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 3:52 pm, May 07, 2015

May 7, 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

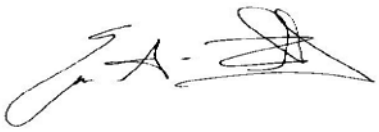
I have reviewed the attached Monthly Remedial Progress Report – March 2015.

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 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 – March 2015

CONESTOGA-ROVERS & ASSOCIATES

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

May 7, 2015 Reference No. 311950

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

Re: Monthly Remedial Progress Report – March 2015
Former Chevron Station 95607
5269 Crow Canyon Road
Castro Valley, California
Fuel Leak Case RO0350

Dear Mr. Detterman:

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

DPE system compliance testing and sampling was performed on March 3, 2015 in accordance with system operational permits. During the reporting period, approximately 162 pounds of total petroleum hydrocarbons as gasoline (TPHg), and 3 pounds of benzene were removed in vapor phase (Table 4), and approximately 0.67 pounds of TPHg and 0.04 pounds of benzene were removed in dissolved phase (Table 2). A summary of the DPE system operational performance for the month of March 2015 is presented below.

VAPOR-PHASE EXTRACTION DATA - MARCH 2015

Soil Vapor Influent Flow Rate (avg scfm)	105 scfm
Soil Vapor Laboratory Influent Concentrations (TPHg ppmv)	320 ppmv
Soil Vapor Laboratory Influent Concentrations (Benzene ppmv)	5 ppmv
Soil Vapor Mass Removal (lb TPHg/period)	162 pounds
Soil Vapor Mass Removal (lb Benzene/period)	3 pounds
Soil Vapor Extraction Period Operating Uptime (hours)	222 hours
Soil Vapor Treatment Destruction Efficiency (%)	100
ppmv – parts per million by volume	

CONESTOGA-ROVERS & ASSOCIATES

May 7, 2015 Reference No. 311950

DISSOLVED-PHASE EXTRACTION DATA - MARCH 2015

Maximum Groundwater Extraction Rate (gpm)	1.6 gpm
Average Groundwater Extraction Rate (gpm)	1.4 gpm
Dissolved-Phase Mass Removal Rate (lb TPHg/period)	0.67 pounds
Dissolved-Phase Mass Removal Rate (lb Benzene/period)	0.04 pounds
Total Volume Groundwater Treated (gallons)	18,527 gallons
Groundwater Extraction Period Operating Uptime (hours)	222 hours

Please contact Darrell Smolko of CRA at (925) 334-8617 or Judy Gilbert of CRA at (510) 420-3314, if you have any questions or comments.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

PROFESSIONAL GEOLOGIST BRANDON S. WILKEN No. 7564 STATE OF CALIFORNIA

Darrell Smolko Brandon S. Wilken, PG 7564

DS/aa/40

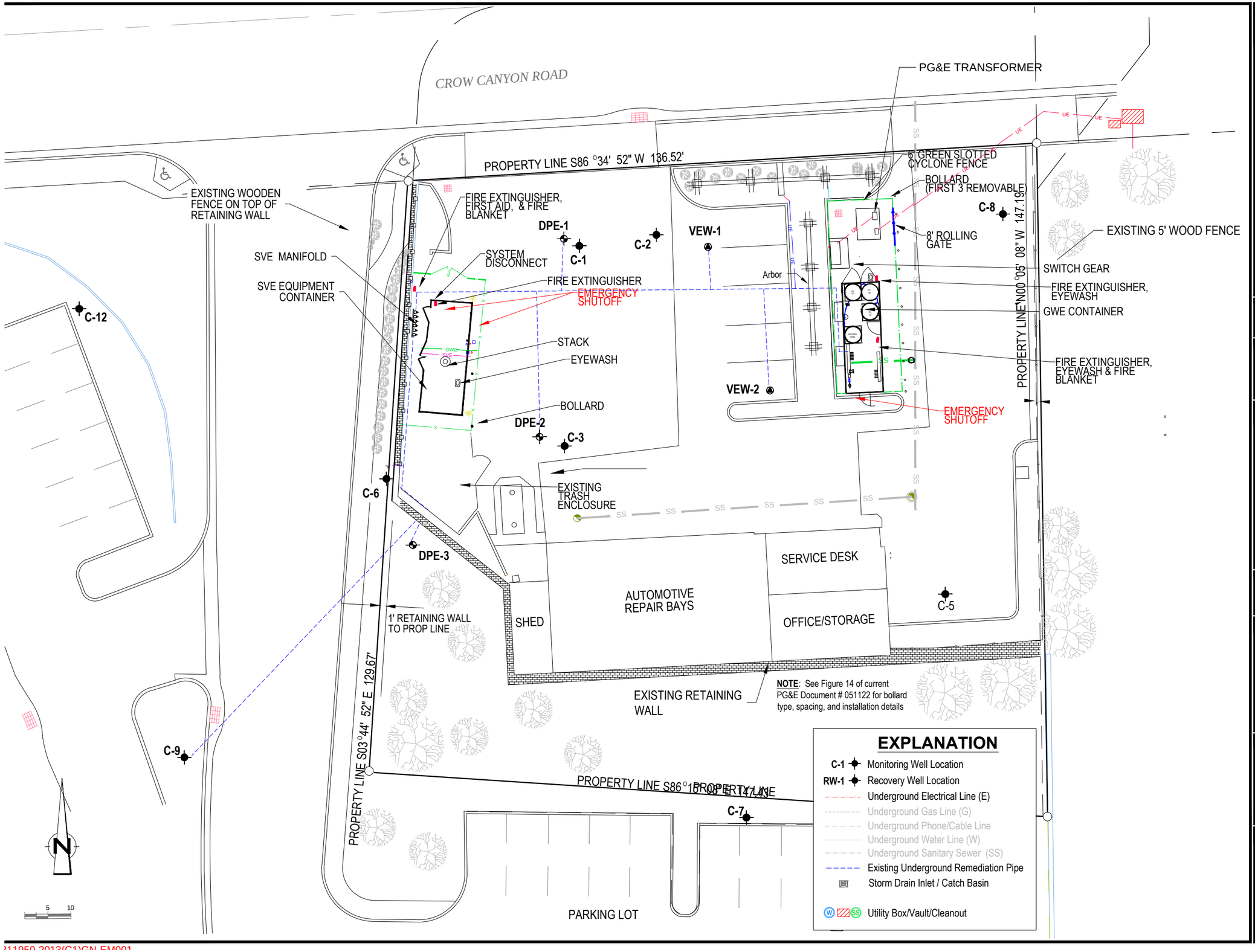
Figure 1 General Site Plan

Table 1 Groundwater Extraction & Treatment System - Hydrocarbon Analytical Data
Table 2 Groundwater Extraction & Treatment System - Operational Data & Dissolved Phase Hydrocarbon Mass Removal
Table 3 Soil Vapor Extraction System - Operational Data
Table 4 Soil Vapor Extraction System - Analytical Data & Mass Removal

Attachment A Air Toxics Laboratory Analytical Report
Attachment B Eurofins Lancaster Laboratory Analytical Report

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

FIGURE



CLIENT

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY

PROJECT

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

TITLE

GENERAL SITE PLAN

PROJECT #311950

DRAWING STATUS

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

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL.

CONESTOGA-ROVERS & ASSOCIATES
5900 HOLLIS STREET, SUITE A
EMERYVILLE CA 94608
PHONE: 510.420.0700
FAX: 510.420.9170
WWW.CRAWORLD.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**	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<0.5	<0.5	<0.5	<0.5	<0.5	7.4
10/13/14	**7,500**	**1,600**	**37**	**76**	**630**	**4**	<50	2	<0.5	<0.5	<0.5	<0.5	NM	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
11/06/14	**8,000**	**990**	**140**	**100**	**590**	<10	<50	2	<0.5	<0.5	<0.5	<0.5	NM	NM	NM	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
12/02/14	**7,000**	**780**	**150**	**160**	**810**	**4**	<50	2	<0.5	<0.5	<0.5	<0.5	NM	NM	NM	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	<0.5	7.3
01/14/15	**3,700**	**290**	**36**	**33**	**390**	**3**	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NM	NM	NM	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
02/04/15	**4,100**	**190**	**14**	<0.5	**350**	**3**	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NM	NM	NM	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
03/03/15	**4,300**	**280**	**45**	**43**	**320**	**2**	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NM	NM	NM	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	<0.5	6.8

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

TPHg analyzed by EPA Method 8015M.
Benzene, toluene, ethylbenzene, and total xylenes analyzed by EPA Method 8260B.
MTBE analyzed by EPA Method 8260B.

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

Date (mm/dd/yy)	Well IDs	Hour Meter[1] (hours)	Totalizer Reading (gallons)	Period Volume (gallons)	Period Operational Flow Rate (gpm)	Cumulative Volume (gallons)	TPHg			Benzene			MTBE		
							TPHg Concentration (µg/L)	Period Removal[c] (pounds)	Cumulative Removal (pounds)	Benzene Concentration (µg/L)	Period Removal[c] (pounds)	Cumulative Removal (pounds)	MTBE Concentration (µg/L)	Period Removal[c] (pounds)	Cumulative Removal (pounds)
9/12/14 9:00	DPE-1 - DPE-3, C-9	4008.5	330,400	0	0.0	0	---	---	---	---	---	---	---	---	---
9/12/14 14:00	DPE-1 - DPE-3, C-9	4013.5	331,500	1,100	3.7	1,100	6,000	0.055	0.055	1,800	0.017	0.017	4	0.000	0.000
9/29/14 14:00	DPE-1 - DPE-3, C-9	4019.0	332,000	500	1.5	1,600	---	0.025	0.08	---	0.008	0.024	---	0.000	0.000
10/6/14 11:00	DPE-1 - DPE-3, C-9	4024.0	332,700	700	2.3	2,300	---	0.035	0.12	---	0.011	0.035	---	0.000	0.000
10/13/14 14:00	DPE-1 - DPE-3, C-9	4,130.0	341,085	8,385	1.3	10,685	7,500	0.525	0.64	1,600	0.112	0.146	4	0.000	0.000
10/20/14 11:30	DPE-1 - DPE-3, C-9	4,296.0	348,600	7,515	0.8	18,200	---	0.470	1.11	---	0.100	0.247	---	0.000	0.001
10/27/14 11:00	DPE-1 - DPE-3, C-9	4,413.0	354,200	5,600	0.8	23,800	---	0.350	1.46	---	0.075	0.322	---	0.000	0.001
11/6/14 13:15	DPE-1 - DPE-3, C-9	4,480.0	364,390	10,190	2.5	33,990	8,000	0.680	2.14	990	0.084	0.406	10	0.001	0.002
11/21/14 13:50	DPE-1 - DPE-3, C-9	4,668.6	373,033	8,643	0.8	42,633	---	0.577	2.72	---	0.071	0.477	---	0.001	0.002
12/2/14 15:15	DPE-1 - DPE-3, C-9	4,781.9	379,635	6,602	1.0	49,235	7,000	0.386	3.10	780	0.043	0.520	4	0.000	0.003
12/16/14 11:30	DPE-1 - DPE-3, C-9	5,030.7	399,600	19,965	1.3	69,200	---	1.166	4.27	---	0.130	0.650	---	0.001	0.003
12/31/14 10:30	DPE-1 - DPE-3, C-9	5,390.1	436,625	37,025	1.7	106,225	---	2.163	6.43	---	0.241	0.891	---	0.001	0.004
1/14/15 11:25	DPE-1 - DPE-3, C-9	5,726.6	461,160	24,535	1.2	130,760	3,700	0.757	7.19	290	0.059	0.950	3	0.001	0.005
1/23/15 14:35	DPE-1 - DPE-3, C-9	5,945.7	472,688	11,528	0.9	142,288		0.356	7.55		0.028	0.978		0.000	0.005
2/4/15 11:00	DPE-1 - DPE-3, C-9	6,226.7	486,220	13,532	0.8	155,820	4,100	0.463	8.01	190	0.021	1.000	3	0.000	0.006
2/17/15 14:30	DPE-1 - DPE-3, C-9	6,309.0	491,310	5,090	1.0	160,910		0.174	8.18		0.008	1.008		0.000	0.006
3/3/15 14:25	DPE-1 - DPE-3, C-9	6,476.0	504,915	13,605	1.4	174,515	4,300	0.488	8.67	280	0.032	1.040	2	0.000	0.006
3/11/15 12:45	DPE-3, C-9	6,501.9	507,364	2,449	1.6	176,964		0.088	8.76		0.006	1.045		0.000	0.006
3/16/15 12:00	DPE-3, C-9	6,530.6	509,837	2,473	1.4	179,437		0.089	8.85		0.006	1.051		0.000	0.006
Agency Limits															
					Total Extracted Volume (gal):	**179,437**	**Pounds Removed:**	**0.665**	**8.85**	**Pounds Removed:**	**0.043**	**1.05**	**Pounds Removed:**	**0.000**	**0.01**
					Average Operational Flow Rate (gpm)[3]:	**1.19**	**Gallons Removed[4]**	**0.109**	**1.45**	**Gallons Removed[4]**	**0.006**	**0.14**	**Gallons Removed[c]**	**0.000**	**0.00**

Reporting Period: 2/17/2015 - 3/16/2015

Number of Days during Reporting Period	**27**	**days**
Gallons of Extracted Ground Water	**18,527**	**gal**
Average Flow Rate	**1.39**	**gpm**
Pounds of TPHg Removed	**0.665**	**lbs**
TPHg Removal Rate	**0.025**	**lbs/day**
Pounds of Benzene Removed	**0.043**	**lbs**
Benzene Removal Rate	**0.002**	**lbs/day**
Pounds of MTBE Removed	**0.000**	**lbs**
MTBE Removal Rate	**0.000**	**lbs/day**

Cumulative Results Since Start-up:

Number Days since Startup	**185**	**days**
Cumulative Total Gallons Extracted	**179,437**	**gal**
Average Flow Rate[3]	**1.19**	**gpm**
Cumulative Pounds of TPHg Removed	**8.85**	**lbs**
TPHg Removal Rate	**0.048**	**lbs/day**
Cumulative Pounds of Benzene Removed	**1.051**	**lbs**
Benzene Removal Rate	**0.006**	**lbs/day**
Cumulative Pounds of MTBE Removed	**0.006**	**lbs**
MTBE Removal Rate	**0.000**	**lbs/day**

Formulas and Assumptions:

1. Hour meter readings taken at the end of the site visit
2. Mass Removed During the Period = Volume of Water Extracted (gallons) x Concentration (µg/L) x (g/10^{6} µg) x (lb/453.6g) 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
NM = not measured
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 (^oF)	INF-1 Measured Flow (acfm)	INF-1 Calculated Flow (scfm)	INF-2 Pressure[1] (inH_2O)	INF-2 Temperature (^oF)	INF-2 Measured Flow[1] (acfm)	INF-2 Calculated Flow (scfm)	Effluent Flow Rate (scfm)	Dilution Air (% open)	Pre-Oxidizer Temp (^oF)	Post-Oxidizer Temp (^oF)	INF-2 OVA (ppmv)	Effluent PID (ppmv)	Mass Removal based on OVA (ppd)	Destruction Efficiency (%)
9/12/14 14:00	C9, DPE-1 - DPE3, VE-1, VE-2	0.00	4013.5	0%	0.0	NM	3.00	NM	NM	NM	10.0	155	294	259	259	20	747	NM	8000	20.0	663.8	99.8%
9/29/14 14:00	C9, DPE-1 - DPE3, VE-1, VE-2	5.50	4019.0	1.3%	5.5	15.0	2.81	93	165	143	11	189	255	213	213	20	880	NM	NM	0.0	NM	100.0%
10/6/14 11:00	C9, DPE-1 - DPE3, VE-1, VE-2	5.00	4024	3.0%	5.0	15.0	2.81	83	144	127	10	176	255	217	217	25	899	NM	560	0.2	39.0	100.0%
10/13/14 14:00	C9, DPE-1 - DPE-3	106.00	4130	62.0%	106.0	14.5	2.35	68	191	176	10.9	180	268	227	227	0	750	883	1100	5.0	80.1	99.5%
10/20/14 11:30	C9, DPE-1 - DPE-3	166.00	4296	100.3%	166.0	15.0	3.18	79	140	123	10.5	171	255	219	219	0	750	927	650	0.3	45.6	100.0%
10/27/14 11:00	C9, DPE-1, DPE-2	117.00	4413	69.9%	117.0	15.0	4.1	61	161	141	11.6	160	270	236	236	0	750	897	700	0.4	53.1	99.9%
11/6/14 13:15	C9, DPE-3, DPE-2	67.00	4480	27.7%	67.0	20.0	5.0	61	146	123	10.7	61	146	152	123	0	701	900	1250	0.0	60.9	100.0%
11/21/14 13:50	C9, DPE-3, DPE-2	188.60	4669	52.3%	188.6	20.0	5.3	68	132	109	11.1	174	176	151	109	0	698	809	558	0.4	27.0	99.9%
12/2/14 15:15	C9, DPE-3, DPE-2	113.30	4782	42.7%	113.3	20.0	7.4	63	103	78	3.3	169	157	133	78	0	697	785	1215	0.5	51.8	100.0%
12/16/14 11:30	C9, DPE-3, DPE-2	249.10	5031	75.0%	249.1	18.5	10.2	64	61	41	4.3	172	118	100	100	0	700	750	1650	3.0	52.7	99.8%
12/31/14 10:30	C9, DPE-3, DPE-2	359.10	5390	100.0%	359.1	22.0	10.0	72	133	88	7.2	179	133	112	112	0	698	707	425	5.0	15.2	98.8%
1/14/15 11:25	C9, DPE-3, DPE-2	336.50	5727	99.9%	336.5	23.0	8.1	71	148	107	9.8	176	148	126	126	0	700	752	1,000	0.5	40.4	100%
1/23/15 14:35	C9, DPE-3, DPE-2	219.10	5946	100.0%	219.1	23.0	7.1	76	157	118	9.6	174	157	134	134	0	700	764	915	3.5	39.3	99.6%
2/4/15 11:00	C9, DPE-2	281.00	6227	98.8%	281.0	22.0	8.3	75	137	98	5.9	183	137	114	114	0	698	738	715	0.7	26.2	99.9%
2/17/15 14:30	C9, DPE-2	82.30	6309	26.1%	82.3	21.5	10.1	62	136	91	6.9	170	136	116	116	0	698	682	515	0.1	19.2	100.0%
3/3/15 14:25	C9, DPE-1	167.00	6476	49.7%	167.0	23.0	11.1	79	118	73	4.0	185	118	98	98	0	690	698	295	0.4	9.2	99.9%
3/11/15 12:45	C9, DPE-3	25.90	6502	13.6%	25.9	23.0	10.9	67	118	75	7.2	151	118	104	104	0	710	740	480	0.2	16.0	100.0%
3/16/15 12:00	C9, DPE-3	28.70	6531	24.1%	28.7	23.0	10.2	67	121	80	7.1	175	121	102	102	0	700	689	235	0.0	7.7	100.0%
Reporting Period			**222**	**34.3%**	**222**										**105**							**100.0%**
Permit Conditions:										**<300**				**<300**			**>600**					**>98.5%**

Abbreviations and Notes:

Reporting period from February 17, 2015 through March 16, 2015

mm/dd/yy = month/day/year
hh:mm = hour : minute
inHg = inches of mercury
inH_2O = inches of water
^oF = degrees Fahrenheit
acfm = actual cubic feet per minute
scfm = standard cubic feet per minute (flow in scfm = flow in acfm * [operating pressure{abs} / standard pressure {abs}] * [standard temperature {abs} / operating temperature {abs}])
% = percentage
INF-1 = pre-dilution system influent
INF-2 = post-dilution system influent
NM = not measured
LEL = Lower Explosive Limit
ppmv = parts per million by volume
PID = photo-ionization detector
FID = flame ionization detector
OVA = organic vapor analyzer
ppd = pounds per day
1. = INF-2 flow read from chart recorder. INF-2 pressure used to convert acfm to scfm.
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
Analytical Data Mass Removal
Former Chevron Station # 9-5607
5269 Crow Canyon Road, Castro Valley, California

Date (mm/dd/yy hh:mm)	Concentrations[1]								TPHg			Benzene			MTBE			VOC		
	INF-2					Effluent														
	Operating Wells	TPHg (ppmv)	Benzene (ppmv)	MTBE (ppmv)	VOC (ppmv)	TPHg (ppmv)	Benzene (ppmv)	MTBE (ppmv)	VOC (ppmv)	Removal Rate[2, 6] (ppd)	Cumulative Removed[7] (pounds)	Emission Rate[2, 6] (ppd)	Removal Rate[3, 6] (ppd)	Cumulative Removed[7] (pounds)	Emission Rate[3, 6] (ppd)	Removal Rate[4, 6] (ppd)	Cumulative Removed[7] (pounds)	Emission Rate[4, 6] (ppd)	Removal Rate[5, 6] (ppd)	Emission Rate[5, 6] (ppd)	Destruction Efficiency (%)
9/12/14 14:00	C9, DPE-1 - DPE3, VE-1, VE-2	4,200	44	38	4,282	46	0.39	0.19	46.58	348.5	0.0	3.8	3.3	0.0	0.0	3.2	0.0	0.0	355.3	4.0	98.9%
9/29/14 14:00	C9, DPE-1 - DPE3, VE-1, VE-2	--	--	--	--	--	--	--	--	287.1	72.8	3.1	2.7	0.7	0.0	2.7	0.7	0.0	292.7	3.3	98.9%
10/6/14 11:00	C9, DPE-1 - DPE3, VE-1, VE-2	--	--	--	--	--	--	--	--	292.3	133.2	3.2	2.8	1.3	0.0	2.7	1.2	0.0	298.0	3.3	98.9%
10/13/14 11:00	C9, DPE-1 - DPE-3	1,500	10	< 20	1,530	<5	< 0.5	< 0.5	< 6.0	109.3	1019.9	0.4	0.7	8.9	0.0	1.5	10.5	0.0	111.4	0.4	99.6%
10/20/14 11:30	C9, DPE-1 - DPE-3	--	--	--	--	--	--	--	--	105.3	1762.0	0.4	0.6	13.3	0.0	1.4	20.6	0.0	107.4	0.4	99.6%
10/27/14 11:00	C9, DPE-1, DPE2	--	--	--	--	--	--	--	--	113.8	2296.2	0.4	0.7	16.6	0.0	1.6	27.9	0.0	116.1	0.5	99.6%
11/6/14 13:15	C9, DPE-2, DPE3	--	--	--	--	--	--	--	--	73.1	2557.0	0.2	0.4	18.2	0.0	1.0	31.5	0.0	74.5	0.2	99.6%
11/21/14 13:50	C9, DPE-2, DPE-3*	558	0.01	0.01	558	0.31	0.0020	< 0.002	0.31	27.0	2950.0	0.0	0.0	19.9	0.0	0.0	35.4	0.0	27.0	0.0	99.9%
12/2/14 15:15	C9, DPE-2, DPE-3	1,000	12	9	1,021	0.23	0.0012	< 0.001	0.23	42.6	3114.3	0.0	0.5	21.0	0.0	0.4	36.3	0.0	43.5	0.0	100.0%
12/16/14 11:30	C9, DPE-2, DPE-3	--	--	--	--	--	--	--	--	32.0	3501.4	0.0	0.3	25.2	0.0	0.3	39.8	0.0	32.6	0.0	100.0%
12/31/14 10:30	C9, DPE-2, DPE-3	--	--	--	--	--	--	--	--	35.9	4008.9	0.0	0.4	30.7	0.0	0.3	44.4	0.0	36.6	0.0	100.0%
1/14/15 11:25	C9, DPE-2, DPE-3	870	13.00	4.7	888	0.08	<0.0010	<0.0010	0.08	35.1	4506.7	0.0	0.5	36.8	0.0	0.2	48.0	0.0	35.8	0.0	100.0%
1/23/15 14:35	C9, DPE-2, DPE-3	--	--	--	--	--	--	--	--	37.4	4837.5	0.0	0.5	41.3	0.0	0.2	49.8	0.0	38.1	0.0	100.0%
2/4/15 11:00	C9, DPE-2	800	17	7	824	1.5	0.014	0.0012	1.52	29.3	5227.7	0.1	0.6	47.5	0.0	0.3	52.6	0.0	30.2	0.1	99.8%
2/17/15 14:30	C9, DPE-2	--	--	--	--	--	--	--	--	29.8	5328.9	0.1	0.6	49.5	0.0	0.3	53.6	0.0	30.7	0.1	99.8%
3/3/15 14:25	C9, DPE-1	320	5.4 M	2.5	328	0.08	<0.0010	<0.0010	0.08	10.0	5467.3	0.0	0.2	52.0	0.0	0.1	54.8	0.0	10.3	0.0	100.0%
3/11/15 12:45	C9, DPE-3	--	--	--	--	--	--	--	--	10.7	5478.4	0.0	0.2	52.2	0.0	0.1	54.9	0.0	10.9	0.0	100.0%
3/16/15 12:00	C9, DPE-3	--	--	--	--	--	--	--	--	10.5	5491.1	0.0	0.2	52.4	0.0	0.1	55.0	0.0	10.8	0.0	100.0%
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 =**	**162**				**Benzene =**	**3**		**MTBE =**	**1**	
									Total Pounds Removed:	**TPHg =**	**5,491**				**Benzene =**	**52.4**		**MTBE =**	**55.0**	

Notes:

1. TPHg, Benzene, and MTBE analyzed by EPA Method TO-3 (Modified). 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 = concentration
   Q = flow = flow
   MW = molecular weig = molecular weight
7. Cumulative TPHg / Benzene / MTBE removed = Previous Total + (Average of Previous and Current Removal Rates * Operation Interval)
8. Influent not measured due to water in vapor stream. Individual well samples were collected at a lower vacuum at this time.
9. Reporting period from February 17, 2015 through March 16, 2015

BAAQMD Requirements:

Flow Rate < 300 scfm

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

Benzene Emission Limit < 0.017 ppd

Destruction efficiency (measured as hexane)

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

Abbreviations:

mm/dd/yy = month/day/year
hh:mm = hours : minutes
TPHg = total petroleum hydrocarbons as gasoline
MTBE = methyl tertiary butyl ether
VOC = volatile organic compounds
ppmv = parts per million by volume
ppd = pounds per day
-- = not measured
lb = pounds
ft^3 = cubic feet
scfm = standard cubic feet per minute
INF-2 = pre-dilution system influent
M = Reported value may be biased due to apparent matrix interferences.

ATTACHMENT A

AIR TOXICS LABORATORY ANALYTICAL REPORT

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3/17/2015
Ms. Judy Gilbert
Conestoga-Rovers Associates (CRA)
5900 Hollis Street
Suite A
Emeryville CA 94608

Project Name: Castro Valley
Project #: 311950 2015.1 94.09
Workorder #: 1503061

Dear Ms. Judy Gilbert

The following report includes the data for the above referenced project for sample(s) received on 3/4/2015 at Air Toxics Ltd.

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

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

Regards,

Kyle Vagadori

Project Manager

eurofins | Air Toxics

WORK ORDER #: 1503061

Work Order Summary

CLIENT:	Ms. Judy Gilbert Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608	**BILL TO:**	Accounts Payable Chevron U.S.A. Inc. 6001 Bollinger Canyon Road L4310 San Ramon, CA 94583
PHONE:	510-420-3314	**P.O. #**	311950 2015.1 94.09
FAX:	510-420-9170	**PROJECT #**	311950 2015.1 94.09 Castro Valley
DATE RECEIVED:	03/04/2015	**CONTACT:**	Kyle Vagadori
DATE COMPLETED:	03/17/2015		

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

CERTIFIED BY: Heidi Mayo DATE: 03/17/15

Technical Director

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

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

LABORATORY NARRATIVE
Modified TO-3
Conestoga-Rovers Associates (CRA)
Workorder# 1503061

Two 1 Liter Tedlar Bag samples were received on March 04, 2015. The laboratory performed analysis for volatile organic compounds in air via modified EPA Method TO-3 using gas chromatography with photo ionization and flame ionization detection. The TPH results are calculated using the response of Gasoline. A molecular weight of 100 is used to convert the TPH ppmv result to ug/L. The method involves concentrating up to 200 mL of sample. The concentrated aliquot is then dry purged to remove water vapor prior to entering the chromatographic system.

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

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

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

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

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

Definition of Data Qualifying Flags

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

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

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

Client Sample ID: EFF

Lab ID#: 1503061-01A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
Toluene	0.0010	0.0038	0.0036	0.013
Total Xylenes	0.0020	0.0087	0.0027	0.012
TPH (Gasoline Range)	0.025	0.10	0.076	0.31

Client Sample ID: INF

Lab ID#: 1503061-02A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
Benzene	0.050	0.16	5.4 M	17 M
Toluene	0.050	0.19	1.1	4.1
Ethyl Benzene	0.050	0.22	1.4	6.3
Total Xylenes	0.10	0.43	5.6	24
Methyl tert-butyl ether	0.050	0.18	2.5	9.1
TPH (Gasoline Range)	1.2	5.1	320	1300

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Client Sample ID: EFF

Lab ID#: 1503061-01A

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Name:	**d030610**	**Date of Collection:**	**3/3/15 2:00:00 AM**
Dil. Factor:	**1.00**	**Date of Analysis:**	**3/6/15 05:11 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	0.0036	0.013
Ethyl Benzene	0.0010	0.0043	Not Detected	Not Detected
Total Xylenes	0.0020	0.0087	0.0027	0.012
Methyl tert-butyl ether	0.0010	0.0036	Not Detected	Not Detected
TPH (Gasoline Range)	0.025	0.10	0.076	0.31

Container Type: 1 Liter Tedlar Bag

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	99	75-150
Fluorobenzene (PID)	94	75-125

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Client Sample ID: INF

Lab ID#: 1503061-02A

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Name:	**d030612**	**Date of Collection: 3/3/15 2:15:00 AM**	
Dil. Factor:	**50.0**	**Date of Analysis: 3/6/15 06:35 PM**	

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
Benzene	0.050	0.16	5.4 M	17 M
Toluene	0.050	0.19	1.1	4.1
Ethyl Benzene	0.050	0.22	1.4	6.3
Total Xylenes	0.10	0.43	5.6	24
Methyl tert-butyl ether	0.050	0.18	2.5	9.1
TPH (Gasoline Range)	1.2	5.1	320	1300

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

Container Type: 1 Liter Tedlar Bag

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	158 Q	75-150
Fluorobenzene (PID)	128 Q	75-125

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Client Sample ID: Lab Blank

Lab ID#: 1503061-03A

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Name:	**d030607**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/6/15 01:12 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)	90	75-150
Fluorobenzene (PID)	85	75-125

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Client Sample ID: LCS

Lab ID#: 1503061-04A

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Name:	**d030605b**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/6/15 11:35 AM**	

Compound	%Recovery	Method Limits
Benzene	98	75-125
Toluene	97	75-125
Ethyl Benzene	100	75-125
Total Xylenes	101	75-125
Methyl tert-butyl ether	97	75-125

Container Type: NA - Not Applicable

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

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Client Sample ID: LCSD

Lab ID#: 1503061-04AA

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Name:	**d030616b**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/6/15 09:40 PM**	

Compound	%Recovery	Method Limits
Benzene	96	75-125
Toluene	95	75-125
Ethyl Benzene	98	75-125
Total Xylenes	102	75-125
Methyl tert-butyl ether	96	75-125

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorobenzene (PID)	88	75-125

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Client Sample ID: LCS

Lab ID#: 1503061-04B

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Name:	**d030603**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/6/15 09:52 AM**	

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

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	88	75-150

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Client Sample ID: LCSD

Lab ID#: 1503061-04BB

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Name:	**d030617**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/6/15 10:12 PM**	

Compound	%Recovery	Method Limits
TPH (Gasoline Range)	78	75-125

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	91	75-150

ATTACHMENT B

EUROFINS LANCASTER LABORATORY ANALYTICAL REPORT

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

March 11, 2015

Project: 95607

Submittal Date: 03/04/2015
Group Number: 1542599
PO Number: 0015164161
Release Number: HETRICK
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
EFF-1-W-150303 NA Groundwater	7791522
MID-1-W-150303 NA Groundwater	7791524
INF-1-W-150303 NA Groundwater	7791525
QA-T-150303 NA Water	7791526

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

Respectfully Submitted,

Amek Carter
Specialist

(717) 556-7252

Sample Description: EFF-1-W-150303 NA Groundwater
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344

LL Sample # WW 7791522
LL Group # 1542599
Account # 10880

Project Name: 95607

Collected: 03/03/2015 13:00 by DS

Submitted: 03/04/2015 09:15
Reported: 03/11/2015 19:43

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

CCCE1

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-150303 NA Groundwater
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344

LL Sample # WW 7791522
LL Group # 1542599
Account # 10880

Project Name: 95607

Collected: 03/03/2015 13:00 by DS

Submitted: 03/04/2015 09:15
Reported: 03/11/2015 19:43

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

CCCE1

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	1.4	J	0.82	4.0	1
06026	Barium	7440-39-3	187		0.58	4.0	1
06027	Beryllium	7440-41-7	N.D.		0.045	1.0	1
06028	Cadmium	7440-43-9	N.D.		0.17	1.0	1
06031	Chromium	7440-47-3	N.D.		0.50	4.0	1
06032	Cobalt	7440-48-4	0.39	J	0.10	1.0	1
06033	Copper	7440-50-8	N.D.		0.50	4.0	1
06035	Lead	7439-92-1	N.D.		0.082	2.0	1
06038	Molybdenum	7439-98-7	0.85	J	0.25	1.0	1
06039	Nickel	7440-02-0	0.96	J	0.79	4.0	1
06041	Selenium	7782-49-2	N.D.		0.50	4.0	1
06042	Silver	7440-22-4	N.D.		0.13	1.0	1
06045	Thallium	7440-28-0	N.D.		0.15	1.0	1
06048	Vanadium	7440-62-2	N.D.		0.22	1.0	1
06049	Zinc	7440-66-6	2.6	J	2.4	30.0	1
	SW-846 7470A		**ug/l**		**ug/l**	**ug/l**	
00259	Mercury	7439-97-6	N.D.		0.050	0.20	1

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

Sample Description: EFF-1-W-150303 NA Groundwater
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344

LL Sample # WW 7791522
LL Group # 1542599
Account # 10880

Project Name: 95607

Collected: 03/03/2015 13:00 by DS

Submitted: 03/04/2015 09:15
Reported: 03/11/2015 19:43

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

CCCE1

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.	3,300	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	W150651AA	03/06/2015 17:41	Amanda K Richards	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W150651AA	03/06/2015 17:41	Amanda K Richards	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	15067A94A	03/08/2015 18:03	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	15067A94A	03/08/2015 18:03	Marie D Beamenderfer	1
06024	Antimony	SW-846 6020A	1	150650639001A	03/09/2015 05:13	Choon Y Tian	1
06025	Arsenic	SW-846 6020A	1	150650639001A	03/09/2015 05:13	Choon Y Tian	1
06026	Barium	SW-846 6020A	1	150650639001D	03/09/2015 05:13	Choon Y Tian	1
06027	Beryllium	SW-846 6020A	1	150650639001A	03/09/2015 05:13	Choon Y Tian	1
06028	Cadmium	SW-846 6020A	1	150650639001A	03/09/2015 05:13	Choon Y Tian	1
06031	Chromium	SW-846 6020A	1	150650639001A	03/09/2015 05:13	Choon Y Tian	1
06032	Cobalt	SW-846 6020A	1	150650639001A	03/09/2015 11:30	Choon Y Tian	1
06033	Copper	SW-846 6020A	1	150650639001A	03/09/2015 05:13	Choon Y Tian	1
06035	Lead	SW-846 6020A	1	150650639001A	03/09/2015 05:13	Choon Y Tian	1
06038	Molybdenum	SW-846 6020A	1	150650639001C	03/09/2015 11:30	Choon Y Tian	1
06039	Nickel	SW-846 6020A	1	150650639001A	03/09/2015 05:13	Choon Y Tian	1
06041	Selenium	SW-846 6020A	1	150650639001B	03/09/2015 05:13	Choon Y Tian	1
06042	Silver	SW-846 6020A	1	150650639001A	03/09/2015 05:13	Choon Y Tian	1
06045	Thallium	SW-846 6020A	1	150650639001A	03/09/2015 05:13	Choon Y Tian	1
06048	Vanadium	SW-846 6020A	1	150650639001A	03/09/2015 05:13	Choon Y Tian	1
06049	Zinc	SW-846 6020A	1	150650639001A	03/09/2015 05:13	Choon Y Tian	1
00259	Mercury	SW-846 7470A	1	150655713002	03/10/2015 00:37	Parker D Lindstrom	1
10639	ICPMS - Water, 3020A - U4	SW-846 3010A modified	1	150650639001	03/08/2015 17:00	Annamaria Kuhns	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	150655713002	03/08/2015 09:20	James L Mertz	1

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

Sample Description: **EFF-1-W-150303 NA Groundwater**
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344

LL Sample # WW 7791522
LL Group # 1542599
Account # 10880

Project Name: 95607

Collected: 03/03/2015 13:00 by DS

Submitted: 03/04/2015 09:15
Reported: 03/11/2015 19:43

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

CCCE1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08255	Total Cyanide (water)	SW-846 9012A	1	15066117101A	03/09/2015 09:05	Joseph E McKenzie	1
02393	Phenols (water)	SW-846 9066	1	15068120101A	03/10/2015 11:58	Joseph E McKenzie	1
08256	Cyanide Water Distillation	SW-846 9012A	1	15066117101A	03/07/2015 12:30	Joseph E McKenzie	1
08123	Phenol Distillation (SW-846)	SW-846 9065	1	15068120101A	03/09/2015 22:35	James S Mathiot	1
08079	HEM (oil & grease)	EPA 1664A	1	15065807901A	03/06/2015 17:31	Michelle L Lalli	1

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

Sample Description: MID-1-W-150303 NA Groundwater
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344

LL Sample # WW 7791524
LL Group # 1542599
Account # 10880

Project Name: 95607

Collected: 03/03/2015 12:40 by DS

Submitted: 03/04/2015 09:15
Reported: 03/11/2015 19:43

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

CCCM1

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	D150631AA	03/04/2015 13:26	Amanda K Richards	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D150631AA	03/04/2015 13:26	Amanda K Richards	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	15063A94A	03/04/2015 13:44	Brett W Kenyon	1
01146	GC VOA Water Prep	SW-846 5030B	1	15063A94A	03/04/2015 13:44	Brett W Kenyon	1

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

Sample Description: INF-1-W-150303 NA Groundwater
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344

LL Sample # WW 7791525
LL Group # 1542599
Account # 10880

Project Name: 95607

Collected: 03/03/2015 12:30 by DS

Submitted: 03/04/2015 09:15
Reported: 03/11/2015 19:43

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

CCCI1

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	280	5	10	10
10945	Ethylbenzene	100-41-4	43	0.5	1	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	2	0.5	1	1
10945	Toluene	108-88-3	45	0.5	1	1
10945	Xylene (Total)	1330-20-7	320	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.	4,300	250	500	5

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	P150641AA	03/05/2015 12:40	Sarah A Guill	1
10945	BTEX/MTBE	SW-846 8260B	1	P150641AA	03/05/2015 13:03	Sarah A Guill	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P150641AA	03/05/2015 12:40	Sarah A Guill	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	P150641AA	03/05/2015 13:03	Sarah A Guill	10
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	15067A94A	03/08/2015 21:26	Marie D Beamenderfer	5
01146	GC VOA Water Prep	SW-846 5030B	1	15067A94A	03/08/2015 21:26	Marie D Beamenderfer	5

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

Sample Description: QA-T-150303 NA Water
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344

LL Sample # WW 7791526
LL Group # 1542599
Account # 10880

Project Name: 95607

Collected: 03/03/2015

Submitted: 03/04/2015 09:15
Reported: 03/11/2015 19:43

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

QACCC

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	P150641AA	03/05/2015 13:25	Sarah A Guill	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P150641AA	03/05/2015 13:25	Sarah A Guill	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	15068A20A	03/09/2015 17:27	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	15068A20A	03/09/2015 17:27	Marie D Beamenderfer	1

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

Quality Control Summary

Client Name: ChevronTexaco Group Number: 1542599
Reported: 03/11/2015 19:43

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: D150631AA	Sample number(s): 7791524								
Benzene	N.D.	0.5	1	ug/l	103	101	78-120	2	30
Ethylbenzene	N.D.	0.5	1	ug/l	97	97	80-120	0	30
Methyl Tertiary Butyl Ether	N.D.	0.5	1	ug/l	106	106	75-120	0	30
Toluene	N.D.	0.5	1	ug/l	98	97	80-120	0	30
Xylene (Total)	N.D.	0.5	1	ug/l	97	96	80-120	2	30
Batch number: P150641AA	Sample number(s): 7791525-7791526								
Benzene	N.D.	0.5	1	ug/l	96	92	78-120	4	30
Ethylbenzene	N.D.	0.5	1	ug/l	96	92	80-120	4	30
Methyl Tertiary Butyl Ether	N.D.	0.5	1	ug/l	98	92	75-120	6	30
Toluene	N.D.	0.5	1	ug/l	101	97	80-120	4	30
Xylene (Total)	N.D.	0.5	1	ug/l	98	94	80-120	5	30
Batch number: W150651AA	Sample number(s): 7791522								
Acetone	N.D.	6.	20	ug/l	101	88	55-129	13	30
t-Amyl methyl ether	N.D.	0.5	1	ug/l	98	100	75-120	2	30
Benzene	N.D.	0.5	1	ug/l	101	100	78-120	1	30
Bromobenzene	N.D.	1.	5	ug/l	99	98	80-120	0	30
Bromochloromethane	N.D.	1.	5	ug/l	103	103	80-120	0	30
Bromodichloromethane	N.D.	0.5	1	ug/l	100	99	73-120	1	30
Bromoform	N.D.	0.5	4	ug/l	95	95	52-123	0	30
Bromomethane	N.D.	0.5	1	ug/l	96	98	53-130	2	30
2-Butanone	N.D.	3.	10	ug/l	113	113	54-133	0	30
t-Butyl alcohol	N.D.	5.	20	ug/l	93	84	78-121	10	30
n-Butylbenzene	N.D.	1.	5	ug/l	100	98	68-120	2	30
sec-Butylbenzene	N.D.	1.	5	ug/l	103	102	75-120	1	30
tert-Butylbenzene	N.D.	1.	5	ug/l	99	101	80-120	2	30
Carbon Disulfide	N.D.	1.	5	ug/l	84	81	58-126	4	30
Carbon Tetrachloride	N.D.	0.5	1	ug/l	104	103	74-130	2	30
Chlorobenzene	N.D.	0.5	1	ug/l	103	103	80-120	0	30
Chloroethane	N.D.	0.5	1	ug/l	97	97	56-120	0	30
2-Chloroethyl Vinyl Ether	N.D.	2.	10	ug/l	102	105	44-143	2	30
Chloroform	N.D.	0.5	1	ug/l	104	102	80-120	2	30
Chloromethane	N.D.	0.5	1	ug/l	95	95	63-120	0	30
2-Chlorotoluene	N.D.	1.	5	ug/l	101	101	80-120	0	30
4-Chlorotoluene	N.D.	1.	5	ug/l	102	101	80-120	1	30
1,2-Dibromo-3-chloropropane	N.D.	2.	5	ug/l	102	104	56-120	1	30
Dibromochloromethane	N.D.	0.5	1	ug/l	104	103	72-120	1	30
1,2-Dibromoethane	N.D.	0.5	1	ug/l	107	107	80-120	1	30
Dibromomethane	N.D.	0.5	1	ug/l	100	99	80-120	1	30
1,2-Dichlorobenzene	N.D.	1.	5	ug/l	98	98	80-120	0	30
1,3-Dichlorobenzene	N.D.	1.	5	ug/l	100	99	80-120	1	30
1,4-Dichlorobenzene	N.D.	1.	5	ug/l	100	101	80-120	1	30

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

Quality Control Summary

Client Name: ChevronTexaco Group Number: 1542599
Reported: 03/11/2015 19:43

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Dichlorodifluoromethane	N.D.	0.5	1	ug/l	102	102	55-127	1	30
1,1-Dichloroethane	N.D.	0.5	1	ug/l	101	100	80-120	1	30
1,2-Dichloroethane	N.D.	0.5	1	ug/l	109	109	72-127	1	30
1,1-Dichloroethene	N.D.	0.5	1	ug/l	102	101	76-124	1	30
cis-1,2-Dichloroethene	N.D.	0.5	1	ug/l	102	101	80-120	0	30
trans-1,2-Dichloroethene	N.D.	0.5	1	ug/l	102	101	80-120	1	30
1,2-Dichloropropane	N.D.	0.5	1	ug/l	101	102	80-120	1	30
1,3-Dichloropropane	N.D.	0.5	1	ug/l	101	102	80-120	1	30
2,2-Dichloropropane	N.D.	0.5	1	ug/l	98	97	63-131	1	30
1,1-Dichloropropene	N.D.	1.	5	ug/l	107	105	80-126	2	30
cis-1,3-Dichloropropene	N.D.	0.5	1	ug/l	101	103	80-120	2	30
trans-1,3-Dichloropropene	N.D.	0.5	1	ug/l	104	102	76-120	1	30
Ethanol	N.D.	50.	250	ug/l	113	97	49-144	15	30
Ethyl t-butyl ether	N.D.	0.5	1	ug/l	98	99	69-120	1	30
Ethylbenzene	N.D.	0.5	1	ug/l	103	103	80-120	0	30
Freon 113	N.D.	2.	10	ug/l	96	96	67-127	0	30
Hexachlorobutadiene	N.D.	2.	5	ug/l	88	90	60-120	2	30
2-Hexanone	N.D.	3.	10	ug/l	105	107	50-131	2	30
di-Isopropyl ether	N.D.	0.5	1	ug/l	99	100	70-124	1	30
Isopropylbenzene	N.D.	1.	5	ug/l	104	104	80-120	0	30
p-Isopropyltoluene	N.D.	1.	5	ug/l	101	101	76-120	1	30
Methyl Tertiary Butyl Ether	N.D.	0.5	1	ug/l	101	103	75-120	2	30
4-Methyl-2-pentanone	N.D.	3.	10	ug/l	117	116	51-124	0	30
Methylene Chloride	N.D.	2.	4	ug/l	97	99	80-120	2	30
Naphthalene	N.D.	1.	5	ug/l	99	100	59-120	1	30
n-Propylbenzene	N.D.	1.	5	ug/l	103	102	80-120	0	30
Styrene	N.D.	1.	5	ug/l	103	104	80-120	0	30
1,1,1,2-Tetrachloroethane	N.D.	0.5	1	ug/l	102	102	80-120	1	30
1,1,2,2-Tetrachloroethane	N.D.	0.5	1	ug/l	99	98	70-120	2	30
Tetrachloroethene	N.D.	0.5	1	ug/l	103	102	80-120	1	30
Toluene	N.D.	0.5	1	ug/l	102	102	80-120	0	30
1,2,3-Trichlorobenzene	N.D.	1.	5	ug/l	98	99	69-120	0	30
1,2,4-Trichlorobenzene	N.D.	1.	5	ug/l	97	97	73-120	0	30
1,1,1-Trichloroethane	N.D.	0.5	1	ug/l	91	90	66-126	1	30
1,1,2-Trichloroethane	N.D.	0.5	1	ug/l	103	99	80-120	3	30
Trichloroethene	N.D.	0.5	1	ug/l	105	104	80-120	1	30
Trichlorofluoromethane	N.D.	0.5	1	ug/l	106	102	58-135	4	30
1,2,3-Trichloropropane	N.D.	1.	5	ug/l	107	107	76-120	1	30
1,2,4-Trimethylbenzene	N.D.	1.	5	ug/l	102	101	80-120	1	30
1,3,5-Trimethylbenzene	N.D.	1.	5	ug/l	102	102	80-120	0	30
Vinyl Chloride	N.D.	0.5	1	ug/l	102	102	69-120	0	30
m+p-Xylene	N.D.	0.5	1	ug/l	105	105	80-120	1	30
o-Xylene	N.D.	0.5	1	ug/l	103	103	80-120	1	30
Batch number: 15063A94A	Sample number(s): 7791524								
TPH-GRO N. CA water C6-C12	N.D.	50.	100	ug/l	115	110	80-139	4	30
Batch number: 15067A94A	Sample number(s): 7791522,7791525								
TPH-GRO N. CA water C6-C12	N.D.	50.	100	ug/l	109	106	80-139	3	30
Batch number: 15068A20A	Sample number(s): 7791526								
TPH-GRO N. CA water C6-C12	N.D.	50.	100	ug/l	126	125	80-139	1	30
Batch number: 150650639001A	Sample number(s): 7791522								
Antimony	N.D.	0.33	2.0	ug/l	96		80-120		
Arsenic	N.D.	0.82	4.0	ug/l	101		80-120		

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

Quality Control Summary

Client Name: ChevronTexaco Group Number: 1542599
Reported: 03/11/2015 19:43

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Beryllium	N.D.	0.045	1.0	ug/l	102		80-120		
Cadmium	N.D.	0.17	1.0	ug/l	105		80-120		
Chromium	N.D.	0.50	4.0	ug/l	102		80-120		
Cobalt	N.D.	0.10	1.0	ug/l	101		80-120		
Copper	N.D.	0.50	4.0	ug/l	107		80-120		
Lead	N.D.	0.082	2.0	ug/l	99		80-120		
Nickel	N.D.	0.79	4.0	ug/l	106		80-120		
Silver	N.D.	0.13	1.0	ug/l	105		80-120		
Thallium	N.D.	0.15	1.0	ug/l	105		80-120		
Vanadium	N.D.	0.22	1.0	ug/l	103		80-120		
Zinc	N.D.	2.4	30.0	ug/l	107		80-120		
Batch number: 150650639001B	Sample number(s): 7791522								
Selenium	N.D.	0.50	4.0	ug/l	103		80-120		
Batch number: 150650639001C	Sample number(s): 7791522								
Molybdenum	0.34 J	0.25	1.0	ug/l	104		80-120		
Batch number: 150650639001D	Sample number(s): 7791522								
Barium	N.D.	0.58	4.0	ug/l	94		80-120		
Batch number: 150655713002	Sample number(s): 7791522								
Mercury	N.D.	0.050	0.20	ug/l	106		80-120		
Batch number: 15066117101A	Sample number(s): 7791522								
Total Cyanide (water)	N.D.	5.0	10	ug/l	98		90-110		
Batch number: 15068120101A	Sample number(s): 7791522								
Phenols (water)	N.D.	15.	40	ug/l	98		82-109		
Batch number: 15065807901A	Sample number(s): 7791522								
HEM (oil & grease)	1,900 J	1,400.	5,000	ug/l	89	87	78-114	2	16

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 150650639001A	Sample number(s): 7791522 UNSPK: P790258 BKG: P790258								
Antimony	22*	27*	75-125	12	20	0.89 J	0.82 J	8 (1)	20
Arsenic	169 (2)	59 (2)	75-125	15	20	63.6	63.6	0	20
Beryllium	100	91	75-125	4	20	3.9	3.8	0 (1)	20
Cadmium	110	73*	75-125	12	20	11.3	11.3	1	20
Chromium	109	53*	75-125	18	20	113	110	3	20
Cobalt	101	97	75-125	4	20	50.8	51.1	1	20
Copper	130*	70*	75-125	13	20	184	186	1	20
Lead	143 (2)	69 (2)	75-125	11	20	83.4	83.6	0	20
Nickel	123	64*	75-125	17	20	130	126	4	20
Silver	97	98	75-125	1	20	0.52 J	0.46 J	12 (1)	20
Thallium	92	93	75-125	0	20	1.3	1.3	2 (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.

Quality Control Summary

Client Name: ChevronTexaco Group Number: 1542599
Reported: 03/11/2015 19:43

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Vanadium	96	25*	75-125	17	20	178	176	1	20
Zinc	170 (2)	41 (2)	75-125	11	20	536	537	0	20
Batch number: 150650639001B	Sample number(s): 7791522 UNSPK: P790258 BKG: P790258								
Selenium	123	95	75-125	13	20	9.8	9.7	1 (1)	20
Batch number: 150650639001C	Sample number(s): 7791522 UNSPK: P790258 BKG: P790258								
Molybdenum	89	82	75-125	6	20	14.3	14.0	2	20
Batch number: 150650639001D	Sample number(s): 7791522 UNSPK: P790258 BKG: P790258								
Barium	18 (2)	-182 (2)	75-125	9	20	1,120	1,230	9	20
Batch number: 150655713002	Sample number(s): 7791522 UNSPK: P791113 BKG: P791113								
Mercury	108	108	80-120	0	20	N.D.	N.D.	0 (1)	20
Batch number: 15066117101A	Sample number(s): 7791522 UNSPK: P791366 BKG: P791366								
Total Cyanide (water)	87		43-137			N.D.	N.D.	0 (1)	20
Batch number: 15068120101A	Sample number(s): 7791522 UNSPK: 7791522								
Phenols (water)	86	82	50-133	5	8				
Batch number: 15065807901A	Sample number(s): 7791522 UNSPK: P792457								
HEM (oil & grease)	74*		78-114						

Surrogate Quality Control

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

Analysis Name: BTEX/MTBE
Batch number: D150631AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7791524	96	98	96	98
Blank	95	99	97	100
LCS	96	101	95	101
LCSD	96	102	96	100
Limits:	80-116	77-113	80-113	78-113

Analysis Name: BTEX/MTBE
Batch number: P150641AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7791525	95	97	102	98
7791526	95	95	102	97
Blank	96	98	102	97
LCS	96	100	102	97
LCSD	95	99	103	98
Limits:	80-116	77-113	80-113	78-113

*- 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: 1542599
Reported: 03/11/2015 19:43

Surrogate Quality Control

Analysis Name: 8260 Full List w/ Sep. Xylenes
Batch number: W150651AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7791522	103	105	100	97
Blank	105	105	99	94
LCS	104	101	101	99
LCSD	102	98	101	101
Limits:	80-116	77-113	80-113	78-113

Analysis Name: TPH-GRO N. CA water C6-C12
Batch number: 15063A94A

	Trifluorotoluene-F
7791524	84
Blank	85
LCS	102
LCSD	100
Limits:	63-135

Analysis Name: TPH-GRO N. CA water C6-C12
Batch number: 15067A94A

	Trifluorotoluene-F
7791522	83
7791525	93
Blank	84
LCS	89
LCSD	98
Limits:	63-135

Analysis Name: TPH-GRO N. CA water C6-C12
Batch number: 15068A20A

	Trifluorotoluene-F
7791526	83
Blank	86
LCS	92
LCSD	91
Limits:	63-135

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

Environmental Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories Environmental

Acct. # 10880 Group # 1542599 Sample # 7791522-26

Client: Chevron EMC	
Project Name/#: Castro Valley	Site ID #: 95607
Project Manager: Judy Gilbert	P.O. #: Direct Bill To Chevro
Sampler: Darrell Smolko / [illegible]	PWSID #:
Phone #: 925-334-8617	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	Date	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	3/3/15	100				X			X	X	X	X	X	X	X	X			
MID-2	↓	1250				X			X	X	X								HOLD MID-2, SAMPLE ONLY IF MID-1 > N.D.
MID-1	↓	1240				X			X	X	X								
INF-1	↓	1230				X			X	X	X								
																			Rush MID-1 24 TAT

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

Date results are needed: RUSH MID-1 24 TAT

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

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

Phone:

Data Package Options (please check if required)

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

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

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	3/3/15	200			
			[signature]	3/4/15	0915

Relinquished by Commercial Carrier: UPS ____ FedEx ✓ Other ____

Temperature upon receipt 1.1 °C

Explanation of Symbols and Abbreviations

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

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

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

Laboratory Data Qualifiers:

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

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

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

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

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

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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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