93	10.31	---	4.62

TABLE 1

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1800½ POWELL STREET, EMERYVILLE, CALIFORNIA

Well ID	*Date*	*TPHmo (µg/L)*	*TPHd (µg/L)*	*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)*	*TOC (ft MSL)*	*Depth to Water (ft TOC)*	*SPH Thickness (ft)*	*GW Elevation (ft MSL)*
S-10	12/03/2010	---	900 l	740	6.0	1.3	<1.0	9.3	---	19	12	<2.0	<2.0	<2.0	14.93	9.60	---	5.33
S-10	12/01/2011	---	10,100 h,l	430	2.87	0.680	<0.500	6.85	---	22.0	<10.0	<0.500	<0.500	<0.500	14.93	10.60	---	4.33
S-10	01/16/2012	---	5,700 l	---	---	---	---	---	---	---	---	---	---	---	14.93	9.96	---	4.97
S-10	10/05/2012	---	510 l	890	10	2.9	<0.50	19	---	31	13	<0.50	<0.50	1.6	14.93	10.19	---	4.74
S-10	12/09/2013	---	2,100 l	550	2.0	0.61	<0.50	6.0	---	7.4	<10	<0.50	<0.50	<0.50	14.93	8.14	---	6.79
S-10	**02/27/2015**	**---**	**2,100**	**140**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**---**	**0.89**	**<10**	**<0.50**	**<0.50**	**<0.50**	**14.93**	**9.65**	**---**	**5.28**
S-12	07/07/1989	---	2,200	<250	0.71	<0.5	<0.5	<3.6	---	---	---	---	---	---	12.84	8.22	---	---
S-12	11/17/1989	---	1,400	<250	18	<2	<2	<5	---	---	---	---	---	---	12.84	---	---	---
S-12	01/04/1990	---	---	<250	24	2.0	<2	<5	---	---	---	---	---	---	12.84	---	---	---
S-12	07/06/1990	---	---	80	15	0.70	<0.5	2.0	---	---	---	---	---	---	12.84	8.27	---	4.57
S-12	10/19/1990	---	---	150	12	9.0	<0.5	3.6	---	---	---	---	---	---	12.84	---	---	---
S-12	01/14/1991	600	1,000	120	3.6	0.80	<0.5	2.9	---	---	---	---	---	---	12.84	---	---	---
S-12	04/23/1991	800	820	100	3.7	3.8	0.80	11	---	---	---	---	---	---	12.84	---	---	---
S-12	07/08/1991	---	---	70	2.5	0.80	<0.5	2.4	---	---	---	---	---	---	12.84	9.50	---	3.34
S-12	10/11/1991	5,100	2,500	220	2.1	0.70	<0.5	1.2	---	---	---	---	---	---	12.84	9.90	---	2.94
S-12	02/12/1992	1,400	2,500	110	0.80	<0.5	<0.5	1.3	---	---	---	---	---	---	12.84	9.43	---	3.41
S-12	05/11/1992	---	3,800 b	140	0.80	0.80	<0.5	2.5	---	---	---	---	---	---	12.84	8.65	---	4.19
S-12	09/01/1992	---	2,600 b	190	3.0	15	0.50	4.5	---	---	---	---	---	---	12.84	9.86	---	2.98
S-12	12/04/1992	---	3,900 b	180	1.2	1.0	1.0	7.7	---	---	---	---	---	---	12.84	9.93	---	2.91
S-12	02/17/1993	---	2,100 b	350 k	0.60	<0.5	0.50	5.5	---	---	---	---	---	---	12.84	8.08	---	4.76
S-12	05/29/1993	---	2,200	290	2.0	1.6	4.4	6.0	---	---	---	---	---	---	12.84	9.08	---	3.76
S-12	08/11/1993	---	720	240	0.70	<0.5	<0.5	1.1	---	---	---	---	---	---	12.84	9.35	---	3.49
S-12	11/12/1993	---	4,100	210 k	0.70	0.50	<0.5	3.4	---	---	---	---	---	---	12.84	9.28	---	3.56
S-12	02/21/1994	---	2,200 c	240 o	0.70	<0.5	<0.5	3.6	---	---	---	---	---	---	12.84	8.22	---	4.62
S-12	05/16/1994	---	2,200	96	1.5	<0.5	<0.5	2.0	---	---	---	---	---	---	12.84	8.92	---	3.92
S-12	08/08/1994	---	3,500 e	110 d	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---	12.84	---	---	0.00
S-12	11/09/1994	---	5,400 e	80	80	<0.5	<0.5	0.60	---	---	---	---	---	---	12.84	7.56	---	5.28
S-12	02/22/1995	---	2,900 e,f	110	0.70	<0.5	<0.5	3.7	---	---	---	---	---	---	12.84	7.98	---	4.86
S-12 (D)	02/22/1995	---	3,400 e,f	110	4.8	7.1	<0.5	2.1	---	---	---	---	---	---	12.84	7.98	---	4.86
S-12	05/02/1995	---	2,800	140	2.4	1.1	0.80	4.3	---	---	---	---	---	---	12.84	8.44	---	4.40
S-12	08/24/1995	---	1,600	200	19	12	5.6	24	---	---	---	---	---	---	12.84	9.00	---	3.84
S-12	12/08/1995	---	2,700	170	2.2	0.70	0.90	3.6	---	---	---	---	---	---	12.84	9.62	---	3.22
S-12	02/29/1996	---	2,200	1,700	<5.0	<5.0	<5.0	<5.0	5,600	---	---	---	---	---	12.84	7.64	---	5.20
S-12	05/22/1996	---	5,700	<1,000	<10	<10	<10	<10	2,400	---	---	---	---	---	12.84	8.94	---	3.90
S-12	07/30/1996	---	3,200	<500	<5.0	<5.0	<5.0	<5.0	1,500	---	---	---	---	---	12.84	9.71	---	3.13

TABLE 1

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1800½ POWELL STREET, EMERYVILLE, CALIFORNIA

Well ID	*Date*	*TPHmo (µg/L)*	*TPHd (µg/L)*	*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)*	*TOC (ft MSL)*	*Depth to Water (ft TOC)*	*SPH Thickness (ft)*	*GW Elevation (ft MSL)*
S-12 (D)	07/30/1996	---	2,900	<500	<5.0	<5.0	<5.0	<5.0	---	2,000	---	---	---	---	12.84	9.71	---	3.13
S-12	11/11/1996	---	6,900	<500	<5.0	<5.0	<5.0	<5.0	1,400	---	---	---	---	---	12.84	9.65	---	3.19
S-12	11/03/1997	---	2,800	110	2.1	<0.50	<0.50	1.3	---	---	---	---	---	---	12.84	8.73	---	4.11
S-12	11/06/1998	---	2,900	<500	<5.0	<5.0	<5.0	<5.0	2,700	---	---	---	---	---	12.84	8.85	---	3.99
S-12	12/07/1999	---	2,800	<500	<5.0	<5.0	<5.0	<5.0	1,900	---	---	---	---	---	12.84	8.32	---	4.52
S-12	11/02/2000	---	4,000	132	0.642	<0.500	<0.500	1.07	1,900	2,230 h	---	---	---	---	12.84	7.50	---	5.34
S-12	12/27/2001	---	2,700	230	<2.0	<2.0	<2.0	<2.0	---	760	---	---	---	---	12.84	7.00	---	5.84
S-12	11/26/2002	---	540	180	<1.0	<1.0	<1.0	1.7	---	390	---	---	---	---	14.87	8.35	---	6.52
S-12	11/25/2003	---	2,600 k	<250	<2.5	<2.5	<2.5	<5.0	---	310	---	---	---	---	14.87	6.04	---	8.83
S-12	11/10/2004	---	1,000 k	290	<1.0	1.2	<1.0	5.0	---	140	---	---	---	---	14.87	7.80	---	7.07
S-12	11/23/2005	---	---	<50.0	<0.500	<0.500	<0.500	2.63	---	93.3	398	<0.500	<0.500	<0.500	14.87	7.22	---	7.65
S-12	11/21/2006	---	220	280	<1.0	<1.0	<1.0	<2.0	---	110	600	<4.0	<4.0	<4.0	14.87	8.53	---	6.34
S-12	11/14/2007	---	660 k,l	360 m	0.23 n	<1.0	<1.0	0.51 n	---	83	830	<2.0	<2.0	<2.0	14.87	7.40	---	7.47
S-12	11/17/2008	---	2,600 l	390	<0.50	<1.0	<1.0	<1.0	---	44	350	<2.0	<2.0	<2.0	14.87	6.80	---	8.07
S-12	11/12/2009	---	690 l	200	<0.50	<1.0	<1.0	<1.0	---	61	370	<2.0	<2.0	<2.0	14.87	8.00	---	6.87
S-12	12/03/2010	---	480 k,l	330	<0.50	<1.0	<1.0	<1.0	---	31	280	<2.0	<2.0	<2.0	14.87	7.47	---	7.40
S-12	12/01/2011	---	15,600 h,l	200	<0.500	<0.500	<0.500	0.970	---	54.3	<10.0	<0.500	<0.500	<0.500	14.87	8.60	---	6.27
S-12	01/16/2012	---	1,800 l,o	---	---	---	---	---	---	---	---	---	---	---	14.87	8.56	---	6.31
S-12	10/05/2012	---	280 l	250	<0.50	<0.50	<0.50	<1.0	---	37	290	<0.50	<0.50	<0.50	14.87	8.58	---	6.29
S-12	12/09/2013	---	250 l	410	<0.50	<0.50	<0.50	<1.0	---	33	240	<0.50	<0.50	<0.50	14.87	8.52	---	6.35
S-12	**02/27/2015**	**---**	**630**	**250**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**---**	**33**	**260**	**0.59**	**<0.50**	**<0.50**	**14.87**	**7.91**	**---**	**6.96**
S-13	07/07/1989	---	3,600	700	200	<5	<5	45	---	---	---	---	---	---	12.59	9.26	---	---
S-13	11/17/1989	5,000	2,000	1,900	700	160	70	340	---	---	---	---	---	---	12.59	---	---	---
S-13	01/04/1990	---	---	2,800	1,400	130	10	500	---	---	---	---	---	---	12.59	---	---	---
S-13	07/06/1990	---	---	3,100	1,800	60	40	270	---	---	---	---	---	---	12.59	9.47	---	3.12
S-13	10/24/1990	---	---	3,400	1,500	28	28	250	---	---	---	---	---	---	12.59	---	---	---
S-13	01/14/1991	1,600	900	1,900	830	15	<10	99	---	---	---	---	---	---	12.59	---	---	---
S-13	04/23/1991	640	770 f	2,900 k	1,100	20	30	140	---	---	---	---	---	---	12.59	---	---	---
S-13	07/08/1991	---	---	1,500	880	10	6.0	160	---	---	---	---	---	---	12.59	10.38	---	2.21
S-13	10/11/1991	4,900	2,400	480	830	15	<0.5	120	---	---	---	---	---	---	12.59	10.78	---	1.81
S-13	02/12/1992	1,300	1,300	1,300	510	<10	<10	86	---	---	---	---	---	---	12.59	10.48	---	2.11
S-13	05/11/1992	---	1,300 b	1,000	470	<0.5	<5	50	---	---	---	---	---	---	12.59	9.48	---	3.11
S-13	09/01/1992	---	---	---	---	---	---	---	---	---	---	---	---	---	12.59	10.74	a	1.85
S-13	12/04/1992	---	2,400 b	900	290	4.6	<2.5	20	---	---	---	---	---	---	12.59	10.30	---	2.29
S-13	02/17/1993	---	1,200 b	840 k	310	3.5	<2.5	27	---	---	---	---	---	---	12.59	7.60	---	4.99

TABLE 1

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1800½ POWELL STREET, EMERYVILLE, CALIFORNIA

Well ID	*Date*	*TPHmo (µg/L)*	*TPHd (µg/L)*	*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)*	*TOC (ft MSL)*	*Depth to Water (ft TOC)*	*SPH Thickness (ft)*	*GW Elevation (ft MSL)*
S-13	05/29/1993	---	4,600	2,100	1,100	19	50	350	---	---	---	---	---	---	12.59	10.60	---	1.99
S-13	08/11/1993	---	2,300	900	230	16	6.9	65	---	---	---	---	---	---	12.59	10.58	---	2.01
S-13	11/12/1993	---	2,800	2,800	200	15	8.6	58	---	---	---	---	---	---	12.59	9.84	---	2.75
S-13	02/21/1994	---	1,800 o	700	200	<5	<5	45	---	---	---	---	---	---	12.59	9.26	---	3.33
S-13	05/16/1994	---	1,700	650	180	2.5	<2.5	21	---	---	---	---	---	---	12.59	9.62	---	2.97
S-13	08/08/1994	---	2,600 e	470	12	1.5	0.50	14	---	---	---	---	---	---	12.59	10.32	---	2.27
S-13	11/09/1994	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	12.59	---	---	---
S-13	02/22/1995	---	2,400 e,f	550	190	4.0	<0.5	17	---	---	---	---	---	---	12.59	8.92	---	3.67
S-13	05/02/1995	---	2,100	790	250	6.9	1.2	22	---	---	---	---	---	---	12.59	9.52	---	3.07
S-13	08/24/1995	---	1,500	330	93	<0.5	<0.5	2.0	---	---	---	---	---	---	12.59	10.02	---	2.57
S-13	12/08/1995	---	2,400	440	110	2.2	0.80	23	---	---	---	---	---	---	12.59	10.75	---	1.84
S-13	02/29/1996	---	2,500	560	130	<5.0	<5.0	30	30	---	---	---	---	---	12.59	9.02	---	3.57
S-13	05/22/1996	---	3,700	430	55	1.6	310	27	<5.0	---	---	---	---	---	12.59	10.20	---	2.39
S-13	07/30/1996	---	1,600	230	30	2.0	1.4	17	15	---	---	---	---	---	12.59	10.42	---	2.17
S-13	11/11/1996	---	2,700	320	19	1.1	<0.5	14	3.5	---	---	---	---	---	12.59	10.28	---	2.31
S-13 (D)	11/11/1996	---	2,400	360	24	1.3	<0.5	15	4.5	---	---	---	---	---	12.59	10.28	---	2.31
S-13	11/03/1997	---	1,900	300	25	1.4	0.63	12	5.0	---	---	---	---	---	12.59	9.36	---	3.23
S-13	11/06/1998	---	1,300	390	53	2.9	1.1	13	17	---	---	---	---	---	12.59	9.85	---	2.74
S-13	12/07/1999	---	1,430	420	15	6.2	2.6	15	42	---	---	---	---	---	12.59	9.72	---	2.87
S-13	11/02/2000	---	4,240	257	4.89	1.92	<0.500	5.17	45.1	---	---	---	---	---	12.59	7.15	---	5.44
S-13	12/27/2001	---	6,400	300	7.2	0.84	<0.50	6.0	---	34	---	---	---	---	12.59	9.35	---	3.24
S-13	11/26/2002	---	850	160	<0.50	<0.50	<0.50	2.6	---	23	---	---	---	---	14.47	9.80	---	4.67
S-13	11/25/2003	---	5,100 k	180	0.57	0.55	<0.50	3.0	---	26	---	---	---	---	14.47	9.94	---	4.53
S-13	11/10/2004	---	1,900 k	220	<0.50	0.71	<0.50	2.8	---	26	---	---	---	---	14.47	10.05	---	4.42
S-13	11/23/2005	---	---	<50.0	4.33	1.24	0.700	5.40	---	27.2	30.3	<0.500	<0.500	<0.500	14.47	10.02	---	4.45
S-13	11/21/2006	---	840	370	19	2.3	0.60	4.9	---	77	73	<2.0	<2.0	5.1	14.47	10.30	---	4.17
S-13	11/14/2007	---	590 k,l	650 m	8.0	1.8	<1.0	4.7	---	32	13	<2.0	<2.0	1.8 n	14.47	9.60	---	4.87
S-13	11/17/2008	---	1,500 l	510	3.0	1.1	<1.0	4.2	---	25	13	<2.0	<2.0	<2.0	14.47	9.24	---	5.23
S-13	11/12/2009	---	1,000 l	410	2.6	1.0	<1.0	2.1	---	32	17	<2.0	<2.0	<2.0	14.47	9.82	---	4.65
S-13	12/03/2010	---	650 k,l	690	3.8	1.6	<1.0	6.3	---	44	22	<2.0	<2.0	3.8	14.47	9.30	---	5.17
S-13	12/01/2011	---	9,100 h,l	580	4.20	1.02	<0.500	5.80	---	67.0	<10.0	<0.500	<0.500	<0.500	14.47	10.02	---	4.45
S-13	01/16/2012	---	1,200 l	---	---	---	---	---	---	---	---	---	---	---	14.47	9.80	---	4.67
S-13	10/05/2012	---	990 l	950	23	6.4	0.91	16	---	120	36	<0.50	<0.50	11	14.47	10.02	---	4.45
S-13	12/09/2013	---	640 l	690	14	1.4	<0.50	5.2	---	27	27	<0.50	<0.50	1.8	14.47	9.08	---	5.39
S-13	**02/27/2015**	**Unable to locate**		**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**14.47**	**---**	**---**	**---**

TABLE 1

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1800½ POWELL STREET, EMERYVILLE, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	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)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)
S-14	11/17/1989	3,000	<400	<250	3.0	<2	<2	<5	---	---	---	---	---	---	12.69	---	---	---
S-14	01/04/1990	---	---	<250	3.0	2.0	<2	<5	---	---	---	---	---	---	12.69	---	---	---
S-14	04/23/1991	<5,000	18,000	1,200	7.4	2.7	15	110	---	---	---	---	---	---	12.69	---	---	---
S-14	07/08/1991	---	---	190	6.5	0.60	1.9	26	---	---	---	---	---	---	12.69	10.32	---	2.37
S-14	10/11/1991	<500	21,000	4,900	7.0	1.2	<0.5	25	---	---	---	---	---	---	12.69	10.77	---	1.92
S-14	02/12/1992	2,500	12,000 k	370	4.6	<2.5	<2.5	26	---	---	---	---	---	---	12.69	10.40	---	2.29
S-14	05/11/1992	---	2,200 b	660	2.9	<2.5	<2.5	24	---	---	---	---	---	---	12.69	9.66	---	3.03
S-14	09/01/1992	---	7,900	700	3.2	<2.5	<2.5	15	---	---	---	---	---	---	12.69	10.74	---	1.95
S-14	12/04/1992	---	11,000 b	210	<0.5	<0.5	0.80	6.8	---	---	---	---	---	---	12.69	10.69	---	2.00
S-14	02/17/1993	---	5,700 b	130 k	<0.5	<0.5	<0.5	4.4	---	---	---	---	---	---	12.69	9.69	---	3.00
S-14	05/29/1993	---	5,200	770	<0.5	<0.5	<0.5	4.5	---	---	---	---	---	---	12.69	10.42	---	2.27
S-14	08/11/1993	---	8,800	920	<1	<1	1.6	17	---	---	---	---	---	---	12.69	10.54	---	2.15
S-14	11/12/1993	---	28,000	710	20	57	25	69	---	---	---	---	---	---	12.69	9.91	---	2.78
S-14	02/21/1994	---	3,600	2,800	<5	<5	<5	14	---	---	---	---	---	---	12.69	9.30	---	3.09
S-14	02/21/1994	---	3,600 c	2,300 o	<5.0	<5	<5	14	---	---	---	---	---	---	12.69	9.30	---	3.39
S-14	05/16/1994	---	6,700	310	<2.5	<2.5	<2.5	3.1	---	---	---	---	---	---	12.69	9.54	---	3.15
S-14	08/08/1994	---	2,900	480 g	<0.5	0.60	<0.5	0.8	---	---	---	---	---	---	12.69	10.29	---	2.40
S-14 (D)	08/08/1994	---	2,900	590 g	<0.5	0.60	<0.5	1.5	---	---	---	---	---	---	12.69	10.29	---	2.40
S-14	11/09/1994	---	6,400 e	170 g	0.70	<0.5	<0.5	2.7	---	---	---	---	---	---	12.69	9.52	---	3.07
S-14	02/22/1995	---	7,000 e,f	550	<0.5	<0.5	<0.5	1.6	---	---	---	---	---	---	12.69	9.18	---	3.51
S-14	05/02/1995	---	2,300	210	1.0	0.90	1.1	6.3	---	---	---	---	---	---	12.69	9.49	---	3.20
S-14 (D)	05/02/1995	---	2,600	160	0.60	0.60	0.70	3.8	---	---	---	---	---	---	12.69	9.49	---	3.20
S-14	08/24/1995	---	3,700	180	0.50	<0.5	<0.5	1.3	---	---	---	---	---	---	12.69	9.94	---	2.75
S-14	12/08/1995	---	4,900	190	1.0	<0.5	0.60	4.6	---	---	---	---	---	---	12.69	10.65	---	2.04
S-14	02/29/1996	---	11,000	200	<0.5	<0.5	<0.5	2.0	3.0	---	---	---	---	---	12.69	8.90	---	3.79
S-14	05/22/1996	---	3,800	93	<0.5	<0.5	<0.5	1.6	<2.5	---	---	---	---	---	12.69	10.10	---	2.59
S-14 (D)	05/22/1996	---	3,900	150	<0.5	<0.5	<0.5	1.8	<2.5	---	---	---	---	---	12.69	10.10	---	2.59
S-14	07/30/1996	---	2,500	<50	<0.5	<0.5	<0.5	0.89	<2.5	---	---	---	---	---	12.69	10.37	---	2.32
S-14	11/11/1996	---	27,000	2,600	<2.5	<2.5	<2.5	3.9	<12	---	---	---	---	---	12.69	10.29	---	2.40
S-14	11/03/1997	---	1,800	430	<0.50	<0.50	<0.50	1.7	<2.5	---	---	---	---	---	12.69	9.52	---	3.17
S-14	11/06/1998	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	12.69	---	---	---
S-14	12/07/1999	---	5,920	970	1.0	1.1	0.59	3.5	2.6	---	---	---	---	---	12.69	9.73	---	2.96
S-14	11/02/2000	---	535,000	273	<0.500	<0.500	<0.500	1.59	<2.50	---	---	---	---	---	12.69	9.98	---	2.71
S-14	12/27/2001	---	20,000	68	<0.50	<0.50	<0.50	1.3	---	<5.0	---	---	---	---	12.69	9.33	---	3.36
S-14	11/26/2002	---	2,400	<50	<0.50	<0.50	<0.50	0.91	---	<5.0	---	---	---	---	14.51	9.70	---	4.81
S-14	11/25/2003	---	4,400 k	78 k	<0.50	<0.50	<0.50	1.2	---	1.6	---	---	---	---	14.51	9.99	---	4.52

TABLE 1

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1800½ POWELL STREET, EMERYVILLE, CALIFORNIA

Well ID	*Date*	*TPHmo (µg/L)*	*TPHd (µg/L)*	*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)*	*TOC (ft MSL)*	*Depth to Water (ft TOC)*	*SPH Thickness (ft)*	*GW Elevation (ft MSL)*
S-14	11/10/2004	---	2,500 k	74 k	<0.50	<0.50	<0.50	<1.0	---	1.9	---	---	---	---	14.51	10.05	---	4.46
S-14	11/23/2005	---	---	<50.0	<0.500	<0.500	<0.500	<0.500	---	1.02	<10.0	<0.500	<0.500	<0.500	14.51	9.92	---	4.59
S-14	11/21/2006	---	5,000	62 j	<0.50 j	<0.50 j	<0.50 j	<1.0 j	---	1.9 j	<5.0 j	<2.0 j	<2.0 j	<2.0 j	14.51	10.26	---	4.25
S-14	11/14/2007	---	550 k,l	120 m	0.98	<1.0	<1.0	0.23 n	---	2.2	<10	<2.0	<2.0	<2.0	14.51	9.63	---	4.88
S-14	11/17/2008	---	1,700 l	<50	<0.50	<1.0	<1.0	<1.0	---	1.4	<10	<2.0	<2.0	<2.0	14.51	9.25	---	5.26
S-14	11/12/2009	---	1,200 l	<50	<0.50	<1.0	<1.0	<1.0	---	1.2	<10	<2.0	<2.0	<2.0	14.51	9.67	---	4.84
S-14	12/03/2010	---	540 l	58	<0.50	<1.0	<1.0	<1.0	---	1.1	<10	<2.0	<2.0	<2.0	14.51	9.12	---	5.39
S-14	12/01/2011	---	7,610 h,l	120	<0.500	<0.500	<0.500	<0.500	---	1.46	<10.0	<0.500	<0.500	<0.500	14.51	9.88	---	4.63
S-14	01/16/2012	---	1,400 l	---	---	---	---	---	---	---	---	---	---	---	14.51	9.69	---	4.82
S-14	10/05/2012	---	1,300 l	82	<0.50	<0.50	<0.50	<1.0	---	1.7	<10	<0.50	<0.50	<0.50	14.51	9.92	---	4.59
S-14	12/09/2013	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	14.51	---	---	---
S-14	**02/27/2015**	**---**	**770**	**97**	**0.94**	**0.55**	**<0.50**	**<1.0**	**---**	**1.5**	**<10**	**<0.50**	**<0.50**	**<0.50**	**14.51**	**9.91**	**---**	**4.60**

Notes:
TPHmo = Total petroleum hydrocarbons as motor oil analyzed by modified EPA Method 8015
TPHd = Total petroleum hydrocarbons as diesel analyzed by modified EPA Method 8015
TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method 8260B; prior to December 27, 2001, analyzed by EPA Method 8015 unless otherwise noted.
BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed by EPA Method 8260B; prior to December 27, 2001, analyzed by EPA Method 8020.
MTBE = Methyl tertiary-butyl ether analyzed by method 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
TOC = Top of casing elevation, in feet relative to mean sea level
SPH = Separate-phase hydrocarbon
GW = Groundwater
µg/L = Micrograms per liter
ft = Feet
MSL = Mean sea level
<x = Not detected at reporting limit x
--- = Not analyzed or available
(D) = Duplicate sample

a = SPH present but not measured
b = Compounds detected within the chromatographic range appear to be weathered diesel.
c = The concentration reported as diesel is due to the presence of a combination of diesel and a heavier petroleum product of hydrocarbon range C18 - C36, possibly motor oil.

TABLE 1

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1800½ POWELL STREET, EMERYVILLE, CALIFORNIA

Well ID	*Date*	*TPHmo (µg/L)*	*TPHd (µg/L)*	*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)*	*TOC (ft MSL)*	*Depth to Water (ft TOC)*	*SPH Thickness (ft)*	*GW Elevation (ft MSL)*

d = The result for gasoline is an unknown hydrocarbon which consists of several peaks.
e = The positive result appears to be a heavier hydrocarbon than diesel.
f = Compounds detected within the chromatographic range of diesel appear to include gasoline compounds.
g = The positive result appears to be a heavier hydrocarbon than gasoline.
h = Sample analyzed outside of EPA recommended holding time.
i = TOC altered due to wellhead maintenance.
j = The sample, as received, was not preserved in accordance to the referenced analytical method.
k = 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.
l = The sample extract was subjected to silica gel treatment prior to analysis.
m = Analyzed by EPA Method 8015B (M).
n = Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
o = Hydrocarbon result partly due to individual peak(s) in quantitation range

Beginning November 26, 2002, depth to water referenced to TOC instead of top of well box.
Active wells surveyed on February 12, 2002 by Virgil Chavez Land Surveying

APPENDIX A

BLAINE TECH SERVICES, INC. –
FIELD NOTES

WELL GAUGING DATA

Project # 150227-BWI Date 2/27/15 Client Shell

Site 1800 Powell St. Emeryville

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
S-5	0959	8					7.76	12.09		
S-8	0938	3					6.81	17.68		
S-9	1015	3	ODOR	Check Well	w/ Disp Dry	Bailer	DRY	—		
S-10	1005	6					9.65	19.23		
S-12	0952	3					7.91	23.72		
S-13	*	Unable to locate								
S-14	0931	3					9.91	21.65		

SHELL WELL MONITORING DATA SHEET

BTS #: 150227-BW1	Site: 9899 5349
Sampler: BW	Date: 2/27/15
Well I.D.: S-5	Well Diameter: 2 3 4 6 (8) ____
Total Well Depth (TD): 12.09	Depth to Water (DTW): 7.76
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]: 8.63	

Purge Method: Bailer, Disposable Bailer, Positive Air Displacement, Electric Submersible, Waterra, Peristaltic, Extraction Pump, Other_____

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

11.3 (Gals.) X 3 = 33.9 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

8" = 2.60

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1209	63.4	6.95	1337	52	11.3	
1217	63.9	6.82	1308	30	22.6	
1225	64.0	6.75	1325	21	33.9	

Did well dewater? Yes (No) Gallons actually evacuated: 33.9

Sampling Date: 2/27/15 Sampling Time: 1230 Depth to Water: 7.78

Sample I.D.: S-5 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:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

SHELL WELL MONITORING DATA SHEET

BTS #: 150227-BW1	Site: 9899 5349
Sampler: BW	Date: 2/27/15
Well I.D.: S-8	Well Diameter: 2 (3) 4 6 8 ___
Total Well Depth (TD): 17.68	Depth to Water (DTW): 6.81
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]: 8.98	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; X Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

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

4.0 (Gals.) X	3	=	12.0 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
1056	69.6	7.20	3142	87	4.0	
1059	69.7	6.68	3451	57	8.0	
1102	69.1	6.63	3281	22	12.0	

Did well dewater? Yes (No) Gallons actually evacuated: 12.0

Sampling Date: 2/27/15 Sampling Time: 1105 Depth to Water: 7.72

Sample I.D.: S8 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:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

SHELL WELL MONITORING DATA SHEET

BTS #: 150227-BW1	Site: 98995349
Sampler: BW	Date: 2/27/15
Well I.D.: ~~BW~~ S-9	Well Diameter: 2 (3) 4 6 8 ___
Total Well Depth (TD): —	Depth to Water (DTW): DRY
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

Sampling Method: Bailer / Disposable Bailer / Extraction Port / Dedicated Tubing / Other: ____

____ (Gals.) X ____ = ____ 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
* Check well w/ Disp Bailer. Well Dry. Tar on bailer						
* No Sample Collected.						

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: Sampling Time: Depth to Water:

Sample I.D.: Laboratory: Test America Other ____

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

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

SHELL WELL MONITORING DATA SHEET

BTS #: 150227-BW1	Site: 9899534 9
Sampler: BLO	Date: 2/27/15
Well I.D.: S-10	Well Diameter: 2 3 4 (6) 8 ___
Total Well Depth (TD): 19.23	Depth to Water (DTW): 9.65
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]: 11.57	

Purge Method:
- Bailer
- Disposable Bailer
- Positive Air Displacement
- X Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- Other_____

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

14.1 (Gals.) X 3 = 42.3 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
1248	63.5	6.95	1410	>1000	14.1	Debris in water
*	Dewatered @	14.5 gallons				DTW-18.74
1450	64.1	6.88	1381	>1000	—	Very muddy
* Well Dewatered during sampling. Filled 3 VOA w/HCl + 1 x 1L Amber UoA						

Did well dewater? (Yes) No Gallons actually evacuated: 14.5

Sampling Date: 2/27/15 Sampling Time: 1450 Depth to Water: 18.56

Sample I.D.: S-10 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:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

SHELL WELL MONITORING DATA SHEET

BTS #: 150227-BW1	Site: 98995349
Sampler: BW	Date: 2/27/15
Well I.D.: S-12	Well Diameter: 2 (3) 4 6 8 ____
Total Well Depth (TD): 23.72	Depth to Water (DTW): 7.91
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]: 11.07	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; X Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other____

Sampling Method: X Bailer; Disposable Bailer; Extraction Port; Dedicated Tubing; Other: ____

5.9 (Gals.) X	3 =	17.7 Gals.
1 Case Volume	Specified Volumes	Calculated Volume

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

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1135	65.3	6.70	7952	104	5.9	
1140	65.5	6.54	4095	61	11.8	
1145	65.5	6.56	4021	50	17.7	

Did well dewater? Yes (No) Gallons actually evacuated: 17.7

Sampling Date: 2/27/15 Sampling Time: 1150 Depth to Water: 9.25

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

SHELL WELL MONITORING DATA SHEET

BTS #: 150227-BW1	Site: 9899534 9
Sampler: BW	Date: 2/27/15
Well I.D.: S-13	Well Diameter: 2 3 4 6 8 ___
Total Well Depth (TD):	Depth to Water (DTW):
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

Sampling Method: Bailer, Disposable Bailer, Extraction Port, Dedicated Tubing, Other: ____

____ (Gals.) X ____ = ____ Gals.
1 Case Volume | Specified Volumes | Calculated Volume

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

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
* Unable to locate well. Paved over?						
* No Sample Collected						

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: Sampling Time: Depth to Water:

Sample I.D.: Laboratory: Test America Other ____

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

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

SHELL WELL MONITORING DATA SHEET

BTS #: 150227-BW1	Site: 98995349
Sampler: BW	Date: 2/27/15
Well I.D.: S-14	Well Diameter: 2 (3) 4 6 8 ___
Total Well Depth (TD): 21.65	Depth to Water (DTW): 9.91
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]: 12.26	

Purge Method:
- Bailer
- Disposable Bailer
- Positive Air Displacement
- X Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- Other_____

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

4.3 (Gals.) X	3	= 12.9 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
1027	68.9	7.07	20.16	102	4.3	
1030	69.0	7.15	6.901	74	8.6	
1033	69.1	7.20	6.725	38	12.9	

Did well dewater? Yes (No) Gallons actually evacuated: 12.9

Sampling Date: 2/27/15 Sampling Time: 1040 Depth to Water: 12.04

Sample I.D.: S-14 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:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

ENVIRONMENTAL WELL, REMEDIATION COMPOUND, AND SITE INSPECTION FORM

INCIDENT # 98995349 ADDRESS 1800 Powell St.

DATE: 2/27/15 CITY & STATE Emeryville, 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
S-5	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P		Y	N	
S-8	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P	No Tag	Y	N	
S-9	Standpipe	Flush	G	P	Size (inch) 8	Y	N	G	R	G	R	NL	G	P	2/2 Tabs Broken, Rim Broken In concrete	Y	N	
S-10	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P		Y	N	
S-12	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P	Replace Cap + Lock. Well very low in box	Y	N	
S-13	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P	* Unable to locate	Y	N	
S-14	Standpipe	Flush	G	P	Size (inch) 8	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 = ____ ____ ____ = 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	X	G	P	N/A	G	P	N/A	G	P	N/A	Y	N	N/A		Y	N	
Building																	
Building w/ Fence Comp.																	
Fenced Compound																	
Trailer																	

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.

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

Version 2.4, March 2008

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

Brian Weeks Blaine Tech Services

Print or type Name of Field Personnel & Consultant Company

APPENDIX B

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: 440-103494-1
Client Project/Site: 1800 1/2 Powell St., Emeryville

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

Attn: Peter Schaefer

Heather Clark

Authorized for release by:
3/10/2015 10:47:10 AM

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

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

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Sample Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 1800 1/2 Powell St., Emeryville

TestAmerica Job ID: 440-103494-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-103494-1	S-5	Ground Water	02/27/15 12:30	03/03/15 09:35
440-103494-2	S-8	Ground Water	02/27/15 11:05	03/03/15 09:35
440-103494-3	S-10	Ground Water	02/27/15 14:50	03/03/15 09:35
440-103494-4	S-12	Ground Water	02/27/15 11:50	03/03/15 09:35
440-103494-5	S-14	Ground Water	02/27/15 10:40	03/03/15 09:35

Job ID: 440-103494-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-103494-1

Comments
No additional comments.

Receipt
The samples were received on 3/3/2015 9:35 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.2º C.

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

GC Semi VOA
Method(s) 8015B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 240636. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch. (LCS 440-240636/2-A)

Method(s) 8015B: Surrogate recovery for the following sample(s) was outside control limits: S-10 (440-103494-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

Organic Prep
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: S-5

Lab Sample ID: 440-103494-1

Date Collected: 02/27/15 12:30

Matrix: Ground Water

Date Received: 03/03/15 09:35

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)	**510**		50		ug/L			03/06/15 16:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*91*		*76 - 132*		*03/06/15 16:55*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*03/06/15 16:55*	*1*
Toluene-d8 (Surr)	*118*		*80 - 128*		*03/06/15 16:55*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**3.8**		0.50		ug/L			03/06/15 16:55	1
Toluene	ND		0.50		ug/L			03/06/15 16:55	1
Ethylbenzene	ND		0.50		ug/L			03/06/15 16:55	1
Xylenes, Total	**2.2**		1.0		ug/L			03/06/15 16:55	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			03/06/15 16:55	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			03/06/15 16:55	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			03/06/15 16:55	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			03/06/15 16:55	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			03/06/15 16:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*03/06/15 16:55*	*1*
Dibromofluoromethane (Surr)	*91*		*76 - 132*		*03/06/15 16:55*	*1*
Toluene-d8 (Surr)	*118*		*80 - 128*		*03/06/15 16:55*	*1*

Client Sample ID: S-8

Lab Sample ID: 440-103494-2

Date Collected: 02/27/15 11:05

Matrix: Ground Water

Date Received: 03/03/15 09:35

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)	**250**		50		ug/L			03/06/15 17:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*95*		*76 - 132*		*03/06/15 17:25*	*1*
4-Bromofluorobenzene (Surr)	*109*		*80 - 120*		*03/06/15 17:25*	*1*
Toluene-d8 (Surr)	*118*		*80 - 128*		*03/06/15 17:25*	*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			03/06/15 17:25	1
Toluene	ND		0.50		ug/L			03/06/15 17:25	1
Ethylbenzene	ND		0.50		ug/L			03/06/15 17:25	1
Xylenes, Total	**1.3**		1.0		ug/L			03/06/15 17:25	1
Methyl-t-Butyl Ether (MTBE)	**1.8**		0.50		ug/L			03/06/15 17:25	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			03/06/15 17:25	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			03/06/15 17:25	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			03/06/15 17:25	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			03/06/15 17:25	1

Client Sample ID: S-8

Lab Sample ID: 440-103494-2

Date Collected: 02/27/15 11:05

Matrix: Ground Water

Date Received: 03/03/15 09:35

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*80 - 120*		*03/06/15 17:25*	*1*
Dibromofluoromethane (Surr)	*95*		*76 - 132*		*03/06/15 17:25*	*1*
Toluene-d8 (Surr)	*118*		*80 - 128*		*03/06/15 17:25*	*1*

Client Sample ID: S-10

Lab Sample ID: 440-103494-3

Date Collected: 02/27/15 14:50

Matrix: Ground Water

Date Received: 03/03/15 09:35

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)	**140**		50		ug/L			03/06/15 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*92*		*76 - 132*		*03/06/15 18:04*	*1*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*03/06/15 18:04*	*1*
Toluene-d8 (Surr)	*118*		*80 - 128*		*03/06/15 18:04*	*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			03/06/15 18:04	1
Toluene	ND		0.50		ug/L			03/06/15 18:04	1
Ethylbenzene	ND		0.50		ug/L			03/06/15 18:04	1
Xylenes, Total	ND		1.0		ug/L			03/06/15 18:04	1
Methyl-t-Butyl Ether (MTBE)	**0.89**		0.50		ug/L			03/06/15 18:04	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			03/06/15 18:04	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			03/06/15 18:04	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			03/06/15 18:04	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			03/06/15 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*03/06/15 18:04*	*1*
Dibromofluoromethane (Surr)	*92*		*76 - 132*		*03/06/15 18:04*	*1*
Toluene-d8 (Surr)	*118*		*80 - 128*		*03/06/15 18:04*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	**2100**		47		ug/L		03/05/15 09:57	03/06/15 00:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*16*	*X*	*45 - 120*	*03/05/15 09:57*	*03/06/15 00:30*	*1*

Client Sample ID: S-12

Lab Sample ID: 440-103494-4

Date Collected: 02/27/15 11:50

Matrix: Ground Water

Date Received: 03/03/15 09:35

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)	**250**		50		ug/L			03/06/15 18:33	1

Client Sample ID: S-12

Lab Sample ID: 440-103494-4

Date Collected: 02/27/15 11:50

Matrix: Ground Water

Date Received: 03/03/15 09:35

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*90*		*76 - 132*		*03/06/15 18:33*	*1*
4-Bromofluorobenzene (Surr)	*108*		*80 - 120*		*03/06/15 18:33*	*1*
Toluene-d8 (Surr)	*122*		*80 - 128*		*03/06/15 18:33*	*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			03/06/15 18:33	1
Toluene	ND		0.50		ug/L			03/06/15 18:33	1
Ethylbenzene	ND		0.50		ug/L			03/06/15 18:33	1
Xylenes, Total	ND		1.0		ug/L			03/06/15 18:33	1
Methyl-t-Butyl Ether (MTBE)	**33**		0.50		ug/L			03/06/15 18:33	1
tert-Butyl alcohol (TBA)	**260**		10		ug/L			03/06/15 18:33	1
Isopropyl Ether (DIPE)	**0.59**		0.50		ug/L			03/06/15 18:33	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			03/06/15 18:33	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			03/06/15 18:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*80 - 120*		*03/06/15 18:33*	*1*
Dibromofluoromethane (Surr)	*90*		*76 - 132*		*03/06/15 18:33*	*1*
Toluene-d8 (Surr)	*122*		*80 - 128*		*03/06/15 18:33*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	**630**		49		ug/L		03/05/15 09:57	03/05/15 23:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*60*		*45 - 120*	*03/05/15 09:57*	*03/05/15 23:26*	*1*

Client Sample ID: S-14

Lab Sample ID: 440-103494-5

Date Collected: 02/27/15 10:40

Matrix: Ground Water

Date Received: 03/03/15 09:35

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)	**97**		50		ug/L			03/08/15 20:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*92*		*76 - 132*		*03/08/15 20:35*	*1*
4-Bromofluorobenzene (Surr)	*108*		*80 - 120*		*03/08/15 20:35*	*1*
Toluene-d8 (Surr)	*120*		*80 - 128*		*03/08/15 20:35*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.94**		0.50		ug/L			03/08/15 20:35	1
Toluene	**0.55**		0.50		ug/L			03/08/15 20:35	1
Ethylbenzene	ND		0.50		ug/L			03/08/15 20:35	1
Xylenes, Total	ND		1.0		ug/L			03/08/15 20:35	1
Methyl-t-Butyl Ether (MTBE)	**1.5**		0.50		ug/L			03/08/15 20:35	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			03/08/15 20:35	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			03/08/15 20:35	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			03/08/15 20:35	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 1800 1/2 Powell St., Emeryville

TestAmerica Job ID: 440-103494-1

Client Sample ID: S-14
Date Collected: 02/27/15 10:40
Date Received: 03/03/15 09:35

Lab Sample ID: 440-103494-5
Matrix: Ground Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			03/08/15 20:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*80 - 120*		*03/08/15 20:35*	*1*
Dibromofluoromethane (Surr)	*92*		*76 - 132*		*03/08/15 20:35*	*1*
Toluene-d8 (Surr)	*120*		*80 - 128*		*03/08/15 20:35*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	**770**		48		ug/L		03/05/15 09:57	03/06/15 01:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*60*		*45 - 120*	*03/05/15 09:57*	*03/06/15 01:33*	*1*

Method Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 1800 1/2 Powell St., Emeryville

TestAmerica Job ID: 440-103494-1

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
8015B	Diesel Range Organics (DRO) (GC) Low Level	SW846	TAL IRV

Protocol References:

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: 1800 1/2 Powell St., Emeryville

TestAmerica Job ID: 440-103494-1

Client Sample ID: S-5

Lab Sample ID: 440-103494-1

Date Collected: 02/27/15 12:30

Matrix: Ground Water

Date Received: 03/03/15 09:35

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	240885	03/06/15 16:55	HR	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	240886	03/06/15 16:55	HR	TAL IRV

Client Sample ID: S-8

Lab Sample ID: 440-103494-2

Date Collected: 02/27/15 11:05

Matrix: Ground Water

Date Received: 03/03/15 09:35

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	240885	03/06/15 17:25	HR	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	240886	03/06/15 17:25	HR	TAL IRV

Client Sample ID: S-10

Lab Sample ID: 440-103494-3

Date Collected: 02/27/15 14:50

Matrix: Ground Water

Date Received: 03/03/15 09:35

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	240885	03/06/15 18:04	HR	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	240886	03/06/15 18:04	HR	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			1060 mL	1 mL	240636	03/05/15 09:57	AP	TAL IRV
Silica Gel Cleanup	Analysis	8015B		1	1060 mL	1 mL	240670	03/06/15 00:30	CN	TAL IRV

Client Sample ID: S-12

Lab Sample ID: 440-103494-4

Date Collected: 02/27/15 11:50

Matrix: Ground Water

Date Received: 03/03/15 09:35

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	240885	03/06/15 18:33	HR	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	240886	03/06/15 18:33	HR	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			1015 mL	1 mL	240636	03/05/15 09:57	AP	TAL IRV
Silica Gel Cleanup	Analysis	8015B		1	1015 mL	1 mL	240670	03/05/15 23:26	CN	TAL IRV

Client Sample ID: S-14

Lab Sample ID: 440-103494-5

Date Collected: 02/27/15 10:40

Matrix: Ground Water

Date Received: 03/03/15 09:35

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	241193	03/08/15 20:35	MM1	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	241194	03/08/15 20:35	MM1	TAL IRV

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 1800 1/2 Powell St., Emeryville

TestAmerica Job ID: 440-103494-1

Client Sample ID: S-14
Date Collected: 02/27/15 10:40
Date Received: 03/03/15 09:35

Lab Sample ID: 440-103494-5
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3510C SGC			1035 mL	1 mL	240636	03/05/15 09:57	AP	TAL IRV
Silica Gel Cleanup	Analysis	8015B		1	1035 mL	1 mL	240670	03/06/15 01:33	CN	TAL IRV

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 440-240885/4
Matrix: Water
Analysis Batch: 240885

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			03/06/15 08:45	1
Toluene	ND		0.50		ug/L			03/06/15 08:45	1
Ethylbenzene	ND		0.50		ug/L			03/06/15 08:45	1
Xylenes, Total	ND		1.0		ug/L			03/06/15 08:45	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			03/06/15 08:45	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			03/06/15 08:45	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			03/06/15 08:45	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			03/06/15 08:45	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			03/06/15 08:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*80 - 120*		*03/06/15 08:45*	*1*
Dibromofluoromethane (Surr)	*93*		*76 - 132*		*03/06/15 08:45*	*1*
Toluene-d8 (Surr)	*121*		*80 - 128*		*03/06/15 08:45*	*1*

Lab Sample ID: LCS 440-240885/5
Matrix: Water
Analysis Batch: 240885

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	25.7		ug/L		103	68 - 130
Toluene	25.0	25.5		ug/L		102	70 - 130
Ethylbenzene	25.0	23.7		ug/L		95	70 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	22.7		ug/L		91	63 - 131
tert-Butyl alcohol (TBA)	250	259		ug/L		103	70 - 130
Isopropyl Ether (DIPE)	25.0	27.0		ug/L		108	58 - 139
Ethyl-t-butyl ether (ETBE)	25.0	23.2		ug/L		93	60 - 136
Tert-amyl-methyl ether (TAME)	25.0	23.1		ug/L		93	57 - 139
m,p-Xylene	25.0	25.9		ug/L		104	70 - 130
o-Xylene	25.0	24.7		ug/L		99	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*
Dibromofluoromethane (Surr)	*92*		*76 - 132*
Toluene-d8 (Surr)	*114*		*80 - 128*

Lab Sample ID: 440-103467-B-14 MS
Matrix: Water
Analysis Batch: 240885

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	33		250	291		ug/L		103	66 - 130
Toluene	ND		250	258		ug/L		102	70 - 130
Ethylbenzene	31		250	261		ug/L		92	70 - 130
Methyl-t-Butyl Ether (MTBE)	450		250	654		ug/L		83	70 - 130
tert-Butyl alcohol (TBA)	ND		2500	2750		ug/L		106	70 - 130
Isopropyl Ether (DIPE)	ND		250	286		ug/L		114	64 - 138

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

Lab Sample ID: 440-103467-B-14 MS
Matrix: Water
Analysis Batch: 240885

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
Ethyl-t-butyl ether (ETBE)	ND		250	239		ug/L		96	70 - 130
Tert-amyl-methyl ether (TAME)	ND		250	245		ug/L		98	68 - 133
m,p-Xylene	40		250	287		ug/L		99	70 - 133
o-Xylene	12		250	261		ug/L		100	70 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*80 - 120*
Dibromofluoromethane (Surr)	*94*		*76 - 132*
Toluene-d8 (Surr)	*114*		*80 - 128*

Lab Sample ID: 440-103467-B-14 MSD
Matrix: Water
Analysis Batch: 240885

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	33		250	293		ug/L		104	66 - 130	1	20
Toluene	ND		250	258		ug/L		102	70 - 130	0	20
Ethylbenzene	31		250	258		ug/L		91	70 - 130	1	20
Methyl-t-Butyl Ether (MTBE)	450		250	637		ug/L		75	70 - 130	3	25
tert-Butyl alcohol (TBA)	ND		2500	2710		ug/L		104	70 - 130	2	25
Isopropyl Ether (DIPE)	ND		250	285		ug/L		114	64 - 138	0	25
Ethyl-t-butyl ether (ETBE)	ND		250	245		ug/L		98	70 - 130	2	25
Tert-amyl-methyl ether (TAME)	ND		250	240		ug/L		96	68 - 133	2	30
m,p-Xylene	40		250	287		ug/L		99	70 - 133	0	25
o-Xylene	12		250	259		ug/L		99	70 - 133	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*76 - 132*
Toluene-d8 (Surr)	*114*		*80 - 128*

Lab Sample ID: MB 440-241193/4
Matrix: Water
Analysis Batch: 241193

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			03/08/15 10:42	1
Toluene	ND		0.50		ug/L			03/08/15 10:42	1
Ethylbenzene	ND		0.50		ug/L			03/08/15 10:42	1
Xylenes, Total	ND		1.0		ug/L			03/08/15 10:42	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			03/08/15 10:42	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			03/08/15 10:42	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			03/08/15 10:42	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			03/08/15 10:42	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			03/08/15 10:42	1

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

Lab Sample ID: MB 440-241193/4
Matrix: Water
Analysis Batch: 241193

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		80 - 120		03/08/15 10:42	1
Dibromofluoromethane (Surr)	93		76 - 132		03/08/15 10:42	1
Toluene-d8 (Surr)	121		80 - 128		03/08/15 10:42	1

Lab Sample ID: LCS 440-241193/5
Matrix: Water
Analysis Batch: 241193

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
Toluene	25.0	23.9		ug/L		96	70 - 130
Ethylbenzene	25.0	22.0		ug/L		88	70 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	20.7		ug/L		83	63 - 131
tert-Butyl alcohol (TBA)	250	230		ug/L		92	70 - 130
Isopropyl Ether (DIPE)	25.0	25.0		ug/L		100	58 - 139
Ethyl-t-butyl ether (ETBE)	25.0	20.2		ug/L		81	60 - 136
Tert-amyl-methyl ether (TAME)	25.0	20.1		ug/L		81	57 - 139
m,p-Xylene	25.0	23.5		ug/L		94	70 - 130
o-Xylene	25.0	22.8		ug/L		91	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		80 - 120
Dibromofluoromethane (Surr)	93		76 - 132
Toluene-d8 (Surr)	116		80 - 128

Lab Sample ID: 440-103621-E-10 MS
Matrix: Water
Analysis Batch: 241193

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	26.7		ug/L		107	66 - 130
Toluene	ND		25.0	26.2		ug/L		105	70 - 130
Ethylbenzene	ND		25.0	24.1		ug/L		96	70 - 130
Methyl-t-Butyl Ether (MTBE)	ND		25.0	24.2		ug/L		97	70 - 130
tert-Butyl alcohol (TBA)	ND		250	269		ug/L		108	70 - 130
Isopropyl Ether (DIPE)	ND		25.0	28.8		ug/L		115	64 - 138
Ethyl-t-butyl ether (ETBE)	ND		25.0	23.2		ug/L		93	70 - 130
Tert-amyl-methyl ether (TAME)	ND		25.0	23.2		ug/L		93	68 - 133
m,p-Xylene	ND		25.0	26.0		ug/L		104	70 - 133
o-Xylene	ND		25.0	25.6		ug/L		102	70 - 133

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		80 - 120
Dibromofluoromethane (Surr)	94		76 - 132
Toluene-d8 (Surr)	112		80 - 128

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

Lab Sample ID: 440-103621-E-10 MSD
Matrix: Water
Analysis Batch: 241193

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	26.5		ug/L		106	66 - 130	1	20
Toluene	ND		25.0	25.9		ug/L		104	70 - 130	1	20
Ethylbenzene	ND		25.0	23.5		ug/L		94	70 - 130	2	20
Methyl-t-Butyl Ether (MTBE)	ND		25.0	24.0		ug/L		96	70 - 130	1	25
tert-Butyl alcohol (TBA)	ND		250	256		ug/L		102	70 - 130	5	25
Isopropyl Ether (DIPE)	ND		25.0	28.7		ug/L		115	64 - 138	0	25
Ethyl-t-butyl ether (ETBE)	ND		25.0	23.1		ug/L		92	70 - 130	1	25
Tert-amyl-methyl ether (TAME)	ND		25.0	23.3		ug/L		93	68 - 133	0	30
m,p-Xylene	ND		25.0	25.3		ug/L		101	70 - 133	3	25
o-Xylene	ND		25.0	24.7		ug/L		99	70 - 133	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*
Dibromofluoromethane (Surr)	*95*		*76 - 132*
Toluene-d8 (Surr)	*113*		*80 - 128*

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

Lab Sample ID: MB 440-240886/4
Matrix: Water
Analysis Batch: 240886

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			03/06/15 08:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*93*		*76 - 132*		*03/06/15 08:45*	*1*
4-Bromofluorobenzene (Surr)	*109*		*80 - 120*		*03/06/15 08:45*	*1*
Toluene-d8 (Surr)	*121*		*80 - 128*		*03/06/15 08:45*	*1*

Lab Sample ID: LCS 440-240886/6
Matrix: Water
Analysis Batch: 240886

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	459		ug/L		92	55 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*93*		*76 - 132*
4-Bromofluorobenzene (Surr)	*108*		*80 - 120*
Toluene-d8 (Surr)	*117*		*80 - 128*

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

Lab Sample ID: 440-103467-B-14 MS
Matrix: Water
Analysis Batch: 240886

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)	1200		17300	17700		ug/L		95	50 - 145

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*94*		*76 - 132*
4-Bromofluorobenzene (Surr)	*107*		*80 - 120*
Toluene-d8 (Surr)	*114*		*80 - 128*

Lab Sample ID: 440-103467-B-14 MSD
Matrix: Water
Analysis Batch: 240886

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)	1200		17300	17700		ug/L		95	50 - 145	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*96*		*76 - 132*
4-Bromofluorobenzene (Surr)	*108*		*80 - 120*
Toluene-d8 (Surr)	*114*		*80 - 128*

Lab Sample ID: MB 440-241194/4
Matrix: Water
Analysis Batch: 241194

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			03/08/15 10:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*93*		*76 - 132*		*03/08/15 10:42*	*1*
4-Bromofluorobenzene (Surr)	*108*		*80 - 120*		*03/08/15 10:42*	*1*
Toluene-d8 (Surr)	*121*		*80 - 128*		*03/08/15 10:42*	*1*

Lab Sample ID: LCS 440-241194/6
Matrix: Water
Analysis Batch: 241194

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	431		ug/L		86	55 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*92*		*76 - 132*
4-Bromofluorobenzene (Surr)	*107*		*80 - 120*
Toluene-d8 (Surr)	*118*		*80 - 128*

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

Lab Sample ID: 440-103621-E-10 MS
Matrix: Water
Analysis Batch: 241194

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	1740		ug/L		101	50 - 145

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*94*		*76 - 132*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*
Toluene-d8 (Surr)	*112*		*80 - 128*

Lab Sample ID: 440-103621-E-10 MSD
Matrix: Water
Analysis Batch: 241194

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	1700		ug/L		99	50 - 145	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*95*		*76 - 132*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*
Toluene-d8 (Surr)	*113*		*80 - 128*

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

Lab Sample ID: MB 440-240636/1-A
Matrix: Water
Analysis Batch: 240670

Client Sample ID: Method Blank
Prep Type: Silica Gel Cleanup
Prep Batch: 240636

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	ND		50		ug/L		03/05/15 09:57	03/05/15 18:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*69*		*45 - 120*	*03/05/15 09:57*	*03/05/15 18:48*	*1*

Lab Sample ID: LCS 440-240636/2-A
Matrix: Water
Analysis Batch: 240670

Client Sample ID: Lab Control Sample
Prep Type: Silica Gel Cleanup
Prep Batch: 240636

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
DRO (C10-C28)	1000	525		ug/L		52	40 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-Octacosane	*64*		*45 - 120*

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

Lab Sample ID: LCSD 440-240636/3-A
Matrix: Water
Analysis Batch: 240670

Client Sample ID: Lab Control Sample Dup
Prep Type: Silica Gel Cleanup
Prep Batch: 240636

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
DRO (C10-C28)			1000	545		ug/L		55	40 - 115	4	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
n-Octacosane	*66*		*45 - 120*

GC/MS VOA

Analysis Batch: 240885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-103467-B-14 MS	Matrix Spike	Total/NA	Water	8260B	
440-103467-B-14 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
440-103494-1	S-5	Total/NA	Ground Water	8260B	
440-103494-2	S-8	Total/NA	Ground Water	8260B	
440-103494-3	S-10	Total/NA	Ground Water	8260B	
440-103494-4	S-12	Total/NA	Ground Water	8260B	
LCS 440-240885/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-240885/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 240886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-103467-B-14 MS	Matrix Spike	Total/NA	Water	8260B/CA_LUFT MS	
440-103467-B-14 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B/CA_LUFT MS	
440-103494-1	S-5	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-103494-2	S-8	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-103494-3	S-10	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-103494-4	S-12	Total/NA	Ground Water	8260B/CA_LUFT MS	
LCS 440-240886/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
MB 440-240886/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

Analysis Batch: 241193

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-103494-5	S-14	Total/NA	Ground Water	8260B	
440-103621-E-10 MS	Matrix Spike	Total/NA	Water	8260B	
440-103621-E-10 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 440-241193/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-241193/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 241194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-103494-5	S-14	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-103621-E-10 MS	Matrix Spike	Total/NA	Water	8260B/CA_LUFT MS	
440-103621-E-10 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B/CA_LUFT MS	
LCS 440-241194/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
MB 440-241194/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

GC Semi VOA

Prep Batch: 240636

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-103494-3	S-10	Silica Gel Cleanup	Ground Water	3510C SGC	

GC Semi VOA (Continued)

Prep Batch: 240636 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-103494-4	S-12	Silica Gel Cleanup	Ground Water	3510C SGC	
440-103494-5	S-14	Silica Gel Cleanup	Ground Water	3510C SGC	
LCS 440-240636/2-A	Lab Control Sample	Silica Gel Cleanup	Water	3510C SGC	
LCSD 440-240636/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	3510C SGC	
MB 440-240636/1-A	Method Blank	Silica Gel Cleanup	Water	3510C SGC	

Analysis Batch: 240670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-103494-3	S-10	Silica Gel Cleanup	Ground Water	8015B	240636
440-103494-4	S-12	Silica Gel Cleanup	Ground Water	8015B	240636
440-103494-5	S-14	Silica Gel Cleanup	Ground Water	8015B	240636
LCS 440-240636/2-A	Lab Control Sample	Silica Gel Cleanup	Water	8015B	240636
LCSD 440-240636/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	8015B	240636
MB 440-240636/1-A	Method Blank	Silica Gel Cleanup	Water	8015B	240636

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
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: 1800 1/2 Powell St., Emeryville

TestAmerica Job ID: 440-103494-1

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

3/10/2015

LAB (LOCATION)
- ☐ CALSCIENCE (_____)
- ☐ SPL Houston (_____)
- ☐ XENCO (_____)
- ☑ 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: 240894 Peter Schaefer

INCIDENT # (ENV SERVICES): 9 8 9 9 5 3 4 9 ☐ CHECK IF NO INCIDENT # APPLIES

DATE: 2/27/15

PAGE: 1 of 1

PO #:

SAP #: 1 3 5 2 6 6

SAMPLING COMPANY: Blaine Tech Services

LOG CODE: BTSS

SITE ADDRESS: Street and City: 1800 1/2 Powell St., Emeryville

State: CA

GLOBAL ID NO.: T0600101231

ADDRESS: 1680 Rogers Avenue, San Jose, CA

EDF DELIVERABLE TO (Name, Company, Office Location): ~~Brenda Garter~~, CRA, Emeryville, CA Ann Kreml

PHONE NO.: 510-420-~~3843~~ 3335

E-MAIL: ShellEDF@CRAWorld.com; Shell-US-LabDataManagement@CRAworld.com

CONSULTANT PROJECT NO.: 240894-95-12.01

PROJECT CONTACT (Hardcopy or PDF Report to): Lorin King

SAMPLER NAME(S) (Print): Brian Weeks

LAB USE ONLY

TELEPHONE: (310) 885-4455 x 108

FAX: (310) 637-5802

E-MAIL: lking@blainetech.com

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:

REQUESTED ANALYSIS

SPECIAL INSTRUCTIONS OR NOTES:

1) Please upload the "CRA EQuIS 4-file EDD" to the CRA Website (http://cralabeddupload.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

Run TPH-D with Silica Gel Clean Up

- ☑ 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)

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)	TEMPERATURE ON RECEIPT, °C / Container PID Readings or Laboratory Notes
	WG	150227-BW1	022715	BW	S-5	1230	WG	X					3	X					X							
	WG	"	"	BW	S-8	1105	WG	X					3	X					X							
	WG	"	"	BW	S-10	1450	WG	X					4	X	X				X							
	WG	"	"	BW	S-12	1150	WG	X					5	X	X				X							
	WG	"	"	BW	S-14	1040	WG	X					5	X	X				X							
	"	"	"	"																						
	"	"	"	"																						
	"	"	"	"																						
	"	"	"	"																						
	"	"	"	"																						

Relinquished by: (Signature)		Received by: (Signature)	Date:	Time:
Brian Weeks		(Sample Custody)	2/27/15	1600
(Sample Custody)			3/2/15	1020

Shell Oil Products Chain Of Custody Record

LAB (LOCATION)
- ☐ CALSCIENCE (_____)
- ☐ SPL Houston (_____)
- ☐ XENCO (_____)
- ☑ 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: 240894 Peter Schaefer

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	WG			BW	S-8	1105	WG	X					3	X					X						
	WG			BW	S-10	1450	WG	X					4	X	X				X						
	WG			BW	S-12	1150	WG	X					5	X	X				X						
	WG			BW	S-14	1040	WG	X					5	X	X				X						

TEMPERATURE ON RECEIPT, °C: (CS) 4.0/3.2 IR71

Container PID Readings or Laboratory Notes

440-103494 Chain of Custody

		Date	Time
Relinquished by: (Signature) Brian Weeks	Received by: (Signature) (Sample Custody)	2/27/15	1600
Relinquished by: (Signature) (Sample Custody)	Received by: (Signature)	3/2/15	1020
Relinquished by: (Signature)	Received by: (Signature)	3-2-15	11:30

1.7°C

VuBank 3/3/15 9:35

Fed: 6329 1552 4949

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3/10/2015

Login Sample Receipt Checklist

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 440-103494-1

Login Number: 103494

List Number: 1

Creator: Skinner, Alma

List Source: TestAmerica Irvine

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	