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

December 1, 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

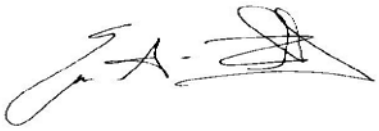
I have reviewed the attached Monthly Remedial Progress Report – October 2015.

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, 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 – October 2015

December 1, 2015 Reference No. 311950

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

Re: Monthly Remedial Progress Report – October 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 (EMC), is providing this *Monthly Remedial Progress Report – October 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 monthly and cumulative summary of the dual-phase extraction (DPE) system operations for the reporting period between September 16, 2015 and October 28, 2015 (Tables 1 through 4).

The soil vapor extraction (SVE) portion of the DPE system has been shut down for repair since July 4, 2015 due to equipment malfunction. On October 14 & 15, 2015, GHD and its contractor repaired, tested, and collected a compliance effluent sample from the SVE unit. The system was temporarily shut down until the effluent vapor sample could be verified to be in compliance with air discharge permit conditions. The SVE unit was restarted on October 22, 2015 with wells DPE-1 and VEW-1 being utilized as extraction wells. However, at around 11:30pm on the night of the system startup, the SVE unit shut down due to a high LEL alarm inside of the enclosure. On October 28, 2015, a GHD technician replaced and calibrated the LEL meters inside of the SVE and GWE enclosures. The SVE system has been operational since October 28, 2015. During the reporting period, approximately 59.2 pounds of TPHg and 0.83 pound of benzene were removed via the vapor phase (Table 4).

GHD continued the operation of the groundwater extraction and treatment system (GWET) in the month of October 2015. GWET system compliance testing and sampling was performed on October 1, 2015 in accordance with system operational permits. During the reporting period, approximately 0.12 pounds of TPHg and 0.006 pounds of benzene were removed via the dissolved

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

phase (Table 2). A summary of the DPE system operational performance for the month of October 2015 is presented below.

VAPOR-PHASE EXTRACTION DATA - OCTOBER 2015

Soil Vapor Influent Flow Rate (average scfm)	131 scfm
Soil Vapor Laboratory Influent Concentrations (TPHg ppmv)	1,000 ppmv
Soil Vapor Laboratory Influent Concentrations (Benzene ppmv)	18 ppmv
Soil Vapor Mass Removal (lb TPHg/period)	59.2 pounds
Soil Vapor Mass Removal (lb Benzene/period)	0.83 pound
Soil Vapor Extraction Period Operating Uptime (hours)	29 hours
Soil Vapor Treatment Destruction Efficiency (%)	100%

ppmv – parts per million by volume
scfm – standard cubic feet per minute

DISSOLVED-PHASE EXTRACTION DATA - OCTOBER 2015

Maximum Groundwater Extraction Rate (gpm)	0.44 gpm
Average Groundwater Extraction Rate (gpm)	0.24 gpm
Dissolved-Phase Mass Removal Rate (lb TPHg/period)	0.12 pounds
Dissolved-Phase Mass Removal Rate (lb Benzene/period)	0.006 pounds
Total Volume Groundwater Treated (gallons)	13,300 gallons
Groundwater Extraction Period Operating Uptime (hours)	912.2 hours

gpm – gallons per minute

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

Sincerely,

GHD

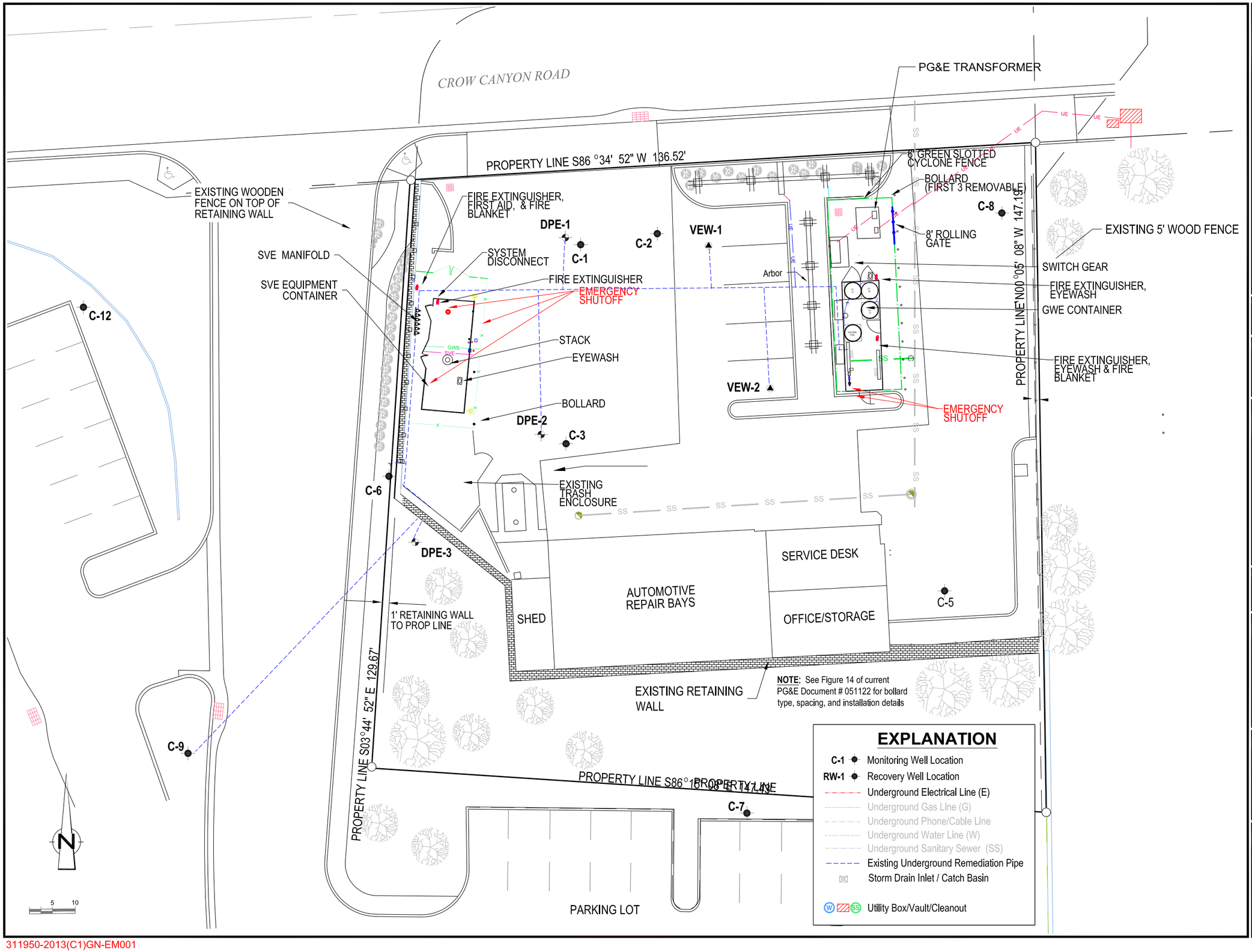
Brandon S. Wilken, PG 7564

AL/mws/54

Figure 1	General Site Plan
Table 1	Groundwater Extraction & Treatment System – Hydrocarbon Analytical Data
Table 2	Groundwater Extraction & Treatment System - Operational and Hydrocarbon Mass Removal Data
Table 3	Soil Vapor Extraction System - Operational Data
Table 4	Soil Vapor Extraction System - Hydrocarbon Analytical and Mass Removal Data
Attachment A	Eurofins Lancaster Laboratory Analytical Report – October 2, 2015
Attachment B	Eurofins Air Toxics Laboratory Analytical Report – October 20, 2015

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

Figure



311950-2013(C1)GN-EM001

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
Influent and Effluent Hydrocarbon Concentration Data
Former Chevron Station # 9-5607
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**	**4.0**	<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**	**4.0**	<50	2.0	<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	<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**	**4.0**	<50	2.0	<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**	**3.0**	<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**	**3.0**	<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**	**2.0**	<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**	**0.8**	**92**	**2.0**	<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**	**3.0**	<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**	<0.5	<0.5	**5.0**	**2.0**	<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
07/20/15	**480**	**2.0**	<0.5	<0.5	**6.0**	**2.0**	<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	
08/05/15	**380**	**1.0**	<0.5	<0.5	**3.0**	**3.0**	<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	
09/02/15	**1,300**	**120**	**3.0**	**2.0**	**14**	**2.0**	<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
10/01/15	**1,100**	**56**	**1.0**	**0.7 J**	**6.0**	**2.0**	<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	7.4

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
J = estimated value ≥ the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
NM = Not meaured 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 # 9-5607
5269 Crow Canyon Road, Castro Valley, California

Date	Well IDs						TPHg			Benzene			MTBE		
(mm/dd/yy)		Operatin Time (hours)	Totalizer Reading (gallons)	Period Volume (gallons)	Period Operational Flow Rate (gpm)	Cumulative Volume (gallons)	TPHg Concentration (µg/L)	Period Removal[2] (pounds)	Cumulative Removal (pounds)	Benzene Concentration (µg/L)	Period Removal[2] (pounds)	Cumulative Removal (pounds)	MTBE Concentration (µg/L)	Period Removal[2] (pounds)	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	0.06	0.06	1,800	0.02	0.02	4.0	0.00004	0.00004
9/29/14 14:00	DPE-1 - DPE-3, C-9	408.0	332,000	500	0.02	1,600	---	0.03	0.08	---	0.01	0.02	---	0.00002	0.00005
10/6/14 11:00	DPE-1 - DPE-3, C-9	165.0	332,700	700	0.07	2,300	---	0.04	0.12	---	0.01	0.03	---	0.00002	0.00008
10/13/14 14:00	DPE-1 - DPE-3, C-9	171.0	341,085	8,385	0.82	10,685	7,500	0.52	0.64	1,600	0.11	0.15	4.0	0.0003	0.0004
10/20/14 11:30	DPE-1 - DPE-3, C-9	165.5	348,600	7,515	0.76	18,200	---	0.47	1.1	---	0.10	0.25	---	0.0003	0.0006
10/27/14 11:00	DPE-1 - DPE-3, C-9	167.5	354,200	5,600	0.56	23,800	---	0.35	1.5	---	0.07	0.32	---	0.0002	0.0008
11/6/14 13:15	DPE-1 - DPE-3, C-9	242.3	364,390	10,190	0.70	33,990	8,000	0.68	2.1	990	0.08	0.41	10	0.0009	0.002
11/21/14 13:50	DPE-1 - DPE-3, C-9	360.6	373,033	8,643	0.40	42,633	---	0.58	2.7	---	0.07	0.48	---	0.0007	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	0.39	3.1	780	0.04	0.52	4.0	0.0002	0.003
12/16/14 11:30	DPE-1 - DPE-3, C-9	332.3	399,600	19,965	1.00	69,200	---	1.17	4.3	---	0.13	0.65	---	0.0007	0.003
12/31/14 10:30	DPE-1 - DPE-3, C-9	359.0	436,625	37,025	1.72	106,225	---	2.16	6.4	---	0.24	0.89	---	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	0.76	7.2	290	0.06	0.95	3.0	0.0006	0.005
1/23/15 14:35	DPE-1 - DPE-3, C-9	219.2	472,688	11,528	0.88	142,288	---	0.36	7.5	---	0.03	0.98	---	0.0003	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	0.46	8.0	190	0.02	1.0	3.0	0.0003	0.006
2/17/15 14:30	DPE-1 - DPE-3, C-9	315.5	491,310	5,090	0.27	160,910	---	0.17	8.2	---	0.01	1.0	---	0.0001	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	0.49	8.7	280	0.03	1.0	2.0	0.0002	0.006
3/11/15 11:45	DPE-1 - DPE-3, C-9	189.3	507,364	2,449	0.22	176,964	---	0.09	8.8	---	0.01	1.0	---	0.00004	0.006
3/16/15 12:00	DPE-1 - DPE-3, C-9	120.2	509,837	2,473	0.34	179,437	---	0.09	8.8	---	0.01	1.1	---	0.00004	0.006
4/2/15 9:30	DPE-1 - DPE-3, C-9	405.5	525,400	15,563	0.64	195,000	---	0.56	9.4	---	0.04	1.1	---	0.0003	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	0.31	9.7	180	0.03	1.1	2.0	0.0003	0.007
4/30/15 10:20	DPE-1 - DPE-3, C-9	331.8	559,100	12,990	0.65	228,700	---	0.20	9.9	---	0.02	1.1	---	0.0002	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	0.08	10.0	570	0.01	1.2	3.0	0.0001	0.007
5/29/15 9:30	DPE-1 - DPE-3, C-9	357.3	576,000	13,800	0.64	245,600	---	0.33	10.3	---	0.07	1.2	---	0.0002	0.007
6/23/15 11:45	DPE-1 - DPE-3, C-9	602.3	597,000	21,000	0.58	266,600	380	0.07	10.4	3.0	0.0005	1.2	2.0	0.0004	0.008
7/20/15 9:00	DPE-1 - DPE-3, C-9	645.2	616,830	19,830	0.51	286,430	480	0.08	10.5	2.0	0.0003	1.2	2.0	0.0003	0.008
8/5/15 15:15	DPE-1 - DPE-3, C-9	390.2	627,335	10,505	0.45	296,935	380	0.03	10.5	1.0	0.0001	1.2	3.0	0.0003	0.008
8/19/15 15:00	DPE-1 - DPE-3, C-9	335.8	635,900	8,565	0.43	305,500	---	0.03	10.5	---	0.0001	1.2	---	0.0002	0.008
9/2/15 14:00	DPE-1 - DPE-3, C-9	239.0	641,700	5,800	0.40	311,300	1,300	0.06	10.6	120	0.006	1.2	2.0	0.0001	0.009
9/16/15 17:30	DPE-1 - DPE-3, C-9	339.5	649,900	8,200	0.40	319,500	---	0.09	10.7	---	0.008	1.2	---	0.0001	0.009
10/1/15 14:00	DPE-1 - DPE-3, C-9	356.5	650,430	530	0.02	320,030	1,100	0.005	10.7	56	0.0002	1.2	2.0	0.00001	0.009
10/22/15 18:30	DPE-1 - DPE-3, C-9	412.5	661,400	10,970	0.44	331,000	---	0.10	10.8	---	0.005	1.2	---	0.0002	0.009
10/28/15 17:40	DPE-1 - DPE-3, C-9	143.2	663,200	1,800	0.21	332,800	---	0.02	10.8	---	0.0008	1.2	---	0.00003	0.009
11/9/15 14:50	DPE-1 - DPE-3, C-9	285.2	669,730	6,530	0.38	339,330	1,100	0.06	10.9	56	0.0031	1.2	2.0	0.00011	0.009
			Total Extracted Volume (gal):			339,330	Pounds Removed:	0.12	10.8	Pounds Removed:	0.006	1.2	Pounds Removed:	0.0002	0.009
			Average Operational Flow Rate (gpm)[3]:			0.57	Gallons Removed[4]:	0.02	1.77	Gallons Removed[4]:	0.00085	0.17	Gallons Removed[4]:	0.00004	0.001

Reporting Period: 9/16/2015 - 10/28/2015			Cumulative Results Since Start-up:		
Number of Days during Reporting Period	42	days	Number Days since Startup	411	days
Gallons of Extracted Ground Water	13,300	gal	Cumulative Total Gallons Extracted	339,330	gal
Average Flow Rate	0.24	gpm	Average Flow Rate[3]	0.57	gpm
Pounds of TPHg Removed	0.12	lbs	Cumulative Pounds of TPHg Removed	10.8	lbs
TPHg Removal Rate	0.003	lbs/day	TPHg Removal Rate	0.03	lbs/day
Pounds of Benzene Removed	0.0062	lbs	Cumulative Pounds of Benzene Removed	1.2	lbs
Benzene Removal Rate	0.000148	lbs/day	Benzene Removal Rate	0.003	lbs/day
Pounds of MTBE Removed	0.0002	lbs	Cumulative Pounds of MTBE Removed	0.009	lbs
MTBE Removal Rate	0.00001	lbs/day	MTBE Removal Rate	0.00002	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/45

Abbreviations:

TPHg = total petroleum hydrocarbons as gasoline
MTBE = methyl tertiary butyl ether

Table 2
Groundwater Extraction and Treatment System
Operational Data and Dissolved Phase Hydrocarbons Mass Removal Data
Former Chevron Station # 9-5607
5269 Crow Canyon Road, Castro Valley, California

3. When concentration of individual parameters were not detected, the concentration was assumed to be half the det

   Average Flow Rate = (Volume of Extracted Water (gal) / Number of Operational Days) * (60 minutes/hour) * (24 ho

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

L = liter
gal = gallon
gpm = gallon per minute
µg/L = micrograms per liter
g = grams
cc = cubic centimeter
lb = pounds

Table 3
Dual Phase Extraction System
Operational Data
Former Chevron Station # 9-5607
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 (°F)	INF-1 Measured Flow (acfm)	INF-1 Calculated Flow (scfm)	INF-2 Pressure[1] (inH_2O)	INF-2 Temperature (°F)	INF-2 Measured Flow[1] (acfm)	INF-2 Calculated Flow (scfm)	Effluent Flow Rate (scfm)	Effluent Flow Rate (scfh)	Effluent Vapor (cubic feet)	Dilution Air (% open)	Pre-Oxidizer Temp (°F)	Post-Oxidizer Temp (°F)	INF-2 OVA (ppmv)	Effluent PID (ppmv)	Mass Removal based on OVA (ppd)	Destruction Efficiency (%)
9/12/14 14:00	C9, DPE-1 - DPE3, VE-1, VE-2	0.0	4014	0%	0.0	NM	3.0	NM	NM	NM	10.0	155	294	259	259	15,517	0	20	747	NM	8,000	20.0	663.8	99.8%
9/29/14 14:00	C9, DPE-1 - DPE3, VE-1, VE-2	5.5	4019	1.3%	5.5	15.0	2.8	93	165	143	11	189	255	213	213	12,784	70,312	20	880	NM	NM	0.0	NM	100.0%
10/6/14 11:00	C9, DPE-1 - DPE3, VE-1, VE-2	5.0	4024	3.0%	5.0	15.0	2.8	83	144	127	10	176	255	217	217	13,014	65,070	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	2.3	68	191	176	10.9	180	268	227	227	13,621	1,443,865	0	750	883	1,100	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	3.2	79	140	123	10.5	171	255	219	219	13,133	2,180,062	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	14,189	1,660,164	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	7,394	495,403	0	701	900	1,250	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	6,517	1,229,109	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	4,696	532,051	0	697	785	1,215	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	5,977	1,488,981	0	700	750	1,650	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	6,710	2,409,733	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	7,550	2,540,450	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	8,030	1,759,403	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	6,848	1,924,213	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	6,955	572,382	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	5,853	977,400	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	6,226	161,266	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	6,145	176,359	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	7,445	1,666,264	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	6,696	2,282,011	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	6,722	1,592,355	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	10,970	232,565	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	5,901	1,531,975	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	5,830	1,037,208	0	700	746	280	2.0	8.7	99.3%
7/4/15 3:35	DPE-1, VEW-2	132.6	7923	51.8%	132.6	SVE SYSTEM DOWN FOR REPAIR																		
10/22/15 18:30	DPE-1, VEW-1	6.2	7930	0.2%	6.2	22.5	5.4	79	105	84	6.0	180	157	131	131	7,886	48,894	0	700	761	174	0.0	7.3	100.0%
10/28/15 17:40	DPE-1, VEW-1	22.8	7952	15.9%	22.8	--	5.8	--	--	--	--	--	176	--	--	--	--	0	700	773	--	--	--	--

Cumulative Results Since Startup: NA

Number Days Since Startup	**411 days**
Number of Hours Operated Since Startup	**3939 hours**

Abbreviations and Notes:

Reporting period: GWE off from 7/4/2015 to 8/19/2015.

mm/dd/yy = month/day/year
hh:mm = hour : minute
inHg = inches of mercury
inH_2O = inches of water
°F = 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.
2. = water in pipe; unable to measure accurate concentration/ LEL readings

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
Dual Phase Extraction System
Analytical Data
Former Chevron Station # 9-5607
5269 Crow Canyon Road, Castro Valley, California

Date (mm/dd/yy hh:mm)	Concentrations[1]								TPHg			Benzene			MTBE			VOC		
	INF-2					Effluent														
	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	405.2	0.0	4.4	3.3	0.0	0.03	3.2	0.0	0.02	355.3	3.9	98.9%
9/29/14 14:00	C9, DPE-1 - DPE3, VE-1, VE-2	--	--	--	--	--	--	--	--	333.8	84.7	3.7	2.7	0.7	0.03	2.7	0.7	0.01	292.7	3.2	98.9%
10/6/14 11:00	C9, DPE-1 - DPE3, VE-1, VE-2	--	--	--	--	--	--	--	--	339.8	154.9	3.7	2.8	1.3	0.03	2.7	1.2	0.01	298.0	3.2	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	127.0	1185.9	0.42	0.7	8.9	0.04	1.5	10.5	0.04	111.4	0.4	99.6%
10/20/14 11:30	C9, DPE-1 - DPE-3	--	--	--	--	--	--	--	--	122.5	2048.8	0.41	0.6	13.3	0.04	1.4	20.6	0.04	107.4	0.4	99.6%
10/27/14 11:00	C9, DPE-1, DPE2	--	--	--	--	--	--	--	--	132.3	2670.0	0.44	0.7	16.6	0.04	1.6	27.9	0.04	116.1	0.5	99.6%
11/6/14 13:15	C9, DPE-2, DPE3	--	--	--	--	--	--	--	--	85.0	2973.3	0.23	0.4	18.2	0.02	1.0	31.5	0.02	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	31.3	3430.3	0.01	0.0	19.9	0.00007	0.0	35.4	0.00007	27.0	0.01	99.9%
12/2/14 15:15	C9, DPE-2, DPE-3	1,000	12	8.8	1,021	0.23	0.0012	< 0.0010	0.23	49.6	3621.3	0.007	0.5	21.0	0.00003	0.4	36.3	0.00003	43.5	0.006	100.0%
12/16/14 11:30	C9, DPE-2, DPE-3	--	--	--	--	--	--	--	--	37.2	4071.3	0.009	0.3	25.2	0.00004	0.3	39.8	0.00003	32.6	0.007	100.0%
12/31/14 10:30	C9, DPE-2, DPE-3	--	--	--	--	--	--	--	--	41.7	4661.5	0.010	0.4	30.7	0.00004	0.3	44.4	0.00004	36.6	0.008	100.0%
1/14/15 11:25	C9, DPE-2, DPE-3	870	13	4.7	888	0.08	<0.0010	<0.0010	0.08	40.8	5240.3	0.004	0.5	36.8	0.00004	0.2	48.0	0.00004	35.8	0.003	100.0%
1/23/15 14:35	C9, DPE-2, DPE-3	--	--	--	--	--	--	--	--	43.4	5625.0	0.004	0.5	41.3	0.00004	0.2	49.8	0.00004	38.1	0.00	100.0%
2/4/15 11:00	C9, DPE-2	800	17	7.3	824	1.5	0.014	0.0012	1.52	34.1	6078.7	0.06	0.6	47.5	0.0005	0.3	52.6	0.00004	30.2	0.06	99.8%
2/17/15 14:30	C9, DPE-2	--	--	--	--	--	--	--	--	34.6	6196.4	0.06	0.6	49.5	0.0005	0.3	53.6	0.00005	30.7	0.06	99.8%
3/3/15 14:25	C9, DPE-1	320	5.4	2.5	328	0.076	<0.0010	<0.0010	0.078	11.6	6357.3	0.003	0.2	52.0	0.00003	0.1	54.8	0.00003	10.3	0.002	100.0%
3/11/15 11:45	C9, DPE-3	--	--	--	--	--	--	--	--	12.4	6370.3	0.003	0.2	52.2	0.00003	0.1	54.9	0.00003	10.9	0.003	100.0%
3/16/15 12:00	C9, DPE-3	--	--	--	--	--	--	--	--	12.2	6385.0	0.003	0.2	52.4	0.00003	0.1	55.0	0.00003	10.8	0.003	100.0%
4/2/15 9:30	C9, DPE-3	--	--	--	--	--	--	--	--	14.8	6511.0	0.004	0.2	54.1	0.00004	0.1	55.9	0.00004	13.1	0.003	100.0%
4/16/15 14:30	DPE-2, DPE-3	250	2.7	1.1	254	0.84	0.008	0.002	0.850	10.4	6690.1	0.03	0.1	56.1	0.0003	0.0	56.9	0.00007	9.1	0.03	99.7%
4/30/15 10:20	DPE-1, DPE-2	--	--	--	--	--	--	--	--	10.4	6793.1	0.04	0.1	56.9	0.0003	0.0	57.3	0.00007	9.1	0.03	99.7%
5/14/15 12:15	DPE-1, VEW-2	160	2.8	0.71	164	0.11	<0.032	<0.036	0.178	10.9	6802.5	0.008	0.1	57.0	0.002	0.0	57.3	0.002	9.6	0.01	99.9%
5/29/15 9:30	DPE-1, VEW-2	--	--	--	--	--	--	--	--	5.9	6893.3	0.004	0.1	58.3	0.001	0.0	57.7	0.001	5.2	0.01	99.9%
6/23/15 11:45	DPE-1, VEW-2	2,300	35.0	11.0	2,346	0.48	<0.032	<0.0010	0.513	83.4	7224.0	0.02	1.0	62.2	0.001	0.4	59.1	0.00003	73.1	0.02	100.0%
7/4/15 3:35	DPE-1, VEW-2	SVE SYSTEM OFF FOR REPAIR		--	--	--	--	--	--	83.4 a	7684.7 a	0.02 a	1.0 a	67.7 a	0.001 a	0.4 a	61.0 a	0.00003 a	73.1 a	0.02 a	100.0% a
10/22/15 18:30	DPE-1, VEW-1	1,000	18	9.0	1,027	0.26	<0.0010	<0.0010	0.262	49.0 b	7697.4 b	0.01 b	0.7 b	67.9 b	0.00004 b	0.4 b	61.1 b	0.00004 b	43.3 b	0.01 b	100.0% b
10/28/15 17:40	DPE-1, VEW-1	--	--	--	--	--	--	--	--	49.0 b,c	7743.9 b,c	0.01 b,c	0.7 b,c	68.5 b,c	0.00004 b,c	0.4 b,c	61.5 b,c	0.00004 b,c	43.3 b,c	0.01 b,c	100.0% b,c
									Period Pounds Removed[9]:	**TPHg =**	**59.2**		**Benzene =**	**0.83**		**MTBE =**	**0.47**			
									Total Pounds Removed:	**TPHg =**	**7,744**		**Benzene =**	**68.5**		**MTBE =**	**61.5**			

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 100 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: SVE system off for repair from 7/4/2015 to 8/19/2015.

a. Air sample was not taken before system malfunction occurred. Used 6/23/15 sample data to calculate removal and efficiency rate and cumulative removed.
b. Air sample was taken on 10/15/15, but no readings were taken during this time. Used 10/22/15 operational data to calculate removal and efficiency rate and cumulative removed.
c. Air flow was not taken on 10/28/15 was taken on 10/15/15, so the flow rate from 10/22/15was used to calculate removal and efficiency rate and cumulative removed.

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
TBD = Sample taken during this time and are awaiting results
n/a = Not available due to SVE equipment malfunction

Attachment A
Eurofins Lancaster Laboratory Analytical Report

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

ChevronTexaco
Suite A
5900 Hollis Street
Emeryville CA 94608

November 02, 2015

Project: 95607

Submittal Date: 10/02/2015
Group Number: 1597861
PO Number: 0015164161
Release Number: HETRICK
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
EFF-1-W-151001 Grab Groundwater	8074264
MID-1-W-151001 Grab Groundwater	8074266
INF-1-W-151001 Grab Groundwater	8074267
QA-T-151001 Water	8074268

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: Judy Gilbert
ELECTRONIC COPY TO	GHD	Attn: Matt B. Smith
ELECTRONIC COPY TO	GHD	Attn: Andy Leung
ELECTRONIC COPY TO	Chevron	Attn: GHD EDD

Respectfully Submitted,

Amek Carter
Specialist

(717) 556-7252

Sample Description: EFF-1-W-151001 Grab Groundwater
Facility# 95607 CRAW
5269 Crow Canyon Rd-Castro T0600100344

LL Sample # WW 8074264
LL Group # 1597861
Account # 10880

Project Name: 95607

Collected: 10/01/2015 09:30 by GB

Submitted: 10/02/2015 09:30
Reported: 11/02/2015 16:25

ChevronTexaco
Suite A
5900 Hollis Street
Emeryville CA 94608

956-1

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-151001 Grab Groundwater
Facility# 95607 CRAW
5269 Crow Canyon Rd-Castro T0600100344

LL Sample # WW 8074264
LL Group # 1597861
Account # 10880

Project Name: 95607

Collected: 10/01/2015 09:30 by GB

Submitted: 10/02/2015 09:30
Reported: 11/02/2015 16:25

ChevronTexaco
Suite A
5900 Hollis Street
Emeryville CA 94608

956-1

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	6.9		0.54	4.0	1
06026	Barium	7440-39-3	186		0.92	4.0	1
06027	Beryllium	7440-41-7	N.D.		0.071	1.0	1
06028	Cadmium	7440-43-9	N.D.		0.23	1.0	1
06031	Chromium	7440-47-3	N.D.		0.70	4.0	1
06032	Cobalt	7440-48-4	N.D.		0.10	1.0	1
06033	Copper	7440-50-8	0.96	J	0.40	4.0	1
06035	Lead	7439-92-1	0.24	J	0.13	2.0	1
06038	Molybdenum	7439-98-7	0.66	J	0.25	1.0	1
06039	Nickel	7440-02-0	1.4	J	0.94	4.0	1
06041	Selenium	7782-49-2	N.D.		0.50	4.0	1
06042	Silver	7440-22-4	N.D.		0.11	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	N.D.		7.4	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-151001 Grab Groundwater
Facility# 95607 CRAW
5269 Crow Canyon Rd-Castro T0600100344

LL Sample # WW 8074264
LL Group # 1597861
Account # 10880

Project Name: 95607

Collected: 10/01/2015 09:30 by GB

Submitted: 10/02/2015 09:30
Reported: 11/02/2015 16:25

ChevronTexaco
Suite A
5900 Hollis Street
Emeryville CA 94608

956-1

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
Trip blank vials were not received by the laboratory for this sample group.

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	W152862AA	10/14/2015 03:06	Christopher G Torres	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W152862AA	10/14/2015 03:06	Christopher G Torres	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	15282C20A	10/10/2015 18:18	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	15282C20A	10/10/2015 18:18	Marie D Beamenderfer	1
06024	Antimony	SW-846 6020A	1	152800639002A	10/16/2015 07:19	Choon Y Tian	1
06025	Arsenic	SW-846 6020A	1	152800639002A	10/09/2015 17:17	Mallory L Clark	1
06026	Barium	SW-846 6020A	1	152800639002D	10/09/2015 17:17	Mallory L Clark	1
06027	Beryllium	SW-846 6020A	1	152800639002A	10/09/2015 17:17	Mallory L Clark	1
06028	Cadmium	SW-846 6020A	1	152800639002A	10/09/2015 17:17	Mallory L Clark	1
06031	Chromium	SW-846 6020A	1	152800639002A	10/09/2015 17:17	Mallory L Clark	1
06032	Cobalt	SW-846 6020A	1	152800639002A	10/09/2015 17:17	Mallory L Clark	1
06033	Copper	SW-846 6020A	1	152800639002A	10/09/2015 17:17	Mallory L Clark	1
06035	Lead	SW-846 6020A	1	152800639002A	10/09/2015 17:17	Mallory L Clark	1
06038	Molybdenum	SW-846 6020A	1	152800639002C	10/18/2015 20:29	Tara L Snyder	1
06039	Nickel	SW-846 6020A	1	152800639002A	10/09/2015 17:17	Mallory L Clark	1
06041	Selenium	SW-846 6020A	1	152800639002B	10/09/2015 17:17	Mallory L Clark	1
06042	Silver	SW-846 6020A	1	152800639002A	10/09/2015 17:17	Mallory L Clark	1
06045	Thallium	SW-846 6020A	1	152800639002A	10/09/2015 17:17	Mallory L Clark	1
06048	Vanadium	SW-846 6020A	1	152800639002A	10/09/2015 17:17	Mallory L Clark	1
06049	Zinc	SW-846 6020A	1	152800639002A	10/09/2015 17:17	Mallory L Clark	1
00259	Mercury	SW-846 7470A	1	152825713002	10/13/2015 05:35	Damary Valentin	1
10639	ICPMS - Water, 3020A - U4	SW-846 3010A modified	1	152800639002	10/08/2015 23:45	Annamaria Kuhns	1

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

Sample Description: **EFF-1-W-151001 Grab Groundwater**
Facility# 95607 CRAW
5269 Crow Canyon Rd-Castro T0600100344

LL Sample # WW 8074264
LL Group # 1597861
Account # 10880

Project Name: 95607

Collected: 10/01/2015 09:30 by GB

Submitted: 10/02/2015 09:30
Reported: 11/02/2015 16:25

ChevronTexaco
Suite A
5900 Hollis Street
Emeryville CA 94608

956-1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05713	WW SW846 Hg Digest	SW-846 7470A	1	152825713002	10/12/2015 00:45	Annamaria Kuhns	1
08255	Total Cyanide (water)	SW-846 9012A	1	15286117101A	10/14/2015 00:04	Joseph E McKenzie	1
02393	Phenols (water)	SW-846 9066	1	15286120101A	10/14/2015 00:47	Joseph E McKenzie	1
08256	Cyanide Water Distillation	SW-846 9012A	1	15286117101A	10/13/2015 17:00	Venia B McFadden	1
08123	Phenol Distillation (SW-846)	SW-846 9065	1	15286120101A	10/13/2015 07:40	Nancy J Shoop	1
08079	HEM (oil & grease)	EPA 1664A	1	15288807901A	10/15/2015 18:38	Michelle L Lalli	1

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

Sample Description: MID-1-W-151001 Grab Groundwater
Facility# 95607 CRAW
5269 Crow Canyon Rd-Castro T0600100344

LL Sample # WW 8074266
LL Group # 1597861
Account # 10880

Project Name: 95607

Collected: 10/01/2015 09:50 by GB

Submitted: 10/02/2015 09:30
Reported: 11/02/2015 16:25

ChevronTexaco
Suite A
5900 Hollis Street
Emeryville CA 94608

956-3

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
Trip blank vials were not received by the laboratory for this sample group.

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	F152862AA	10/13/2015 13:31	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F152862AA	10/13/2015 13:31	Brett W Kenyon	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	15282C20A	10/10/2015 18:45	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	15282C20A	10/10/2015 18:45	Marie D Beamenderfer	1

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

Sample Description: INF-1-W-151001 Grab Groundwater
Facility# 95607 CRAW
5269 Crow Canyon Rd-Castro T0600100344

LL Sample # WW 8074267
LL Group # 1597861
Account # 10880

Project Name: 95607

Collected: 10/01/2015 10:00 by GB

Submitted: 10/02/2015 09:30
Reported: 11/02/2015 16:25

ChevronTexaco
Suite A
5900 Hollis Street
Emeryville CA 94608

956-4

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	56		0.5	1	1
10945	Ethylbenzene	100-41-4	0.7	J	0.5	1	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	2		0.5	1	1
10945	Toluene	108-88-3	1		0.5	1	1
10945	Xylene (Total)	1330-20-7	6		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.	1,100		50	100	1

General Sample Comments

CA ELAP Lab Certification No. 2792
Trip blank vials were not received by the laboratory for this sample group.

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	F152862AA	10/13/2015 13:53	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F152862AA	10/13/2015 13:53	Brett W Kenyon	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	15282C20A	10/10/2015 19:12	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	15282C20A	10/10/2015 19:12	Marie D Beamenderfer	1

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

Sample Description: QA-T-151001 Water
Facility# 95607 CRAW
5269 Crow Canyon Rd-Castro T0600100344

LL Sample # WW 8074268
LL Group # 1597861
Account # 10880

Project Name: 95607

Collected: 10/01/2015

Submitted: 10/02/2015 09:30
Reported: 11/02/2015 16:25

ChevronTexaco
Suite A
5900 Hollis Street
Emeryville CA 94608

956-5

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
Trip blank vials were not received by the laboratory for this sample group.

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	F152862AA	10/13/2015 12:03	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F152862AA	10/13/2015 12:03	Brett W Kenyon	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	15282C20A	10/10/2015 15:07	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	15282C20A	10/10/2015 15:07	Marie D Beamenderfer	1

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

Quality Control Summary

Client Name: ChevronTexaco Group Number: 1597861
Reported: 11/02/2015 16:25

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: F152862AA	Sample number(s): 8074266-8074268								
Benzene	N.D.	0.5	1	ug/l	85	87	78-120	2	30
Ethylbenzene	N.D.	0.5	1	ug/l	88	90	78-120	2	30
Methyl Tertiary Butyl Ether	N.D.	0.5	1	ug/l	90	90	75-120	0	30
Toluene	N.D.	0.5	1	ug/l	90	91	80-120	2	30
Xylene (Total)	N.D.	0.5	1	ug/l	93	96	80-120	3	30
Batch number: W152862AA	Sample number(s): 8074264								
Acetone	N.D.	6.	20	ug/l	105		58-138		
t-Amyl methyl ether	N.D.	0.5	1	ug/l	99		75-120		
Benzene	N.D.	0.5	1	ug/l	110		78-120		
Bromobenzene	N.D.	1.	5	ug/l	105		80-120		
Bromochloromethane	N.D.	1.	5	ug/l	101		80-120		
Bromodichloromethane	N.D.	0.5	1	ug/l	101		73-120		
Bromoform	N.D.	0.5	4	ug/l	101		61-121		
Bromomethane	N.D.	0.5	1	ug/l	96		53-130		
2-Butanone	N.D.	3.	10	ug/l	121		62-131		
t-Butyl alcohol	N.D.	5.	20	ug/l	112		78-121		
n-Butylbenzene	N.D.	1.	5	ug/l	99		68-120		
sec-Butylbenzene	N.D.	1.	5	ug/l	99		75-120		
tert-Butylbenzene	N.D.	1.	5	ug/l	98		74-121		
Carbon Disulfide	N.D.	1.	5	ug/l	77		58-126		
Carbon Tetrachloride	N.D.	0.5	1	ug/l	110		74-130		
Chlorobenzene	N.D.	0.5	1	ug/l	107		80-120		
Chloroethane	N.D.	0.5	1	ug/l	90		56-120		
2-Chloroethyl Vinyl Ether	N.D.	2.	10	ug/l	98		42-152		
Chloroform	N.D.	0.5	1	ug/l	110		80-120		
Chloromethane	N.D.	0.5	1	ug/l	97		65-129		
2-Chlorotoluene	N.D.	1.	5	ug/l	101		78-121		
4-Chlorotoluene	N.D.	1.	5	ug/l	102		78-120		
1,2-Dibromo-3-chloropropane	N.D.	2.	5	ug/l	91		55-131		
Dibromochloromethane	N.D.	0.5	1	ug/l	98		72-120		
1,2-Dibromoethane	N.D.	0.5	1	ug/l	107		80-120		
Dibromomethane	N.D.	0.5	1	ug/l	105		80-120		
1,2-Dichlorobenzene	N.D.	1.	5	ug/l	107		80-120		
1,3-Dichlorobenzene	N.D.	1.	5	ug/l	104		80-120		
1,4-Dichlorobenzene	N.D.	1.	5	ug/l	106		80-120		
Dichlorodifluoromethane	N.D.	0.5	1	ug/l	74		55-127		
1,1-Dichloroethane	N.D.	0.5	1	ug/l	110		80-120		
1,2-Dichloroethane	N.D.	0.5	1	ug/l	112		72-127		
1,1-Dichloroethene	N.D.	0.5	1	ug/l	99		76-124		
cis-1,2-Dichloroethene	N.D.	0.5	1	ug/l	109		80-120		
trans-1,2-Dichloroethene	N.D.	0.5	1	ug/l	111		80-120		
1,2-Dichloropropane	N.D.	0.5	1	ug/l	108		80-120		

*- 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: 1597861
Reported: 11/02/2015 16:25

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	105		80-120		
2,2-Dichloropropane	N.D.		0.5	1	ug/l	164*		71-125		
1,1-Dichloropropene	N.D.		1.	5	ug/l	102		80-126		
cis-1,3-Dichloropropene	N.D.		0.5	1	ug/l	98		80-120		
trans-1,3-Dichloropropene	N.D.		0.5	1	ug/l	98		76-120		
Ethanol	N.D.		50.	250	ug/l	122		49-144		
Ethyl t-butyl ether	N.D.		0.5	1	ug/l	105		69-120		
Ethylbenzene	N.D.		0.5	1	ug/l	106		78-120		
Freon 113	N.D.		2.	10	ug/l	91		67-127		
Hexachlorobutadiene	3	J	2.	5	ug/l	107		60-120		
2-Hexanone	N.D.		3.	10	ug/l	111		59-127		
di-Isopropyl ether	N.D.		0.5	1	ug/l	119		70-124		
Isopropylbenzene	N.D.		1.	5	ug/l	102		80-120		
p-Isopropyltoluene	N.D.		1.	5	ug/l	96		76-120		
Methyl Tertiary Butyl Ether	N.D.		0.5	1	ug/l	106		75-120		
4-Methyl-2-pentanone	N.D.		3.	10	ug/l	111		59-130		
Methylene Chloride	N.D.		2.	4	ug/l	105		77-121		
Naphthalene	N.D.		1.	5	ug/l	94		59-120		
n-Propylbenzene	N.D.		1.	5	ug/l	104		75-130		
Styrene	N.D.		1.	5	ug/l	99		80-120		
1,1,1,2-Tetrachloroethane	N.D.		0.5	1	ug/l	103		80-120		
1,1,2,2-Tetrachloroethane	N.D.		0.5	1	ug/l	102		65-131		
Tetrachloroethene	N.D.		0.5	1	ug/l	114		80-122		
Toluene	N.D.		0.5	1	ug/l	109		80-120		
1,2,3-Trichlorobenzene	N.D.		1.	5	ug/l	98		69-120		
1,2,4-Trichlorobenzene	N.D.		1.	5	ug/l	96		73-120		
1,1,1-Trichloroethane	N.D.		0.5	1	ug/l	110		66-126		
1,1,2-Trichloroethane	N.D.		0.5	1	ug/l	104		80-120		
Trichloroethene	N.D.		0.5	1	ug/l	106		80-120		
Trichlorofluoromethane	N.D.		0.5	1	ug/l	85		60-142		
1,2,3-Trichloropropane	N.D.		1.	5	ug/l	107		76-120		
1,2,4-Trimethylbenzene	N.D.		1.	5	ug/l	99		75-120		
1,3,5-Trimethylbenzene	N.D.		1.	5	ug/l	99		80-120		
Vinyl Chloride	N.D.		0.5	1	ug/l	85		69-120		
m+p-Xylene	N.D.		0.5	1	ug/l	106		80-120		
o-Xylene	N.D.		0.5	1	ug/l	100		79-120		
Batch number: 15282C20A	Sample number(s): 8074264,8074266-8074268									
TPH-GRO N. CA water C6-C12	N.D.		50.	100	ug/l	92	91	71-138	1	30
Batch number: 152800639002A	Sample number(s): 8074264									
Antimony	N.D.		0.33	2.0	ug/l	98		80-120		
Arsenic	N.D.		0.54	4.0	ug/l	104		80-120		
Beryllium	N.D.		0.071	1.0	ug/l	106		80-120		
Cadmium	N.D.		0.23	1.0	ug/l	97		80-120		
Chromium	N.D.		0.70	4.0	ug/l	97		80-120		
Cobalt	N.D.		0.10	1.0	ug/l	102		80-120		
Copper	N.D.		0.40	4.0	ug/l	106		80-120		
Lead	N.D.		0.13	2.0	ug/l	97		80-120		
Nickel	N.D.		0.94	4.0	ug/l	109		80-120		
Silver	N.D.		0.11	1.0	ug/l	102		80-120		
Thallium	N.D.		0.15	1.0	ug/l	103		80-120		
Vanadium	N.D.		0.22	1.0	ug/l	99		80-120		
Zinc	N.D.		7.4	30.0	ug/l	104		80-120		
Batch number: 152800639002B	Sample number(s): 8074264									

*- 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.

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Quality Control Summary

Client Name: ChevronTexaco Group Number: 1597861
Reported: 11/02/2015 16:25

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Selenium	N.D.	0.50	4.0	ug/l	104		80-120		
Batch number: 152800639002C	Sample number(s): 8074264								
Molybdenum	0.30 J	0.25	1.0	ug/l	98		80-120		
Batch number: 152800639002D	Sample number(s): 8074264								
Barium	N.D.	0.92	4.0	ug/l	98		80-120		
Batch number: 152825713002	Sample number(s): 8074264								
Mercury	N.D.	0.050	0.20	ug/l	105		80-120		
Batch number: 15286117101A	Sample number(s): 8074264								
Total Cyanide (water)	N.D.	5.0	10	ug/l	108		90-110		
Batch number: 15286120101A	Sample number(s): 8074264								
Phenols (water)	N.D.	15.	40	ug/l	103		82-109		
Batch number: 15288807901A	Sample number(s): 8074264								
HEM (oil & grease)	N.D.	1,400.	5,000	ug/l	88	89	78-114	1	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: W152862AA	Sample number(s): 8074264 UNSPK: P078338								
Acetone	91	103	58-138	13	30				
t-Amyl methyl ether	95	107	75-120	12	30				
Benzene	105	117	78-120	11	30				
Bromobenzene	97	108	80-120	11	30				
Bromochloromethane	100	101	80-120	1	30				
Bromodichloromethane	93	104	73-120	10	30				
Bromoform	93	99	61-121	6	30				
Bromomethane	97	100	53-130	3	30				
2-Butanone	107	118	62-131	10	30				
t-Butyl alcohol	92	117	78-121	9	30				
n-Butylbenzene	100	110	68-120	10	30				
sec-Butylbenzene	102	116	75-120	9	30				
tert-Butylbenzene	101	110	74-121	7	30				
Carbon Disulfide	78	84	58-126	7	30				
Carbon Tetrachloride	111	122	74-130	10	30				
Chlorobenzene	97	109	80-120	11	30				
Chloroethane	93	97	56-120	4	30				
2-Chloroethyl Vinyl Ether	0*	0*	42-152	0	30				
Chloroform	102	112	80-120	9	30				
Chloromethane	108	113	65-129	4	30				
2-Chlorotoluene	94	106	78-121	11	30				
4-Chlorotoluene	94	104	78-120	10	30				
1,2-Dibromo-3-chloropropane	87	98	55-131	12	30				
Dibromochloromethane	90	98	72-120	8	30				
1,2-Dibromoethane	94	104	80-120	10	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: 1597861
Reported: 11/02/2015 16:25

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
Dibromomethane	95	107	80-120	11	30							
1,2-Dichlorobenzene	96	107	80-120	11	30							
1,3-Dichlorobenzene	96	107	80-120	11	30							
1,4-Dichlorobenzene	97	109	80-120	11	30							
Dichlorodifluoromethane	98	99	55-127	1	30							
1,1-Dichloroethane	105	115	80-120	9	30							
1,2-Dichloroethane	105	115	72-127	9	30							
1,1-Dichloroethene	101	111	76-124	9	30							
cis-1,2-Dichloroethene	103	114	80-120	10	30							
trans-1,2-Dichloroethene	108	119	80-120	10	30							
1,2-Dichloropropane	102	112	80-120	9	30							
1,3-Dichloropropane	96	103	80-120	8	30							
2,2-Dichloropropane	162*	179*	71-125	10	30							
1,1-Dichloropropene	100	110	80-126	9	30							
cis-1,3-Dichloropropene	88	98	80-120	10	30							
trans-1,3-Dichloropropene	88	98	76-120	11	30							
Ethanol	134	125	49-144	7	30							
Ethyl t-butyl ether	95	109	69-120	14	30							
Ethylbenzene	103	112	78-120	9	30							
Freon 113	116	125	67-127	8	30							
Hexachlorobutadiene	104	115	60-120	11	30							
2-Hexanone	102	113	59-127	10	30							
di-Isopropyl ether	110	122	70-124	10	30							
Isopropylbenzene	102	119	80-120	12	30							
p-Isopropyltoluene	92	103	76-120	12	30							
Methyl Tertiary Butyl Ether	97	110	75-120	11	30							
4-Methyl-2-pentanone	104	113	59-130	8	30							
Methylene Chloride	99	109	77-121	10	30							
Naphthalene	90	101	59-120	12	30							
n-Propylbenzene	98	111	75-130	12	30							
Styrene	91	101	80-120	10	30							
1,1,1,2-Tetrachloroethane	96	107	80-120	10	30							
1,1,2,2-Tetrachloroethane	88	99	65-131	11	30							
Tetrachloroethene	108	120	80-122	11	30							
Toluene	102	113	80-120	11	30							
1,2,3-Trichlorobenzene	90	99	69-120	10	30							
1,2,4-Trichlorobenzene	92	104	73-120	12	30							
1,1,1-Trichloroethane	112	122	66-126	8	30							
1,1,2-Trichloroethane	98	109	80-120	10	30							
Trichloroethene	102	112	80-120	9	30							
Trichlorofluoromethane	99	102	60-142	4	30							
1,2,3-Trichloropropane	99	111	76-120	11	30							
1,2,4-Trimethylbenzene	95	107	75-120	12	30							
1,3,5-Trimethylbenzene	94	106	80-120	12	30							
Vinyl Chloride	97	100	69-120	3	30							
m+p-Xylene	100	110	80-120	9	30							
o-Xylene	95	105	79-120	10	30							
Batch number: 152800639002A	Sample number(s): 8074264 UNSPK: P076138 BKG: P076138											
Antimony	65*	68*	75-125	5	20	0.39	J	N.D.		200* (1)		20
Arsenic	113	112	75-125	1	20	5.4		7.3		29* (1)		20
Beryllium	102	104	75-125	2	20	0.45	J	0.45	J	1 (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.

Quality Control Summary

Client Name: ChevronTexaco Group Number: 1597861
Reported: 11/02/2015 16:25

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
Cadmium	98	101	75-125	3	20	N.D.	N.D.	0 (1)	20
Chromium	96	98	75-125	1	20	9.8	10.5	7 (1)	20
Cobalt	102	107	75-125	4	20	6.1	6.8	10	20
Copper	102	104	75-125	2	20	12.8	14.6	13 (1)	20
Lead	103	101	75-125	2	20	8.3	8.7	5 (1)	20
Nickel	106	116	75-125	7	20	14.1	15.1	7 (1)	20
Silver	102	107	75-125	5	20	N.D.	N.D.	0 (1)	20
Thallium	112	107	75-125	5	20	N.D.	N.D.	0 (1)	20
Vanadium	98	97	75-125	1	20	13.2	13.7	4	20
Zinc	102	108	75-125	5	20	42.6	42.1	1 (1)	20
Batch number: 152800639002B	Sample number(s): 8074264 UNSPK: P076138 BKG: P076138								
Selenium	100	101	75-125	1	20	N.D.	N.D.	0 (1)	20
Batch number: 152800639002C	Sample number(s): 8074264 UNSPK: P076138 BKG: P076138								
Molybdenum	96	105	75-125	8	20	1.4	1.3	14 (1)	20
Batch number: 152800639002D	Sample number(s): 8074264 UNSPK: P076138 BKG: P076138								
Barium	80	116	75-125	12	20	98.8	101	2	20
Batch number: 152825713002	Sample number(s): 8074264 UNSPK: P074063 BKG: P074063								
Mercury	103	102	80-120	1	20	N.D.	N.D.	0 (1)	20
Batch number: 15286117101A	Sample number(s): 8074264 UNSPK: 8074264 BKG: 8074264								
Total Cyanide (water)	101		72-114			N.D.	N.D.	0 (1)	20
Batch number: 15286120101A	Sample number(s): 8074264 UNSPK: 8074264								
Phenols (water)	106	112*	82-109	6	8				
Batch number: 15288807901A	Sample number(s): 8074264 UNSPK: P078208								
HEM (oil & grease)	113		78-114						

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: F152862AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8074266	103	99	100	97
8074267	101	97	102	103
8074268	103	106	101	98
Blank	101	101	101	101
LCS	102	109	102	99
LCSD	101	101	102	104
Limits:	80-116	77-113	80-113	78-113

Analysis Name: 8260 Full List w/ Sep. Xylenes

*- 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.

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Quality Control Summary

Client Name: ChevronTexaco Group Number: 1597861
Reported: 11/02/2015 16:25

Surrogate Quality Control

Batch number: W152862AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8074264	106	107	102	93
Blank	106	107	100	93
LCS	104	109	104	100
MS	104	110	102	101
MSD	106	104	101	99
Limits:	80-116	77-113	80-113	78-113

Analysis Name: TPH-GRO N. CA water C6-C12
Batch number: 15282C20A

	Trifluorotoluene-F
8074264	86
8074266	87
8074267	94
8074268	80
Blank	87
LCS	94
LCSD	95
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 # ~~1597844~~ 1597861 Sample # ~~8074112-15~~ 8074264-68 (initials 10/2/15)

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

Analyses Requested / Preservation Codes

Sample Identification	Collection Date	Collection Time	Grab	Composite	Soil	Water	Other	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	10.1.15	0930	X			X		11	X	X	X	X	X	X	X	X			
MID-2	10.1.15	0940	X			X		6	X	X	X								HOLD MID-2, SAMPLE ONLY IF MID-1 > N.D.
MID-1	10.1.15	0950	X			X		6	X	X	X								
INF-1	10.1.15	1000	X			X		6	X	X	X								

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

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: Judy.Gilbert@ghd.com matthew.b.smith@ghd.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
Bruski	10.1.15	1415			
			[signature]	10/2/15	09:30

Relinquished by Commercial Carrier:
UPS ______ FedEx ______ Other ______

Temperature upon receipt 2.4 °C

eurofins | Lancaster Laboratories Environmental

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, and ISO 17025) 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.

Attachment B
Eurofins Air Toxics Laboratory Analytical Report

eurofins | Air Toxics

10/20/2015
Ms. Judy Gilbert
GHD
5900 Hollis Street
Suite A
Emeryville CA 94608

Project Name: Castro Valley
Project #: 311950 2015.1 94.09
Workorder #: 1510320

Dear Ms. Judy Gilbert

The following report includes the data for the above referenced project for sample(s) received on 10/19/2015 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 Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free 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

eurofins | Air Toxics

WORK ORDER #: 1510320

Work Order Summary

CLIENT:	Ms. Judy Gilbert GHD 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:	10/19/2015	**CONTACT:**	Kyle Vagadori
DATE COMPLETED:	10/20/2015		

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
04B	LCS	Modified TO-3	NA	NA
04BB	LCSD	Modified TO-3	NA	NA

CERTIFIED BY:  DATE: 10/20/15

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
GHD
Workorder# 1510320

Two 1 Liter Tedlar Bag samples were received on October 19, 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

Samples were received past the recommended hold time of 3 days. Analysis proceeded.

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

eurofins | Air Toxics

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

Client Sample ID: EFF

Lab ID#: 1510320-01A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
Toluene	0.0010	0.0038	0.0053	0.020
Ethyl Benzene	0.0010	0.0043	0.0015	0.0065
Total Xylenes	0.0020	0.0087	0.0072	0.031
TPH (Gasoline Range)	0.025	0.10	0.26	1.1

Client Sample ID: INF

Lab ID#: 1510320-02A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
Benzene	0.15	0.49	18	57
Toluene	0.15	0.58	2.9 M	11 M
Ethyl Benzene	0.15	0.67	1.4	6.2
Total Xylenes	0.31	1.3	6.1	26
Methyl tert-butyl ether	0.15	0.56	9.0	33
TPH (Gasoline Range)	3.8	16	1000	4200

eurofins | Air Toxics

Client Sample ID: EFF

Lab ID#: 1510320-01A

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Name:	**d102006**	**Date of Collection: 10/15/15 5:10:00 PM**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/20/15 10:57 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	0.0053	0.020
Ethyl Benzene	0.0010	0.0043	0.0015	0.0065
Total Xylenes	0.0020	0.0087	0.0072	0.031
Methyl tert-butyl ether	0.0010	0.0036	Not Detected	Not Detected
TPH (Gasoline Range)	0.025	0.10	0.26	1.1

Container Type: 1 Liter Tedlar Bag

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	93	75-150
Fluorobenzene (PID)	93	75-125

eurofins | Air Toxics

Client Sample ID: INF

Lab ID#: 1510320-02A

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Name:	**d102007**	**Date of Collection: 10/15/15 5:20:00 PM**	
Dil. Factor:	**154**	**Date of Analysis: 10/20/15 11:35 AM**	

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
Benzene	0.15	0.49	18	57
Toluene	0.15	0.58	2.9 M	11 M
Ethyl Benzene	0.15	0.67	1.4	6.2
Total Xylenes	0.31	1.3	6.1	26
Methyl tert-butyl ether	0.15	0.56	9.0	33
TPH (Gasoline Range)	3.8	16	1000	4200

M = Reported value may be biased due to apparent matrix interferences.
Q = Exceeds Quality Control limits, possibly due to matrix effects.

Container Type: 1 Liter Tedlar Bag

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	123	75-150
Fluorobenzene (PID)	128 Q	75-125

eurofins | Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1510320-03A

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Name:	**d102005**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/20/15 10:08 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)	93	75-150
Fluorobenzene (PID)	90	75-125

eurofins | Air Toxics

Client Sample ID: LCS

Lab ID#: 1510320-04A

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Name:	**d102004b**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/20/15 09:33 AM**	

Compound	%Recovery	Method Limits
Benzene	103	75-125
Toluene	106	75-125
Ethyl Benzene	117	75-125
Total Xylenes	118	75-125
Methyl tert-butyl ether	110	75-125

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorobenzene (PID)	81	75-125

eurofins | Air Toxics

Client Sample ID: LCS

Lab ID#: 1510320-04B

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Name:	**d102002**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/20/15 08:20 AM**	

Compound	%Recovery	Method Limits
TPH (Gasoline Range)	79	75-125

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	101	75-150

eurofins | Air Toxics

Client Sample ID: LCSD

Lab ID#: 1510320-04BB

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Name:	**d102012**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/20/15 03:02 PM**	

Compound	%Recovery	Method Limits
TPH (Gasoline Range)	84	75-125

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	90	75-150