Eric Hetrick
Project Manager
Marketing Business Unit

Chevron Environmental Management Company
6101 Bollinger Canyon Road
San Ramon, CA 94583
Tel (925) 790-6491
ehetrick@chevron.com

RECEIVED
By Alameda County Environmental Health 9:26 am, Aug 18, 2015

August 11, 2015

Alameda County Health Care Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Former Chevron Service Station 95607
5269 Crow Canyon Road
Castro Valley, CA
ACEH Case #RO 0350

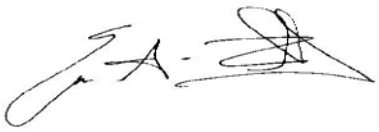
I have reviewed the attached Monthly Remedial Progress Report – June 2015.

The information in this report is accurate to the best of my knowledge and all local Agency/Regional Board guidelines have been followed. This report was prepared by GHD (formerly Conestoga Rovers Associates), upon who assistance and advice I have relied.

This letter is submitted pursuant to the requirements of California Water Code Section 13267(b)(1) and the regulating implementation entitled Appendix A pertaining thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Sincerely,



Eric Hetrick
Project Manager

Attachment: Monthly Remedial Progress Report – June 2015

August 11, 2015 Reference No. 311950

Mr. Mark Detterman
Alameda County Environmental Health Services
1131 Harbor Bay Parkway
Alameda, California 94502

Re: Monthly Remedial Progress Report – June 2015
Former Chevron Station 9-5607
5269 Crow Canyon Road
Castro Valley, California
Fuel Leak Case RO0350

Dear Mr. Detterman:

GHD, on behalf of Chevron Environmental Management Company (Chevron EMC), is providing this *Monthly Remedial Progress Report – June 2015* (Report), for the site referenced above (Figure 1). This report was prepared in accordance with Alameda County Environmental Health Services (ACEHS) Approval of the Remedial Action Plan, dated December 11, 2013. This report includes a summary of the DPE system operations conducted in the month of June 2015 and cumulatively (Tables 1 through 4).

DPE system compliance testing and sampling was performed on June 23, 2015 in accordance with system operational permits. During the reporting period, approximately 284.5 pounds of total petroleum hydrocarbons as gasoline (TPHg), and 4.0 pounds of benzene were removed in vapor phase (Table 4), and approximately 0.04 pounds of TPHg and 0.0003 pounds of benzene were removed in dissolved phase (Table 2). A summary of the DPE system operational performance for the month of June 2015 is presented below.

GHD Services Inc.
5900 Hollis Street Suite A Emeryville California 94608 USA
T 510 420 0700 **F** 510 420 9170 **W** www.ghd.com

VAPOR-PHASE EXTRACTION DATA - JUNE 2015

Soil Vapor Influent Flow Rate (avg scfm)	98 scfm
Soil Vapor Laboratory Influent Concentrations (TPHg ppmv)	2,300 ppmv
Soil Vapor Laboratory Influent Concentrations (Benzene ppmv)	35 ppmv
Soil Vapor Mass Removal (lb TPHg/period)	284.5 pounds
Soil Vapor Mass Removal (lb Benzene/period)	4.0 pounds
Soil Vapor Extraction Period Operating Uptime (hours)	178 hours
Soil Vapor Treatment Destruction Efficiency (%)	99.0

ppmv – parts per million by volume

scfm – standard cubic feet per minute

DISSOLVED-PHASE EXTRACTION DATA - JUNE 2015

Maximum Groundwater Extraction Rate (gpm)	0.64 gpm
Average Groundwater Extraction Rate (gpm)	0.58 gpm
Dissolved-Phase Mass Removal Rate (lb TPHg/period)	0.067 pounds
Dissolved-Phase Mass Removal Rate (lb Benzene/period)	0.001 pounds
Total Volume Groundwater Treated (gallons)	21,000 gallons
Groundwater Extraction Period Operating Uptime (hours)	589 hours

gpm – gallons per minute

Please contact Judy Gilbert of GHD at (510) 420-3314, if you have any questions or comments.

Sincerely,

GHD

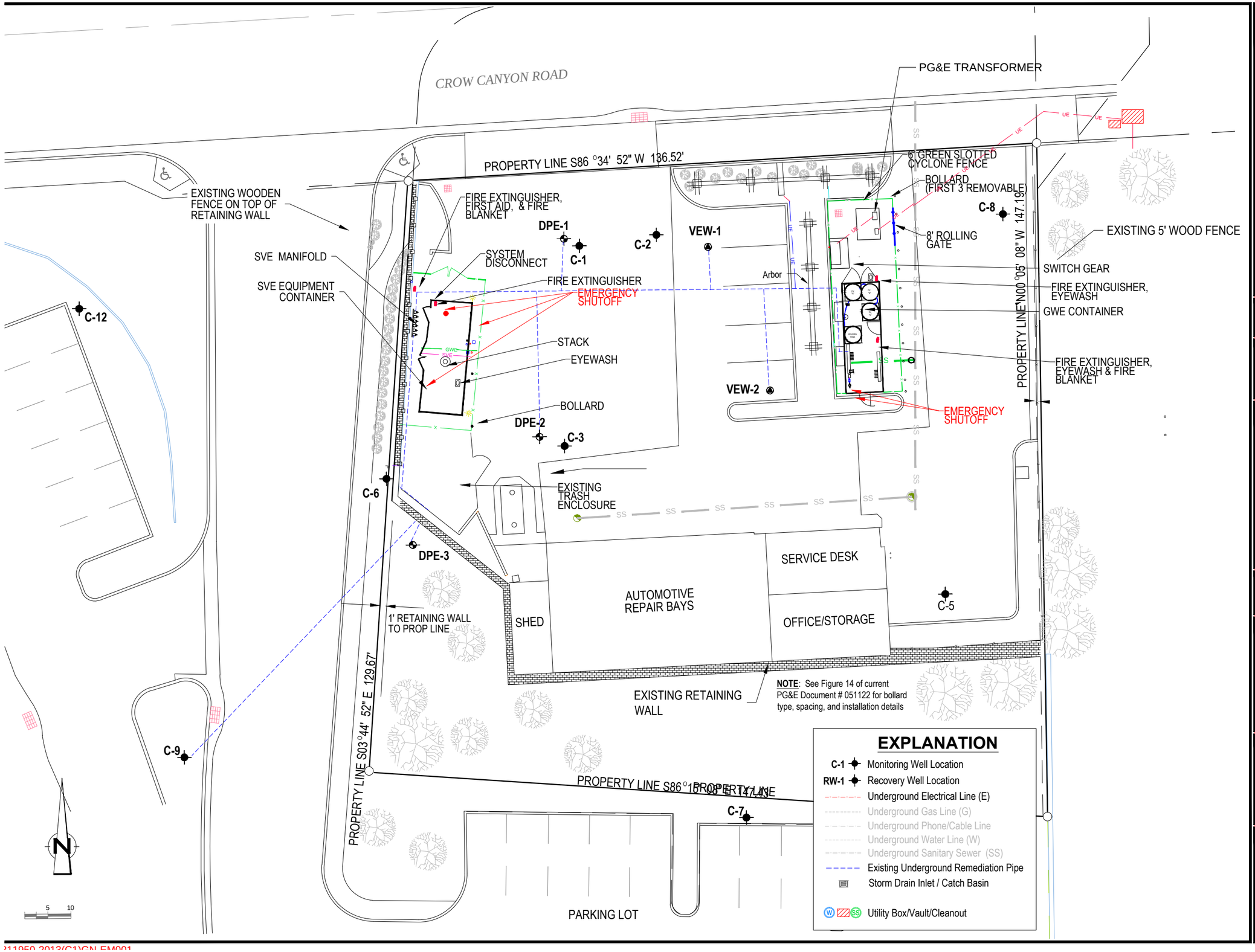
Brandon S. Wilken, PG 7564

DK/mws/46

Figure 1	General Site Plan
Table 1	Groundwater Extraction & Treatment System - Hydrocarbon Analytical Data
Table 2	Groundwater Extraction & Treatment System - Operational Data & Dissolved Phase Hydrocarbon Mass Removal Data
Table 3	Soil Vapor Extraction System - Operational Data
Table 4	Soil Vapor Extraction System - Analytical & Mass Removal Data
Attachment A	Air Toxics Laboratory Analytical Report
Attachment B	Eurofins Lancaster Laboratory Analytical Report

c.c.: Mr. Eric Hetrick, Chevron EMC *(electronic copy)*
Mr. Kevin Hinkley, Property Owner
Ms. Diane Riggs, Forest Creek Townhomes Association

Figure



CLIENT

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY

PROJECT

FORMER CHEVRON STATION #9-5607
5269 CROW CANYON ROAD
CASTRO VALLEY, CA

TITLE

GENERAL SITE PLAN

PROJECT #311950

DRAWING STATUS

N°	Revision	Date	By
1	RELOCATE GWE TRAILER	10/12/13	DK
1	ADD SVE-1 AND SVE-2	10/23/13	DK
2	RELOCATE GWE TRAILER	3/25/14	DS
3	AS-BUILT	10/10/14	DS

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL.

GHD
5900 HOLLIS STREET, SUITE A
EMERYVILLE CA 94608
PHONE: 510.420.0700
FAX: 510.420.9170
WWW.GHD.COM

Source Reference:

Designed By: DS	Date: 10/10/2014	Drawing N°: FIG 1
Drafted By: DS	Date: 10/10/2014	
Reviewed By: DK	Date: 10/23/2014	
Scale: 1:10		

Tables

Table 1
Groundwater Extraction and Treatment System
Hydrocarbon Analytical Data
Former Chevron Station # 95607
5269 Crow Canyon Road, Castro Valley, California

	Influent						Midfluent 1						Midfluent 2						Effluent						
Sample Date (mm/dd/yy)	TPHg Conc. (µg/L)	Benzene Conc. (µg/L)	Toluene Conc. (µg/L)	Ethylbenzene Conc. (µg/L)	Xylenes Conc. (µg/L)	MTBE Conc. (µg/L)	TPHg Conc. (µg/L)	Benzene Conc. (µg/L)	Toluene Conc. (µg/L)	Ethylbenzene Conc. (µg/L)	Xylenes Conc. (µg/L)	MTBE Conc. (µg/L)	TPHg Conc. (µg/L)	Benzene Conc. (µg/L)	Toluene Conc. (µg/L)	Ethylbenzene Conc. (µg/L)	Xylenes Conc. (µg/L)	MTBE Conc. (µg/L)	TPHg Conc. (µg/L)	Benzene Conc. (µg/L)	Toluene Conc. (µg/L)	Ethylbenzene Conc. (µg/L)	Xylenes Conc. (µg/L)	MTBE Conc. (µg/L)	pH[a]
09/12/14	6,000	1,800	19	120	94	4	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<0.5	<0.5	<0.5	<0.5	<0.5	7.4
10/13/14	7,500	1,600	37	76	630	4	<50	2	<0.5	<0.5	<0.5	<0.5	NM	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
11/06/14	8,000	990	140	100	590	<10	<50	2	<0.5	<0.5	<0.5	<0.5	NM	NM	NM	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
12/02/14	7,000	780	150	160	810	4	<50	2	<0.5	<0.5	<0.5	<0.5	NM	NM	NM	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	<0.5	7.3
01/14/15	3,700	290	36	33	390	3	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NM	NM	NM	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
02/04/15	4,100	190	14	<0.5	350	3	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NM	NM	NM	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
03/03/15	4,300	280	45	43	320	2	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NM	NM	NM	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	<0.5	6.8
04/16/15	1,800	180	6	0.8	92	2	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NM	NM	NM	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
05/14/15	2,900	570	16	42	89	3	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NM	NM	NM	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
06/23/15	380	3	<0.5	<0.5	5	2	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NM	NM	NM	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	<0.5	7.2

Notes and Abbreviations:

mm/dd/yy = month/day/year
Conc. = concentration
TPHg = total petroleum hydrocarbons quantified as gasoline
MTBE = methyl tertiary butyl ether
µg/L = micrograms per liter
<X.X = not detected at or below the detection limit indicated
a = pH measured in the field
NM =Not measured due to nondetect at MID-1

TPHg analyzed by EPA Method 8015M.

Benzene, toluene, ethylbenzene, and total xylenes analyzed by EPA Method 8260B.
MTBE analyzed by EPA Method 8260B.

Table 2
Groundwater Extraction and Treatment System
Operational Data and Dissolved Phase Hydrocarbons Mass Removal Data
Former Chevron Station # 95607
5269 Crow Canyon Road, Castro Valley, California

Date (mm/dd/yy)	Well IDs	Period Operating Time (hours)	Totalizer Reading (gallons)	Period Volume (gallons)	Period Operational Flow Rate (gpm)	Cumulative Volume (gallons)	TPHg Concentration (µg/L)	TPHg Period Removal[2] (pounds)	TPHg Cumulative Removal (pounds)	Benzene Concentration (µg/L)	Benzene Period Removal[2] (pounds)	Benzene Cumulative Removal (pounds)	MTBE Concentration (µg/L)	MTBE Period Removal[2] (pounds)	MTBE Cumulative Removal (pounds)
9/12/14 9:00	DPE-1 - DPE-3, C-9	---	330,400	0	---	0	---	---	---	---	---	---	---	---	---
9/12/14 14:00	DPE-1 - DPE-3, C-9	5.0	331,500	1,100	3.67	1,100	6,000	0.055	0.055	1,800	0.017	0.017	4	0.000	0.000
9/29/14 14:00	DPE-1 - DPE-3, C-9	408.0	332,000	500	0.02	1,600	---	0.025	0.08	---	0.008	0.024	---	0.000	0.000
10/6/14 11:00	DPE-1 - DPE-3, C-9	165.0	332,700	700	0.07	2,300	---	0.035	0.12	---	0.011	0.035	---	0.000	0.000
10/13/14 14:00	DPE-1 - DPE-3, C-9	171.0	341,085	8,385	0.82	10,685	7,500	0.525	0.64	1,600	0.112	0.146	4	0.000	0.000
10/20/14 11:30	DPE-1 - DPE-3, C-9	165.5	348,600	7,515	0.76	18,200	---	0.470	1.11	---	0.100	0.247	---	0.000	0.001
10/27/14 11:00	DPE-1 - DPE-3, C-9	167.5	354,200	5,600	0.56	23,800	---	0.350	1.46	---	0.075	0.322	---	0.000	0.001
11/6/14 13:15	DPE-1 - DPE-3, C-9	242.3	364,390	10,190	0.70	33,990	8,000	0.680	2.14	990	0.084	0.406	10	0.001	0.002
11/21/14 13:50	DPE-1 - DPE-3, C-9	360.6	373,033	8,643	0.40	42,633	---	0.577	2.72	---	0.071	0.477	---	0.001	0.002
12/2/14 15:15	DPE-1 - DPE-3, C-9	265.4	379,635	6,602	0.41	49,235	7,000	0.386	3.10	780	0.043	0.520	4	0.000	0.003
12/16/14 11:30	DPE-1 - DPE-3, C-9	332.3	399,600	19,965	1.00	69,200	---	1.166	4.27	---	0.130	0.650	---	0.001	0.003
12/31/14 10:30	DPE-1 - DPE-3, C-9	359.0	436,625	37,025	1.72	106,225	---	2.163	6.43	---	0.241	0.891	---	0.001	0.004
1/14/15 11:25	DPE-1 - DPE-3, C-9	336.9	461,160	24,535	1.21	130,760	3,700	0.757	7.19	290	0.059	0.950	3	0.001	0.005
1/23/15 14:35	DPE-1 - DPE-3, C-9	219.2	472,688	11,528	0.88	142,288		0.356	7.55		0.028	0.978		0.000	0.005
2/4/15 11:00	DPE-1 - DPE-3, C-9	284.4	486,220	13,532	0.79	155,820	4,100	0.463	8.01	190	0.021	1.00	3	0.000	0.006
2/17/15 14:30	DPE-1 - DPE-3, C-9	315.5	491,310	5,090	0.27	160,910		0.174	8.18		0.008	1.01		0.000	0.006
3/3/15 14:25	DPE-1 - DPE-3, C-9	335.9	504,915	13,605	0.68	174,515	4,300	0.488	8.67	280	0.032	1.04	2	0.000	0.006
3/11/15 11:45	DPE-1 - DPE-3, C-9	189.3	507,364	2,449	0.22	176,964		0.088	8.76		0.006	1.05		0.000	0.006
3/16/15 12:00	DPE-1 - DPE-3, C-9	120.2	509,837	2,473	0.34	179,437		0.089	8.85		0.006	1.05		0.000	0.006
4/2/15 9:30	DPE-1 - DPE-3, C-9	405.5	525,400	15,563	0.64	195,000		0.558	9.41		0.036	1.09		0.000	0.006
4/16/15 14:30	DPE-1 - DPE-3, C-9	341.0	546,110	20,710	1.01	215,710	1,800	0.311	9.72	180	0.031	1.12	2	0.000	0.007
4/30/15 10:20	DPE-1 - DPE-3, C-9	331.8	559,100	12,990	0.65	228,700		0.195	9.91		0.020	1.14		0.000	0.007
5/14/15 12:15	DPE-1 - DPE-3, C-9	337.9	562,200	3,100	0.15	231,800	2,900	0.075	9.99	570	0.015	1.15	3	0.000	0.007
5/29/15 9:30	DPE-1 - DPE-3, C-9	357.3	576,000	13,800	0.64	245,600		0.334	10.3		0.066	1.22		0.000	0.007
6/23/15 11:45	DPE-1 - DPE-3, C-9	588.9	597,000	21,000	0.59	266,600	380	0.067	10.4	3	0.001	1.22	2	0.000	0.008
Agency Limits															
					Total Extracted Volume (gal):	**266,600**	**Pounds Removed:**	**0.067**	**10.4**	**Pounds Removed:**	**0.001**	**1.22**	**Pounds Removed:**	**0.00**	**0.01**
					Average Operational Flow Rate (gpm)[3]:	**0.65**	**Gallons Removed[4]:**	**0.01**	**1.71**	**Gallons Removed[4]:**	**0.00**	**0.17**	**Gallons Removed[4]:**	**0.00**	**0.00**

Reporting period from May 29,2015 through June 23, 2015

Number of Days during Reporting Period	**25**	**days**
Gallons of Extracted Ground Water	**21,000**	**gal**
Average Flow Rate	**0.58**	**gpm**
Pounds of TPHg Removed	**0.067**	**lbs**
TPHg Removal Rate	**0.003**	**lbs/day**
Pounds of Benzene Removed	**0.001**	**lbs**
Benzene Removal Rate	**0.000**	**lbs/day**
Pounds of MTBE Removed	**0.000**	**lbs**
MTBE Removal Rate	**0.000**	**lbs/day**

Cumulative Results Since Start-up:

Number Days since Startup	**284**	**days**
Cumulative Total Gallons Extracted	**266,600**	**gal**
Average Flow Rate[3]	**0.65**	**gpm**
Cumulative Pounds of TPHg Removed	**10.4**	**lbs**
TPHg Removal Rate	**0.037**	**lbs/day**
Cumulative Pounds of Benzene Removed	**1.22**	**lbs**
Benzene Removal Rate	**0.004**	**lbs/day**
Cumulative Pounds of MTBE Removed	**0.008**	**lbs**
MTBE Removal Rate	**0.000**	**lbs/day**

Formulas and Assumptions:

1. Hour meter readings taken at the end of the site visit
2. Mass Removed During the Period = Volume of Water Extracted (gallons) x Concentration (µg/L) x (g/10^6 µg) x (lb/453.6g)
3. When concentration of individual parameters were not detected, the concentration was assumed to be half the detecti
   Average Flow Rate = (Volume of Extracted Water (gal) / Number of Operational Days) * (60 minutes/hour) * (24 hours/d
4. Gallons Removed = (Mass (lb) / Density (g/cc)) x 453.6 (g/lb) x (L/1000 cc) x (gal/3.785 L)
   Density: = 0.73 g/cc TPHg
   = 0.88 g/cc Benzene
   = 0.74 g/cc MTBE

Abbreviations:

TPHg = total petroleum hydrocarbons as gasoline
MTBE = methyl tertiary butyl ether
L = liter
gal = gallon
gpm = gallon per minute
µg/L = micrograms per liter
g = grams
cc = cubic centimeter
NM = not measured
lb = pounds

Table 3
Soil Vapor Extraction System
Operational Data
Former Chevron Station # 95607
5269 Crow Canyon Road, Castro Valley, California

Date (mm/dd/yy hh:mm)	Operating Wells (open)	Operating Time (hours)	Hour Meter (hours)	System Uptime (%)	Period Operation (hours)	Blower Vacuum (inHg)	INF-1 Vacuum (inHg)	INF-1 Temperature (^oF)	INF-1 Measured Flow (acfm)	INF-1 Calculated Flow (scfm)	INF-2 Pressure[1] (inH_2O)	INF-2 Temperature (^oF)	INF-2 Measured Flow[1] (acfm)	INF-2 Calculated Flow (scfm)	Effluent Flow Rate (scfm)	Dilution Air (% open)	Pre-Oxidizer Temp (^oF)	Post-Oxidizer Temp (^oF)	INF-2 OVA (ppmv)	Effluent PID (ppmv)	Mass Removal based on OVA (ppd)	Destruction Efficiency (%)
9/12/14 14:00	C9, DPE-1 - DPE3, VEW-1, VEW-2	0.0	4013.5	0%	0.0	NM	3.00	NM	NM	NM	10.0	155	294	259	259	20	747	NM	8000	20.0	663.8	99.8%
9/29/14 14:00	C9, DPE-1 - DPE3, VEW-1, VEW-2	5.5	4019.0	1.3%	5.5	15.0	2.81	93	165	143	11	189	255	213	213	20	880	NM	NM	0.0	NM	100.0%
10/6/14 11:00	C9, DPE-1 - DPE3, VEW-1, VEW-2	5.0	4024	3.0%	5.0	15.0	2.81	83	144	127	10	176	255	217	217	25	899	NM	560	0.2	39.0	100.0%
10/13/14 14:00	C9, DPE-1 - DPE-3	106.0	4130	62.0%	106.0	14.5	2.35	68	191	176	10.9	180	268	227	227	0	750	883	1100	5.0	80.1	99.5%
10/20/14 11:30	C9, DPE-1 - DPE-3	166.0	4296	100.3%	166.0	15.0	3.18	79	140	123	10.5	171	255	219	219	0	750	927	650	0.3	45.6	100.0%
10/27/14 11:00	C9, DPE-1, DPE-2	117.0	4413	69.9%	117.0	15.0	4.1	61	161	141	11.6	160	270	236	236	0	750	897	700	0.4	53.1	99.9%
11/6/14 13:15	C9, DPE-3, DPE-2	67.0	4480	27.7%	67.0	20.0	5.0	61	146	123	10.7	61	146	152	123	0	701	900	1250	0.0	60.9	100.0%
11/21/14 13:50	C9, DPE-3, DPE-2	188.6	4669	52.3%	188.6	20.0	5.3	68	132	109	11.1	174	176	151	109	0	698	809	558	0.4	27.0	99.9%
12/2/14 15:15	C9, DPE-3, DPE-2	113.3	4782	42.7%	113.3	20.0	7.4	63	103	78	3.3	169	157	133	78	0	697	785	1215	0.5	51.8	100.0%
12/16/14 11:30	C9, DPE-3, DPE-2	249.1	5031	75.0%	249.1	18.5	10.2	64	61	41	4.3	172	118	100	100	0	700	750	1650	3.0	52.7	99.8%
12/31/14 10:30	C9, DPE-3, DPE-2	359.1	5390	100.0%	359.1	22.0	10.0	72	133	88	7.2	179	133	112	112	0	698	707	425	5.0	15.2	98.8%
1/14/15 11:25	C9, DPE-3, DPE-2	336.5	5727	99.9%	336.5	23.0	8.1	71	148	107	9.8	176	148	126	126	0	700	752	1,000	0.5	40.4	100%
1/23/15 14:35	C9, DPE-3, DPE-2	219.1	5946	100.0%	219.1	23.0	7.1	76	157	118	9.6	174	157	134	134	0	700	764	915	3.5	39.3	99.6%
2/4/15 11:00	C9 DPE-2	281.0	6227	98.8%	281.0	22.0	8.3	75	137	98	5.9	183	137	114	114	0	698	738	715	0.7	26.2	99.9%
2/17/15 14:30	C9 DPE-2	82.3	6309	26.1%	82.3	21.5	10.1	62	136	91	6.9	170	136	116	116	0	698	682	515	0.1	19.2	100.0%
3/3/15 14:25	C9 DPE-1	167.0	6476	49.7%	167.0	23.0	11.1	79	118	73	4.0	185	118	98	98	0	690	698	295	0.4	9.2	99.9%
3/11/15 11:45	C9 DPE-3	25.9	6502	13.7%	25.9	23.0	10.9	67	118	75	7.2	151	118	104	104	0	710	740	480	0.2	16.0	100.0%
3/16/15 12:00	C9 DPE-3	28.7	6531	23.9%	28.7	23.0	10.2	67	121	80	7.1	175	121	102	102	0	700	689	235	0.0	7.7	100.0%
4/2/15 9:30	C9 DPE-3	223.8	6754	55.2%	223.8	23.0	8.4	73	146	104	10.0	177	146	124	124	0	698	688	125	0.4	5.0	99.7%
4/16/15 14:30	DPE-2, DPE-3	340.8	7095	99.9%	340.8	23.0	8.4	87	137	95	6.8	199	137	112	112	0	699	700	210	0.6	7.5	99.7%
4/30/15 10:20	DPE-1, DPE-2	236.9	7332	71.4%	236.9	23.0	8.2	86	137	96	4.6	193	137	112	112	0	701	699	140	0.8	5.0	99.4%
5/14/15 12:15	DPE-1, VEW-2	21.2	7353	6.3%	21.2	23.0	13.0	81	98	54	1.9	187	223	183	183	40	698	693	75	0.0	4.4	100.0%
5/29/15 9:30	DPE-1, VEW-2	259.6	7613	72.7%	259.6	23.0	11.8	79	44	26	4.2	180	118	98	98	50	699	724	190	2.3	6.0	98.8%
6/23/15 11:45	DPE-1, VEW-2	177.9	7791	29.5%	177.9	23.0	10.1	79	175	114	5.6	190	118	97	97	0	700	746	280	2.0	8.7	99.3%
Reporting Period				**29.5%**	**177.9**										**98**							**99.0%**
Permit Conditions:										**<300**				**<300**				**>600**				**>98.5%**

Abbreviations and Notes:

Reporting period from May 29,2015 through June 23, 2015

mm/dd/yy = month/day/year
hh:mm = hour : minute
inHg = inches of mercury
inH_2O = inches of water
^oF = degrees Fahrenheit
acfm = actual cubic feet per minute
scfm = standard cubic feet per minute (flow in scfm = flow in acfm * [operating pressure{abs} / standard pressure {abs}] * [standard temperature {abs} / operating temperature {abs}])
% = percentage
INF-1 = pre-dilution system influent
INF-2 = post-dilution system influent
NM = not measured
LEL = Lower Explosive Limit
ppmv = parts per million by volume
PID = photo-ionization detector
FID = flame ionization detector
OVA = organic vapor analyzer
ppd = pounds per day
1. = INF-2 flow read from chart recorder. INF-2 pressure used to convert acfm to scfm.

Compliance:

BAAQMD Requirements:
Flow Rate < 300 scfm
Oxidizer Temperature > 600 degrees Fahrenheit in electric catalytic mode and > 1400 degrees in thermal catalytic mode
Benzene Emission Limit < 0.017ppd
Destruction Efficiency (measured as hexane)
98.50% VOC >2,000 ppmv
97.00% VOC >200 and <2,000 ppmv
90.00% VOC < 200 ppmv
Note: If outlet VOC < 10 ppmv, destruction efficiency requirement is waived

Table 4
Soil Vapor Extraction System
Analytical Mass Removal Data
Former Chevron Station # 95607
5269 Crow Canyon Road, Castro Valley, California

Date	Concentrations[1]								TPHg			Benzene			MTBE			VOC		
	INF-2					Effluent														
(mm/dd/yy hh:mm)	Operating Wells	TPHg (ppmv)	Benzene (ppmv)	MTBE (ppmv)	VOC (ppmv)	TPHg (ppmv)	Benzene (ppmv)	MTBE (ppmv)	VOC (ppmv)	Removal Rate[2, 6] (ppd)	Cumulative Removed[7] (pounds)	Emission Rate[2, 6] (ppd)	Removal Rate[3, 6] (ppd)	Cumulative Removed[7] (pounds)	Emission Rate[3, 6] (ppd)	Removal Rate[4, 6] (ppd)	Cumulative Removed[7] (pounds)	Emission Rate[4, 6] (ppd)	Removal Rate[5, 6] (ppd)	Emission Rate[5, 6] (ppd)	Destruction Efficiency (%)
9/12/14 14:00	C9, DPE-1 - DPE3, VE-1, VE-2	4,200	44	38	4,282	46	0.39	0.19	46.58	348.5	0.0	3.8	3.3	0.0	0.0	3.2	0.0	0.0	355.3	4.0	98.9%
9/29/14 14:00	C9, DPE-1 - DPE3, VE-1, VE-2	--	--	--	--	--	--	--	--	287.1	72.8	3.1	2.7	0.7	0.0	2.7	0.7	0.0	292.7	3.3	98.9%
10/6/14 11:00	C9, DPE-1 - DPE3, VE-1, VE-2	--	--	--	--	--	--	--	--	292.3	133.2	3.2	2.8	1.3	0.0	2.7	1.2	0.0	298.0	3.3	98.9%
10/13/14 11:00	C9, DPE-1 - DPE-3	1,500	10	< 20	1,530	<5	< 0.5	< 0.5	< 6.0	109.3	1019.9	0.4	0.7	8.9	0.0	1.5	10.5	0.0	111.4	0.4	99.6%
10/20/14 11:30	C9, DPE-1 - DPE-3	--	--	--	--	--	--	--	--	105.3	1762.0	0.4	0.6	13.3	0.0	1.4	20.6	0.0	107.4	0.4	99.6%
10/27/14 11:00	C9, DPE-1, DPE2	--	--	--	--	--	--	--	--	113.8	2296.2	0.4	0.7	16.6	0.0	1.6	27.9	0.0	116.1	0.5	99.6%
11/6/14 13:15	C9, DPE-2, DPE3	--	--	--	--	--	--	--	--	73.1	2557.0	0.2	0.4	18.2	0.0	1.0	31.5	0.0	74.5	0.2	99.6%
11/21/14 13:50	C9, DPE-2, DPE-3*	558	0.01	0.01	558	0.31	0.0020	< 0.0020	0.31	27.0	2950.0	0.0	0.0	19.9	0.0	0.0	35.4	0.0	27.0	0.0	99.9%
12/2/14 15:15	C9, DPE-2, DPE-3	1,000	12	9	1,021	0.23	0.0012	< 0.0010	0.23	42.6	3114.3	0.0	0.5	21.0	0.0	0.4	36.3	0.0	43.5	0.0	100.0%
12/16/14 11:30	C9, DPE-2, DPE-3	--	--	--	--	--	--	--	--	32.0	3501.4	0.0	0.3	25.2	0.0	0.3	39.8	0.0	32.6	0.0	100.0%
12/31/14 10:30	C9, DPE-2, DPE-3	--	--	--	--	--	--	--	--	35.9	4008.9	0.0	0.4	30.7	0.0	0.3	44.4	0.0	36.6	0.0	100.0%
1/14/15 11:25	C9, DPE-2, DPE-3	870	13.00	4.7	888	0.08	<0.0010	<0.0010	0.08	35.1	4506.7	0.0	0.5	36.8	0.0	0.2	48.0	0.0	35.8	0.0	100.0%
1/23/15 14:35	C9, DPE-2, DPE-3	--	--	--	--	--	--	--	--	37.4	4837.5	0.0	0.5	41.3	0.0	0.2	49.8	0.0	38.1	0.0	100.0%
2/4/15 11:00	C9 DPE-2	800	17	7	824	1.5	0.014	0.0012	1.52	29.3	5227.7	0.1	0.6	47.5	0.0	0.3	52.6	0.0	30.2	0.1	99.8%
2/17/15 14:30	C9 DPE-2	--	--	--	--	--	--	--	--	29.8	5328.9	0.1	0.6	49.5	0.0	0.3	53.6	0.0	30.7	0.1	99.8%
3/3/15 14:25	C9 DPE-1	320	5.4	2.5	328	0.076	<0.0010	<0.0010	0.078	10.0	5467.3	0.0	0.2	52.0	0.0	0.1	54.8	0.0	10.3	0.0	100.0%
3/11/15 11:45	C9 DPE-3	--	--	--	--	--	--	--	--	10.7	5478.4	0.0	0.2	52.2	0.0	0.1	54.9	0.0	10.9	0.0	100.0%
3/16/15 12:00	C9 DPE-3	--	--	--	--	--	--	--	--	10.5	5491.1	0.0	0.2	52.4	0.0	0.1	55.0	0.0	10.8	0.0	100.0%
4/2/15 9:30	C9 DPE-3	--	--	--	--	--	--	--	--	12.7	5599.5	0.0	0.2	54.1	0.0	0.1	55.9	0.0	13.1	0.0	100.0%
4/16/15 14:30	DPE-2, DPE-3	250	2.7	1.1	254	0.84	0.0080	0.0020	0.850	9.0	5753.5	0.0	0.1	56.1	0.0	0.0	56.9	0.0	9.1	0.0	99.7%
4/30/15 10:20	DPE-1, DPE-2	--	--	--	--	--	--	--	--	9.0	5842.0	0.0	0.1	56.9	0.0	0.0	57.3	0.0	9.1	0.0	99.7%
5/14/15 12:15	DPE-1, VEW-2	160	2.8	0.71	164	0.11	<0.0010	<0.0010	0.112	9.4	5850.1	0.0	0.1	57.0	0.0	0.0	57.3	0.0	9.6	0.0	99.9%
5/29/15 9:30	DPE-1, VEW-2	--	--	--	--	--	--	--	--	5.0	5928.2	0.0	0.1	58.3	0.0	0.0	57.7	0.0	5.2	0.0	99.9%
6/23/15 11:45	DPE-1, VEW-2	2,300	35	11	2,346	0.48	<0.0010	<0.0010	0.482	71.7	6212.7	0.0	1.0	62.2	0.0	0.4	59.1	0.0	73.1	0.0	100.0%
Permit conditions															<0.017 ppd						>98.5% for >2,000 ppm inlet >97% for >200-<2,000 ppm inlet >90% for <200 ppm inlet
										Period Pounds Removed[9]:			**TPHg =**	**284.5**		**Benzene =**	**4.0**		**MTBE =**	**1.4**	
										Total Pounds Removed:			**TPHg =**	**6,213**		**Benzene =**	**62.2**		**MTBE =**	**59.1**	

Notes:

1. TPHg, Benzene, and MTBE analyzed by EPA Method 8015/8020. Vapor samples were collected in 1-liter tedlar bags unless otherwise noted.
2. Molecular weight of TPHg assumed to be 86 lb/lb-mole as hexane.
3. Molecular weight of Benzene assumed to be 78 lb/lb-mole.
4. Molecular weight of MTBE assumed to be 88 lb/lb-mole.
5. Molecular weight of VOCs assumed to be 86 lb/lb-mole as hexane.
6. Removal/Emission Rate (ppd) = C (ppmv) x Q (scfm) x (1lb-mole/386ft^3) x MW (lb/lb-mole) x 60 min/hr x 24 hr/day x 10^{-6}
   C = concentration
   Q = flow
   MW = molecular weight
7. Cumulative TPHg / Benzene / MTBE removed = Previous Total + (Average of Previous and Current Removal Rates * Operation Interval)
8. Infilluent not measured due to water in vapor stream. Individual well samples were collected at a lower vacuum at this time.
9. Reporting period from May 29,2015 through June 23, 2015

BAAQMD Requirements:

Flow Rate < 300 scfm

Oxidizer Temperature > 600 deg Fahrenheit in electric catalytic mode and > 1400 degrees in thermal catalytic mode

Benzene Emission Limit < 0.017 ppd

Destruction efficiency (measured as hexane)

98.50% VOC >2,000 ppmv
97.00% VOC >200 and <2,000 ppmv
90.00% VOC < 200 ppmv
Note: If outlet VOC < 10 ppmv, destruction efficiency requirement is waived

Abbreviations:

mm/dd/yy = month/day/year
hh:mm = hours : minutes
TPHg = total petroluem hydrocarbons as gasoline
MTBE = methyl tertiary butyl ether
VOC = volatile organic compounds
ppmv = parts per million by volume
ppd = pounds per day
lb = pounds
ft^3 = cubic feet
scfm = standard cubic feet per minute
INF-1 = pre-dilution system influent
INF-2 = post-dilution system influent

Attachment A
Air Toxics Laboratory Analytical Report

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7/8/2015
Ms. Judy Gilbert
Conestoga-Rovers Associates (CRA)
5900 Hollis Street
Suite A
Emeryville CA 94608

Project Name: Castro Valley
Project #: 311950 2015.1 94.09
Workorder #: 1506442

Dear Ms. Judy Gilbert

The following report includes the data for the above referenced project for sample(s) received on 6/24/2015 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-3 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kyle Vagadori at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kyle Vagadori

Project Manager

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WORK ORDER #: 1506442

Work Order Summary

CLIENT:	Ms. Judy Gilbert Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608	**BILL TO:**	Accounts Payable Chevron U.S.A. Inc. 6001 Bollinger Canyon Road L4310 San Ramon, CA 94583
PHONE:	510-420-3314	**P.O. #**	311950 2015.1 94.09
FAX:	510-420-9170	**PROJECT #**	311950 2015.1 94.09 Castro Valley
DATE RECEIVED:	06/24/2015	**CONTACT:**	Kyle Vagadori
DATE COMPLETED:	07/08/2015		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	EFF	Modified TO-3	Tedlar Bag	Tedlar Bag
02A	INF	Modified TO-3	Tedlar Bag	Tedlar Bag
03A	Lab Blank	Modified TO-3	NA	NA
04A	LCS	Modified TO-3	NA	NA
04AA	LCSD	Modified TO-3	NA	NA
04B	LCS	Modified TO-3	NA	NA
04BB	LCSD	Modified TO-3	NA	NA

CERTIFIED BY: Heidi Mayo DATE: 07/08/15

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 9563
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-3
Conestoga-Rovers Associates (CRA)
Workorder# 1506442

Two Client Tedlar Bag samples were received on June 24, 2015. The laboratory performed analysis for volatile organic compounds in air via modified EPA Method TO-3 using gas chromatography with photo ionization and flame ionization detection. The TPH results are calculated using the response of Gasoline. A molecular weight of 100 is used to convert the TPH ppmv result to ug/L. The method involves concentrating up to 200 mL of sample. The concentrated aliquot is then dry purged to remove water vapor prior to entering the chromatographic system.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	***TO-3***	***ATL Modifications***
Daily Calibration Standard Frequency	Prior to sample analysis and every 4 - 6 hrs	Prior to sample analysis and after the analytical batch </= 20 samples.
Initial Calibration Calculation	4-point calibration using a linear regression model	5-point calibration using average Response Factor
Initial Calibration Frequency	Weekly	When daily calibration standard recovery is outside 75 - 125 %, or upon significant changes to procedure or instrumentation
Moisture Control	Nafion system	Sorbent system
Minimum Detection Limit (MDL)	Calculated using the equation DL = A+3.3S, where A is intercept of calibration line and S is the standard deviation of at least 3 reps of low level standard	40 CFR Pt. 136 App. B
Preparation of Standards	Levels achieved through dilution of gas mixture	Levels achieved through loading various volumes of the gas mixture

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The recovery of surrogate Fluorobenzene in sample INF was outside control limits due to high level hydrocarbon matrix interference. Data is reported as qualified.

Total Xylenes concentration is calculated by summing the individual concentrations of m,p-Xylene and O-Xylene.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:
B - Compound present in laboratory blank greater than reporting limit.
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the detection limit.
M - Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
MODIFIED EPA METHOD TO-3 GC/PID/FID

Client Sample ID: EFF

Lab ID#: 1506442-01A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
Toluene	0.0010	0.0038	0.0049	0.018
Ethyl Benzene	0.0010	0.0043	0.0010	0.0045
Total Xylenes	0.0020	0.0087	0.0068	0.029
TPH (Gasoline Range)	0.025	0.10	0.48	1.9

Client Sample ID: INF

Lab ID#: 1506442-02A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
Benzene	0.16	0.51	35 M	110 M
Toluene	0.16	0.60	8.9	34
Ethyl Benzene	0.16	0.69	4.4	19
Total Xylenes	0.32	1.4	43	190
Methyl tert-butyl ether	0.16	0.58	11	38
TPH (Gasoline Range)	4.0	16	2300	9500

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Client Sample ID: EFF

Lab ID#: 1506442-01A

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Name:	**d062507**	**Date of Collection:**	**6/23/15 11:30:00 AM**
Dil. Factor:	**1.00**	**Date of Analysis:**	**6/25/15 11:35 AM**

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
Benzene	0.0010	0.0032	Not Detected	Not Detected
Toluene	0.0010	0.0038	0.0049	0.018
Ethyl Benzene	0.0010	0.0043	0.0010	0.0045
Total Xylenes	0.0020	0.0087	0.0068	0.029
Methyl tert-butyl ether	0.0010	0.0036	Not Detected	Not Detected
TPH (Gasoline Range)	0.025	0.10	0.48	1.9

Container Type: Client Tedlar Bag

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	96	75-150
Fluorobenzene (PID)	119	75-125

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Client Sample ID: INF

Lab ID#: 1506442-02A

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Name:	**d062510**	**Date of Collection: 6/23/15 11:35:00 AM**	
Dil. Factor:	**160**	**Date of Analysis: 6/25/15 01:46 PM**	

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
Benzene	0.16	0.51	35 M	110 M
Toluene	0.16	0.60	8.9	34
Ethyl Benzene	0.16	0.69	4.4	19
Total Xylenes	0.32	1.4	43	190
Methyl tert-butyl ether	0.16	0.58	11	38
TPH (Gasoline Range)	4.0	16	2300	9500

M = Reported value may be biased due to apparent matrix interferences.
Q = Exceeds Quality Control limits, due to matrix effects. Matrix effects confirmed by re-analysis.

Container Type: Client Tedlar Bag

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	196 Q	75-150
Fluorobenzene (PID)	204 Q	75-125

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Client Sample ID: Lab Blank

Lab ID#: 1506442-03A

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Name:	**d062505**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/25/15 10:19 AM**	

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
Benzene	0.0010	0.0032	Not Detected	Not Detected
Toluene	0.0010	0.0038	Not Detected	Not Detected
Ethyl Benzene	0.0010	0.0043	Not Detected	Not Detected
Total Xylenes	0.0020	0.0087	Not Detected	Not Detected
Methyl tert-butyl ether	0.0010	0.0036	Not Detected	Not Detected
TPH (Gasoline Range)	0.025	0.10	Not Detected	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	83	75-150
Fluorobenzene (PID)	103	75-125

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Client Sample ID: LCS

Lab ID#: 1506442-04A

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Name:	**d062504b**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/25/15 09:41 AM**	

Compound	%Recovery	Method Limits
Benzene	104	75-125
Toluene	100	75-125
Ethyl Benzene	99	75-125
Total Xylenes	103	75-125
Methyl tert-butyl ether	109	75-125

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorobenzene (PID)	99	75-125

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Client Sample ID: LCSD

Lab ID#: 1506442-04AA

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Name:	**d062518b**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/25/15 08:52 PM**	

Compound	%Recovery	Method Limits
Benzene	103	75-125
Toluene	96	75-125
Ethyl Benzene	92	75-125
Total Xylenes	97	75-125
Methyl tert-butyl ether	107	75-125

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorobenzene (PID)	103	75-125

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Client Sample ID: LCS

Lab ID#: 1506442-04B

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Name:	**d062502**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/25/15 08:40 AM**	

Compound	%Recovery	Method Limits
TPH (Gasoline Range)	95	75-125

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	85	75-150

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Client Sample ID: LCSD

Lab ID#: 1506442-04BB

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Name:	**d062519**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/25/15 09:28 PM**	

Compound	%Recovery	Method Limits
TPH (Gasoline Range)	93	75-125

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	86	75-150

Attachment B
Eurofins Lancaster Laboratory Analytical Report

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

July 21, 2015

Project: 95607

Submittal Date: 06/24/2015
Group Number: 1571820
PO Number: 0015164161
Release Number: HETRICK
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
EFF-1-W-150623 Grab Groundwater	7942163
MID-1-W-150623 Grab Groundwater	7942165
INF-1-W-150623 Grab Groundwater	7942166

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ .

ELECTRONIC COPY TO	CRA	Attn: Darrell Smolko
ELECTRONIC COPY TO	CRA	Attn: Judy Gilbert
ELECTRONIC COPY TO	Chevron	Attn: CRA EDD

Respectfully Submitted,

Amek Carter
Specialist

(717) 556-7252

Sample Description: EFF-1-W-150623 Grab Groundwater
Facility# 95607 CRAW
5269 Crow Canyon Rd-Castro T0600100344

LL Sample # WW 7942163
LL Group # 1571820
Account # 10880

Project Name: 95607

Collected: 06/23/2015 09:30 by GB

Submitted: 06/24/2015 09:20
Reported: 07/21/2015 13:24

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

-EF1-

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10335	Acetone	67-64-1	N.D.	6	20	1
10335	t-Amyl methyl ether	994-05-8	N.D.	0.5	1	1
10335	Benzene	71-43-2	N.D.	0.5	1	1
10335	Bromobenzene	108-86-1	N.D.	1	5	1
10335	Bromochloromethane	74-97-5	N.D.	1	5	1
10335	Bromodichloromethane	75-27-4	N.D.	0.5	1	1
10335	Bromoform	75-25-2	N.D.	0.5	4	1
10335	Bromomethane	74-83-9	N.D.	0.5	1	1
10335	2-Butanone	78-93-3	N.D.	3	10	1
10335	t-Butyl alcohol	75-65-0	N.D.	5	20	1
10335	n-Butylbenzene	104-51-8	N.D.	1	5	1
10335	sec-Butylbenzene	135-98-8	N.D.	1	5	1
10335	tert-Butylbenzene	98-06-6	N.D.	1	5	1
10335	Carbon Disulfide	75-15-0	N.D.	1	5	1
10335	Carbon Tetrachloride	56-23-5	N.D.	0.5	1	1
10335	Chlorobenzene	108-90-7	N.D.	0.5	1	1
10335	Chloroethane	75-00-3	N.D.	0.5	1	1
10335	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	2	10	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.					
10335	Chloroform	67-66-3	N.D.	0.5	1	1
10335	Chloromethane	74-87-3	N.D.	0.5	1	1
10335	2-Chlorotoluene	95-49-8	N.D.	1	5	1
10335	4-Chlorotoluene	106-43-4	N.D.	1	5	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	5	1
10335	Dibromochloromethane	124-48-1	N.D.	0.5	1	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1	1
10335	Dibromomethane	74-95-3	N.D.	0.5	1	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	5	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	5	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	5	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	0.5	1	1
10335	1,1-Dichloroethane	75-34-3	N.D.	0.5	1	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.5	1	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1	1
10335	1,2-Dichloropropane	78-87-5	N.D.	0.5	1	1
10335	1,3-Dichloropropane	142-28-9	N.D.	0.5	1	1
10335	2,2-Dichloropropane	594-20-7	N.D.	0.5	1	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	5	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1	1
10335	Ethanol	64-17-5	N.D.	50	250	1
10335	Ethyl t-butyl ether	637-92-3	N.D.	0.5	1	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1	1
10335	Freon 113	76-13-1	N.D.	2	10	1
10335	Hexachlorobutadiene	87-68-3	N.D.	2	5	1
10335	2-Hexanone	591-78-6	N.D.	3	10	1
10335	di-Isopropyl ether	108-20-3	N.D.	0.5	1	1

*=This limit was used in the evaluation of the final result

Sample Description: EFF-1-W-150623 Grab Groundwater
Facility# 95607 CRAW
5269 Crow Canyon Rd-Castro T0600100344

LL Sample # WW 7942163
LL Group # 1571820
Account # 10880

Project Name: 95607

Collected: 06/23/2015 09:30 by GB

Submitted: 06/24/2015 09:20
Reported: 07/21/2015 13:24

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

-EF1-

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**		**ug/l**	**ug/l**	
10335	Isopropylbenzene	98-82-8	N.D.		1	5	1
10335	p-Isopropyltoluene	99-87-6	N.D.		1	5	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.		0.5	1	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.		3	10	1
10335	Methylene Chloride	75-09-2	N.D.		2	4	1
10335	Naphthalene	91-20-3	N.D.		1	5	1
10335	n-Propylbenzene	103-65-1	N.D.		1	5	1
10335	Styrene	100-42-5	N.D.		1	5	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.		0.5	1	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.		0.5	1	1
10335	Tetrachloroethene	127-18-4	N.D.		0.5	1	1
10335	Toluene	108-88-3	N.D.		0.5	1	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.		1	5	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.		1	5	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.		0.5	1	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.		0.5	1	1
10335	Trichloroethene	79-01-6	N.D.		0.5	1	1
10335	Trichlorofluoromethane	75-69-4	N.D.		0.5	1	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.		1	5	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.		1	5	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.		1	5	1
10335	Vinyl Chloride	75-01-4	N.D.		0.5	1	1
10335	m+p-Xylene	179601-23-1	N.D.		0.5	1	1
10335	o-Xylene	95-47-6	N.D.		0.5	1	1
GC Volatiles	**SW-846 8015B**		**ug/l**		**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.		50	100	1
Metals	**SW-846 6020A**		**ug/l**		**ug/l**	**ug/l**	
06024	Antimony	7440-36-0	N.D.		0.33	2.0	1
06025	Arsenic	7440-38-2	5.9		0.82	4.0	1
06026	Barium	7440-39-3	193		0.58	4.0	1
06027	Beryllium	7440-41-7	N.D.		0.045	1.0	1
06028	Cadmium	7440-43-9	N.D.		0.17	1.0	1
06031	Chromium	7440-47-3	N.D.		0.50	4.0	1
06032	Cobalt	7440-48-4	N.D.		0.10	1.0	1
06033	Copper	7440-50-8	5.2		0.50	4.0	1
06035	Lead	7439-92-1	3.9		0.082	2.0	1
06038	Molybdenum	7439-98-7	1.3		0.25	1.0	1
06039	Nickel	7440-02-0	1.5	J	0.79	4.0	1
06041	Selenium	7782-49-2	N.D.		0.50	4.0	1
06042	Silver	7440-22-4	N.D.		0.13	1.0	1
06045	Thallium	7440-28-0	N.D.		0.15	1.0	1
06048	Vanadium	7440-62-2	N.D.		0.22	1.0	1
06049	Zinc	7440-66-6	13.3	J	2.4	30.0	1
	SW-846 7470A		**ug/l**		**ug/l**	**ug/l**	
00259	Mercury	7439-97-6	N.D.		0.050	0.20	1

*=This limit was used in the evaluation of the final result

Sample Description: EFF-1-W-150623 Grab Groundwater
Facility# 95607 CRAW
5269 Crow Canyon Rd-Castro T0600100344

LL Sample # WW 7942163
LL Group # 1571820
Account # 10880

Project Name: 95607

Collected: 06/23/2015 09:30 by GB

Submitted: 06/24/2015 09:20
Reported: 07/21/2015 13:24

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

-EF1-

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
Wet Chemistry	**SW-846 9012A**		ug/l	ug/l	ug/l	
08255	Total Cyanide (water)	57-12-5	N.D.	5.0	10	1
	SW-846 9066		ug/l	ug/l	ug/l	
02393	Phenols (water)	n.a.	N.D.	15	40	1
	EPA 1664A		ug/l	ug/l	ug/l	
08079	HEM (oil & grease)	n.a.	N.D.	1,400	5,000	1

General Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	8260 Full List w/ Sep. Xylenes	SW-846 8260B	1	N151881AA	07/07/2015 15:12	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	N151881AA	07/07/2015 15:12	Linda C Pape	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	15181C20A	07/01/2015 03:47	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	15181C20A	07/01/2015 03:47	Jeremy C Giffin	1
06024	Antimony	SW-846 6020A	1	151800639001A	07/06/2015 07:51	Choon Y Tian	1
06025	Arsenic	SW-846 6020A	1	151800639001A	07/06/2015 07:51	Choon Y Tian	1
06026	Barium	SW-846 6020A	1	151800639001D	07/06/2015 07:51	Choon Y Tian	1
06027	Beryllium	SW-846 6020A	1	151800639001A	07/06/2015 07:51	Choon Y Tian	1
06028	Cadmium	SW-846 6020A	1	151800639001A	07/06/2015 07:51	Choon Y Tian	1
06031	Chromium	SW-846 6020A	1	151800639001A	07/06/2015 07:51	Choon Y Tian	1
06032	Cobalt	SW-846 6020A	1	151800639001A	07/06/2015 07:51	Choon Y Tian	1
06033	Copper	SW-846 6020A	1	151800639001A	07/06/2015 07:51	Choon Y Tian	1
06035	Lead	SW-846 6020A	1	151800639001A	07/06/2015 07:51	Choon Y Tian	1
06038	Molybdenum	SW-846 6020A	1	151800639001C	07/06/2015 07:51	Choon Y Tian	1
06039	Nickel	SW-846 6020A	1	151800639001A	07/06/2015 07:51	Choon Y Tian	1
06041	Selenium	SW-846 6020A	1	151800639001B	07/06/2015 07:51	Choon Y Tian	1
06042	Silver	SW-846 6020A	1	151800639001A	07/06/2015 07:51	Choon Y Tian	1
06045	Thallium	SW-846 6020A	1	151800639001A	07/06/2015 07:51	Choon Y Tian	1
06048	Vanadium	SW-846 6020A	1	151800639001A	07/06/2015 07:51	Choon Y Tian	1
06049	Zinc	SW-846 6020A	1	151800639001A	07/06/2015 07:51	Choon Y Tian	1
00259	Mercury	SW-846 7470A	1	151775713004	06/29/2015 06:44	Damary Valentin	1
10639	ICPMS - Water, 3020A - U4	SW-846 3010A modified	1	151800639001	07/01/2015 09:39	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	151775713004	06/29/2015 00:10	Annamaria Kuhns	1
08255	Total Cyanide (water)	SW-846 9012A	1	15183117101A	07/02/2015 13:39	David A Seavey	1
02393	Phenols (water)	SW-846 9066	1	15188120101A	07/08/2015 12:38	David A Seavey	1

*=This limit was used in the evaluation of the final result

Sample Description: EFF-1-W-150623 Grab Groundwater
Facility# 95607 CRAW
5269 Crow Canyon Rd-Castro T0600100344

LL Sample # WW 7942163
LL Group # 1571820
Account # 10880

Project Name: 95607

Collected: 06/23/2015 09:30 by GB

Submitted: 06/24/2015 09:20
Reported: 07/21/2015 13:24

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

-EF1-

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08256	Cyanide Water Distillation	SW-846 9012A	1	15183117101A	07/02/2015 08:05	Nancy J Shoop	1
08123	Phenol Distillation (SW-846)	SW-846 9065	1	15188120101A	07/07/2015 09:50	Nancy J Shoop	1
08079	HEM (oil & grease)	EPA 1664A	1	15187807902A	07/06/2015 17:34	Michelle L Lalli	1

*=This limit was used in the evaluation of the final result

Sample Description: MID-1-W-150623 Grab Groundwater
Facility# 95607 CRAW
5269 Crow Canyon Rd-Castro T0600100344

LL Sample # WW 7942165
LL Group # 1571820
Account # 10880

Project Name: 95607

Collected: 06/23/2015 09:50 by GB

Submitted: 06/24/2015 09:20
Reported: 07/21/2015 13:24

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

-MD1-

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1	1
10945	Toluene	108-88-3	N.D.	0.5	1	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1	1
GC Volatiles	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	100	1

General Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	BTEX/MTBE	SW-846 8260B	1	D151872AA	07/06/2015 14:02	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D151872AA	07/06/2015 14:02	Daniel H Heller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	15181C20A	07/01/2015 04:15	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	15181C20A	07/01/2015 04:15	Jeremy C Giffin	1

*=This limit was used in the evaluation of the final result

Sample Description: INF-1-W-150623 Grab Groundwater
Facility# 95607 CRAW
5269 Crow Canyon Rd-Castro T0600100344

LL Sample # WW 7942166
LL Group # 1571820
Account # 10880

Project Name: 95607

Collected: 06/23/2015 10:00 by GB

Submitted: 06/24/2015 09:20
Reported: 07/21/2015 13:24

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

-IN1-

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	**ug/l**	
10945	Benzene	71-43-2	3	0.5	1	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	2	0.5	1	1
10945	Toluene	108-88-3	N.D.	0.5	1	1
10945	Xylene (Total)	1330-20-7	5	0.5	1	1
GC Volatiles	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	380	50	100	1

General Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	BTEX/MTBE	SW-846 8260B	1	D151872AA	07/06/2015 15:11	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D151872AA	07/06/2015 15:11	Daniel H Heller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	15181C20A	07/01/2015 04:42	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	15181C20A	07/01/2015 04:42	Jeremy C Giffin	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: ChevronTexaco Group Number: 1571820
Reported: 07/21/2015 13:24

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: D151872AA	Sample number(s): 7942165-7942166								
Benzene	N.D.	0.5	1	ug/l	94		78-120		
Ethylbenzene	N.D.	0.5	1	ug/l	93		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.5	1	ug/l	94		75-120		
Toluene	N.D.	0.5	1	ug/l	94		80-120		
Xylene (Total)	N.D.	0.5	1	ug/l	95		80-120		
Batch number: N151881AA	Sample number(s): 7942163								
Acetone	N.D.	6.	20	ug/l	102	94	55-129	8	30
t-Amyl methyl ether	N.D.	0.5	1	ug/l	98	100	75-120	2	30
Benzene	N.D.	0.5	1	ug/l	94	95	78-120	1	30
Bromobenzene	N.D.	1.	5	ug/l	96	98	80-120	2	30
Bromochloromethane	N.D.	1.	5	ug/l	103	103	80-120	1	30
Bromodichloromethane	N.D.	0.5	1	ug/l	93	94	73-120	1	30
Bromoform	N.D.	0.5	4	ug/l	92	93	52-123	1	30
Bromomethane	N.D.	0.5	1	ug/l	90	91	53-130	2	30
2-Butanone	N.D.	3.	10	ug/l	97	97	54-133	0	30
t-Butyl alcohol	N.D.	5.	20	ug/l	113	110	78-121	2	30
n-Butylbenzene	N.D.	1.	5	ug/l	98	98	68-120	0	30
sec-Butylbenzene	N.D.	1.	5	ug/l	102	102	75-120	0	30
tert-Butylbenzene	N.D.	1.	5	ug/l	95	94	80-120	0	30
Carbon Disulfide	N.D.	1.	5	ug/l	89	91	58-126	2	30
Carbon Tetrachloride	N.D.	0.5	1	ug/l	101	101	74-130	1	30
Chlorobenzene	N.D.	0.5	1	ug/l	101	103	80-120	2	30
Chloroethane	N.D.	0.5	1	ug/l	86	89	56-120	3	30
2-Chloroethyl Vinyl Ether	N.D.	2.	10	ug/l	86	88	44-143	3	30
Chloroform	N.D.	0.5	1	ug/l	95	95	80-120	0	30
Chloromethane	N.D.	0.5	1	ug/l	78	80	63-120	2	30
2-Chlorotoluene	N.D.	1.	5	ug/l	99	98	80-120	1	30
4-Chlorotoluene	N.D.	1.	5	ug/l	100	99	80-120	1	30
1,2-Dibromo-3-chloropropane	N.D.	2.	5	ug/l	86	87	56-120	1	30
Dibromochloromethane	N.D.	0.5	1	ug/l	99	98	72-120	1	30
1,2-Dibromoethane	N.D.	0.5	1	ug/l	102	103	80-120	1	30
Dibromomethane	N.D.	0.5	1	ug/l	98	100	80-120	1	30
1,2-Dichlorobenzene	N.D.	1.	5	ug/l	97	96	80-120	1	30
1,3-Dichlorobenzene	N.D.	1.	5	ug/l	98	97	80-120	0	30
1,4-Dichlorobenzene	N.D.	1.	5	ug/l	96	96	80-120	1	30
Dichlorodifluoromethane	N.D.	0.5	1	ug/l	78	79	55-127	2	30
1,1-Dichloroethane	N.D.	0.5	1	ug/l	93	94	80-120	1	30
1,2-Dichloroethane	N.D.	0.5	1	ug/l	97	97	72-127	0	30
1,1-Dichloroethene	N.D.	0.5	1	ug/l	94	95	76-124	1	30
cis-1,2-Dichloroethene	N.D.	0.5	1	ug/l	98	99	80-120	1	30
trans-1,2-Dichloroethene	N.D.	0.5	1	ug/l	100	98	80-120	2	30
1,2-Dichloropropane	N.D.	0.5	1	ug/l	96	98	80-120	2	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ChevronTexaco Group Number: 1571820
Reported: 07/21/2015 13:24

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,3-Dichloropropane	N.D.	0.5	1	ug/l	97	98	80-120	1	30
2,2-Dichloropropane	N.D.	0.5	1	ug/l	98	99	63-131	1	30
1,1-Dichloropropene	N.D.	1.	5	ug/l	94	96	80-126	2	30
cis-1,3-Dichloropropene	N.D.	0.5	1	ug/l	96	100	80-120	3	30
trans-1,3-Dichloropropene	N.D.	0.5	1	ug/l	98	100	76-120	2	30
Ethanol	N.D.	50.	250	ug/l	78	76	49-144	3	30
Ethyl t-butyl ether	N.D.	0.5	1	ug/l	95	97	69-120	2	30
Ethylbenzene	N.D.	0.5	1	ug/l	100	101	80-120	1	30
Freon 113	N.D.	2.	10	ug/l	97	98	67-127	1	30
Hexachlorobutadiene	N.D.	2.	5	ug/l	94	96	60-120	2	30
2-Hexanone	N.D.	3.	10	ug/l	100	100	50-131	1	30
di-Isopropyl ether	N.D.	0.5	1	ug/l	94	97	70-124	4	30
Isopropylbenzene	N.D.	1.	5	ug/l	94	95	80-120	0	30
p-Isopropyltoluene	N.D.	1.	5	ug/l	91	91	76-120	0	30
Methyl Tertiary Butyl Ether	N.D.	0.5	1	ug/l	99	102	75-120	3	30
4-Methyl-2-pentanone	N.D.	3.	10	ug/l	95	96	51-124	1	30
Methylene Chloride	N.D.	2.	4	ug/l	93	95	80-120	2	30
Naphthalene	N.D.	1.	5	ug/l	91	92	59-120	1	30
n-Propylbenzene	N.D.	1.	5	ug/l	99	100	80-120	1	30
Styrene	N.D.	1.	5	ug/l	93	94	80-120	1	30
1,1,1,2-Tetrachloroethane	N.D.	0.5	1	ug/l	99	100	80-120	0	30
1,1,2,2-Tetrachloroethane	N.D.	0.5	1	ug/l	90	91	70-120	0	30
Tetrachloroethene	N.D.	0.5	1	ug/l	105	107	80-120	2	30
Toluene	N.D.	0.5	1	ug/l	97	99	80-120	2	30
1,2,3-Trichlorobenzene	N.D.	1.	5	ug/l	89	91	69-120	2	30
1,2,4-Trichlorobenzene	N.D.	1.	5	ug/l	90	93	73-120	3	30
1,1,1-Trichloroethane	N.D.	0.5	1	ug/l	90	91	66-126	1	30
1,1,2-Trichloroethane	N.D.	0.5	1	ug/l	95	95	80-120	0	30
Trichloroethene	N.D.	0.5	1	ug/l	97	99	80-120	1	30
Trichlorofluoromethane	N.D.	0.5	1	ug/l	92	93	58-135	1	30
1,2,3-Trichloropropane	N.D.	1.	5	ug/l	98	95	76-120	2	30
1,2,4-Trimethylbenzene	N.D.	1.	5	ug/l	93	92	80-120	1	30
1,3,5-Trimethylbenzene	N.D.	1.	5	ug/l	98	99	80-120	1	30
Vinyl Chloride	N.D.	0.5	1	ug/l	84	87	69-120	4	30
m+p-Xylene	N.D.	0.5	1	ug/l	103	103	80-120	0	30
o-Xylene	N.D.	0.5	1	ug/l	102	101	80-120	1	30
Batch number: 15181C20A	Sample number(s): 7942163,7942165-7942166								
TPH-GRO N. CA water C6-C12	N.D.	50.	100	ug/l	93	93	80-139	0	30
Batch number: 151775713004	Sample number(s): 7942163								
Mercury	N.D.	0.050	0.20	ug/l	90		80-120		
Batch number: 151800639001A	Sample number(s): 7942163								
Antimony	N.D.	0.33	2.0	ug/l	86	102	80-120	17	20
Arsenic	N.D.	0.82	4.0	ug/l	105	118	80-120	12	20
Beryllium	N.D.	0.045	1.0	ug/l	105	108	80-120	3	20
Cadmium	N.D.	0.17	1.0	ug/l	105	108	80-120	2	20
Chromium	N.D.	0.50	4.0	ug/l	103	105	80-120	2	20
Cobalt	N.D.	0.10	1.0	ug/l	105	110	80-120	5	20
Copper	N.D.	0.50	4.0	ug/l	108	111	80-120	2	20
Lead	N.D.	0.082	2.0	ug/l	105	105	80-120	0	20
Nickel	N.D.	0.79	4.0	ug/l	108	113	80-120	4	20
Silver	N.D.	0.13	1.0	ug/l	104	109	80-120	5	20
Thallium	N.D.	0.15	1.0	ug/l	106	103	80-120	3	20
Vanadium	N.D.	0.22	1.0	ug/l	108	107	80-120	1	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

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Quality Control Summary

Client Name: ChevronTexaco Group Number: 1571820
Reported: 07/21/2015 13:24

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Zinc	N.D.	2.4	30.0	ug/l	112	116	80-120	3	20
Batch number: 151800639001B	Sample number(s): 7942163								
Selenium	N.D.	0.50	4.0	ug/l	106	108	80-120	2	20
Batch number: 151800639001C	Sample number(s): 7942163								
Molybdenum	N.D.	0.25	1.0	ug/l	103	105	80-120	2	20
Batch number: 151800639001D	Sample number(s): 7942163								
Barium	N.D.	0.58	4.0	ug/l	107	116	80-120	8	20
Batch number: 15183117101A	Sample number(s): 7942163								
Total Cyanide (water)	N.D.	5.0	10	ug/l	100		90-110		
Batch number: 15188120101A	Sample number(s): 7942163								
Phenols (water)	N.D.	15.	40	ug/l	102		82-109		
Batch number: 15187807902A	Sample number(s): 7942163								
HEM (oil & grease)	N.D.	1,400.	5,000	ug/l	95	90	78-114	6	11

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: D151872AA	Sample number(s): 7942165-7942166 UNSPK: 7942165								
Benzene	85	87	72-134	3	30				
Ethylbenzene	84	88	71-134	4	30				
Methyl Tertiary Butyl Ether	79	84	72-126	7	30				
Toluene	84	88	80-125	5	30				
Xylene (Total)	85	89	79-125	5	30				
Batch number: N151881AA	Sample number(s): 7942163 UNSPK: P941843								
Acetone	84	87	35-144	4	30				
t-Amyl methyl ether	98	101	65-117	3	30				
Benzene	100	101	72-134	1	30				
Bromobenzene	98	100	82-115	2	30				
Bromochloromethane	107	106	76-134	0	30				
Bromodichloromethane	96	97	73-125	1	30				
Bromoform	92	94	48-118	2	30				
Bromomethane	93	96	47-129	3	30				
2-Butanone	90	92	44-135	1	30				
t-Butyl alcohol	107	112	67-119	4	30				
n-Butylbenzene	105	106	74-134	1	30				
sec-Butylbenzene	108	111	74-137	3	30				
tert-Butylbenzene	101	104	81-121	4	30				
Carbon Disulfide	98	99	53-149	2	30				
Carbon Tetrachloride	112	112	75-148	0	30				
Chlorobenzene	105	106	87-124	0	30				
Chloroethane	94	93	55-130	1	30				
2-Chloroethyl Vinyl Ether	85	86	10-151	2	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ChevronTexaco Group Number: 1571820
Reported: 07/21/2015 13:24

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Chloroform	99	100	81-134	1	30				
Chloromethane	82	86	61-125	4	30				
2-Chlorotoluene	102	104	82-118	2	30				
4-Chlorotoluene	102	105	84-122	3	30				
1,2-Dibromo-3-chloropropane	85	90	50-123	5	30				
Dibromochloromethane	101	103	74-116	2	30				
1,2-Dibromoethane	102	104	77-116	2	30				
Dibromomethane	98	99	83-119	1	30				
1,2-Dichlorobenzene	99	101	84-119	2	30				
1,3-Dichlorobenzene	100	103	86-121	3	30				
1,4-Dichlorobenzene	99	101	85-121	1	30				
Dichlorodifluoromethane	85	87	58-156	3	30				
1,1-Dichloroethane	98	101	84-129	3	30				
1,2-Dichloroethane	99	99	63-142	0	30				
1,1-Dichloroethene	103	105	79-137	2	30				
cis-1,2-Dichloroethene	102	104	80-141	2	30				
trans-1,2-Dichloroethene	105	108	86-131	3	30				
1,2-Dichloropropane	100	100	83-124	0	30				
1,3-Dichloropropane	97	100	81-120	3	30				
2,2-Dichloropropane	105	108	69-135	2	30				
1,1-Dichloropropene	103	105	86-137	3	30				
cis-1,3-Dichloropropene	100	103	70-116	3	30				
trans-1,3-Dichloropropene	101	102	74-119	1	30				
Ethanol	73	78	53-146	7	30				
Ethyl t-butyl ether	97	99	74-122	3	30				
Ethylbenzene	107	107	71-134	1	30				
Freon 113	110	111	89-148	1	30				
Hexachlorobutadiene	101	105	56-134	4	30				
2-Hexanone	95	98	38-131	3	30				
di-Isopropyl ether	96	100	70-129	4	30				
Isopropylbenzene	100	102	75-128	2	30				
p-Isopropyltoluene	96	98	76-123	2	30				
Methyl Tertiary Butyl Ether	100	103	72-126	3	30				
4-Methyl-2-pentanone	93	96	45-128	3	30				
Methylene Chloride	96	99	78-133	3	30				
Naphthalene	90	94	52-125	4	30				
n-Propylbenzene	104	106	74-134	2	30				
Styrene	97	97	78-125	0	30				
1,1,1,2-Tetrachloroethane	102	103	80-123	1	30				
1,1,2,2-Tetrachloroethane	91	91	72-128	0	30				
Tetrachloroethene	112	113	80-128	1	30				
Toluene	103	105	80-125	2	30				
1,2,3-Trichlorobenzene	91	93	62-133	2	30				
1,2,4-Trichlorobenzene	92	96	56-137	4	30				
1,1,1-Trichloroethane	97	99	69-140	2	30				
1,1,2-Trichloroethane	96	97	71-141	2	30				
Trichloroethene	104	108	88-133	3	30				
Trichlorofluoromethane	98	102	63-163	4	30				
1,2,3-Trichloropropane	97	98	76-118	1	30				
1,2,4-Trimethylbenzene	98	98	72-130	0	30				
1,3,5-Trimethylbenzene	103	103	65-132	0	30				
Vinyl Chloride	90	94	66-133	4	30				

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ChevronTexaco Group Number: 1571820
Reported: 07/21/2015 13:24

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
m+p-Xylene	111	110	79-125	1	30				
o-Xylene	105	107	79-125	1	30				
Batch number: 151775713004	Sample number(s): 7942163 UNSPK: 7942163 BKG: 7942163								
Mercury	84	80	80-120	5	20	N.D.	N.D.	0 (1)	20
Batch number: 15183117101A	Sample number(s): 7942163 UNSPK: P944552 BKG: P944552								
Total Cyanide (water)	107		72-114			N.D.	N.D.	0 (1)	20
Batch number: 15188120101A	Sample number(s): 7942163 UNSPK: P944209								
Phenols (water)	83	108	82-109	26*	8				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: BTEX/MTBE
Batch number: D151872AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7942165	100	98	98	98
7942166	100	96	99	99
Blank	99	96	98	98
LCS	99	101	98	99
MS	100	101	97	99
MSD	101	102	98	99
Limits:	80-116	77-113	80-113	78-113

Analysis Name: 8260 Full List w/ Sep. Xylenes
Batch number: N151881AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7942163	108	105	98	91
Blank	105	106	99	92
LCS	103	103	103	100
LCSD	103	102	103	100
MS	103	103	103	101
MSD	102	102	102	99
Limits:	80-116	77-113	80-113	78-113

Analysis Name: TPH-GRO N. CA water C6-C12
Batch number: 15181C20A

	Trifluorotoluene-F
7942163	94
7942165	95
7942166	103
Blank	95
LCS	106
LCSD	106

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ChevronTexaco Group Number: 1571820
Reported: 07/21/2015 13:24

Surrogate Quality Control

Limits: 63-135

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Environmental Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories Environmental

Acct. # 10880 Group # 1571820 Sample # 7942163-67

Client: **Chevron EMC**			
Project Name/#: Castro Valley	Site ID #: 95607		
Project Manager: Judy Gilbert	P.O. #: Direct Bill To Chevro		
Sampler: GREG BRUSKI	PWSID #:		
Phone #: 707 332 8265	Quote #:		
State where sample(s) were collected: GWE Effluent			

Matrix: ☐ Soil ☐ Sediment ☑ Water ☐ Potable ☐ Ground ☐ NPDES ☐ Surface ☐ Other:

For Lab Use Only: SF #: _____ SCR #: _____

Preservation Codes: H = HCl; T = Thiosulfate; N = HNO_3; B = NaOH; S = H_2SO_4; P = H_3PO_4; O = Other

Sample Identification	Collection Date	Collection Time	Grab	Composite	Total # of Containers	TPH-g by 8015M	BTEX by 8260	MTBE by 8260	METALS by 6020B	VOCs by 8260	TOG by 1664A	Phenolics by 9065	CN by 9016	Remarks
EFF-1	6.23.15	0930	X		11	X	X	X	X	X	X	X	X	
MID-2	6.23.15	0940	X		6	X	X	X						HOLD MID-2, SAMPLE ONLY IF MID-1 > N.D.
MID-1	6.23.15	0950	X		6	X	X	X						
INF-1	6.23.15	1000	X		6	X	X	X						

Turnaround Time Requested (TAT) (please check): Standard ☑ Rush ☐
(Rush TAT is subject to laboratory approval and surcharges.)

Date results are needed:

Rush results requested by (please check): E-Mail ☐ Phone ☐

E-mail Address: jgilbert@craworld.com dsmolko@craworld.com

Phone:

Data Package Options (please check if required)

Type I (Validation/non-CLP) ☐ MA MCP ☐
Type III (Reduced non-CLP) ☐ CT RCP ☐
Type IV (CLP SOW) ☐ TX TRRP-13 ☐
Type VI (Raw Data Only) ☐

EDD Required? Yes ☑ No ☐ If yes, format: Zip File

	Relinquished by:	Date	Time	Received by:	Date	Time
1	BRUSKI	6.23.15	1415			
2						
3						
4						
5				Received by:	Date 6.24.15	Time 920

Relinquished by Commercial Carrier: UPS _____ FedEx X Other _____

Temperature upon receipt 2.2 °C

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

<	less than
>	greater than
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.
ppb	parts per billion
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Laboratory Data Qualifiers:

B - Analyte detected in the blank
C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and the < Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference…

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, ISO17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.