

5900 Hollis Street, Suite A, Emeryville, California 94608 Telephone: 510·420·0700 Facsimile: 510·420·9170 www.CRAworld.com

January 10, 2008

Mr. Jeff Carson Oro Loma Sanitary District 2600 Grant Avenue San Lorenzo, California 94580

Monthly Discharge Report - December 2007

Former Chevron Service Station #9-0260 21995 Foothill Blvd Hayward, California Permit No. 007-03 **RECEIVED**

10:48 am, Jun 07, 2010

Alameda County Environmental Health

Dear Mr. Carson:

Re:

Conestoga-Rovers & Associates (CRA) prepared this document on behalf of Chevron Environmental Management Company (Chevron), in accordance with the requirements of the wastewater discharge permit. During the current reporting period, the remediation system at the subject site operated in compliance with the conditions specified in the wastewater discharge permit.

If you have any questions regarding the contents of this document, please call Matthew Lundberg at (510) 420-3346 or Casey Sanders at (916) 677-3407.

Sincerely,

Conestoga-Rovers & Associates

Casey Sandars

Enclosure:

Monthly Discharge Report - December 2007

cc;

Ms. Olivia Skance, Environmental Management Company, 6001 Bollinger

Canyon Road, San Ramon, CA 94583



MONTHLY DISCHARGE REPORT - DECEMBER 2007

Reporting Period Data Summary

Compliance Sampling Frequency

Monthly

Initial Totalizer Reading

117,400 gallons

Final Totalizer Reading

170,809 gallons

Discharged Volume

53,409 gallons

Average Discharge Flow Rate

1.69 gallons per minute

Maximum Discharge Flow Rate

1.83 gallons per minute

Discharge Violations or Exceedances

None

Tables:

1 - Groundwater Extraction - System Analytical Data

2 - Groundwater Extraction - Operation and Mass Removal Data

3 - Groundwater Extraction - Effluent Compliance

Attachments:

A - Laboratory Analytical Reports

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I:\Chevron\9-0260 Hayward\Remediation\O&M\Monthly Discharge Reports\December 07\December 07 Monthly Discharge Report.doc

Table 1: Groundwater Extraction - System Analytical Data - Former Chevron Station #9-0260, 21995 Foothill Blvd, Hayward, CA

		Influent			Midfluent 1			Effluent		
Sample Date (mm/dd/yy)	TPHg Conc. (µg/L)	Benzene Conc. (µg/L)	MtBE Conc. (μg/L)	TPHg Conc. (µg/L)	Benzene Conc. (µg/L)	MtBE Conc. (μg/L)	TPHg Conc. (µg/L)	Benzene Conc. (µg/L)	MtBE Conc. (μg/L)	рН
06/25/07	34,000	2,000	92	NA	NA	NA	< 50	< 0.5	< 0.5	7.17
07/17/07	42,000	1,700	57	< 50	< 0.5	< 0.5	< 50	< 0.5	< 0.5	7.1
07/26/07	57,000	1,800	51	< 50	< 0.5	< 0.5	< 50	< 0.5	< 0.5	· NA
08/17/07	65,000	2,800	74	< 50	< 0.5	< 0.5	< 50	< 0.5	< 0.5	7.2
08/22/07	44,000	2,100	56	< 50	< 0.5	< 0.5	< 50	< 0.5	< 0.5	7.3
08/29/07	43,000	2,000	53	< 50	< 0.5	< 0.5	< 50	< 0.5	< 0.5	6.89
09/26/07	42,000	1,800	33	< 50	< 0.5	< 0.5	< 50	< 0.5	< 0.5	6.5
10/04/07	34,000	1,500	40	< 50	< 0.5	< 0.5	< 50	< 0.5	< 0.5	7.92
10/08/07	45,000	2,400	45	150	4.1	< 0.5	< 50	< 0.5	< 0.5	7.36
10/19/07	42,000	2,300	38	< 50	1.2	< 0.5	< 50	< 0.5	< 0.5	7.3
10/25/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	7.3
12/05/07	46,000	2,400	42	< 50	< 0.5	< 0.5	< 50	< 0.5	< 0.5	NS
12/18/07	31,000	1,800	37	< 50	0.9	< 0.5	< 50	< 0.5	< 0.5	7.8

Abbreviations & Notes:

Conc. = Concentration

μg/L = Micrograms per liter

NA = Not analyzed

NS = Not sampled

TPHg = Total purgeable hydrocarbons as gasoline, analyzed by EPA Method 8015B

pH analyzed onsite with multimeter

Benzene analyzed by EPA Method 8020

MtBE = Methyl-tertiary butyl ether, analyzed by EPA Method 8260B

Table 2: Groundwater Extraction - Operation and Mass Removal Data - Former Chevron Station #9-0260, 21995 Foothill Blvd, Hayward, CA

Site Visit (mm/dd/yy)	Hour Meter (hours)	Flow Meter Reading (gal)	Period Volume (gal)	Period Operational Flow Rate (gpm)	Cumulative Volume (gal)	TPHg Conc. (µg/L)	TPHg Period Removal (pounds)	Cumulative Removal (pounds)	Benzene Conc. (µg/L)	Benzene Period Removal (pounds)	Cumulative Removal (pounds)	MTBE Conc. (µg/L)	MTBE Period Removal (pounds)	Cumulative Removal (pounds)
06/25/07	0.0	211	0	0.00	0	34,000	0.000	0.000	2,000	0.000	0.000	92	0.000	0.000
07/16/07	0.0	211	0	0.00	0	NS	0.000	0.000	NS	0.000	0.000	NS	0.000	0.000
07/17/07 a	2.0	7,524	7,313	4.51	7,313	42,000	2.563	2.563	1,700	0.104	0.104	57	0.003	0.003
07/26/07	5.0	9,422	1,898	10.54	9,211	57,000	0.903	3.466	1,800	0.029	0.132	51	0.001	0.004
08/03/07	NA.	10,947	1,525	0.13	10.736	NS	0.725	4.191	NS	0.023	0.155	NS	0.001	0.005
08/16/07	NA.	12,100	1,153	0.06	11,889	NS	0.625	4.816	NS	0.027	0.182	NS	0.001	0.006
08/17/07	NA.	15,500	3,400	2.36	15,289	65,000	1.844	6.660	2,800	0.079	0.262	74	0.002	0.008
08/22/07	NA.	18,700	3,200	0.44	18,489	44,000	1.175	7.835	2,100	0.056	0.318	56	0.001	0.009
08/24/07	NA.	22,800	4,100	1.42	22,589	NS	1.505	9.341	NS	0.072	0.389	NS	0.002	0.011
08/29/07	NA .	24,810	2,010	0.28	24,599	43,000	0.721	10.062	2,000	0.034	0.423	53	0.001	0.012
09/18/07	NA	26,700	1,890	0.07	26,489	NS	0.662	10.724	NS	0.028	0.451	NS	0.001	0.013
09/21/07	NA	29,900	3,200	0.74	29,689	NS	1.121	11.846	NS	0.048	0.499	NS	0.001	0.013
09/26/07	NA	39,700	9,800	1.36	39,489	42,000	3.435	15.280	1,800	0.147	0.647	33	0.003	0.016
09/27/07	NA	44,300	4,600	3.19	44,089	NS	1.612	16.892	NS	0.069	0.716	NS	0.001	0.017
10/04/07	NA	65,765	21,465	2.13	65,554	34,000	6.090	22.982	1,500	0.269	0.984	40	0.007	0.025
10/08/07	NA.	73,526	7,761	1.35	73,315	45,000	2.914	25.896	2,400	0.155	1.140	45	0.003	0.027
10/19/07	NA	97,500	23,974	1.51	97,289	42,000	8.402	34.298	2,300	0.460	1.600	38	0.008	0.035
10/25/07 ь	NA	117,400	19,900	2.30	117,189	, NS	6.974	41.273	NS	0.382	1.982	NS	0.006	0.041
12/05/07 b	2.0	119,284	1,884	0.03	119,073	46,000	0.723	41.996	2,400	0.038	2.020	42	0.001	0.042
12/06/07	22.3	121,500	2,216	1.54	121,289	NS	0.851	42.846	NS	0.044	2.064	NS	0.001	0.043
12/11/07	141.8	134,679	13,179	1.83	134,468	NS	5.058	47.905	NS	0.264	2.328	NS	0.005	0.047
12/18/07	304.9	149,033	14,355	1.42	148,822	31,000	3.713	51.618	1,800	0.216	2.543	37	0.004	0.052
12/27/07	518.7	170,809	21,776	1.68	170,598	NS	5.633	57.251	NS	0.327	2.871	NS	0.007	0.059
	 	2.4	Total Extr	acted Volume (gal):	170,598	Pounds Removed:		57.251	Pounds Removed:	· .	2.871	Pounds Remo	ved:	0.059
		Ave	erage Operation:	al Flow Rate (gpm):	0.64	Gallons Removed:		9.399	Gallons Removed:		0.391	Gallons Remo	ved:	0.009

Reporting Period:		Cumulative Totals: 1/18/2007 through 6/6/2	2007
Number of Days during Reporting Perioc	91 days	Number Days since Startup	176 days
Gallons of Extracted Ground Water	126,509 gal	Cumulative Total Gallons Extracted	170,598 gal
Average Flow Rate	0.97 gpm	Cumulative Average Flow Rate	0.67 gpm
Pounds of TPHg Removed	34.726 lbs	Cumulative Pounds of TPHg Removed	57.251 lbs
Pounds of Benzene Removed	1.8278 lbs	Cumulative Pounds of Benzene Removed	2.8706 lbs
Pounds of MTBE Removed	3.448E-02 lbs	Cumulative Pounds of MTBE Removed	5.861E-02 lbs

Abbreviations & Notes:

TPHg = Total petroleum hydrocarbons as gasoline MTBE = Methyl tertiary butyl ether Conc. = Concentration
µg/L = Microgram per liter

L = Liter

gal = Gallon

Table 2: Groundwater Extraction - Operation and Mass Removal Data - Former Chevron Station # 9-0260, 21995 Foothill Blvd, Hayward, CA

gpm = Gallon per minute

g = Gram

NS = not sampled

NA = not analyzed

a = hour meter was reset after running for 25 hours after installation of new programmable logic controller

b = System shut down for carbon changeout.

Mass removed based on the formula: volume extracted (gal) x Concentration ($\mu g/L$) x ($g/10^6 \mu g$) x (pound/453.6g) x (3.785 L/gal)

When constituents are not detected, the concentration is assumed to be equal to half the detection limit in subsequent calculations.

Volume removal data based on the formula: mass (pounds) x (density)⁻¹ (cc/g) x 453.6 (g/pound) x (L/1000 cc) x (gal/3.785 L)

Period operational flow rate based on the formula: (cumulative volume (gal)) / (current hour meter reading - last hour meter reading (hr)) / (60 (min/hr))

Density inputs: TPHg = 0.73 g/cc, Benzene = 0.88 g/cc, TBA = 0.78 g/cc, MTBE = 0.74 g/cc

TPHg analyzed by EPA Method 8015B; BTEX analyzed by EPA method 8020, and MTBE analyzed by EPA Method 8260B

Table 1: Groundwater Extraction - System Analytical Data - Former Chevron Station # 9-0260, 21995 Foothill Blvd, Hayward, CA

		Influent			Midfluent 1			Effluent		
Sample	TPHg	Benzene	MtBE	TPHg	Benzene	MtBE	TPHg	Benzene	MtBE	pН
Date	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	
(mm/dd/yy)	$(\mu g/L)$	$(\mu g/L)$	$(\mu g/L)$	(µg/L)	$(\mu g/L)$	$(\mu g/L)$	(μg/L)	(μg/L)	(µg/L)	·
06/25/07	34,000	2,000	92	NA	NA	NA	< 50	< 0.5	< 0.5	7.17
07/17/07	42,000	1,700	57	< 50	< 0.5	< 0.5	< 50	< 0.5	< 0.5	7.1
07/26/07	57,000	1,800	- 51	< 50	< 0.5	< 0.5	< 50	< 0.5	< 0.5	NA.
08/17/07	65,000	2,800	74	< 50	< 0.5	< 0.5	< 50	< 0.5	< 0.5	7.2
08/22/07	44,000	2,100	56	< 50	< 0.5	< 0.5	< 50	< 0.5	< 0.5	7.3
08/29/07	43,000	2,000	53	< 50	< 0.5	< 0.5	< 50	< 0.5	< 0.5	6.89
09/26/07	42,000	1,800	33	< 50	< 0.5	< 0.5	< 50	< 0.5	< 0.5	6.5
10/04/07	34,000	1,500	40	< 50	< 0.5	< 0.5	< 50	< 0.5	< 0.5	7.92
10/08/07	45,000	2,400	45 .	150	4.1	< 0.5	< 50	< 0.5	< 0.5	7.36
10/19/07	42,000	2,300	38	< 50	1.2	< 0.5	< 50	< 0.5	< 0.5	7.3
10/25/07	ŃS	NS	NS	NS	NS	NS	NS	NS	NS	7.3
12/05/07	46,000	2,400	42	< 50	< 0.5	< 0.5	< 50	< 0.5	< 0.5	NS
12/18/07	31,000	1,800	37	< 50	0.9	< 0.5	< 50	< 0.5	< 0.5	7.8

Abbreviations & Notes:

Conc. = Concentration

 $\mu g/L = Micrograms per liter$

NA = Not analyzed

NS = Not sampled

TPHg = Total purgeable hydrocarbons as gasoline, analyzed by EPA Method 8015B

pH analyzed onsite with multimeter

Benzene analyzed by EPA Method 8020

MtBE = Methyl-tertiary butyl ether, analyzed by EPA Method 8260B

Attachment A

Laboratory Analytical Reports



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

ANALYTICAL RESULTS

Prepared for:

ChevronTexaco 6001 Bollinger Canyon Rd L4310 San Ramon CA 94583

925-842-8582

Prepared by:

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 1068945. Samples arrived at the laboratory on Saturday, December 08, 2007. The PO# for this group is 0015014975 and the release number is SINHA.

Client Description	Lancaster Labs Number
INF-W-071205 Grab Water	5232287
MID-W-071205 Grab Water	5232288
EFF-W-071205 Grab Water	5232289

ELECTRONIC CRA
COPY TO
ELECTRONIC CRA
COPY TO
ELECTRONIC Chevron
COPY TO

Attn: Charlotte Evans

Attn: Matthew Lundberg

Attn: C Sanders



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Questions? Contact your Client Services Representative Angela M Miller at (717) 656-2300

Respectfully Submitted,

Augus M Goshert
Susan M. Goshert
Group Leader



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Lancaster Laboratories Sample No. WW 5232287

INF-W-071205_Grab_Water

Facility# 90260 CETE

21995 Foothill-Hayward T0600100315 INF

Collected: 12/05/2007 14:55

by MJ

Account Number: 10880

Submitted: 12/08/2007 10:00

Reported: 12/19/2007 at 19:18

Discard: 01/19/2008

ChevronTexaco

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

FBHIN I 5E w

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters	n.a.	46,000.	2,500.	ug/l	50
	The reported concentration of gasoline constituents eluting patent time.					
05879	BTEX					
02161	Benzene	71-43-2	2,400.	25.	ug/l	50
02164	Toluene	108-88-3	7,500.	25.	ug/l	50
02166	Ethylbenzene	100-41-4	920.	25.	ug/l	50 ·
02171	Total Xylenes	1330-20-7	4,800.	75.	ug/1	50
02309	MTBE by GC/MS (water)					
02010	Methyl Tertiary Butyl Ether	1634-04-4	42.	5.	ug/l	10

State of California Lab Certification No. 2116
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 Chronicle

CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01729	TPH-GRO - Waters	TPH GRO SW-846 8015B mod	1	12/11/2007 14:46	Steven A Skiles	50
05879	BTEX	SW-846 8020A	1	12/11/2007 14:46	Steven A Skiles	5.0
02309	MTBE by GC/MS (water)	SW-846 8260B	1	12/18/2007 02:38	Michael A Ziegler	10
01146	GC VOA Water Prep	SW-846 5030B	1	12/11/2007 14:46	Steven A Skiles	50
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/18/2007 02:38	Michael A Ziegler	10



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1

Lancaster Laboratories Sample No. WW 5232288

MID-W-071205 Grab Water Facility# 90260 CETE

21995 Foothill-Hayward T0600100315 MTD Collected:12/05/2007 14:50 by MJ

Submitted: 12/08/2007 10:00 Reported: 12/19/2007 at 19:18

Discard: 01/19/2008

Account Number: 10880

ChevronTexaco

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

FBHMD I 5E w

CAT

No.

01729 05879

02309

01146

01163

Analysis Name

BTEX

TPH-GRO - Waters

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
	The reported concentration of gasoline constituents eluting start time.					
05879	BTEX					
02161	Benzene	71-43-2	N.D.	0.5	ug/l	1
02164	Toluene	108-88-3	N.D.	0.5	ug/l	1
02166	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
02171	Total Xylenes	1330-20-7	N.D.	1.5	ug/l	1
02309	MTBE by GC/MS (water)					
02010	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0,.5	ug/l	1 .

State of California Lab Certification No. 2116
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.

	Analysis		Dilution
Method	Trial# Date and Time	Analyst	Factor
TPH GRO SW-846 8015B mod	1 12/11/2007 15:15	Steven A Skiles	1
SW-846 8020A	1 12/11/2007 15:15	Steven A Skiles	1

 MTBE by GC/MS (water)
 SW-846 8260B
 1
 12/18/2007 03:24
 Michael A Ziegler

 GC VOA Water Prep
 SW-846 5030B
 1
 12/11/2007 15:15
 Steven A Skiles

 GC/MS VOA Water Prep
 SW-846 5030B
 1
 12/18/2007 03:24
 Michael A Ziegler

Laboratory Chronicle



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Page 1 of 1

Lancaster Laboratories Sample No. WW 5232289

EFF-W-071205 Grab Water Facility# 90260 CETE

21995 Foothill-Hayward T0600100315 EFF Collected:12/05/2007 14:45 by MJ

Submitted: 12/08/2007 10:00 Reported: 12/19/2007 at 19:18

Discard: 01/19/2008

Account Number: 10880

ChevronTexaco

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

FBHEF I 5E w

				As Received		
CAT	•		As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
	The reported concentration of gasoline constituents eluting start time.					
05879	BTEX					
02161	Benzene	71-43-2	N.D.	0.5	ug/1	1
02164	Toluene	108-88-3	N.D.	0.5	ug/l	1
02166	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
02171	Total Xylenes	1330-20-7	N.D.	1.5	ug/l	1
02309	MTBE by GC/MS (water)			v ·		
02010	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	ug/l	1

State of California Lab Certification No. 2116 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.

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CAT			4.0	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01729	TPH-GRO - Waters	TPH GRO SW-846 8015B mod	1	12/11/2007 15:45	Steven A Skiles	1
05879	BTEX	SW-846 8020A	1	12/11/2007 15:45	Steven A Skiles	1
02309	MTBE by GC/MS (water)	SW-846 8260B	1 .	12/18/2007 03:47	Michael A Ziegler	1
01146	GC VOA Water Prep	SW-846 5030B	1 .	12/11/2007 15:45	Steven A Skiles	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/18/2007 03:47	Michael A Ziegler	. 1



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Quality Control Summary

Client Name: ChevronTexaco Reported: 12/19/07 at 07:18 PM Group Number: 1068945

Matrix QC may not be reported if 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

Laboratory Compliance Quality Control

Analysis Name	Blank <u>Result</u>	Blank MDL	Report <u>Units</u>	LCS <u>%REC</u>	LCSD %REC	LCS/LCSD <u>Limits</u>	RPD	RPD Max
Batch number: 07346A07A	Sample n	umber(s):	5232287-52	32289				
TPH-GRO - Waters	N.D.	50.	ug/l	130	124	75-135	4	30
Benzene	N.D.	0.5	ug/1	99	97	86-119	2	30
Toluene	N.D.	0,5	ug/l	105	102	82-119	2	30
Ethylbenzene	N.D.	0.5	ug/l	99	97	81-119	2	30
Total Xylenes	N.D.	1.5	ug/l	98	97	82-120	2	30
Batch number: D073514AA	Sample n	umber(s):	5232287-52	32289				
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	92		73-119		

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 <u>Limits</u>	RPD	RPD <u>MAX</u>	BKG Conc	DUP Conc	DUP RPD	Dup RPD <u>Max</u>
Batch number: 07346A07A	Sample	number(s)	: 5232287	-52322	89 UNSP	K: P229207,	P229208		
TPH-GRO - Waters	134		63-154						
Benzene	105	•	78-131						
Toluene	106		78-129						
Ethylbenzene	104		75-133						
Total Xylenes	102		84-131						
Batch number: D073514AA Methyl Tertiary Butyl Ether	Sample 90	number(s)	: 5232287 69-127	-52322	89 UNSP 30	K: 5232289			
routing buty i delici			00 147	-					

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.

Trifluorotoluene-F

Analysis Name: TPH-GRO - Waters

Batch number: 07346A07A
Trifluorotoluene-P

5232287	113	117
5232288	112	115
5232289	113	117
Blank	114	117
LCS	113	121
LÇSD	113	122

*- Outside of specification

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



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Page 2 of 2

Quality Control Summary

Client Name: ChevronTexaco

Group Number: 1068945

Reported: 12/19/07 at 07:18 PM

Surrogate Quality Control

MS	113	122		
Limits:	69-129	63-135	, 	
	ame: MTBE by GC/MS (water) er: D073514AA			
	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5232287	80	87	97	95
5232288	83	90	96	93
5232289	84	92	94	93
Blank	84	94	98	93
LCS	82	91	96	96
MS	84	93	97	98
MSD	82	90	95	95
Limits:	80-116	77-113	80-113	78-113

^{*-} Outside of specification

⁽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.

Chevron California Ragion Analysis Request/Chain of Catody



120707-07

Acct. #. 10880 For Lancaster Laboratories use only

Group #1068945 Sample #: 5232287-89

									_						,	Anal	yse	s Re	que	sted				SCR#:	<u> </u>	
Facility #: 9-0260 M1	L									Τ	T	L				Pres	erv	atio	п Со	des				Preserv	ative Co	des
Site Address: 21995 F	oothill B	lvd, Hayw	ard, Ca	lifornia	<u> </u>							\vdash	╁	┝	-	_	\vdash	-	_			\Box	_	H = HCI N = HNO ₃	T = Thi	osulfate
Chevron PM; Satya Si	inha	Lead Co	nsultan	t <u>Con</u> e	estoga	-Rove	rs& Associ	ates			S					_	Th, 2)						- [$S = H_2SO_4$	B = Nat O = Oth	
Consultant/Office: CR	A 5900 H	Iollis St., S	Ste A, <u>E</u>	meryv	ille, C	<u> 9460</u>	<u> 28</u>			1	of Containers					13 Proirity Pollutant Metals (EPA 200)	Se, Si,							☐ Must meet lo	west dete	ction limits
Consultant Prj. Mgr.: C	Charlotte	Evans									ğ					(EP	(An, Ar, Be, Ca, Ch, Cu, Pb, M, Ni, Se,	420.1)						possible for 8		ounds
Consultant Phone #: 5			· ·	_ Fax :	#: <u>510</u>	-420-9	9170				P		ŀ	4		Meta	ę,	A 42				Ī	- [Email results t		
Sampler: MAR	حاة	huson	J							0	Total Number	R	150	Cyanide (EPA 335.4)	=	llutani	Ð.	Total Phenols (EPA	8260B					mlundberg@cr	aworld.com	om and
Service Order #:	·			n SAF	₹:				1	Sosit	ş	86. 1€	by 80	(EP/	A 150	ity Po	3e, Ca,	heno	Ą.		ĺ			csanders@cra		<u>n</u>
Field Point Name	Matrix	Repeat Sample	Top Denth	Year	Month	Dev :	Time Collected	New Field Bt	Grab	Composite	otal	BTEX by 8020	TPHg by 8015	yanid	pH (EPA 150.1)	3 Proi	n, Ar, (otal P	MTBE	-				email edf to:		_
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Lancaster Laboratories Explanation of Symbols and Abbreviations

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

N.D.	none detected	BMQL	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	MPN	Most Probable Number
IU	International Units	CP Units	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	NTU	nephelometric turbidity units
. С	degrees Celsius	F	degrees Fahrenheit
Cal	(diet) calories	lb.	pound(s)
meq	milliequivalents	kg	kilogram(s)
g	gram(s)	mg	milligram(s)
ug	microgram(s)	Ĭ	liter(s)
ml	milliliter(s)	ul	microliter(s)
m3	cubic meter(s)	fib >5 um/ml	fibers greater than 5 microns in length per ml

- less than The number following the sign is the <u>limit of quantitation</u>, the smallest amount of analyte which can be reliably determined using this specific test.
- > 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 of gas per liter of gas.

Inorganic Qualifiers

- ppb parts per billion
- **Dry weight**Besults 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.

U.S. EPA data qualifiers:

Organic Qualifiers

Α	TIC is a possible aldol-condensation product	В	Value is <crdl, but="" th="" ≥idl<=""></crdl,>
В	Analyte was also detected in the blank	E	Estimated due to interference
С	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quatitated on a diluted sample	Ň	Spike amount not within control limits
Е	Concentration exceeds the calibration range of	S	Method of standard additions (MSA) used
	the instrument		for calculation
J	Estimated value	U	Compound was not detected
N	Presumptive evidence of a compound (TICs only)	W .	Post digestion spike out of control limits
Р	Concentration difference between primary and	*	Duplicate analysis not within control limits
	confirmation columns >25%	+	Correlation coefficient for MSA < 0.995

U Compound was not detected

X,Y,Z Defined in case narrative

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

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. This report shall not be reproduced except in full, without the written approval of the laboratory.

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ANALYTICAL RESULTS

Prepared for:

ChevronTexaco 6001 Bollinger Canyon Rd L4310 San Ramon CA 94583

925-842-8582

Prepared by:

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 1070863. Samples arrived at the laboratory on Friday, December 21, 2007. The PO# for this group is 0015014975 and the release number is SKANCE.

Client Description		Lancaster Labs Number
INF-W-071218 Grab Water		5243458
MID-W-071218 Grab Water	4	5243459
EFF-W-071218 Grab Water		5243460

ELECTRONIC CRA
COPY TO
ELECTRONIC CRA
COPY TO
ELECTRONIC Chevron
COPY TO

Attn: Charlotte Evans

Attn: Matthew Lundberg

Attn: C Sanders



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Questions? Contact your Client Services Representative Angela M Miller at (717) 656-2300

Respectfully Submitted,

Valerie L. Tomayko Group Leader



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Lancaster Laboratories Sample No. WW 5243458

INF-W-071218 Grab Water Facility# 90260 CETE

21995 Foothill-Hayward T0600100315 INF Collected:12/18/2007 12:25 by MJ

Submitted: 12/21/2007 11:00 Reported: 01/02/2008 at 11:09

Discard: 02/02/2008

Account Number: 10880

ChevronTexaco

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

FTBIN I 5E w

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters	n.a.	31,000.	1,000.	ug/l	20
	The reported concentration of I gasoline constituents eluting patent time.					
05879	BTEX					
02161	Benzene	71-43-2	1,800.	10.	ug/l	20
02164	Toluene	108-88-3	5,100.	10.	ug/l	20
02166	Ethylbenzene	100-41-4	900.	10.	ug/l	20
02171	Total Xylenes	1330-20-7	4,400.	30.	ug/l	20
02309	MTBE by GC/MS (water)					
02010	Methyl Tertiary Butyl Ether	1634-04-4	37.	5.	ug/l	10

State of California Lab Certification No. 2116
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 Chronicle

			Analysis		Dilution
Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
TPH-GRO - Waters	TPH GRO SW-846 8015B mod	1	12/27/2007 03:13	Martha L Seidel	20
BTEX	SW-846 8020A	1	12/27/2007 03:13	Martha L Seidel	20
MTBE by GC/MS (water)	SW-846 8260B	1	12/29/2007 04:07	Michael A Ziegler	10
GC VOA Water Prep	SW-846 5030B	. 1	12/27/2007 03:13	Martha L Seidel	20
GC/MS VOA Water Prep	SW-846 5030B	1	12/29/2007 04:07	Michael A Ziegler	10
	TPH-GRO - Waters BTEX MTBE by GC/MS (water) GC VOA Water Prep	TPH-GRO - Waters TPH GRO SW-846 8015B mod BTEX SW-846 8020A MTBE by GC/MS (water) SW-846 8260B GC VOA Water Prep SW-846 5030B	TPH-GRO - Waters TPH GRO SW-846 8015B 1 mod BTEX SW-846 8020A 1 MTBE by GC/MS (water) SW-846 8260B 1 GC VOA Water Prep SW-846 5030B 1	Analysis Name Method Trial# Date and Time TPH-GRO - Waters TPH GRO SW-846 8015B 1 12/27/2007 03:13 mod BTEX SW-846 8020A 1 12/27/2007 03:13 mod MTBE by GC/MS (water) SW-846 8260B 1 12/29/2007 04:07 mod GC VOA Water Prep SW-846 5030B 1 12/27/2007 03:13 mod	Analysis Name Method Trial# Date and Time Analyst TPH-GRO - Waters TPH GRO SW-846 8015B 1 12/27/2007 03:13 Martha L Seidel mod BTEX SW-846 8020A 1 12/27/2007 03:13 Martha L Seidel MTBE by GC/MS (water) SW-846 8260B 1 12/29/2007 04:07 Michael A Ziegler GC VOA Water Prep SW-846 5030B 1 12/27/2007 03:13 Martha L Seidel



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Lancaster Laboratories Sample No. WW 5243459

MID-W-071218 Grab Water Facility# 90260 CETE

21995 Foothill-Hayward T0600100315 MID Collected:12/18/2007 12:20 by MJ

Account Number: 10880

Submitted: 12/21/2007 11:00

Reported: 01/02/2008 at 11:09

Discard: 02/02/2008

ChevronTexaco

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

FTBMD I 5E w

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01729	TPH-GRO - Waters		•			
01730	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
	The reported concentration of gasoline constituents eluting start time.					
05879	BTEX					
02161	Benzene	71-43-2	0.9	0.5	ug/l	1
02164	Toluene	108-88-3	3.3	0.5	ug/l	1
02166	Ethylbenzene	100-41-4	0.6	0.5	ug/l	1 .
02171	Total Xylenes	1330-20-7	2.6	1.5	ug/l	1
02309	MTBE by GC/MS (water)					
02010	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	ug/l	1

State of California Lab Certification No. 2116 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	Chro	nicle		
CAT		en e		Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01729	TPH-GRO - Waters	TPH GRO SW-846 8015B mod	1	12/27/2007 11:11	Martha L Seidel	1
05879	BTEX	SW-846 8020A	1	12/27/2007 11:11	Martha L Seidel	1
02309	MTBE by GC/MS (water)	SW-846 8260B	. 1	12/29/2007 04:31	Michael A Ziegler	1.
01146	GC VOA Water Prep	SW-846 5030B	1	12/27/2007 11:11	Martha L Seidel	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/29/2007 04:31	Michael A Ziegler	1



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Lancaster Laboratories Sample No. WW 5243460

EFF-W-071218 Grab Water Facility# 90260 CETE

21995 Foothill-Hayward T0600100315 EFF Collected:12/18/2007 12:15 by MJ

Submitted: 12/21/2007 11:00 Reported: 01/02/2008 at 11:09

Discard: 02/02/2008

Account Number: 10880

ChevronTexaco

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

FTBEF I 5E w

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
	The reported concentration of gasoline constituents eluting start time.					
05879	BTEX					
02161	Benzene	71-43-2	N.D.	0.5	ug/l	1
02164	Toluene	108-88-3	N.D.	0.5	ug/l	1
02166	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
02171	Total Xylenes	1330-20-7	N.D.	1.5	ug/l	1
02309	MTBE by GC/MS (water)					
02010	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	ug/l	. 1

State of California Lab Certification No. 2116 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 Chronicle								
CAT			Analysis			Dilution		
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor		
01729	TPH-GRO - Waters	TPH GRO SW-846 8015B mod	1	12/27/2007 03:56	Martha L Seidel	1 .		
05879	BTEX	SW-846 8020A	1	12/27/2007 03:56	Martha L Seidel	1 .		
02309	MTBE by GC/MS (water)	SW-846 8260B	1	12/29/2007 04:55	Michael A Ziegler	1		
01146	GC VOA Water Prep	SW-846 5030B	1	12/27/2007 03:56	Martha L Seidel	1		
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/29/2007 04:55	Michael A Ziegler	1		