Carryl MacLeod
Project Manager
Marketing Business Unit

Chevron Environmental Management Company
6101 Bollinger Canyon Road
San Ramon, CA 94583
Tel (925) 790-6506
cmacleod@chevron.com

March 14, 2016

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 – January 2016.

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 Services Inc., upon whose 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,

Carryl MacLeod
Project Manager

Attachment: Monthly Remedial Progress Report – January 2016

March 14, 2016 Reference No. 311950

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

Re: Monthly Remedial Progress Report – January 2016
Former Chevron Station 9-5607
5269 Crow Canyon Road
Castro Valley, California
Fuel Leak Case RO0350

Dear Mr. Detterman:

GHD Services Inc. (GHD), on behalf of Chevron Environmental Management Company (EMC), is providing this *Monthly Remedial Progress Report – January 2016* (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 December 27, 2015 and January 20, 2016 (Tables 1 through 4).

The soil vapor extraction (SVE) and groundwater extraction and treatment (GWET) systems (collectively referred to as the DPE system) shutdown sometime between December 25 and December 26, 2015 due to unknown causes. The DPE system was restarted on January 5, 2016. On January 8, 2016, the system shutdown due to a well vault high level alarm. The well vault alarms were checked and the DPE system was restarted on January 12, 2016 and the DPE system operated through January 20, 2016. On January 7, 2016, GHD collected compliance effluent samples from the SVE and GWET systems.

During the reporting period, approximately 0.51 pounds of TPHg and 0.02 pounds of benzene were removed via the dissolved phase (Table 2). In addition, approximately 60 pounds of TPHg and 0.66 pounds of benzene were removed via the vapor phase (Table 4). A summary of the DPE system operational performance for the month of January 2016 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 - JANUARY 2016

Soil Vapor Influent Flow Rate (average scfm)	115 scfm
Soil Vapor Laboratory Influent Concentrations (TPHg ppmv)	120 ppmv
Soil Vapor Laboratory Influent Concentrations (Benzene ppmv)	1.7 ppmv
Soil Vapor Mass Removal (lb TPHg/period)	60 pounds
Soil Vapor Mass Removal (lb Benzene/period)	0.66 pound
Soil Vapor Extraction Period Operating Uptime (hours)	368.1 hours
Soil Vapor Treatment Destruction Efficiency (%)	99.6 percent

ppmv – parts per million by volume

scfm – standard cubic feet per minute

DISSOLVED-PHASE EXTRACTION DATA - JANUARY 2016

Maximum Groundwater Extraction Rate (gpm)	1.68 gpm
Average Groundwater Extraction Rate (gpm)	1.35 gpm
Dissolved-Phase Mass Removal Rate (lb TPHg/period)	0.51 pounds
Dissolved-Phase Mass Removal Rate (lb Benzene/period)	0.02 pounds
Total Volume Groundwater Treated (gallons)	20,930 gallons
Groundwater Extraction Period Operating Uptime (hours)	366.7 hours

gpm – gallons per minute

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

Sincerely,
GHD

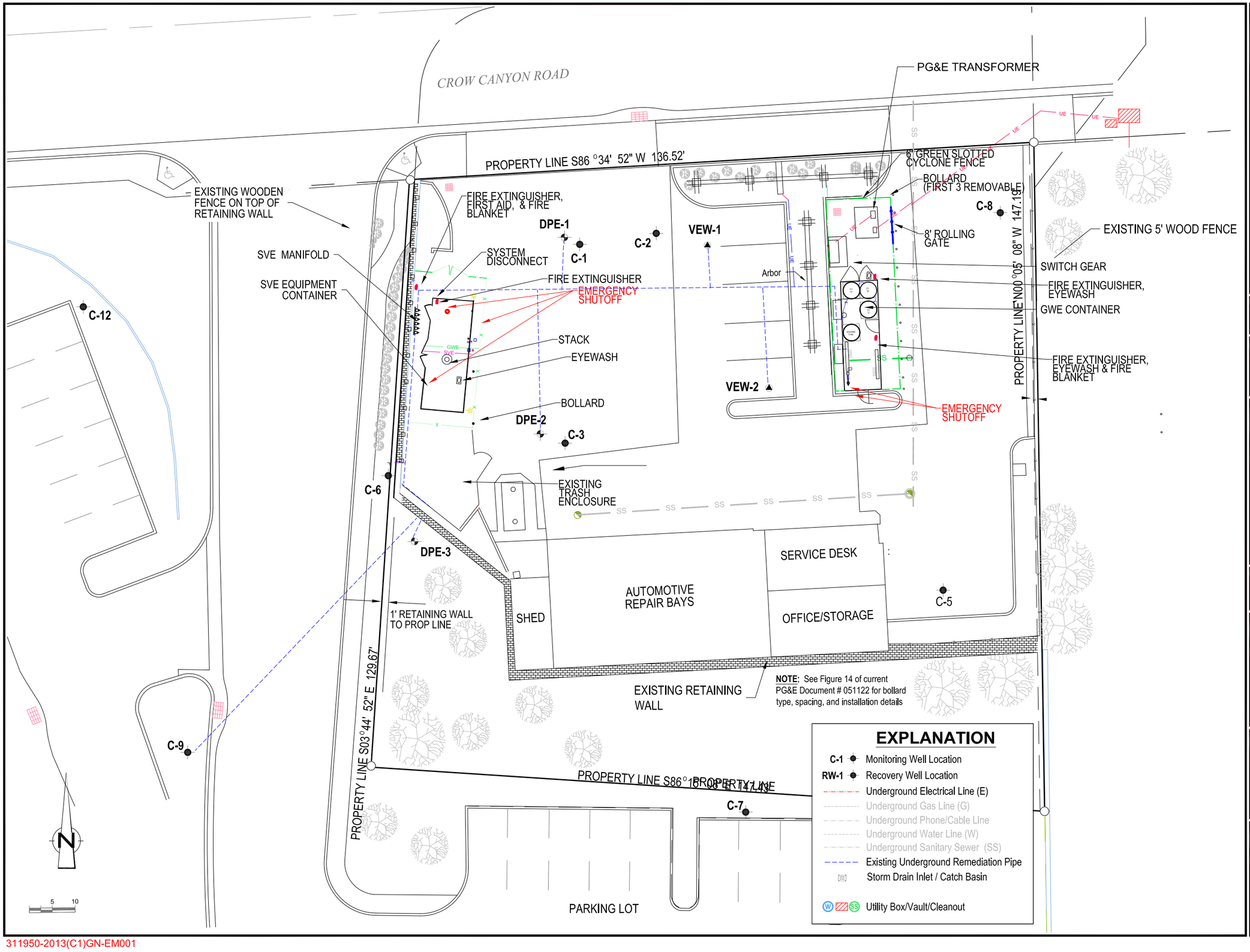
Matthew B. Smith, PE 82552

MBS/mws/59

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

c.c.: Ms. Carryl MacLeod, 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
11/09/15	**340**	**1.0**	<0.5	<0.5	**1.0**	**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	
12/02/15	**360**	**1.0**	<0.5	<0.5	**0.9 J**	**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	
01/07/16	**2,900**	**140**	**8.0**	<3.0	**210**	<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	6.8

Notes and Abbreviations:

mm/dd/yy = month/day/year
Conc. = concentration
TPHg = total petroleum hydrocarbons quantified as gasoline, analyzed by EPA Method 8015M.
MTBE = methyl tertiary butyl ether, analyzed by EPA Method 8260B.
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 Midfluent 1 (MID-1)

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

Midfluent 2 (MID-2) concentrations are not measured due to non-detect at MID-1.

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							TPHg			Benzene			MTBE		
(mm/dd/yy)	Well IDs	Operating 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**	5.5	332,000	500	1.52	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**	5.0	332,700	700	2.33	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**	106.0	341,085	8,385	1.32	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**	166.0	348,600	7,515	0.75	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**	117.0	354,200	5,600	0.80	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**	67.0	364,390	10,190	2.53	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**	188.6	373,033	8,643	0.76	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**	113.3	379,635	6,602	0.97	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**	249.1	399,600	19,965	1.34	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**	359.1	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**	336.5	461,160	24,535	1.22	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**	219.1	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**	281.0	486,220	13,532	0.80	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**	82.3	491,310	5,090	1.03	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**	167.0	504,915	13,605	1.36	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**	25.9	507,364	2,449	1.58	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**	28.7	509,837	2,473	1.44	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**	223.8	525,400	15,563	1.16	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**	340.8	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**	236.9	559,100	12,990	0.91	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**	21.2	562,200	3,100	2.44	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**	259.6	576,000	13,800	0.89	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**	342.1	661,400	10,970	0.53	331,000	---	0.10	10.8	---	0.005	1.2	---	0.0002	0.009
10/28/15 16:37	**DPE-1 - DPE-3, C-9**	142.1	663,200	1,800	0.21	332,800	---	0.02	10.8	---	0.0008	1.2	---	0.00003	0.009
11/9/15 12:15	**DPE-1 - DPE-3, C-9**	283.6	669,730	6,530	0.38	339,330	340	0.02	10.8	1.0	0.0001	1.2	2.0	0.00011	0.009
11/18/15 13:10	**DPE-1 - DPE-3, C-9**	111.1	670,913	1,183	0.18	340,513	---	0.00	10.8	---	0.00001	1.2	---	0.00002	0.009
11/25/15 17:34	**DPE-1 - DPE-3, C-9**	118.8	674,400	3,487	0.49	344,000	---	0.01	10.8	---	0.00003	1.2	---	0.00006	0.009
12/2/15 11:20	**DPE-1 - DPE-3, C-9**	161.8	679,100	4,700	0.48	348,700	360	0.01	10.8	1.0	0.00004	1.2	2.0	0.00008	0.009
12/17/15 11:30	**DPE-1 - DPE-3, C-9**	360.2	691,900	12,800	0.59	361,500	---	0.04	10.9	---	0.00011	1.2	---	0.00021	0.009
12/21/15 11:00	**DPE-1 - DPE-3, C-9**	13.0	692,440	540	0.69	362,040	---	0.00	10.9	---	0.000005	1.2	---	0.00001	0.009
1/5/16 15:15	**DPE-1 - DPE-3, C-9**	108.0	699,000	6,560	1.01	368,600	---	0.02	10.9	---	0.0001	1.2	---	0.00011	0.009
1/7/16 11:38	**DPE-1 - DPE-3, C-9**	44.4	703,100	4,100	1.54	372,700	2,900	0.10	11.0	140.0	0.005	1.2	3.0	0.00010	0.01
1/12/16 12:50	**DPE-1 - DPE-3, C-9**	22.4	705,360	2,260	1.68	374,960	---	0.05	11.1	---	0.003	1.2	---	0.00006	0.01
1/20/16 12:48	**DPE-1 - DPE-3, C-9**	192.0	719,930	14,570	1.26	389,530	---	0.35	11.4	---	0.02	1.3	---	0.00036	0.01
	Total Extracted Volume (gal):	**414,760**	**Pounds Removed:**	**0.51**	**11.4**	**Pounds Removed:**	**0.02**	**1.3**	**Pounds Removed:**	**0.001**	**0.01**				
	Average Operational Flow Rate (gpm)[3]:	**0.77**	**Gallons Removed[4]:**	**0.08**	**1.9**	**Gallons Removed[4]:**	**0.003**	**0.17**	**Gallons Removed[4]:**	**0.00008**	**0.002**				

Reporting Period: 12/27/2015 - 1/20/2016

Number of Days during Reporting Period	**25**	**days**
Gallons of Extracted Ground Water	**20,930**	**gal**
Average Flow Rate	**1.35**	**gpm**
Pounds of TPHg Removed	**0.51**	**lbs**
TPHg Removal Rate	**0.02**	**lbs/day**
Pounds of Benzene Removed	**0.02**	**lbs**
Benzene Removal Rate	**0.0010**	**lbs/day**
Pounds of MTBE Removed	**0.0005**	**lbs**
MTBE Removal Rate	**0.00002**	**lbs/day**

Cumulative Results Since Start-up:

Number Days since Startup	**495**	**days**
Cumulative Total Gallons Extracted	**414,760**	**gal**
Average Flow Rate[3]	**0.77**	**gpm**
Cumulative Pounds of TPHg Removed	**11.4**	**lbs**
TPHg Removal Rate	**0.02**	**lbs/day**
Cumulative Pounds of Benzene Removed	**1.3**	**lbs**
Benzene Removal Rate	**0.003**	**lbs/day**
Cumulative Pounds of MTBE Removed	**0.01**	**lbs**
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 t `
3. When concentration of individual parameters were not detected, the concentration was assumed to be half the detection limit for calculation purposes.
   Average Flow Rate = (Volume of Extracted Water (gal) / Number of Operational Days) * (60 minutes/hour) * (24 hours/day)
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
lb = pounds
--- = not applicable

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	C-9, DPE-1 - DPE3, VE-1, VE-2	0.0	4013.5	0%	0.0	NM	3.00	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	C-9, DPE-1 - DPE3, VE-1, VE-2	5.5	4019.0	1.3%	5.5	15.0	2.81	93	165	143	11	189	255	213	213	12,784	70,312	20	880	NM	NM	0.0	NM	100%
10/6/14 11:00	C-9, DPE-1 - DPE3, VE-1, VE-2	5.0	4024.0	3.0%	5.0	15.0	2.81	83	144	127	10	176	255	217	217	13,014	65,070	25	899	NM	560	0.2	39.0	100%
10/13/14 14:00	C-9, DPE-1 - DPE-3	106.0	4130.0	62.0%	106.0	14.5	2.35	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	C-9, DPE-1 - DPE-3	166.0	4296.0	100%	166.0	15.0	3.18	79	140	123	10.5	171	255	219	219	13,133	2,180,062	0	750	927	650	0.3	45.6	100%
10/27/14 11:00	C-9, DPE-1, DPE-2	117.0	4413.0	69.9%	117.0	15.0	4.14	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	C-9, DPE-3, DPE-2	67.0	4480.0	27.7%	67.0	20.0	5.00	61	146	123	10.7	61	146	152	123	7,394	495,403	0	701	900	1,250	0.0	60.9	100%
11/21/14 13:50	C-9, DPE-3, DPE-2	188.6	4668.6	52.3%	188.6	20.0	5.30	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	C-9, DPE-3, DPE-2	113.3	4781.9	42.7%	113.3	20.0	7.40	63	103	78	3.3	169	157	133	78	4,696	532,051	0	697	785	1,215	0.5	51.8	100%
12/16/14 11:30	C-9, DPE-3, DPE-2	249.1	5031.0	75.0%	249.1	18.5	10.20	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	C-9, DPE-3, DPE-2	359.1	5390.1	100%	359.1	22.0	10.00	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	C-9, DPE-3, DPE-2	336.5	5726.6	100%	336.5	23.0	8.10	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	C-9, DPE-3, DPE-2	219.1	5945.7	100%	219.1	23.0	7.10	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	C-9, DPE-2	281.0	6226.7	98.8%	281.0	22.0	8.30	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	C-9, DPE-2	82.3	6309.0	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%
3/3/15 14:25	C-9, DPE-1	167.0	6476.0	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	C-9, DPE-3	25.9	6501.9	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%
3/16/15 12:00	C-9, DPE-3	28.7	6530.6	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%
4/2/15 9:30	C-9, DPE-3	223.8	6754.4	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	7095.2	100%	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	7332.1	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	7353.3	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%
5/29/15 9:30	DPE-1, VEW-2	259.6	7612.9	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	7790.8	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	7923.4	51.8%	132.6	SVE SYSTEM DOWN FOR REPAIR																		
10/22/15 18:30	DPE-1, VEW-1	6.2	7929.6	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%
10/28/15 16:37	DPE-1, VEW-1	22.8	7952.4	16.0%	22.8	NM	5.8	NM	NM	NM	NM	NM	176	NM	NM	NM	NM	0	700	773	NM	NM	NM	NM
11/9/15 12:15	DPE-1, VEW-2	284.3	8236.7	100%	284.3	23.0	8.0	55	66	50	6.5	175	176	149	149	8,921	2,536,202	0	699	762	250	0.0	11.9	100%
11/18/15 13:10	DPE-1, VEW-2	44.6	8281.3	20.6%	44.6	22.5	7.1	64	81	63	6.4	171	157	133	133	8,006	357,082	0	701	734	153	0.8	6.6	99.5%
11/25/15 17:34	DPE-1, VEW-2	118.8	8400.1	68.9%	118.8	LOCAL POWER OUTAGE, RESTART ONLY																		
12/2/15 11:20	DPE-1, C-9	163.0	8563.1	100%	163.0	22.5	7.2	53	84	66	7.5	174	157	133	133	7,995	1,303,135	0	700	833	230	0.6	9.8	99.7%
12/17/15 11:30	DPE-1, C-9	358.6	8921.7	100%	358.6	23.0	7.2	54	64	50	7.0	170	157	134	134	8,031	2,879,800	0	700	795	425	3.0	18.3	99.3%
12/21/15 11:00	DPE-1, C-9	12.3	8934.0	12.9%	12.3	22.5	7.7	54	53	40	6.7	172	157	133	133	7,999	98,393	0	700	731	206	3.0	8.8	98.5%
1/5/16 15:15	DPE-1, C-9	108.0	9042.0	29.6%	108.0	SVE SYSTEM DOWN, RESTART ONLY																		
1/7/16 11:38	DPE-1, C-9	43.5	9085.5	100%	43.5	22.5	8.6	53	62	46	6.0	176	137	115	115	6,925	301,228	0	700	688	11	0.0	0.4	100%
1/12/16 12:50	DPE-1, C-9	25.0	9110.5	20.6%	25.0	SVE SYSTEM DOWN, RESTART ONLY															27			
1/20/16 12:48	DPE-1, C-9	191.6	9302.1	100%	191.6	23.0	8.8	65.5	49	35	5.4	177	137	115	115	6,906	1,323,195	0	700	694	36	0.0	1.3	100%

Since Startup:	45%	5,289	**Average Flow Rate (acfm/scfm):**	168	143				
Year to Date:	51%	368.1	**Maxium Flow Rate (acfm/scfm):**	294	259	**Throughput (cubic feet) from 9/12/14 to 1/20/16:**	36,876,530		
Month to Date:	51%	368.1							

Cumulative Results Since Startup: 9/12/2014 to 1/20/2016

Number Days Since Startup **522 days**

Number of Hours Operated Since Startup **5841 hours**

Abbreviations and Notes:

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

GWE off from 7/4/2015 to 10/22/2015 for system repairs. GWE system temporarily off from 12/17/15 to 12/21/15 due to high holding tank alarm. Temporary shut-down between 12/25/15 to 12/26/15 due to unknown causes

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	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	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	155	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	1186	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	2049	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	0.44	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	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	585*	0.01	0.01	585	0.31	0.0020	< 0.0020	0.31	32.9	3436	0.01	0.0	19.9	0.00007	0.0	35.4	0.00007	28.3	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	3631	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	4081	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	4671	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	5250	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	5635	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	C-9, DPE-2	800	17	7.3	824	1.5	0.014	0.0012	1.52	34.1	6088	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	C-9, DPE-2	--	--	--	--	--	--	--	--	34.6	6206	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	C-9, DPE-1	320	5.4	2.5	328	0.076	<0.0010	<0.0010	0.078	11.6	6367	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	C-9, DPE-3	--	--	--	--	--	--	--	--	12.4	6380	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	C-9, DPE-3	--	--	--	--	--	--	--	--	12.2	6395	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	C-9, DPE-3	--	--	--	--	--	--	--	--	14.8	6521	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	0.85	10.4	6700	0.03	0.1	56.1	0.0003	0.04	56.9	0.00007	9.1	0.03	99.7%
4/30/15 10:20	DPE-1, DPE-2	--	--	--	--	--	--	--	--	10.4	6803	0.04	0.1	56.9	0.0003	0.04	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	0.18	10.9	6812	0.008	0.1	57.0	0.002	0.04	57.3	0.002	9.6	0.01	99.9%
5/29/15 9:30	DPE-1, VEW-2	--	--	--	--	--	--	--	--	5.9	6903	0.004	0.1	58.3	0.001	0.02	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	0.51	83.4	7234	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	7694 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	0.26	49.0 b	7707 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 16:37	DPE-1, VEW-1	--	--	--	--	--	--	--	--	49.0 b,c	7753 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
11/9/15 12:15	DPE-1, VEW-2	870	13	6.2	889	0.58	0.0010	<0.0010	0.58	48.3	8325	0.03	0.6	75.9	0.00005	0.3	65.6	0.00005	42.4	0.03	99.9%
11/18/15 13:10	DPE-1, VEW-2	--	--	--	--	--	--	--	--	43.3	8406	0.03	0.5	76.9	0.00004	0.3	66.1	0.00004	38.1	0.02	99.9%
11/25/15 18:10	DPE-1, VEW-2	--	--	--	--	--	--	--	--	43.3 c	8486 c	0.03 c	0.5 c	77.9 c	0.00004 c	0.3 c	66.6 c	0.00004 c	38.1 c	0.02 c	99.9% c
12/2/15 11:20	DPE-1, C-9	3,700	52	28	3,780	0.87	0.0045	0.0012	0.88	184	9735	0.04	2.0	91.6	0.0002	1.2	74.9	0.00005	162	0.04	100.0%
12/17/15 11:30	DPE-1, C-9	--	--	--	--	--	--	--	--	185	12489	0.04	2.0	121.8	0.0002	1.2	93.2	0.00005	162	0.04	100.0%
12/21/15 11:00	DPE-1, C-9	--	--	--	--	--	--	--	--	184	12584	0.04	2.0	123	0.0002	1.2	93.9	0.00005	162	0.04	100.0%
1/5/16 15:15	DPE-1, C-9	--	--	--	--	--	--	--	--	184 c	12678 c	0.04 c	2.0 c	124 c	0.0002 c	1.2 c	94.5 c	0.00005 c	162 c	0.04 c	100.0%
1/7/16 11:38	DPE-1, C-9	120	1.7	0.35	122	0.54	0.0015	<0.0010	0.54	5.2	12688	0.02	0.1	124	0.00006	0.01	94.5	0.00004	4.5	0.02	99.6%
1/12/16 12:50	DPE-1, C-9	--	--	--	--	--	--	--	--	5.2 c	12697 c	0.02 c	0.1 c	124 c	0.00006 c	0.01 c	94.6 c	0.00004 c	4.5 c	0.02 c	99.6%
1/20/16 12:48	DPE-1, C-9	--	--	--	--	--	--	--	--	5.2	12738	0.02	0.1	124	0.00006	0.01	94.7	0.00004	4.5	0.02	99.6%
										Period Pounds Removed[9]:	**TPHg = 60**		**Benzene = 0.66**			**MTBE = 0.15**				
										Total Pounds Removed:	**TPHg = 12,738**		**Benzene = 124**			**MTBE = 94.7**				

Reporting Period: January 2015	
Number Days in Reporting Period	**25**
Pounds of TPHg Removed during Reporting Period	**60**
Average TPHg Removal Rate (lb/day)	**2.4**
Pounds of Benzene Removed during Reporting Period	**0.7**
Average Benzene Removal Rate (lb/day)	**0.03**
Pounds of MtBE Removed during Reporting Period	**0.2**
Average MtBE Removal Rate (lb/day)	**0.01**
Cumulative Results Since Startup: 9/12/2014 through 1/20/2016	
Number Days in Since Startup	**495**
Cumulative Pounds of TPHg Removed Since Startup	**12,738**
Average TPHg Removal Rate (lb/day) Since Startup	**83.8**
Cumulative Pounds of Benzene Removed Since Startup	**124**
Average Benzene Removal Rate (lb/day) Since Startup	**0.78**
Cumulative pounds of MtBE Removed Since Startup	**0.15**
Average MtBE Removal Rate (lb/day) Since Startup	**0.64**

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

Abbreviations (continued):
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

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

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

Attachment A
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

February 05, 2016

Project: 95607

Submittal Date: 01/08/2016
Group Number: 1622216
PO Number: 0015164161
Release Number: HETRICK
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
EFF-1-W-010716 Grab Groundwater	8199744
MID-1-W-010716 Grab Groundwater	8199746
INF-1-W-010716 Grab Groundwater	8199747
QA-T-W-010716 Water	8199748

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

Respectfully Submitted,

Amek Carter
Specialist

(717) 556-7252

Sample Description: EFF-1-W-010716 Grab Groundwater
Facility# 95607 CRAW
5269 Crow Canyon Rd-Castro T0600100344

LL Sample # WW 8199744
LL Group # 1622216
Account # 10880

Project Name: 95607

Collected: 01/07/2016 09:00 by GB

Submitted: 01/08/2016 09:45
Reported: 02/05/2016 09:50

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

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-010716 Grab Groundwater
Facility# 95607 CRAW
5269 Crow Canyon Rd-Castro T0600100344

LL Sample # WW 8199744
LL Group # 1622216
Account # 10880

Project Name: 95607

Collected: 01/07/2016 09:00 by GB

Submitted: 01/08/2016 09:45
Reported: 02/05/2016 09:50

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

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	11.7		0.54	4.0	1
06026	Barium	7440-39-3	187		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	0.11	J	0.10	1.0	1
06033	Copper	7440-50-8	1.8	J	0.40	4.0	1
06035	Lead	7439-92-1	0.18	J	0.13	2.0	1
06038	Molybdenum	7439-98-7	1.8		0.25	1.0	1
06039	Nickel	7440-02-0	N.D.		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-010716 Grab Groundwater
Facility# 95607 CRAW
5269 Crow Canyon Rd-Castro T0600100344

LL Sample # WW 8199744
LL Group # 1622216
Account # 10880

Project Name: 95607

Collected: 01/07/2016 09:00 by GB

Submitted: 01/08/2016 09:45
Reported: 02/05/2016 09:50

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

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.	2,300	J	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	N160121AA	01/12/2016 10:55	Nicole S Lamoreaux	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	N160121AA	01/12/2016 10:55	Nicole S Lamoreaux	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	16012A20A	01/12/2016 15:27	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	16012A20A	01/12/2016 15:27	Marie D Beamenderfer	1
06024	Antimony	SW-846 6020A	1	160120639001A	01/15/2016 11:05	Deborah A Krady	1
06025	Arsenic	SW-846 6020A	1	160120639001A	01/15/2016 11:05	Deborah A Krady	1
06026	Barium	SW-846 6020A	1	160120639001D	01/15/2016 11:05	Deborah A Krady	1
06027	Beryllium	SW-846 6020A	1	160120639001A	01/15/2016 11:05	Deborah A Krady	1
06028	Cadmium	SW-846 6020A	1	160120639001A	01/15/2016 11:05	Deborah A Krady	1
06031	Chromium	SW-846 6020A	1	160120639001A	01/18/2016 09:01	Deborah A Krady	1
06032	Cobalt	SW-846 6020A	1	160120639001A	01/15/2016 11:05	Deborah A Krady	1
06033	Copper	SW-846 6020A	1	160120639001A	01/15/2016 11:05	Deborah A Krady	1
06035	Lead	SW-846 6020A	1	160120639001A	01/15/2016 11:05	Deborah A Krady	1
06038	Molybdenum	SW-846 6020A	1	160120639001C	01/18/2016 09:01	Deborah A Krady	1
06039	Nickel	SW-846 6020A	1	160120639001A	01/15/2016 11:05	Deborah A Krady	1
06041	Selenium	SW-846 6020A	1	160120639001B	01/15/2016 11:05	Deborah A Krady	1
06042	Silver	SW-846 6020A	1	160120639001A	01/15/2016 11:05	Deborah A Krady	1
06045	Thallium	SW-846 6020A	1	160120639001A	01/15/2016 11:05	Deborah A Krady	1
06048	Vanadium	SW-846 6020A	1	160120639001A	01/18/2016 09:01	Deborah A Krady	1
06049	Zinc	SW-846 6020A	1	160120639001A	01/15/2016 11:05	Deborah A Krady	1
00259	Mercury	SW-846 7470A	1	160125713003	01/15/2016 09:52	Damary Valentin	1
10639	ICPMS - Water, 3020A - U4	SW-846 3010A modified	1	160120639001	01/14/2016 08:55	Christopher M Klumpp	1

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

Sample Description: **EFF-1-W-010716 Grab Groundwater**
Facility# 95607 CRAW
5269 Crow Canyon Rd-Castro T0600100344

LL Sample # WW 8199744
LL Group # 1622216
Account # 10880

Project Name: 95607

Collected: 01/07/2016 09:00 by GB

Submitted: 01/08/2016 09:45
Reported: 02/05/2016 09:50

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

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	160125713003	01/14/2016 11:50	Christopher M Klumpp	1
08255	Total Cyanide (water)	SW-846 9012A	1	16013117101A	01/14/2016 07:49	Joseph E McKenzie	1
02393	Phenols (water)	SW-846 9066	1	16014120101A	01/15/2016 10:25	Drew M Gerhart	1
08256	Cyanide Water Distillation	SW-846 9012A	1	16013117101A	01/13/2016 09:15	Nancy J Shoop	1
08123	Phenol Distillation (SW-846)	SW-846 9065	1	16014120101A	01/14/2016 09:20	Nancy J Shoop	1
08079	HEM (oil & grease)	EPA 1664A	1	16019807901A	01/19/2016 18:37	Michelle L Lalli	1

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

Sample Description: MID-1-W-010716 Grab Groundwater
Facility# 95607 CRAW
5269 Crow Canyon Rd-Castro T0600100344

LL Sample # WW 8199746
LL Group # 1622216
Account # 10880

Project Name: 95607

Collected: 01/07/2016 09:20 by GB

Submitted: 01/08/2016 09:45
Reported: 02/05/2016 09:50

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

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

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	F160113AA	01/11/2016 20:17	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F160113AA	01/11/2016 20:17	Hu Yang	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	16012A20A	01/12/2016 15:54	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	16012A20A	01/12/2016 15:54	Marie D Beamenderfer	1

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

Sample Description: INF-1-W-010716 Grab Groundwater
Facility# 95607 CRAW
5269 Crow Canyon Rd-Castro T0600100344

LL Sample # WW 8199747
LL Group # 1622216
Account # 10880

Project Name: 95607

Collected: 01/07/2016 09:30 by GB

Submitted: 01/08/2016 09:45
Reported: 02/05/2016 09:50

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

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	140	3	5	5
10945	Ethylbenzene	100-41-4	N.D.	3	5	5
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	3	5	5
10945	Toluene	108-88-3	8	3	5	5
10945	Xylene (Total)	1330-20-7	210	3	5	5
GC Volatiles	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	2,900	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	Z160112AA	01/12/2016 00:46	Hu Yang	5
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z160112AA	01/12/2016 00:46	Hu Yang	5
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	16012A20A	01/12/2016 16:22	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	16012A20A	01/12/2016 16:22	Marie D Beamenderfer	1

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

Sample Description: QA-T-W-010716 Water
Facility# 95607 CRAW
5269 Crow Canyon Rd-Castro T0600100344

LL Sample # WW 8199748
LL Group # 1622216
Account # 10880

Project Name: 95607

Collected: 01/07/2016

Submitted: 01/08/2016 09:45
Reported: 02/05/2016 09:50

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

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

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	Z160112AA	01/11/2016 21:09	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z160112AA	01/11/2016 21:09	Hu Yang	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	16012A20A	01/12/2016 13:36	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	16012A20A	01/12/2016 13:36	Marie D Beamenderfer	1

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

Quality Control Summary

Client Name: ChevronTexaco
Reported: 02/05/2016 09:50

Group Number: 1622216

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.

Method Blank

Analysis Name	Result	MDL**	LOQ
	ug/l	ug/l	ug/l
Batch number: F160113AA	Sample number(s): 8199746		
Benzene	N.D.	0.5	1
Ethylbenzene	N.D.	0.5	1
Methyl Tertiary Butyl Ether	N.D.	0.5	1
Toluene	N.D.	0.5	1
Xylene (Total)	N.D.	0.5	1
Batch number: N160121AA	Sample number(s): 8199744		
Acetone	N.D.	6	20
t-Amyl methyl ether	N.D.	0.5	1
Benzene	N.D.	0.5	1
Bromobenzene	N.D.	1	5
Bromochloromethane	N.D.	1	5
Bromodichloromethane	N.D.	0.5	1
Bromoform	N.D.	0.5	4
Bromomethane	N.D.	0.5	1
2-Butanone	N.D.	3	10
t-Butyl alcohol	N.D.	5	20
n-Butylbenzene	N.D.	1	5
sec-Butylbenzene	N.D.	1	5
tert-Butylbenzene	N.D.	1	5
Carbon Disulfide	N.D.	1	5
Carbon Tetrachloride	N.D.	0.5	1
Chlorobenzene	N.D.	0.5	1
Chloroethane	N.D.	0.5	1
2-Chloroethyl Vinyl Ether	N.D.	2	10
Chloroform	N.D.	0.5	1
Chloromethane	N.D.	0.5	1
2-Chlorotoluene	N.D.	1	5
4-Chlorotoluene	N.D.	1	5
1,2-Dibromo-3-chloropropane	N.D.	2	5
Dibromochloromethane	N.D.	0.5	1
1,2-Dibromoethane	N.D.	0.5	1
Dibromomethane	N.D.	0.5	1
1,2-Dichlorobenzene	N.D.	1	5
1,3-Dichlorobenzene	N.D.	1	5
1,4-Dichlorobenzene	N.D.	1	5
Dichlorodifluoromethane	N.D.	0.5	1
1,1-Dichloroethane	N.D.	0.5	1
1,2-Dichloroethane	N.D.	0.5	1
1,1-Dichloroethene	N.D.	0.5	1
cis-1,2-Dichloroethene	N.D.	0.5	1
trans-1,2-Dichloroethene	N.D.	0.5	1
1,2-Dichloropropane	N.D.	0.5	1

*- 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.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: ChevronTexaco
Reported: 02/05/2016 09:50

Group Number: 1622216

Analysis Name	Result	MDL**	LOQ
	ug/l	ug/l	ug/l
1,3-Dichloropropane	N.D.	0.5	1
2,2-Dichloropropane	N.D.	0.5	1
1,1-Dichloropropene	N.D.	1	5
cis-1,3-Dichloropropene	N.D.	0.5	1
trans-1,3-Dichloropropene	N.D.	0.5	1
Ethanol	N.D.	50	250
Ethyl t-butyl ether	N.D.	0.5	1
Ethylbenzene	N.D.	0.5	1
Freon 113	N.D.	2	10
Hexachlorobutadiene	N.D.	2	5
2-Hexanone	N.D.	3	10
di-Isopropyl ether	N.D.	0.5	1
Isopropylbenzene	N.D.	1	5
p-Isopropyltoluene	N.D.	1	5
Methyl Tertiary Butyl Ether	N.D.	0.5	1
4-Methyl-2-pentanone	N.D.	3	10
Methylene Chloride	N.D.	2	4
Naphthalene	N.D.	1	5
n-Propylbenzene	N.D.	1	5
Styrene	N.D.	1	5
1,1,1,2-Tetrachloroethane	N.D.	0.5	1
1,1,2,2-Tetrachloroethane	N.D.	0.5	1
Tetrachloroethene	N.D.	0.5	1
Toluene	N.D.	0.5	1
1,2,3-Trichlorobenzene	N.D.	1	5
1,2,4-Trichlorobenzene	N.D.	1	5
1,1,1-Trichloroethane	N.D.	0.5	1
1,1,2-Trichloroethane	N.D.	0.5	1
Trichloroethene	N.D.	0.5	1
Trichlorofluoromethane	N.D.	0.5	1
1,2,3-Trichloropropane	N.D.	1	5
1,2,4-Trimethylbenzene	N.D.	1	5
1,3,5-Trimethylbenzene	N.D.	1	5
Vinyl Chloride	N.D.	0.5	1
m+p-Xylene	N.D.	0.5	1
o-Xylene	N.D.	0.5	1
Batch number: Z160112AA	Sample number(s): 8199747-8199748		
Benzene	N.D.	0.5	1
Ethylbenzene	N.D.	0.5	1
Methyl Tertiary Butyl Ether	N.D.	0.5	1
Toluene	N.D.	0.5	1
Xylene (Total)	N.D.	0.5	1
Batch number: 16012A20A	Sample number(s): 8199744,8199746-8199748		
TPH-GRO N. CA water C6-C12	N.D.	50	100
Batch number: 160120639001A	Sample number(s): 8199744		
Antimony	N.D.	0.33	2.0
Arsenic	N.D.	0.54	4.0
Beryllium	N.D.	0.071	1.0
Cadmium	N.D.	0.23	1.0
Chromium	N.D.	0.70	4.0
Cobalt	N.D.	0.10	1.0
Copper	1.2 J	0.40	4.0

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Quality Control Summary

Client Name: ChevronTexaco
Reported: 02/05/2016 09:50

Group Number: 1622216

Analysis Name	Result	MDL**	LOQ
	ug/l	ug/l	ug/l
Lead	N.D.	0.13	2.0
Nickel	N.D.	0.94	4.0
Silver	N.D.	0.11	1.0
Thallium	N.D.	0.15	1.0
Vanadium	N.D.	0.22	1.0
Zinc	N.D.	7.4	30.0
Batch number: 160120639001B	Sample number(s): 8199744		
Selenium	N.D.	0.50	4.0
Batch number: 160120639001C	Sample number(s): 8199744		
Molybdenum	N.D.	0.25	1.0
Batch number: 160120639001D	Sample number(s): 8199744		
Barium	N.D.	0.92	4.0
Batch number: 160125713003	Sample number(s): 8199744		
Mercury	N.D.	0.050	0.20
Batch number: 16013117101A	Sample number(s): 8199744		
Total Cyanide (water)	N.D.	5.0	10
Batch number: 16014120101A	Sample number(s): 8199744		
Phenols (water)	N.D.	15	40
Batch number: 16019807901A	Sample number(s): 8199744		
HEM (oil & grease)	N.D.	1,400	5,000

LCS/LCSD

Analysis Name	LCS Spike Added	LCS Conc	LCSD Spike Added	LCSD Conc	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	ug/l	ug/l	ug/l	ug/l					
Batch number: F160113AA	Sample number(s): 8199746								
Benzene	20	18.72			94		78-120		
Ethylbenzene	20	18.15			91		78-120		
Methyl Tertiary Butyl Ether	20	19.11			96		75-120		
Toluene	20	18.12			91		80-120		
Xylene (Total)	60	55.61			93		80-120		
Batch number: N160121AA	Sample number(s): 8199744								
Acetone	150	165.73	150	228.23	110	152*	58-138	32*	30
t-Amyl methyl ether	20	17.55	20	17.4	88	87	75-120	1	30
Benzene	20	22.37	20	21.99	112	110	78-120	2	30
Bromobenzene	20	20.24	20	20.1	101	101	80-120	1	30
Bromochloromethane	20	22.78	20	22.69	114	113	80-120	0	30
Bromodichloromethane	20	19.44	20	19.03	97	95	73-120	2	30
Bromoform	20	17.24	20	17.14	86	86	61-121	1	30
Bromomethane	20	15.7	20	15.54	78	78	53-130	1	30
2-Butanone	150	151.05	150	167.6	101	112	62-131	10	30
t-Butyl alcohol	200	199.15	200	197.43	100	99	78-121	1	30
n-Butylbenzene	20	20.26	20	19.86	101	99	68-120	2	30
sec-Butylbenzene	20	19.89	20	19.46	99	97	75-120	2	30
tert-Butylbenzene	20	18.58	20	18.35	93	92	74-121	1	30
Carbon Disulfide	20	20.45	20	20.05	102	100	58-126	2	30

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Quality Control Summary

Client Name: ChevronTexaco
Reported: 02/05/2016 09:50

Group Number: 1622216

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Carbon Tetrachloride	20	21.74	20	21.08	109	105	74-130	3	30
Chlorobenzene	20	21.5	20	20.95	108	105	80-120	3	30
Chloroethane	20	16.54	20	16.23	83	81	56-120	2	30
2-Chloroethyl Vinyl Ether	20	17.23	20	17.22	86	86	42-152	0	30
Chloroform	20	21.56	20	21.23	108	106	80-120	2	30
Chloromethane	20	20.7	20	18.82	104	94	65-129	10	30
2-Chlorotoluene	20	19.72	20	19.69	99	98	78-121	0	30
4-Chlorotoluene	20	20.15	20	19.66	101	98	78-120	2	30
1,2-Dibromo-3-chloropropane	20	14.26	20	14.09	71	70	55-131	1	30
Dibromochloromethane	20	19.16	20	18.63	96	93	72-120	3	30
1,2-Dibromoethane	20	20.03	20	19.78	100	99	80-120	1	30
Dibromomethane	20	21.1	20	20.92	106	105	80-120	1	30
1,2-Dichlorobenzene	20	20.16	20	19.82	101	99	80-120	2	30
1,3-Dichlorobenzene	20	19.96	20	19.67	100	98	80-120	1	30
1,4-Dichlorobenzene	20	20.72	20	20.37	104	102	80-120	2	30
Dichlorodifluoromethane	20	17.49	20	17.05	87	85	55-127	3	30
1,1-Dichloroethane	20	20.93	20	20.63	105	103	80-120	1	30
1,2-Dichloroethane	20	20.24	20	19.82	101	99	72-127	2	30
1,1-Dichloroethene	20	22.68	20	22.24	113	111	76-124	2	30
cis-1,2-Dichloroethene	20	22.25	20	21.6	111	108	80-120	3	30
trans-1,2-Dichloroethene	20	22.94	20	22.44	115	112	80-120	2	30
1,2-Dichloropropane	20	21.78	20	21.12	109	106	80-120	3	30
1,3-Dichloropropane	20	19.68	20	19.23	98	96	80-120	2	30
2,2-Dichloropropane	20	19.65	20	19.03	98	95	71-125	3	30
1,1-Dichloropropene	20	20.18	20	19.6	101	98	80-126	3	30
cis-1,3-Dichloropropene	20	19.08	20	18.83	95	94	80-120	1	30
trans-1,3-Dichloropropene	20	17.99	20	17.74	90	89	76-120	1	30
Ethanol	500	737.13	500	746.75	147*	149*	49-144	1	30
Ethyl t-butyl ether	20	17.14	20	17.07	86	85	69-120	0	30
Ethylbenzene	20	20.54	20	19.85	103	99	78-120	3	30
Freon 113	20	25.34	20	23.85	127	119	67-127	6	30
Hexachlorobutadiene	20	19.78	20	19.03	99	95	60-120	4	30
2-Hexanone	100	92.44	100	93.45	92	93	59-127	1	30
di-Isopropyl ether	20	19.51	20	19.21	98	96	70-124	2	30
Isopropylbenzene	20	19.86	20	19.54	99	98	80-120	2	30
p-Isopropyltoluene	20	19.25	20	19.02	96	95	76-120	1	30
Methyl Tertiary Butyl Ether	20	18.88	20	18.6	94	93	75-120	2	30
4-Methyl-2-pentanone	100	97.28	100	95.14	97	95	59-130	2	30
Methylene Chloride	20	21.91	20	21.3	110	107	77-121	3	30
Naphthalene	20	16.64	20	16.12	83	81	59-120	3	30
n-Propylbenzene	20	20.33	20	19.89	102	99	75-130	2	30
Styrene	20	19.11	20	18.44	96	92	80-120	4	30
1,1,1,2-Tetrachloroethane	20	20.18	20	19.78	101	99	80-120	2	30
1,1,2,2-Tetrachloroethane	20	19.03	20	18.6	95	93	65-131	2	30
Tetrachloroethene	20	21.68	20	21.34	108	107	80-122	2	30
Toluene	20	20.98	20	20.47	105	102	80-120	2	30
1,2,3-Trichlorobenzene	20	18.08	20	17.73	90	89	69-120	2	30
1,2,4-Trichlorobenzene	20	17.99	20	17.61	90	88	73-120	2	30
1,1,1-Trichloroethane	20	21.58	20	21	108	105	66-126	3	30
1,1,2-Trichloroethane	20	20.3	20	19.86	101	99	80-120	2	30
Trichloroethene	20	22.23	20	21.78	111	109	80-120	2	30
Trichlorofluoromethane	20	21.22	20	20.6	106	103	60-142	3	30
1,2,3-Trichloropropane	20	20.03	20	19.4	100	97	76-120	3	30

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P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: ChevronTexaco
Reported: 02/05/2016 09:50

Group Number: 1622216

Analysis Name	LCS Spike Added	LCS Conc	LCSD Spike Added	LCSD Conc	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	ug/l	ug/l	ug/l	ug/l					
1,2,4-Trimethylbenzene	20	18.87	20	18.62	94	93	75-120	1	30
1,3,5-Trimethylbenzene	20	19.09	20	18.69	95	93	80-120	2	30
Vinyl Chloride	20	20.02	20	19.32	100	97	69-120	4	30
m+p-Xylene	40	41.24	40	40.39	103	101	80-120	2	30
o-Xylene	20	19.09	20	18.49	95	92	79-120	3	30
Batch number: Z160112AA	Sample number(s): 8199747-8199748								
Benzene	20	18.94			95		78-120		
Ethylbenzene	20	19.29			96		78-120		
Methyl Tertiary Butyl Ether	20	19.78			99		75-120		
Toluene	20	19.73			99		80-120		
Xylene (Total)	60	59.4			99		80-120		
	ug/l	ug/l	ug/l	ug/l					
Batch number: 16012A20A	Sample number(s): 8199744,8199746-8199748								
TPH-GRO N. CA water C6-C12	1100	1083.06	1100	1076.37	98	98	71-138	1	30
	ug/l	ug/l	ug/l	ug/l					
Batch number: 160120639001A	Sample number(s): 8199744								
Antimony	6.00	5.84			97		80-120		
Arsenic	10	10.49			105		80-120		
Beryllium	4.00	4.13			103		80-120		
Cadmium	5.00	5.02			100		80-120		
Chromium	50	49.63			99		80-120		
Cobalt	250	256.8			103		80-120		
Copper	50	51.48			103		80-120		
Lead	15	15.23			102		80-120		
Nickel	50	52.55			105		80-120		
Silver	50	52			104		80-120		
Thallium	2.00	1.93			96		80-120		
Vanadium	50	49.09			98		80-120		
Zinc	500	513.7			103		80-120		
Batch number: 160120639001B	Sample number(s): 8199744								
Selenium	10	10.07			101		80-120		
Batch number: 160120639001C	Sample number(s): 8199744								
Molybdenum	50	49.46			99		80-120		
Batch number: 160120639001D	Sample number(s): 8199744								
Barium	50	50.78			102		80-120		
Batch number: 160125713003	Sample number(s): 8199744								
Mercury	1.00	0.966			97		80-120		
	ug/l	ug/l	ug/l	ug/l					
Batch number: 16013117101A	Sample number(s): 8199744								
Total Cyanide (water)	200	207.3			104		90-110		
Batch number: 16014120101A	Sample number(s): 8199744								
Phenols (water)	200	197.44			99		82-109		
	ug/l	ug/l	ug/l	ug/l					
Batch number: 16019807901A	Sample number(s): 8199744								

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Quality Control Summary

Client Name: ChevronTexaco
Reported: 02/05/2016 09:50

Group Number: 1622216

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
HEM (oil & grease)	40000	39700	40000	39500	99	99	78-114	1	11

MS/MSD

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

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: F160113AA	Sample number(s): 8199746 UNSPK: P200348									
Benzene	20.74	100	116.54	100	114.11	96	93	78-120	2	30
Ethylbenzene	20.24	100	117.89	100	115.86	98	96	78-120	2	30
Methyl Tertiary Butyl Ether	4.53	100	93.96	100	90.05	89	86	75-120	4	30
Toluene	7.57	100	100.2	100	98.48	93	91	80-120	2	30
Xylene (Total)	14.61	300	302.84	300	297.07	96	94	80-120	2	30
Batch number: N160121AA	Sample number(s): 8199744 UNSPK: P200445									
Acetone	N.D.	3000	4342.85	3000	4036.96	145*	135	58-138	7	30
t-Amyl methyl ether	N.D.	400	331.74	400	343.35	83	86	75-120	3	30
Benzene	16.13	400	454.35	400	455.64	110	110	78-120	0	30
Bromobenzene	N.D.	400	396.86	400	400.42	99	100	80-120	1	30
Bromochloromethane	N.D.	400	456.27	400	462.51	114	116	80-120	1	30
Bromodichloromethane	N.D.	400	394.39	400	394.03	99	99	73-120	0	30
Bromoform	N.D.	400	341.18	400	345.63	85	86	61-121	1	30
Bromomethane	N.D.	400	414.01	400	354.06	104	89	53-130	16	30
2-Butanone	N.D.	3000	3153.41	3000	3168.86	105	106	62-131	0	30
t-Butyl alcohol	N.D.	4000	3969.25	4000	4065.79	99	102	78-121	2	30
n-Butylbenzene	N.D.	400	409.27	400	405.39	102	101	68-120	1	30
sec-Butylbenzene	N.D.	400	390.29	400	392.29	98	98	75-120	1	30
tert-Butylbenzene	N.D.	400	371.41	400	360.99	93	90	74-121	3	30
Carbon Disulfide	N.D.	400	413.77	400	410.01	103	103	58-126	1	30
Carbon Tetrachloride	N.D.	400	438.94	400	435.48	110	109	74-130	1	30
Chlorobenzene	N.D.	400	435.36	400	433.07	109	108	80-120	1	30
Chloroethane	N.D.	400	410.81	400	401.03	103	100	56-120	2	30
2-Chloroethyl Vinyl Ether	N.D.	400	331.25	400	343.55	83	86	42-152	4	30
Chloroform	N.D.	400	439.59	400	439	110	110	80-120	0	30
Chloromethane	N.D.	400	405.42	400	394.02	101	99	65-129	3	30
2-Chlorotoluene	N.D.	400	388.68	400	390.15	97	98	78-121	0	30
4-Chlorotoluene	N.D.	400	400.74	400	400.32	100	100	78-120	0	30
1,2-Dibromo-3-chloropropane	N.D.	400	279.61	400	285.19	70	71	55-131	2	30
Dibromochloromethane	N.D.	400	381.55	400	383.77	95	96	72-120	1	30
1,2-Dibromoethane	N.D.	400	396.5	400	405.26	99	101	80-120	2	30
Dibromomethane	N.D.	400	432.13	400	434.43	108	109	80-120	1	30
1,2-Dichlorobenzene	N.D.	400	401.3	400	404.61	100	101	80-120	1	30
1,3-Dichlorobenzene	N.D.	400	394.39	400	396.44	99	99	80-120	1	30
1,4-Dichlorobenzene	N.D.	400	407.61	400	411.8	102	103	80-120	1	30
Dichlorodifluoromethane	N.D.	400	365.07	400	359.25	91	90	55-127	2	30
1,1-Dichloroethane	N.D.	400	417.02	400	422.68	104	106	80-120	1	30
1,2-Dichloroethane	N.D.	400	404.85	400	411.35	101	103	72-127	2	30
1,1-Dichloroethene	N.D.	400	452.38	400	450.46	113	113	76-124	0	30
cis-1,2-Dichloroethene	N.D.	400	443.9	400	442.43	111	111	80-120	0	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.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: ChevronTexaco
Reported: 02/05/2016 09:50

Group Number: 1622216

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
trans-1,2-Dichloroethene	N.D.	400	460.46	400	455.1	115	114	80-120	1	30
1,2-Dichloropropane	N.D.	400	437.8	400	441.02	109	110	80-120	1	30
1,3-Dichloropropane	N.D.	400	393.57	400	400.77	98	100	80-120	2	30
2,2-Dichloropropane	N.D.	400	382.62	400	384.48	96	96	71-125	0	30
1,1-Dichloropropene	N.D.	400	404.04	400	401.77	101	100	80-126	1	30
cis-1,3-Dichloropropene	N.D.	400	367.69	400	381.18	92	95	80-120	4	30
trans-1,3-Dichloropropene	N.D.	400	350.41	400	359.83	88	90	76-120	3	30
Ethanol	N.D.	10000	15354.16	10000	15570.68	154*	156*	49-144	1	30
Ethyl t-butyl ether	N.D.	400	318.16	400	333.22	80	83	69-120	5	30
Ethylbenzene	N.D.	400	408.05	400	409.14	102	102	78-120	0	30
Freon 113	N.D.	400	507.59	400	499.98	127	125	67-127	2	30
Hexachlorobutadiene	N.D.	400	386.85	400	389.86	97	97	60-120	1	30
2-Hexanone	N.D.	2000	1902.24	2000	1904.86	95	95	59-127	0	30
di-Isopropyl ether	N.D.	400	378.18	400	387.9	95	97	70-124	3	30
Isopropylbenzene	N.D.	400	389.79	400	394.43	97	99	80-120	1	30
p-Isopropyltoluene	N.D.	400	383.31	400	382.49	96	96	76-120	0	30
Methyl Tertiary Butyl Ether	N.D.	400	355.21	400	370.39	89	93	75-120	4	30
4-Methyl-2-pentanone	N.D.	2000	1975.78	2000	1995.98	99	100	59-130	1	30
Methylene Chloride	N.D.	400	434.8	400	436.03	109	109	77-121	0	30
Naphthalene	N.D.	400	306.58	400	319.56	77	80	59-120	4	30
n-Propylbenzene	N.D.	400	405.82	400	407.43	101	102	75-130	0	30
Styrene	N.D.	400	384.08	400	381.48	96	95	80-120	1	30
1,1,1,2-Tetrachloroethane	N.D.	400	400.93	400	405.7	100	101	80-120	1	30
1,1,2,2-Tetrachloroethane	N.D.	400	378.49	400	388.54	95	97	65-131	3	30
Tetrachloroethene	N.D.	400	426.83	400	426.7	107	107	80-122	0	30
Toluene	N.D.	400	418.13	400	421.14	105	105	80-120	1	30
1,2,3-Trichlorobenzene	N.D.	400	336.97	400	348.61	84	87	69-120	3	30
1,2,4-Trichlorobenzene	N.D.	400	335.21	400	339.49	84	85	73-120	1	30
1,1,1-Trichloroethane	N.D.	400	429.91	400	426.98	107	107	66-126	1	30
1,1,2-Trichloroethane	N.D.	400	404.19	400	415.86	101	104	80-120	3	30
Trichloroethene	N.D.	400	446.9	400	447.03	112	112	80-120	0	30
Trichlorofluoromethane	N.D.	400	452.84	400	436.75	113	109	60-142	4	30
1,2,3-Trichloropropane	N.D.	400	388.71	400	401.79	97	100	76-120	3	30
1,2,4-Trimethylbenzene	N.D.	400	379.06	400	379.65	95	95	75-120	0	30
1,3,5-Trimethylbenzene	N.D.	400	377.97	400	383.24	94	96	80-120	1	30
Vinyl Chloride	N.D.	400	409.52	400	405.15	102	101	69-120	1	30
m+p-Xylene	N.D.	800	831.69	800	831	104	104	80-120	0	30
o-Xylene	N.D.	400	372.31	400	375.35	93	94	79-120	1	30
Batch number: Z160112AA	Sample number(s): 8199747-8199748 UNSPK: P199716									
Benzene	N.D.	20	18.84	20	19.5	94	97	78-120	3	30
Ethylbenzene	N.D.	20	19.59	20	20.44	98	102	78-120	4	30
Methyl Tertiary Butyl Ether	N.D.	20	17.85	20	19.05	89	95	75-120	7	30
Toluene	N.D.	20	19.37	20	20.19	97	101	80-120	4	30
Xylene (Total)	N.D.	60	58.84	60	61.15	98	102	80-120	4	30
	ug/l	ug/l	ug/l	ug/l	ug/l					
Batch number: 160120639001A	Sample number(s): 8199744 UNSPK: P197874									
Antimony	0.525	6.00	5.37	6.00	4.21	81	61*	75-125	24*	20
Arsenic	121.6	10	144.2	10	132.8	226 (2)	112 (2)	75-125	8	20
Beryllium	1.96	4.00	7.32	4.00	6.13	134*	104	75-125	18	20
Cadmium	0.911	5.00	6.75	5.00	5.58	117	93	75-125	19	20
Chromium	20.59	50	77.02	50	78.09	113	115	75-125	1	20

*- 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.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: ChevronTexaco
Reported: 02/05/2016 09:50

Group Number: 1622216

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Cobalt	25.45	250	304.7	250	274.1	112	99	75-125	11	20
Copper	36.59	50	100.2	50	84.78	127*	96	75-125	17	20
Lead	42.81	15	80.63	15	59.06	252*	108	75-125	31*	20
Nickel	60.74	50	156.4	50	116.7	191*	112	75-125	29*	20
Silver	N.D.	50	51.37	50	49.87	103	100	75-125	3	20
Thallium	0.180	2.00	2.33	2.00	2.20	107	101	75-125	6	20
Vanadium	57.78	50	148.3	50	124.4	181*	133*	75-125	18	20
Zinc	175	500	782.8	500	642.6	122	94	75-125	20	20
Batch number: 160120639001B	Sample number(s): 8199744 UNSPK: P197874									
Selenium	N.D.	10	10.82	10	10.63	108	106	75-125	2	20
Batch number: 160120639001C	Sample number(s): 8199744 UNSPK: P197874									
Molybdenum	8.07	50	58.21	50	55.47	100	95	75-125	5	20
Batch number: 160120639001D	Sample number(s): 8199744 UNSPK: P197874									
Barium	850.1	50	1427	50	991.5	1154 (2)	283 (2)	75-125	36*	20
Batch number: 160125713003	Sample number(s): 8199744 UNSPK: P197878									
Mercury	N.D.	1.00	0.937	1.00	0.874	94	87	80-120	7	20
	ug/l	ug/l	ug/l	ug/l	ug/l					
Batch number: 16013117101A	Sample number(s): 8199744 UNSPK: P200362									
Total Cyanide (water)	N.D.	200	117.7			59*		72-114		
Batch number: 16014120101A	Sample number(s): 8199744 UNSPK: P203392									
Phenols (water)	N.D.	200	202.71	200	233.2	101	117*	82-109	14*	8
	ug/l	ug/l	ug/l	ug/l	ug/l					
Batch number: 16019807901A	Sample number(s): 8199744 UNSPK: P204187									
HEM (oil & grease)	5122	50000	47750			85		78-114		

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc ug/l	DUP Conc ug/l	DUP RPD	DUP RPD Max
Batch number: 160120639001A	Sample number(s): 8199744 BKG: P197874			
Antimony	0.525	0.335	44* (1)	20
Arsenic	121.6	120.4	1	20
Beryllium	1.96	1.91	3 (1)	20
Cadmium	0.911	0.916	1 (1)	20
Chromium	20.59	21.78	6	20
Cobalt	25.45	26.11	3	20
Copper	36.59	37.92	4	20
Lead	42.81	42.69	0	20
Nickel	60.74	62.56	3	20
Silver	N.D.	N.D.	0 (1)	20
Thallium	0.180	0.211	16 (1)	20

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Quality Control Summary

Client Name: ChevronTexaco
Reported: 02/05/2016 09:50

Group Number: 1622216

Analysis Name	BKG Conc	DUP Conc	DUP RPD	DUP RPD Max
	ug/l	ug/l		
Vanadium	57.78	58.61	1	20
Zinc	175	178.6	2	20
Batch number: 160120639001B	Sample number(s): 8199744 BKG: P197874			
Selenium	N.D.	N.D.	0 (1)	20
Batch number: 160120639001C	Sample number(s): 8199744 BKG: P197874			
Molybdenum	8.07	8.22	2	20
Batch number: 160120639001D	Sample number(s): 8199744 BKG: P197874			
Barium	850.1	824.2	3	20
Batch number: 160125713003	Sample number(s): 8199744 BKG: P197878			
Mercury	N.D.	N.D.	0 (1)	20
	ug/l	ug/l		
Batch number: 16013117101A	Sample number(s): 8199744 BKG: P200362			
Total Cyanide (water)	N.D.	N.D.	0 (1)	20

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: F160113AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8199746	102	102	96	89
Blank	103	99	95	89
LCS	100	102	93	89
MS	100	99	95	93
MSD	101	102	97	94
Limits:	80-116	77-113	80-113	78-113

Analysis Name: 8260 Full List w/ Sep. Xylenes
Batch number: N160121AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8199744	105	104	92	85
Blank	103	103	93	86
LCS	100	101	97	95
LCSD	100	101	96	95
MS	100	101	97	96
MSD	101	101	97	95
Limits:	80-116	77-113	80-113	78-113

Analysis Name: BTEX/MTBE
Batch number: Z160112AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8199747	100	97	99	96
8199748	103	99	98	91

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P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: ChevronTexaco
Reported: 02/05/2016 09:50

Group Number: 1622216

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
Blank	103	99	97	92
LCS	100	99	99	99
MS	100	98	99	97
MSD	100	99	98	100
Limits:	80-116	77-113	80-113	78-113

Analysis Name: TPH-GRO N. CA water C6-C12
Batch number: 16012A20A

	Trifluorotoluene-F
8199744	90
8199746	90
8199747	99
8199748	91
Blank	90
LCS	103
LCSD	103
Limits:	63-135

*- Outside of specification
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Environmental Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories Environmental

Acct. # 10880 Group # 1622216 Sample # 8199744-48

Client: Chevron EMC			
Project Name/#: Castro Valley	Site ID #: 95607		
Project Manager: Judy Gilbert	P.O. #: Direct Bill To Chevron		
Sampler: GREG BRUSKI	PWSID #:		
Phone #: 7073328265	Quote #:		
State where sample(s) were collected: GWE Effluent			

Matrix: Sediment ☐ / Soil ☐; Water: Ground ☑ Surface ☐ Potable ☐ NPDES ☐; 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	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	1.7.16	0900	X			X			X	X	X	X	X	X	X	X			
MID-2	1.7.16	0910	X			X			X	X	X								HOLD MID-2, SAMPLE ONLY IF MID-1 > N.D.
MID-1	1.7.16	0920	X			X			X	X	X								
INF-1	1.7.16	0930	X			X			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: judy.gilbert@ghd.com, matthew.b.smith@ghd.com, and bonnie.chin@ghd.com

Phone: (510) 420-3314

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	1.7.16	1510			
			[signature]	1.8.16	945

Relinquished by Commercial Carrier: UPS ____ FedEx X Other ____

Temperature upon receipt 2.3 °C

Eurofins Lancaster Laboratories Environmental, LLC • 2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 7045 0713

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Sample Administration Receipt Documentation Log

Doc Log ID: 133141

Group Number(s): 1622216

Client: Chevron

Delivery and Receipt Information

Delivery Method:	Fed Ex	Arrival Timestamp:	01/08/2016 9:45
Number of Packages:	1	Number of Projects:	1

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace ≥ 6mm:	No
Samples Chilled:	Yes	Total Trip Blank Qty:	4
Paperwork Enclosed:	Yes	Trip Blank Type:	HCL
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Timothy Cubberley (6520) at 13:40 on 01/08/2016

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT131	2.3	DT	Wet	Y	Bagged	N

2425 New Holland Pike
Lancaster, PA 17605-2425

T 717-656-2300
F 717-656-2681
www.LancasterLabs.com

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

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1/21/2016
Ms. Judy Gilbert
GHD
5900 Hollis Street
Suite A
Emeryville CA 94608

Project Name: Castro Valley
Project #: 311950 2015.1 94.09
Workorder #: 1601063

Dear Ms. Judy Gilbert

The following report includes the data for the above referenced project for sample(s) received on 1/8/2016 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

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WORK ORDER #: 1601063

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:	01/08/2016	**CONTACT:**	Kyle Vagadori
DATE COMPLETED:	01/21/2016		

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: 01/21/16

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# 1601063

Two Client Tedlar Bag samples were received on January 08, 2016. 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.

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#: 1601063-01A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
Benzene	0.0010	0.0032	0.0015	0.0047
Toluene	0.0010	0.0038	0.0075	0.028
Ethyl Benzene	0.0010	0.0043	0.0060	0.026
Total Xylenes	0.0020	0.0087	0.038	0.16
TPH (Gasoline Range)	0.025	0.10	0.54	2.2

Client Sample ID: INF

Lab ID#: 1601063-02A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
Benzene	0.0050	0.016	1.7	5.3
Toluene	0.0050	0.019	0.59	2.2
Ethyl Benzene	0.0050	0.022	1.3	5.8
Total Xylenes	0.010	0.043	2.6	12
Methyl tert-butyl ether	0.0050	0.018	0.35	1.3
TPH (Gasoline Range)	0.12	0.51	120	490

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Client Sample ID: EFF

Lab ID#: 1601063-01A

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Name:	**d010806**	**Date of Collection: 1/7/16 12:00:00 PM**	
Dil. Factor:	**1.00**	**Date of Analysis: 1/8/16 02:54 PM**	

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
Benzene	0.0010	0.0032	0.0015	0.0047
Toluene	0.0010	0.0038	0.0075	0.028
Ethyl Benzene	0.0010	0.0043	0.0060	0.026
Total Xylenes	0.0020	0.0087	0.038	0.16
Methyl tert-butyl ether	0.0010	0.0036	Not Detected	Not Detected
TPH (Gasoline Range)	0.025	0.10	0.54	2.2

Container Type: Client Tedlar Bag

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	96	75-150
Fluorobenzene (PID)	113	75-125

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Client Sample ID: INF

Lab ID#: 1601063-02A

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Name:	**d010809**	**Date of Collection: 1/7/16 12:10:00 PM**	
Dil. Factor:	**5.00**	**Date of Analysis: 1/8/16 05:38 PM**	

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
Benzene	0.0050	0.016	1.7	5.3
Toluene	0.0050	0.019	0.59	2.2
Ethyl Benzene	0.0050	0.022	1.3	5.8
Total Xylenes	0.010	0.043	2.6	12
Methyl tert-butyl ether	0.0050	0.018	0.35	1.3
TPH (Gasoline Range)	0.12	0.51	120	490

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)	285 Q	75-150
Fluorobenzene (PID)	261 Q	75-125

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Client Sample ID: Lab Blank

Lab ID#: 1601063-03A

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Name:	**d010805**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 1/8/16 02:08 PM**	

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)	95	75-150
Fluorobenzene (PID)	111	75-125

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Client Sample ID: LCS

Lab ID#: 1601063-04A

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Name:	**d010804b**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 1/8/16 01:09 PM**	

Compound	%Recovery	Method Limits
Benzene	97	75-125
Toluene	89	75-125
Ethyl Benzene	89	75-125
Total Xylenes	88	75-125
Methyl tert-butyl ether	104	75-125

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorobenzene (PID)	102	75-125

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Client Sample ID: LCSD

Lab ID#: 1601063-04AA

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Name:	**d010811b**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 1/8/16 09:07 PM**	

Compound	%Recovery	Method Limits
Benzene	98	75-125
Toluene	92	75-125
Ethyl Benzene	93	75-125
Total Xylenes	94	75-125
Methyl tert-butyl ether	102	75-125

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorobenzene (PID)	101	75-125

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Client Sample ID: LCS

Lab ID#: 1601063-04B

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Name:	**d010802**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 1/8/16 11:33 AM**	

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

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	94	75-150

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Client Sample ID: LCSD

Lab ID#: 1601063-04BB

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Name:	**d010812**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 1/8/16 10:00 PM**	

Compound	%Recovery	Method Limits
TPH (Gasoline Range)	85	75-125

Container Type: NA - Not Applicable

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