Eric Hetrick
Project Manager
Marketing Business Unit

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

RECEIVED
By Alameda County Environmental Health 9:03 am, Sep 23, 2015

September 22, 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

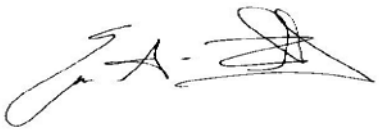
I have reviewed the attached Monthly Remedial Progress Report – July 2015.

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

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

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

Sincerely,



Eric Hetrick
Project Manager

Attachment: Monthly Remedial Progress Report – July 2015

September 22, 2015 Reference No. 311950

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

Re: Monthly Remedial Progress Report – July 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 – July 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 June 23, 2015 and July 20, 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. GHD and its contractors are currently investigating the cause of the equipment malfunction to determine a potential solution to restore SVE operation. No vapor sample was collected for laboratory analyses due to the SVE equipment failure. Since the system malfunction occurred before GHD could collect operational and analytical data for the month of July, the vapor phase hydrocarbon mass removal from June 23, 2015 to the SVE system shutdown on July 4, 2015 was estimated using the analytical and operational data from June 23, 2015. Approximately 396 pounds of total petroleum hydrocarbons as gasoline (TPHg), and 5.5 pounds of benzene were removed via the vapor phase during this period (Table 4).

GHD continued the operation of the groundwater extraction and treatment system (GWET) in the month of July 2015. GWET system compliance testing and sampling was performed on July 20, 2015 in accordance with system operational permits. During the reporting period, approximately 0.08 pounds of TPHg and 0.0003 pounds of benzene were removed via the dissolved phase (Table 2). A summary of the DPE system operational performance for the month of July 2015 is presented below.

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

VAPOR-PHASE EXTRACTION DATA - JULY 2015

Soil Vapor Influent Flow Rate (average scfm)	System Off for Repair
Soil Vapor Laboratory Influent Concentrations (TPHg ppmv)	System Off for Repair
Soil Vapor Laboratory Influent Concentrations (Benzene ppmv)	System Off for Repair
Soil Vapor Mass Removal (lb TPHg/period)	396 pounds*
Soil Vapor Mass Removal (lb Benzene/period)	5.5 pounds*
Soil Vapor Extraction Period Operating Uptime (hours)	133 hours
Soil Vapor Treatment Destruction Efficiency (%)	100 percent*

ppmv – parts per million by volume

scfm – standard cubic feet per minute

* - used system influent flow rates and influent and effluent concentrations from 6/23/15 to calculate the mass removal rates and destruction efficiencies since the system malfunctions occurred before a sample could be taken in July.

DISSOLVED-PHASE EXTRACTION DATA - JULY 2015

Maximum Groundwater Extraction Rate (gpm)	0.51 gpm
Average Groundwater Extraction Rate (gpm)	0.51 gpm
Dissolved-Phase Mass Removal Rate (lb TPHg/period)	0.08 pounds
Dissolved-Phase Mass Removal Rate (lb Benzene/period)	0.0003 pounds
Total Volume Groundwater Treated (gallons)	19,830 gallons
Groundwater Extraction Period Operating Uptime (hours)	645 hours

gpm – gallons per minute

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

Sincerely,

GHD

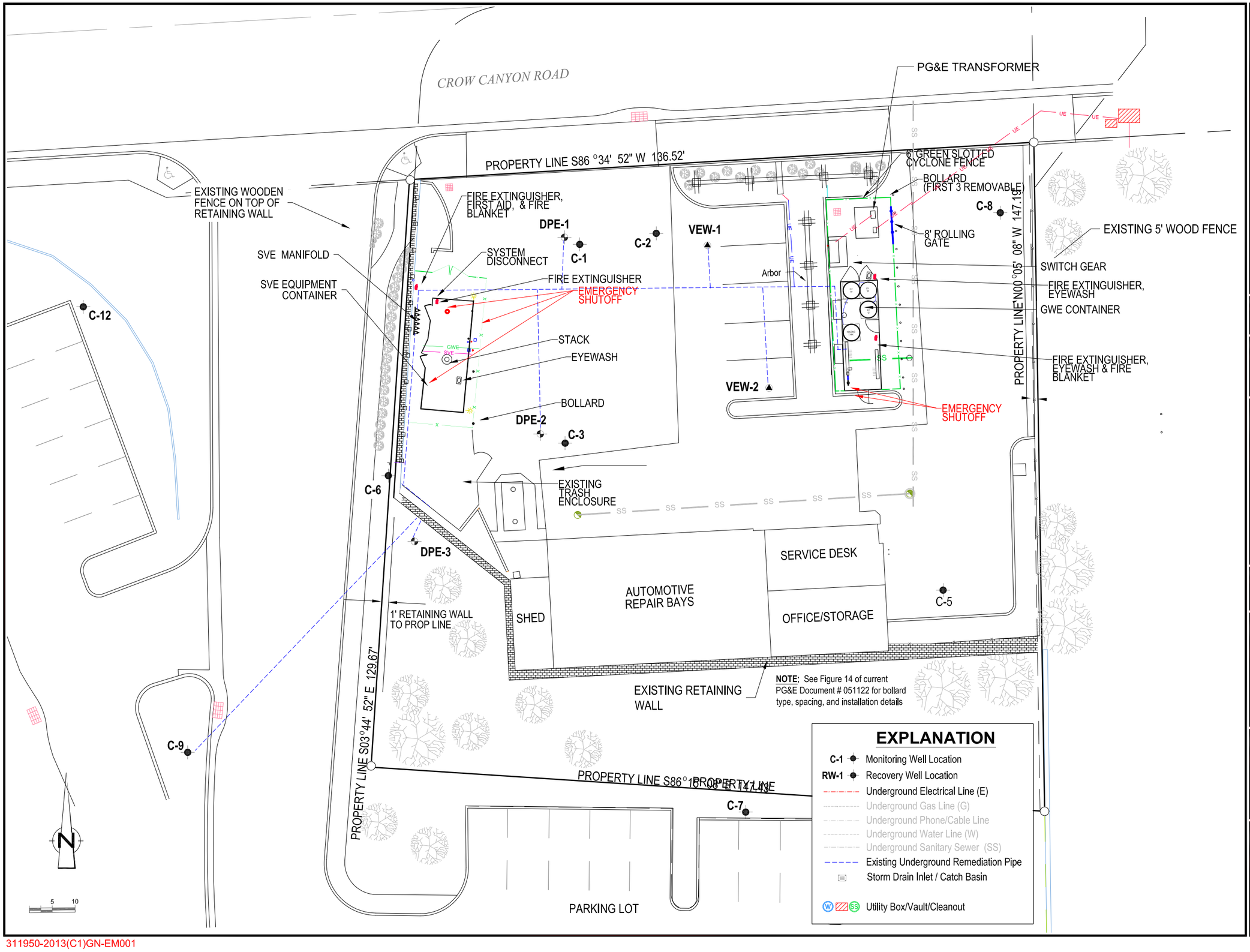
Brandon S. Wilken, PG 7564

AL/mws/49

Figure 1	General Site Plan
Table 1	Groundwater Extraction & Treatment System - Hydrocarbon Analytical Data
Table 2	Groundwater Extraction & Treatment System - Operational and 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 – August 3, 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
Hydrocarbon Analytical 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	

Notes and Abbreviations:

mm/dd/yy = month/day/year
Conc. = concentration
TPHg = total petroleum hydrocarbons quantified as gasoline
MTBE = methyl tertiary butyl ether
µg/L = micrograms per liter
<X.X = not detected at or below the detection limit indicated
a = pH measured in the field
NM = Not 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 and Mass Removal Data
Former Chevron Station # 9-5607
5269 Crow Canyon Road, Castro Valley, California

Date (mm/dd/yy)	Well IDs	Operatin Time (hours)	Totalizer Reading (gallons)	Period Volume (gallons)	Period Operational Flow Rate (gpm)	Cumulative Volume (gallons)	TPHg			Benzene			MTBE		
							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
Agency Limits															

Total Extracted Volume (gal):	**286,430**	**Pounds Removed:**	**0.08**	**10.5**	**Pounds Removed:**	**0.0003**	**1.2**	**Pounds Removed:**	**0.0003**	**0.008**
Average Operational Flow Rate (gpm)[3]:	**0.64**	**Gallons Removed[4]:**	**0.01**	**1.72**	**Gallons Removed[4]:**	**0.0000**	**0.17**	**Gallons Removed[4]:**	**0.0001**	**0.001**

Reporting Period: 6/23/2015 - 7/20/2015			**Cumulative Results Since Start-up:**		
Number of Days during Reporting Period	**27**	**days**	**Number Days since Startup**	**311**	**days**
Gallons of Extracted Ground Water	**19,830**	**gal**	**Cumulative Total Gallons Extracted**	**286,430**	**gal**
Average Flow Rate	**0.51**	**gpm**	**Average Flow Rate[3]**	**0.64**	**gpm**
Pounds of TPHg Removed	**0.08**	**lbs**	**Cumulative Pounds of TPHg Removed**	**10.5**	**lbs**
TPHg Removal Rate	**0.003**	**lbs/day**	**TPHg Removal Rate**	**0.03**	**lbs/day**
Pounds of Benzene Removed	**0.0003**	**lbs**	**Cumulative Pounds of Benzene Removed**	**1.2**	**lbs**
Benzene Removal Rate	**0.0000**	**lbs/day**	**Benzene Removal Rate**	**0.004**	**lbs/day**
Pounds of MTBE Removed	**0.0003**	**lbs**	**Cumulative Pounds of MTBE Removed**	**0.008**	**lbs**
MTBE Removal Rate	**0.0000**	**lbs/day**	**MTBE Removal Rate**	**0.0000**	**lbs/day**

Formulas and Assumptions:

1. Hour meter readings taken at the end of the site visit
2. Mass Removed During the Period = Volume of Water Extracted (gallons) x Concentration (µg/L) x (g/10^6 µg) x (lb/453.6g) x (3.785 L/gal)
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

Table 3
Soil Vapor 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, VEW-1, VEW-2	0.0	4014	0%	0.0	NM	3.00	NM	NM	NM	10.0	155	294	259	259	15,517	0	20	747	NM	8000	20.0	663.8	99.8%
9/29/14 14:00	C9, DPE-1 - DPE3, VEW-1, VEW-2	5.5	4019	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	100.0%
10/6/14 11:00	C9, DPE-1 - DPE3, VEW-1, VEW-2	5.0	4024	3.0%	5.0	15.0	2.81	83	144	127	10	176	255	217	217	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	2.35	68	191	176	10.9	180	268	227	227	13,621	1,443,865	0	750	883	1100	5.0	80.1	99.5%
10/20/14 11:30	C9, DPE-1 - DPE-3	166.0	4296	100.3%	166.0	15.0	3.18	79	140	123	10.5	171	255	219	219	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	1250	0.0	60.9	100.0%
11/21/14 13:50	C9, DPE-3, DPE-2	188.6	4669	52.3%	188.6	20.0	5.3	68	132	109	11.1	174	176	151	109	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	1215	0.5	51.8	100.0%
12/16/14 11:30	C9, DPE-3, DPE-2	249.1	5031	75.0%	249.1	18.5	10.2	64	61	41	4.3	172	118	100	100	5,977	1,488,981	0	700	750	1650	3.0	52.7	99.8%
12/31/14 10:30	C9, DPE-3, DPE-2	359.1	5390	100.0%	359.1	22.0	10.0	72	133	88	7.2	179	133	112	112	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 OFF FOR REPAIR																		
Permit Conditions:										**<300**				**<300**					**>600**					**>98.5%**

Abbreviations and Notes:

Reporting period from 6/23/2015 through 7/4/2015

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
Soil Vapor Extraction System
Hydrocarbon Analytical and Mass Removal 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, VEW-1, VEW-2	4,200	44	38	4,282	46	0.39	0.19	46.58	348.5	0.0	3.8	3.3	0.0	0.03	3.2	0.0	0.02	355.3	4.0	98.9%
9/29/14 14:00	C9, DPE-1 - DPE3, VEW-1, VEW-2	--	--	--	--	--	--	--	--	287.1	72.8	3.1	2.7	0.7	0.03	2.7	0.7	0.01	292.7	3.3	98.9%
10/6/14 11:00	C9, DPE-1 - DPE3, VEW-1, VEW-2	--	--	--	--	--	--	--	--	292.3	133.2	3.2	2.8	1.3	0.03	2.7	1.2	0.01	298.0	3.3	98.9%
10/13/14 11:00	C9, DPE-1 - DPE-3	1,500	10	< 20	1,530	<5	< 0.5	< 0.5	< 6.0	109.3	1019.9	0.36	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	--	--	--	--	--	--	--	--	105.3	1762.0	0.35	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	--	--	--	--	--	--	--	--	113.8	2296.2	0.38	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	--	--	--	--	--	--	--	--	73.1	2557.0	0.20	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	< 0.002	0.31	27.0	2950.0	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	9	1,021	0.23	0.0012	< 0.001	0.23	42.6	3114.3	0.006	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	--	--	--	--	--	--	--	--	32.0	3501.4	0.007	0.3	25.2	0.00004	0.3	39.8	0.00003	32.6	0.008	100.0%
12/31/14 10:30	C9, DPE-2, DPE-3	--	--	--	--	--	--	--	--	35.9	4008.9	0.008	0.4	30.7	0.00004	0.3	44.4	0.00004	36.6	0.009	100.0%
1/14/15 11:25	C9, DPE-2, DPE-3	870	13.00	4.7	888	0.08	<0.001	<0.001	0.08	35.1	4506.7	0.003	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	--	--	--	--	--	--	--	--	37.4	4837.5	0.003	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	824	1.5	0.014	0.0012	1.52	29.3	5227.7	0.05	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	--	--	--	--	--	--	--	--	29.8	5328.9	0.06	0.6	49.5	0.0005	0.3	53.6	0.00004	30.7	0.06	99.8%
3/3/15 14:25	C9, DPE-1	320	5.4	2.5	328	0.076	<0.001	<0.001	0.078	10.0	5467.3	0.002	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	--	--	--	--	--	--	--	--	10.7	5478.4	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	--	--	--	--	--	--	--	--	10.5	5491.1	0.002	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	--	--	--	--	--	--	--	--	12.7	5599.5	0.003	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	9.0	5753.5	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	--	--	--	--	--	--	--	--	9.0	5842.0	0.03	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	9.4	5850.1	0.006	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	--	--	--	--	--	--	--	--	5.0	5928.2	0.003	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	<0.001	0.513	71.7	6212.7	0.01	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			--	--	--	--	--	71.7 a	6608.8 a	0.01 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
Permit conditions															<0.017 ppd						>98.5% for >2,000 ppm inlet >97% for >200-<2,000 ppm inlet >90% for <200 ppm inlet
									Period Pounds Removed[9]:	**TPHg =**	**396**		**Benzene =**	**5.5**		**MTBE =**	**1.9**			
									Total Pounds Removed:	**TPHg =**	**6,609**		**Benzene =**	**67.7**		**MTBE =**	**61.0**			

Notes:

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

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
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

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

August 03, 2015

Project: 95607

Submittal Date: 07/23/2015
Group Number: 1579095
PO Number: 0015164161
Release Number: HETRICK
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
EFF-W-150720 NA Groundwater	7976600
MID-1-W-150720 NA Groundwater	7976602
INF-W-150720 NA Groundwater	7976603

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	Chevron	Attn: CRA EDD

Respectfully Submitted,

Amek Carter
Specialist

(717) 556-7252

Sample Description: EFF-W-150720 NA Groundwater
Facility# 95607 CRAW
5269 Crow Canyon Rd-Castro T0600100344

LL Sample # WW 7976600
LL Group # 1579095
Account # 10880

Project Name: 95607

Collected: 07/20/2015 11:30 by DS

Submitted: 07/23/2015 09:10
Reported: 08/03/2015 16:50

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

CCEFF

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	Z152091AA	07/28/2015 13:19	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z152091AA	07/28/2015 13:19	Hu Yang	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	15208A20A	07/28/2015 00:48	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	15208A20A	07/28/2015 00:48	Marie D Beamenderfer	1

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

Sample Description: MID-1-W-150720 NA Groundwater
Facility# 95607 CRAW
5269 Crow Canyon Rd-Castro T0600100344

LL Sample # WW 7976602
LL Group # 1579095
Account # 10880

Project Name: 95607

Collected: 07/20/2015 11:50 by DS

Submitted: 07/23/2015 09:10
Reported: 08/03/2015 16:50

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

CCMI1

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	Z152051AA	07/24/2015 11:55	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z152051AA	07/24/2015 11:55	Hu Yang	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	15204A20A	07/24/2015 03:24	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	15204A20A	07/24/2015 03:24	Jeremy C Giffin	1

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

Sample Description: INF-W-150720 NA Groundwater
Facility# 95607 CRAW
5269 Crow Canyon Rd-Castro T0600100344

LL Sample # WW 7976603
LL Group # 1579095
Account # 10880

Project Name: 95607

Collected: 07/20/2015 12:00 by DS

Submitted: 07/23/2015 09:10
Reported: 08/03/2015 16:50

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

CCINF

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	2	0.5	1	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	2	0.5	1	1
10945	Toluene	108-88-3	N.D.	0.5	1	1
10945	Xylene (Total)	1330-20-7	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.	480	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	Z152091AA	07/28/2015 13:43	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z152091AA	07/28/2015 13:43	Hu Yang	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	15208A20A	07/28/2015 01:16	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	15208A20A	07/28/2015 01:16	Marie D Beamenderfer	1

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

Quality Control Summary

Client Name: ChevronTexaco Group Number: 1579095
Reported: 08/03/2015 16:50

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: Z152051AA	Sample number(s): 7976602								
Benzene	N.D.	0.5	1	ug/l	89	91	78-120	2	30
Ethylbenzene	N.D.	0.5	1	ug/l	91	93	80-120	3	30
Methyl Tertiary Butyl Ether	N.D.	0.5	1	ug/l	87	79	75-120	9	30
Toluene	N.D.	0.5	1	ug/l	92	95	80-120	4	30
Xylene (Total)	N.D.	0.5	1	ug/l	94	97	80-120	3	30
Batch number: Z152091AA	Sample number(s): 7976600,7976603								
Benzene	N.D.	0.5	1	ug/l	96	95	78-120	0	30
Ethylbenzene	N.D.	0.5	1	ug/l	98	95	80-120	3	30
Methyl Tertiary Butyl Ether	N.D.	0.5	1	ug/l	94	94	75-120	0	30
Toluene	N.D.	0.5	1	ug/l	101	97	80-120	3	30
Xylene (Total)	N.D.	0.5	1	ug/l	102	99	80-120	3	30
Batch number: 15204A20A	Sample number(s): 7976602								
TPH-GRO N. CA water C6-C12	N.D.	50.	100	ug/l	91	90	80-139	1	30
Batch number: 15208A20A	Sample number(s): 7976600,7976603								
TPH-GRO N. CA water C6-C12	N.D.	50.	100	ug/l	92	91	80-139	1	30

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: Z152051AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7976602	103	100	100	94
Blank	101	98	99	94
LCS	101	100	100	101
LCSD	100	97	100	101
Limits:	80-116	77-113	80-113	78-113

Analysis Name: BTEX/MTBE
Batch number: Z152091AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7976600	104	102	100	93

*- 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: 1579095
Reported: 08/03/2015 16:50

Surrogate Quality Control

7976603	98	99	98	97
Blank	102	98	101	94
LCS	102	99	101	100
LCSD	101	99	101	100
Limits:	80-116	77-113	80-113	78-113

Analysis Name: TPH-GRO N. CA water C6-C12
Batch number: 15204A20A

	Trifluorotoluene-F
7976602	93
Blank	93
LCS	100
LCSD	103
Limits:	63-135

Analysis Name: TPH-GRO N. CA water C6-C12
Batch number: 15208A20A

	Trifluorotoluene-F
7976600	94
7976603	102
Blank	93
LCS	103
LCSD	103
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

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072215-04

Acct. # 10880 Group # 1579095 Sample # 7976600-03

Client: Chevron EMC			
Project Name/#: Castro Valley		Site ID #: 95607	
Project Manager: Judy Gilbert		P.O. #: Direct Bill To Chevro	
Sampler: Daniel Smolko		PWSID #:	
Phone #: 925-334-8617		Quote #:	
State where sample(s) were collected: GWE Effluent			

Matrix: Sediment ☐ Soil ☐; Water: Ground ☑ Potable ☐; Surface ☐ 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							Remarks
EFF-	7/20/15	1730				X		6	X	X	X							
MID-2	↓	1140				X		6	X	X	X							HOLD MID-2, SAMPLE ONLY IF MID-1 > N.D.
MID-1	↓	1150				X		6	X	X	X							
INF-	↓	1200				X		6	X	X	X							24 hr TAT on MID-1

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: jgilbert@craworld.com dsmolko@craworld.com

Phone:

Relinquished by:	Date	Time	Received by:	Date	Time
Daniel Smolko	7/20/15	1700	[signature]	7/22/15	1255
A. Aelgor	22JUL15	1634	FX		
			[signature]	7/23/15	910

Relinquished by Commercial Carrier:
UPS ______ FedEx X ______ Other ______

Temperature upon receipt 0.4-5.6 °C

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

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7045 0713

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Explanation of Symbols and Abbreviations

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

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

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

Laboratory Data Qualifiers:

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

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

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

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

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

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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.

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