April 29, 2002 G-R #386383

TO:

Mr. James Brownell

Delta Environmental Consultants, Inc. 3164 Gold Camp Drive, Suite 200 Rancho Cordova, California 95670

CC: Ms. Karen Streich

Chevron Products Company

P.O. Box 6004

San Ramon, California 94583

FROM:

Deanna L. Harding

Project Coordinator Gettler-Ryan Inc.

6747 Sierra Court, Suite J Dublin, California 94568 RE: Chevron Service Station

#9-4800

1700 Castro Street Oakland, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	April 25, 2002	Groundwater Monitoring and Sampling Report First Quarter - Event of March 15, 2002

COMMENTS:

This report is being sent for your review. Please provide any comments/changes and propose any groundwater monitoring modifications for the next event prior to *May 13, 2002*, at which time the final report will be distributed to the following:

Ms. Eva Chu, Alameda County Health Care Services, Dept. of Environmental Health, 1131 Harbor Bay Parkway, Suite 250, Alameda, CA 94502-6577

Mr. Greg Gurss, Gettler-Ryan Inc., 3140 Gold Camp Drive, Suite 170, Rancho Cordova, CA 95670

Enclosures



April 25, 2002 G-R Job #386383

Ms. Karen Streich Chevron Products Company P.O. Box 6004 San Ramon, CA 94583

RE: First Quarter Event of March 15, 2002

Groundwater Monitoring & Sampling Report

Chevron Service Station #9-4800

1700 Castro Street Oakland, California

Dear Ms. Streich:

This report documents the most recent groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R) at the referenced site. All field work was conducted in accordance with G-R Standard Operating Procedure - Groundwater Sampling (attached).

Static groundwater levels were measured and the wells were checked for the presence of separate-phase hydrocarbons. Static water level data, groundwater elevations, and separate-phase hydrocarbon thickness (if any) are presented in the attached Table 1. A Potentiometric Map is included as Figure 1.

Groundwater samples were collected from the monitoring wells and submitted to a state certified laboratory for analyses. The field data sheets for this event are attached. Analytical results are presented in the table(s) listed below. The chain of custody document and laboratory analytical report are also attached.

No. 6882

Please call if you have any questions or comments regarding this report. Thank you.

Sincerely,

Deanna L. Harding Project Coordinator

Douglas Lee

Senio Geologist, R.G. No. 6882

Figure 1:

Potentiometric Map

Table 1:

Groundwater Monitoring Data and Analytical Results

. Hardy

Table 2:

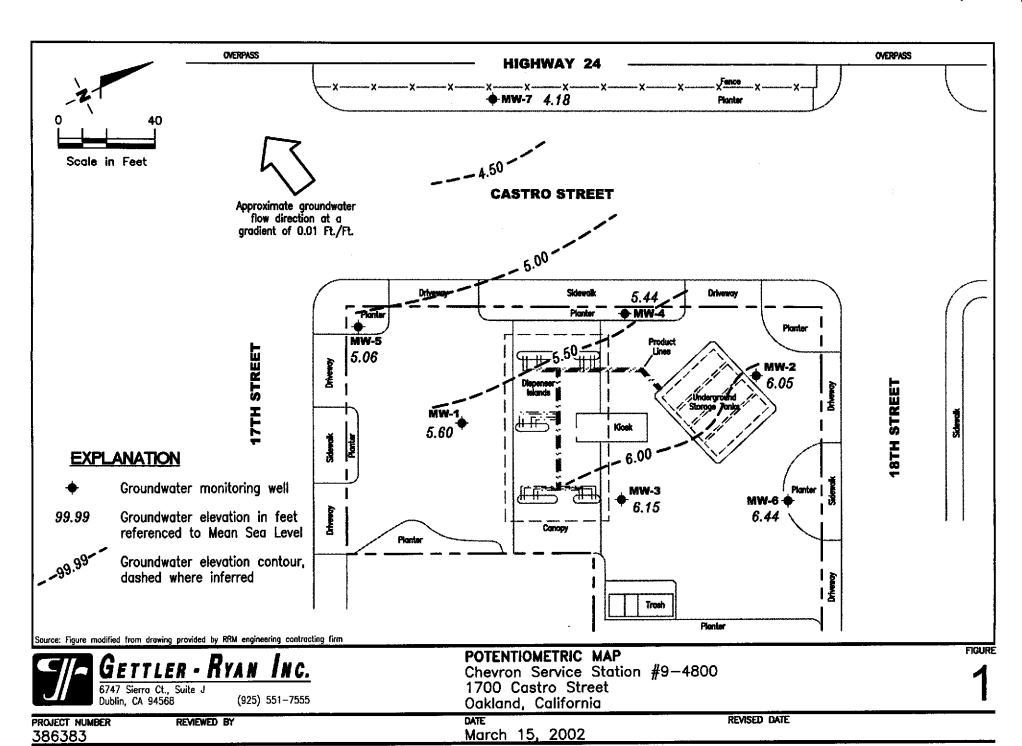
Groundwater Analytical Results - Oxygenate Compounds

Attachments: Sta

Standard Operating Procedure - Groundwater Sampling

Field Data Sheets

Chain of Custody Document and Laboratory Analytical Reports



FILE NAME: P:\Enviro\Chevron\9-4800\Q02-9-4800.dwg | Layout Tab: Pot1

Table 1
Groundwater Monitoring Data and Analytical Results

Chevron Service Station #9-4800 1700 Castro Street Oakland, California

					Oakianu, Can	TOTHIG				
WELL ID/	TOC*	GWE	DTW	TPH-D	TPH-G	В	T	E	X	MTBE
DATE	(ft.)	(msl)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
MW-1										
06/04/97	30.75	4.39	25.82	71 ¹	890	100	110	29	150	<10
09/16/97	30.75	4.85	25.90	75 ¹	1,600	210	210	60 .	250	<10
12/17/97	30.75	4.88	25.87	65 ¹	940	120	100	41	160	<25
3/18/98	30.75	5.90	24.85	77 ¹	530	91	39	22	65	6.8
6/28/98	30.75	5.92	24.83	140 ¹	1,100	220	140	37	120	14
9/07/98	30.75	5.56	25.19	280^{1}	1,700	530	86	84	240	49
2/09/98	30.75	5.10	25.65	240¹	1,700	240	130	100	270	32
3/11/99	30.75	5.30	25.45	98¹	353	53.9	28.6	20.5	56.1	14.1
6/17/99	30.75	5.39	25.36	217 ¹	810	270	150	95	340	15
9/29/99	30.75	5.13	25.62	153 ¹	659	76	49.7	35.1	118	12.6
2/14/99	30.75	5.07	25.68	188 ^{1,2}	2,760	287	199	139	502	<12.5
3/09/00 ³	30.75	5.54	25.21	166 ¹	1,590	238	94.9	72.2	247	22.3
6/10/00	30.75	5.73	25.02		1,460	242	47.8	83.8	151	97.3
9/30/00	30.75	5.30	25.45	240 ⁷	650 ⁶	130	49	69	190	21
2/22/00	30.75	5.05	25.70	200 ⁹	640 ⁶	110	33	58	160	68
3/01/01	30.75	5.25	25.50	2117	1,500 ⁶	210	67.9	109	320	87.3
5/04/01	30.75	5.41	25.34	130 ⁷	991	127	32.6	73.0	137	95.4
9/05/01	30.75	5.16	25.59	SAMPLED SEMI						
2/21/01	30.75	5.17	25.58	210	2,000	220	16	110	400	34
3/15/02	30.75	5.60	25.15							
∕IW-2							•			
6/04/97	30.00	5.13	24.87	4,000 ¹	13,000	790	30	420	1,700	4000
9/16/97	30.00	5.06	24.94	2,200 ^t	4,000	360	9.7	210	460	1500
2/17/97	30.00	5.18	24.82	2,100¹	4,100	380	<10	200	460	2100
3/1 8/98	30.00	6.43	23.57	3,700 ¹	8,400	1,800	<50	350	630	13,000
6/28/984	30.00	6.21	23.79	4,400 ¹	9,300	740	340	710	2,300	3800
9/07/98	30.00	5.78	24.22	3,100 ^t	9,900	1,000	150	640	1,800	4500/4100
2/09/98	30.00	5.31	24.69	1,900 ¹	8,500	860	74	610	960	2600/2600
3/11/99	30.00	5.79	24.21	2,700 ^t	12,500	1,520	42.2	645	2,250	3400/5050

Table 1
Groundwater Monitoring Data and Analytical Results

Chevron Service Station #9-4800 1700 Castro Street Oakland, California

WELL ID/	TOC*	GWE	DTW	TPH-D	TPH-G	В	Т	E	X	MTBE
DATE	(ft.)	(msl)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
MW-2 (cont)										
06/17/99	30.00	5.69	24.31	7,150 ¹	27,000	2,200	260	1500	5,900	4700
09/29/99	30.00	5.45	24.55	3,030 ¹	6910	582	11.1	491	1,170	1970
12/14/99	30.00	5.39	24.61	615 ^{1,2}	4230	282	1 2.3	284	690	631
03/09/00 ³	30.00	6.08	23.92	3,300 ¹	15,300	1,110	39.4	1,040	3,030	2,470
06/10/00	30.00	6.13	23.87		7,360	560	40.7	627	1,280	1,260
09/30/00	30.00	5.67	24.33	1,800 ⁷	3,600 ⁶	280	<10	420	430	290
12/22/00	30.00	5.39	24.61	870 ⁹	1,500 ⁶	100	<1.3	160	59	380
03/01/01	30.00	5.79	24.21	1,3207	2,340 ⁶	171	<5.00	238	157	864
05/04/01	30.00	5.83	24.17	3,100 ⁷	11,900	199	33.9	1,420	290	3,890
09/05/01	30.00	5.45	24.55	2,200	3,300	170	1.7	310	110	1,100
12/21/01	30.00	5.60	24.40	980	1,100	58	0.72	120	14	450
03/15/02	30.00	6.05	23.95	2,200	5,000	250	9.1	470	430	1,800
MW-3							·			
06/04/97	31.32	5.27	26.05	<50	190	26	20	1.5	16	8.2
09/16/97	31.32	5.17	26.15	<50	270	58	53	6.1	30	21
12/17/97	31.32	5.22	26.10	<50	290	50	54	8.1	37	21
03/18/98	31.32	6.42	24.90	<50	390	140	33	4.6	30	94
06/28/98	31.32	6.39	24.93	<50	290	90	11	1.6	13	150
09/07/98	31.32	5.97	25.35	<50	170	46	20	4.3	19	120
12/09/98	31.32	5.41	25.91	55 ¹	660	120	93	22	72	150
03/11/99	31.32	5.85	25.47	<50	653	136	69.5	13.7	63.8	144
06/17/99	31.32	5.90	25.42	103 ¹	530	190	110	24	88	210
09/29/99	31.32	5.61	25.71	232 ¹	433	97.8	61.4	16.9	56.6	156
12/14/99	31.32	5.55	25.77	<50 ²	8650	1040	795	212	800	995
03/09/00 ³	31.32	6.14	25.18	74.6 ¹	1170	304	103	25.2	114	539
06/10/00	31.32	6.29	25.03		359	63.8	27.8	10.5	35.4	393
09/30/00	31.32	5.79	25.53	100 ⁸	220^{6}	42	33	12	38	67
12/22/00	31.32	5.52	25.80	1109	370 ⁶	96	48	18	58	180
03/01/01	31.32	5.75	25.57	144 ⁷	912 ⁶	218	89.0	36.0	110	310

Table 1
Groundwater Monitoring Data and Analytical Results
Chevron Service Station #9-4800

hevron Service Station #9-1700 Castro Street Oakland, California

WELL ID/	TOC*	GWE	DTW	TPH-D	TPH-G	В	T	E	Х	MTBE
DATE	(ft.)	(msl)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
MW-3 (cont)										
05/04/01	31.32	5.96	25.36	<50	1,260	146	79.6	38.2	101	1,070
09/05/01	31.32	5.61	25.71	SAMPLED SEM	I-ANNUALLY					
12/21/01	31.32	5.67	25.65	180	850	160	11	32	84	300
03/15/02	31.32	6.15	25.17							
MW-4										
04/08/99	30.13				130	3.1	<0.5	<0.5	7.7	4,700
06/17/99	30.13	5.19	24.94	3,780 ¹	590	58	<5.0	<5.0	160	6,200
09/29/99	30.13	4.96	25.17	1,130 ¹	692	10.7	<2.5	5.51	236	7,840
12/14/99	30.13	4.91	25.22	571 ^{1,2}	625	<10	3.83	<10	94.6	4,470
03/09/00 ³	30.13	5.45	24.68	600 ¹	402	3.76	1.18	<0.5	71.4	3,140
06/10/00	30.13	5.53	24.60		<1,000	13.2	<10.0	<10.0	97.8	3,080
09/30/00	30.13	5.09	25.04	1,400 ⁷	280 ⁶	21	0.67	6.3	60	3,300
12/22/00	30.13	4.90	25.23	740 ⁹	240^{6}	2.2	< 0.50	1.3	25	2,200
03/01/01	30.13	5.15	24.98	661 ⁷	193	2.31	< 0.500	1.34	12.1	1,220
05/04/01	30.13	5.25	24.88	1,100 ⁷	722	12.0	<5.00	17,1	89.4	2,390
09/05/01	30.13	4.96	25.17	2,500	1,400	23	2.2	19	260	2,300
12/21/01	30.13	5.06	25.07	1,100	310	2.9	< 0.50	2.6	32	860
03/15/02	30.13	5.44	24.69	3,100	520	5.0	<0.50	15	6.8	2,700
MW-5										
04/08/99	30.93			<50	<50	<0.5	<0.5	<0.5	<0.5	<2.5
06/17/99	30.93	4.93	26.00	53.8 ^t	<50	<0.5	<0.5	<0.5	<0.5	<2.5
09/29/99	30.93	4.73	26.20	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.5
12/14/99	30.93	4.61	26.32	<50 ²	<50	<0.5	<0.5	<0.5	< 0.5	0.598
03/09/003	30.93	5.00	25.93	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.5
06/10/00	30.93	5.21	25.72		<50.0	< 0.500	< 0.500	< 0.500	< 0.500	<2.50
09/30/00	30.93	4.79	26.14	1308	<50	< 0.50	< 0.50	< 0.50	< 0.50	<2.5
12/22/00	30.93	4.60	26.33	250 ⁸	<50	< 0.50	< 0.50	< 0.50	<0.50	9.1

Table 1 Groundwater Monitoring Data and Analytical Results

Chevron Service Station #9-4800 1700 Castro Street Oakland, California

WELL ID/	TOC*	GWE	DTW	TPH-D	TPH-G	В	T	E	X	MTBE
DATE	(ft.)	(msl)	(fL)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(क्ष्मुक)
MW-5 (cont)								•		
03/01/01	30.93	4.77	26.16	77.4 ⁷	<50.0	<0.500	< 0.500	<0.500	<0.500	<2.50
05/04/01	30.93	4.89	26.04		DUE TO INSUFF		10.555		40.500	
09/05/01	30.93	4.72	26.21	SAMPLED SEM			P=		•	<u></u>
12/21/01	30.93	4.73	26.20	110	<50	<0.50	< 0.50	< 0.50	<1.5	<2.5
03/15/02	30.93	5.06	25.87			••				
MW-6										
04/08/99	30.58			<u>:_</u>	<50	<0.5	<0.5	<0.5	<0.5	4.5
06/17/99	30.58	5.99	24.59	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.5
09/29/99	30.58	5.81	24.77	<50	<50	<0.5	<0.5	<0.5	<0.5	4.46
12/14/99	30.58	5.74	24.84	<50 ²	<50	<0.5	<0.5	<0.5	<0.5	4.13
03/09/00 ³	30.58	6.49	24.09	<50	<50	<0.5	<0.5	<0.5	<0.5	2.82
06/10/00	30.58	6.58	24.00		<50.0	<0.500	< 0.500	< 0.500	< 0.500	<2.50
09/30/00	30.58	6.00	24.58	1108	<50	< 0.50	<0.50	<0.50	< 0.50	7.3
12/22/00	30.58	5.75	24.83	100 ⁸	<50	<0.50	<0.50	<0.50	< 0.50	4.5
03/01/01	30.58	6.07	24.51	1417	<50.0	< 0.500	< 0.500	< 0.500	< 0.500	7.52
05/04/01	30.58	6.26	24.32	<50	<50.0	< 0.500	<5.00	<5.00	<5.00	2.74
09/05/01	30.58	5.99	24.59	SAMPLED SEMI		<u></u> .				
12/21/01	30.58	5.93	24.65	200	<50	<0.50	<0.50	< 0.50	<1.5	8.5
03/15/02	30.58	6.44	24.14			••				
MW-7										
05/04/01 ¹¹	31.90	4.03	27.87	<50	<50.0	<0.500	<5.00	<5.00	<5.00	567/470 ¹²
09/05/01	31.90	3.86	28.04	<50	<50	<0.50	<0.50	<0.50	<1.5	1,400/1,30012
12/21/01	31.90	3.04	28.86	210	<50	<0.50	<0.50	<0.50	<1.5	620/670 ¹²
03/15/02	31.90	4.18	27.72	<50	<50	<0.50	<0.50	<0.50	<1.5	320/350 ¹²

Table 1
Groundwater Monitoring Data and Analytical Results

Chevron Service Station #9-4800 1700 Castro Street Oakland, California

WELL ID/	TOC*	GWE	DTW	TPH-D	TPH-G	В	T	E	Х	MTBE
DATE	(ft.)	(msl)	(ft.)	(ppb)	(ррь)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
TRIP BLANK				•						
06/04/97					<50	<0.5	-0 E	-O. F	0.5	
09/16/97					<50		<0.5	<0.5	<0.5	<2.5
12/17/97	<u></u>					<0.5	<0.5	<0.5	<0.5	<2.5
03/18/98					<50 -50	<0.5	<0.5	<0.5	<0.5	<2.5
06/28/98			 .		<50	<0.5	<0.5	<0.5	<0.5	<2.5
				***	<50	<0.5	<0.5	<0.5	<0.5	<2.5
09/07/98		**		••	<50	<0.5	<0.5	<0.5	<0.5	<2.5
12/09/98					<50	<0.5	<0.5	< 0.5	<0.5	<2.5
)3/11/99					<50	< 0.5	<0.5	<0.5	<0.5	<5.0
06/17/99					<50	< 0.5	<0.5	<0.5	< 0.5	<2.5
12/14/99					<50	<0.5	<0.5	<0.5	< 0.5	<2.5
03/09/00 ³				~~	<50	<0.5	< 0.5	< 0.5	<0.5	<2.5
06/10/00	••				<50.0	< 0.500	< 0.500	< 0.500	< 0.500	<2.50
09/30/00					<50	< 0.50	< 0.50	< 0.50	<0.50	<2.5
12/22/00 ¹⁰		**			<50	<0.50	< 0.50	< 0.50	<0.50	<2.5
03/01/01					<50.0	< 0.500	< 0.500	< 0.500	<0.500	<2.50
05/04/01					<50.0	< 0.500	<5.00	<5.00	<5.00	< 0.500
09/05/01					<50	<0.50	< 0.50	<0.50	<1.5	<2.5
QA										
12/21/01			••		<50	< 0.50	<0.50	< 0.50	<1.5	<2.5
3/15/02					<50	<0.50	<0.50	<0.50	<1.5	<2.5

Table 1

Groundwater Monitoring Data and Analytical Results

Chevron Service Station #9-4800 1700 Castro Street Oakland, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to June 10, 2000, were compiled from reports prepared by Blaine Tech Services, Inc.

TOC = Top of Casing

TPH-G = Total Petroleum Hydrocarbons as Gasoline

-- = Not Measured/Not Analyzed

(ft.) = Feet

B = Benzene

(ppb) = Parts per Billion

GWE = Groundwater Elevation

T = Toluene

QA = Quality Assurance

(msl) = Mean sea level

E = Ethylbenzene

DTW = Depth to Water

X = Xylenes

TPH-D = Total Petroleum Hydrocarbons as Diesel

MTBE = Methyl tertiary butyl ether

- * TOC elevation was surveyed on April 11, 2001, by Virgil Chavez Land Surveying. The benchmark for the survey was the top of curb at the south end of the return at the southeast corner of Castro Street and 18th Street. (Benchmark Elevation = 29.65 feet, msl).
- Chromatogram pattern indicates an unidentified hydrocarbon.
- Sample was extracted outside EPA recommended holding time.
- TPH-G, B, T, E, X and MTBE was analyzed outside EPA recommended holding time.
- EPA Method 8240.
- ⁵ Confirmation run.
- 6 Laboratory report indicates gasoline C6-C12.
- Laboratory report indicates unidentified hydrocarbons C9-C24.
- ⁸ Laboratory report indicates unidentified hydrocarbons >C16.
- Laboratory report indicates unidentified hydrocarbons C9-C40.
- Laboratory report indicates this sample was analyzed outside of the EPA recommended holding time.
- Well development performed.
- 12 MTBE by EPA Method 8260.

Table 2
Groundwater Analytical Results - Oxygenate Compounds

Chevron Service Station #9-4800 1700 Castro Street Oakland, California

WELL ID/ DATE	ETHANOL (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)
MW-4						
04/08/99	<25,000	<5000	5400	<100	<100	<100
MW-5						
04/08/99	<500	<100	<2.0	<2.0	<2.0	<2.0
MW-6						
04/08/99	<500	<100	5.6	<2.0	<2.0	<2.0
MW-7						
05/04/01	<500	57	470	<2.0	<2.0	11
09/05/01	<500	<100	1,300	<2	<2	32
12/21/01	<500	<100	670	<2	<2	15
03/15/02	<500	<100	350	<2	<2	8

EXPLANATIONS:

Groundwater laboratory analytical results prior to May 4, 2001, were compiled from reports prepared by Blaine Tech Services, Inc.

TBA = Tertiary butyl alcohol

MTBE = Methyl tertiary butyl ether

DIPE = Di-isopropyl ether

 $ETBE = Ethyl \ tertiary \ butyl \ ether$

TAME = Tertiary amyl methyl ether

(ppb) = Parts per billion

STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

Gettler-Ryan Inc. field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. Prior to sample collection, the type of analysis to be performed is determined. Loss prevention of volatile compounds is controlled and sample preservation for subsequent analysis is maintained.

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using an interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is noted in the field notes. In addition, static water level measurements are collected with the interface probe and are also recorded in the field notes.

After water levels are collected and prior to sampling, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, suction, Grundfos), or polyvinyl chloride bailers. Temperature, pH and electrical conductivity are measured a minimum of three times during the purging. Purging continues until these parameters stabilize.

Groundwater samples are collected using Chevron-designated disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used when possible. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the sample collector's initials. The water samples are placed in a cooler, maintained at 4°C for transport to the laboratory. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory supplied trip blank accompanies each sampling set. For sampling sets greater than 20 samples, 5% trip blanks are included. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

As requested by Chevron Products Company, the purge water and decontamination water generated during sampling activities is transported by IWM to McKittrick Waste Management located in McKittrick, California.

Client/CHEVRON Facility# 9	-48DO		Job#:	<u> 3863</u>	83
Address: 170	o Casteo.	<u>Si</u> .	Date:	3	115/02
	Klund, CA		Sampler:		7
Well ID	mn -1	Well Condition	on: ·).k
Well Diameter	$\underline{\beta}_{in}$	Hydrocarbon Thickness:	<i>[2]</i>	Amount B	19/
Total Depth	29.90 ft	Volume		et) (product/wa 3" = 0.38	
Depth to Water	25.15 th.	Factor (VF)		= 1.50	
Purge Equipment:	Disposable Bailer Bailer Stack Suction Grundfos Other:	Sa	X 3 (case volum mpling uipment:	Disposable Bailer Pressure Baile Grab Sample Other	er N/A
Starting Time: Sampling Time: Purging Flow Rate: Did well de-water?	/	Water Co Sediment	Conditions: pior: Description: Time:		Odor:
,	ume pH	Conductivity µmhos/cm	Temperature	D.O. (mg/L)	ORP (mV) (ppm)
		BORATORY IN	•		
SAMPLE ID (#) - CONTAINER REFF		TYPE LA	CASTER	ANALYSES TPH(G)/btex/mtbe
-/			LAN	CHOIEK	
		7			
COMMENTS: _M	DETOPED only	/ Took S MASTE	L Lock	ull Duptil. .5910	

Client/CHEVRO	ON -480	0			Job#	':	3863	23	
Address:)			6 SH	,	Date	: <u> </u>	3	15/02	
City:					Sam				
Well ID	-	-2	_ v	Vell Condition	on:			.E	
Well Diameter		<u>i</u>		lydrocarbon hickness: _	Ø	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Amount B		
Total Depth		9.65+	ŗļ	Volume	2* = 0		3" = 0.38	· · · · · · · · · · · · · · · · · · ·	(Gallons)
Depth to Water	23	3.95 A	L	Factor (VF)			.50		- 0.00
Purge Equipment:	Dispose Bailer Stack Suction Grundfo Other:	ble Baile		Sa	mpling	: Di Ba Pr Gr	sposable Bailer essure Bailer ab Sample	er	3. O (gal.)
Starting Time:		1133	· · ·	Weather	Conditio	ons:	cl.	CAR	
Sampling Time:	·	1143		Water Co	olor:	راه ب	Dy	Odor: 1	125
Purging Flow R									
Did well de-war	ter?	w		If yes;	Time: _		Volun	ne:	(qal.)
Time 1134 -	Volume (gal.)	2.20	£	nductivity mhos/cm 1248 1296	آء ف	erature	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
1138	3.0	3.16		1310		6.8 6.6			
									4.74
SAMPLE ID	(#) - CONT/	AINER	LABO	RATORY IN	•		, RATORY	ANALY	veee'
MW-2	3 X VOA		Y	He	· ·	LANCA		TPH(G)/btex/π	
Mw · 2	2 × AMBC		4	N		11	11	TPILD	
			·						
COMMENTS: _	Took	TOTA	l ne	11 Depot				/	

Client/CHEVRON Facility# 9	-48DO		Job#	#: <u>386</u>	383
	00 Costeo	<u>54</u>	. Date):	3/15/02
	Klund, C				72
Well ID	<u> ကယ - 3</u>	w	ell Condition:		0.k
Well Diameter	<u>&in.</u>		/drocarbon		nt Bailed
Total Depth	29.41 ft.		olume 2° = 0	(feet) (product 0.17 3" =	
Depth to Water	25.17 th.	F	Factor (VF)	6" = 1.50	12" = 5.80
Purge Equipment:	Disposable Bailer Bailer Stack Syction Grundfos Other:	L L	X 3 (case Sampling Equipmen	t: Disposable Bailer Pressure E Grap Sam	Bailer N/A
Starting Time: Sampling Time: Purging Flow Rate	:	nom.	Weather Condition Water Color: Sediment Descri	/	Odor:
Did well de-water	/		If yes; Time:	v	olume:lgsl.)
	olume pH			F (mg	ORP Alkalinity (ppm)
SAMPLE ID	(#) - CONTAINER	LABOR	ATORY INFORMA	· · · · ·	ANALYSES ³
		Υ		LANCASTER	TPH(G)/btex/m/be
_					/
COMMENTS:	MONITORES O	Ny,	/ 700k 7011	el well Da	ort.

Client/CHEVRO	N - 4800	· · · · · · · · · · · · · · · · · · ·		Job#:		<u> 3863</u> 8	33	
	700 Cast	ec St	,	Date:			3/15/02	
	akland,						2	
Well ID	<u> ကယ - 4</u>		ell Conditio	on:			0.K	
Well Diameter		<u>.io.</u> Hy	ydrocarbon nickness:	7.7		Amount Ba		(Gallons)
Total Depth	28.29	. Г	Volume	·		3" = 0.38		* = 0.66
Depth to Water	24.69	l .	Factor (VF)			50		0.00
Purge Equipment:	Dispusable Bar Bailer Stack Suction Grundfos Other:		Sa	X 3 (case v impling juipment:	Dis Bai Pre Gra	posable Ba	r	2.0 (gal.)
Starting Time: Sampling Time: Purging Flow R	1205		Water Co		Clou		Clowy Odor:	
	ter?		If yes;	Time:		Volum	ne:	(cal.)
Time		μ 32 <u>μ</u>	nductivity nhos/cm 1182	60 (01	o-9 (o-4	D.O. (mg/L)		Alkalinity (ppm)
1159	2.0 7.	<u> </u>	1/21	(al	9-0			
								
								rest (
SAMPLE ID	(#) - CONTAINER	LABOI REFRIG.	RATORY IN	IFORMAT		ATORY	·ANAL	YSES "
MW-4	3 X VOIAUTAL	Υ	He		LANCAS	STER	TPH(G)/btex/r	ntbe
Mw·Y	2×AMBU	4	NP.		//	11	TPH-D	
COMMENTS: _	700K 701	al we	II Dep	n+.			/	

Client/CHEVRON Facility#	-48DO		_ Job#:	<u> 3863</u>		
	00 Casteo	<u>54.</u>	_ Date:		3/15/02	<u> </u>
	Klund, Cf		Sampler	:	72	
Well ID	mw-5	Well Con	dition:		5. K	
Well Diameter	in.	Hydrocarl Thickness		Amount (feet) (product/w		
Total Depth	27.95 tt.	Volume		3" = 0.3		(Gallons) * = 0.66
Depth to Water	25.87 n.	Factor (VI	F)	6" = 1.50	12" = 5.80	
·	/	F ≠	X 3 (case volu	ime) = Estimated i	^p urge Volume: _	(oal.)
Purge Equipment:	Disposable Bailer Bailer Stack Suction Grundfos Other:	· · · · · · · · · · · · · · · · · · ·	Sampling Equipment:	Disposable E Bailer Pressure Bai Grab Sample Other:	ler <i>NA</i>	
Starting Time:		Weat	her Conditions:		•	
Sampling Time:			r Color:	/	Odor:	/
Purging Flow Rat			nent Descriptions; Time:			/
Did well de-wate	"-	ii yes	; Tittle: /	Void	me:	(gal.)
	plume pH (gal.)	Conductivity µmhos/cm		ure D.O. (mg/L)		Alkalinity (ppm)
/_			Z		- /	
					/	
					-	••••
SAMPLE ID/			Y INFORMATIO		ANAL	YSES
		Υ		ANCASTER	TPH(G)/btex/	
					 / -	
COMMENTS:	MONITORED OF	sky / 70	ook total	Q. well D	ерга.	
<u> </u>						

Client/CHEVRON Facility# 9	-4800		Job#:	<u> 38638</u>	3	
	so Casteo S	. K	Date:	3/	15/02	
	Klund, CA		Sampler:		2	
Well ID	MW-6	Well Condition:		0	k	
Well Diameter		Hydrocarbon Thickness:	 _	Amount Bai	~~~	
Total Depth	28.06 tt.	Volume	2" = 0.17	· · · · · · · · · · · · · · · · · · ·		(Gallons) = 0.66
Depth to Water	24.14 tt.	Factor (VF)	6" = 1.	50	12" = 5.80	
Purge Equipment:	Disposable Bailer Bailer Stack Suction Grundfos Other:		pling pment: Dis Bai Pre Gra	Estimated Purg posable Bail ler essure Bailer ab Sample her:	er 10/14	(gal.)
Starting Time: Sampling Time: Purging Flow Rate Did well de-water	/	Sediment [onditions: or: Description: ne:		Odor:	(qal.)
Time Vo	Nume pH gal.)	Conductivity µmhos/cm	Temperature •F	D.O. (mg/L)	ORP (mV)	· Alkalinity (ppm)
		/			<u> </u>	
				/		
SAMPLE ID	LA (#) - CONTAINER REFR	BORATORY INF	ORMATION YPE - LABOR	ATORY	ANALYS	ses ^{, -}
	Y		LANCA		PH(G)/btex/mt	<i>''</i>
					/_	
COMMENTS:	MONITORES ONLY	Took	TOTAL WE	Il Dept	4.	

Address: 170 City: 0	-4800 00 Casted Klund, C	S4 . A		Job#: Date: Sampler:		3/15/02	
Well ID	mw-7	Well	Condition	:	0	با.	
Well Diameter	in	· ·	rocarbon	<i>P</i>	Amount Ba		
Total Depth	30,00 ft.		kness:		(product/wat		(Gallons)
Depth to Water	27.72 ft.	Yol Fac	ume tor (VF)	2" = 0.17 6" = 1	3" = 0.38 .50	12" = 5.80	* = 0.66
Purge <u> </u>	Disposable Bailer Bailer Stack Suction Grundfos Other:	> .	Sarr	Ba Pro Gr	sposable Ba iller essure Baile ab Sample ther:	iller er	
Starting Time:	1215	· ,	Weather C	conditions:	de	m	
-	1215			Conditions:			ISHT
Sampling Time:	1226	1	Water Cold		NW	Odor: 5	
Sampling Time: Purging Flow Rate	1226	gpm.	Water Cold Sediment I	or: <u>167. Bu</u>	ewal	Odor: <u>S</u>	
Sampling Time: Purging Flow Rate Did well de-water Time Vol	1226	gom. Condo μ mh (3	Water Cold Sediment I If yes; Til activity os/cm	or: <u>//67. By</u> Description:	ewal	Odor: <u>&</u>	
Sampling Time: Purging Flow Rate Did well de-water Time Vol (g 1216	1226 1226 1226 1226 1226 1226 1226 1226	gpm. Condi μmh (3	Water Cold Sediment I If yes; Til sectivity os/cm	or:	Volum	Odor: <u>&</u> ne:	(gal.)
Sampling Time: Purging Flow Rate Did well de-water Time Vol (g 1216	1226 1226 1226 1226	gpm. Condi μmh (3	Water Cold Sediment I If yes; Til activity os/cm	or:	Volum	Odor: <u>&</u> ne:	(gal.)
Sampling Time: Purging Flow Rate Did well de-water Time Vol [216] [217]	1226 1226 1226 1226 1226 1226 1226 1226	gpm. Condi μmh (3	Water Cold Sediment I If yes; Til sectivity os/cm	or:	Volum	Odor: <u>&</u> ne:	(gal.)
Time Vol. (g. /2/2	1226 1226 1226 1226 1226 1226 1226 1226	gpm. Condi μmh (3	Water Cold Sediment I If yes; Til sectivity os/cm	or:	Volum	Odor: <u>&</u> ne:	(gal.)
Sampling Time: Purging Flow Rate Did well de-water Time Vol [216] [217]	1226 1226 1226 1226 1226 1226 1226 1226	Condi	Water Cold Sediment I If yes; Till sectivity octivity Sectivity 38 326	or:	Volum	Odor: <u>&</u> ne:	(gal.)
Sampling Time: Purging Flow Rate Did well de-water Time Vol (216 (8) /2/2 (12/8)	1226 1226 1226 1226 1226 1226 1226 1226 1226	Condo	Water Cold Sediment I If yes; Till activity os/cm (4) 338 326	or:	D.O. (mg/L)	Odor: <u>S</u>	Alkalinity (ppm)
Sampling Time: Purging Flow Rate Did well de-water Time Vol 1216 /2/7 /2 18	1226 1226	Condi	Water Cold Sediment I If yes; Till Inctivity Os/cm UK 3/8 326 TORY INF	Description:	D.O. (mg/L)	Odor: <u>\$</u> De: ORP (mV)	Alkalinity (ppm)
Sampling Time: Purging Flow Rate Did well de-water: Time Vol 1216 1217 1218 SAMPLE ID UW. 7	1226 1226 1	Condinate of the condin	Water Cold Sediment I If yes; Till activity os/cm (4) 338 326	Description:	D.O. (mg/L)	Odor: <u>\$</u> De: ORP (mV)	Alkalinity (ppm)
Sampling Time: Purging Flow Rate Did well de-water: Time Vol 1216 1217 1218 SAMPLE ID	1226 1226	Condi	Water Cold Sediment I If yes; Till setivity os/cm 44 328 328 TORY INF PRESERV. T	Description: Temperature Formation ORMATION TYPE LABO LANCA	D.O. (mg/L) RATORY STER	Odor: 54 ORP (mV) ANAL TPH(G)/btex/r	Alkalinity (ppm)
Sampling Time: Purging Flow Rate Did well de-water: Time Vol 1216 1217 1218 SAMPLE ID UW 7	1226 1226 1	Condi	Water Cold Sediment I If yes; Till setivity os/cm 44 328 328 TORY INF PRESERV. T	Description: Temperature Formation ORMATION TYPE LABO LANCA	D.O. (mg/L) RATORY STER	Odor: 54 ORP (mV) ANAL TPH(G)/btex/r	Alkalinity (ppm)
Sampling Time: Purging Flow Rate Did well de-water: Time Vol 1216 1217 1218 SAMPLE ID UW. 7	1226 1226 1	Condu µmh (3)	Water Cold Sediment I If yes; Till activity os/cm (4) 338 326 TORY INF PRESERV. T	Description: Temperature Formation ORMATION TYPE LABO LANCA	D.O. (mg/L) RATORY STER	Odor: 54 ORP (mV) ANAL TPH(G)/btex/r	Alkalinity (ppm)

9/97-fieldat.frm

Chevron California Region Analysis Request/Chain of Custody



Acct. #: 10905	For Lancaster Laboratories use only Sample #: 37 10035-38	SCR#:	
			

	(Y	050L	-(フ			Analyses Requested													
Facility #: 9-4800 Job #386383	Global ID	#T06001	020	76	Matri	x					F	res	ervat	on C	odes				Preserva	tive Code	s
Site Address:1700 CASTRO ST., OAKLA	ND, CA					ļ		H				1	\dashv		+	 			H = HCI N = HNO ₃	T = Thiose B = NaOh	
Chevron PM:Tom Bauhs Lead	Consultant:	Delta/G-R		· -	T	\top				eanup					ŀ					O = Other	
Consultant/Office: G-R, Inc., 6747 Sierra			4568		8 S		Jers	风		ଞ୍ଚ		7							☐ J value report	ng needed	
Consultant Prj. Mgr.:Deanna L. Harding		na@gring		`	☐ Potable ☐ NPDES		Total Number of Containers	☐ 8021 🛱		Silica Gel Cleanup		Oxygenates + ETHANO							Must meet lov possible for 83		
Consultant Phone #:925-551-7555				"]	č	0				181							8021 MTBE Con	•	31100
Sampler: AMALDA	_ · ux n	<u> </u>		\exists			per c	8260	D GRO	D DR(rtes 🚽	7421						☐ Confirm highe		60
<i>I</i>	on SAR:	· · · · · · · · · · · · · · · · · · ·		Composite		Oil	Ë	BTEX + MTBE	TPH 8015 MOD	TPH 8015 MOD DRO	8260 full scan	ygen;	□ 83						☐ Confirm all hit		
	Date	Time	Grab	<u>ال</u> ق	Water		otal I	EX+	H 801	H 801	60 full	٥ اح	Lead 7420						□Runoxy		
Sample Identification	Collected	Collected	٥	0 0	5 <u>3</u>	0	_			£.	8	**	<u> </u>		+	_	-	H	Comments / R		· · ·
QA MW·Z	3115/02	1143	$\frac{1}{x}$	- -	1.	+	<u>2</u>	× ×		X	-		\vdash	+	+			Н	Comments / R	.emarks	
Mw·4		1205	X	╁	+ 🕏	11	5			X			\vdash	-		1					
Mu - 7	4	1226	X		X		B	X		Ĺ		X									
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		Relingui	ebad i						7	\vdash	Date	┯	Time	I IRd	ceive	1 Ave	ใก	\wedge	1-M/	Date	Time
Turnaround Time Requested (TAT) (please circ	e)	Keimqui	m	رل		ريس	Le	<u></u>	<u> </u>		115/		1320	113		4()		b	400(MX)	3/13/05	
STD. TAT 72 hour 48 hour 24 hour 4 day 5 day		Aellachi	ster	'nV	7 1	Dη	Δ	VII) ,	Date	(0)	Time 405	Ře	geNje	i by:	۲	. 1		Date 3-18-2	Time 1405
24 hour 4 day 5 day		Relingui	charl	N. K	 ₩	ΩŲ	עע		7					_	deive	<i>∼cc</i> d bv:	ريس	<u> </u>	may.	Date	Time
Data Package Options (please circle if required)	•	Lan		• /	In	se.				3	Q1	2/5	Time 3:30		4,1		m	<u></u>		318-01	_
Summary Type I — Full Relinque VI (Raw Data)				y Cor	nmercia	al Can	١,	1	7:6		(S)			Received by:		Date	Time 7085				
WIP (RWQCB)		UPS		FedEx			her/	-{		עני	<u>()</u>	<u> </u>		 _	<i>\}_</i>	<u>u</u>	22	20	7	D3/A/2	1005
Disk	•	Temper	ature l	Jpon F	Receipt	7.	0_	<u> </u>	" ——				_	Cu	stody	Seals	s Inta	ct?	Yes) No		



ANALYTICAL RESULTS

Prepared for:

Chevron Products Company 6001 Bollinger Canyon Road Building L PO Box 6004 San Ramon CA 94583-0904 925-842-8582

Prepared by:

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

APR 0.5 2002

GETTLER-KYAN INC.

SAMPLE GROUP

The sample group for this submittal is 800788. Samples arrived at the laboratory on Tuesday, March 19, 2002. The PO# for this group is 99011184 and the release number is BAUHS.

Client Description			Lancaster Labs Number
QA-T-020315	NA '	Water	3790635
MW-2-W-020315	Grab	Water	3790636
MW-4-W-020315	Grab	Water	3790637
MW-7-W-020315	Grab	Water	3790638

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

1 COPY TO

Delta C/O Gettler-Ryan

Attn: Deanna L. Harding

Questions? Contact your Client Services Representative Teresa M Lis at (717) 656-2300.

Respectfully Submitted,

Christine M. Dulaney

Sr. Chemist



Page 1 of 1

Lancaster Laboratories Sample No. WW 3790635

Collected:03/15/2002 00:00

Account Number: 10905

Submitted: 03/19/2002 08:50 Reported: 04/01/2002 at 14:57 Chevron Products Company 6001 Bollinger Canyon Road

Discard: 05/02/2002

Building L PO Box 6004 San Ramon CA 94583-0904

QA-T-020315

NA

GRD

Facility# 94800 Job# 386383 1700 Castro St-Oakland

T0600102076 QA

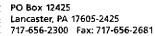
Water

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Pactor
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters The reported concentration of Tigasoline constituents eluting prostart time. A site-specific MSD sample was a was performed to demonstrate pro-	rior to the C6	(n-hexane) TPH-G for the project.	RO range A LCS/LCSD	ug/1	
08214	BTEX, MTBE (8021)					
00776	Benzene	71-43-2	N.D.	0.50	ug/l	1
00777	Toluene	108-88-3	N.D.	0.50	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.50	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	1.5	ug/l	1
00780	Methyl tert-Butyl Ether A site-specific MSD sample was a was performed to demonstrate pre				ug/l	1

State of California Lab Certification No. 2116

		Laboratory	Chro	nicle		
CAT		-		Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	03/23/2002 03:34	John B Kiser	1
08214	BTEX, MTBE (8021)	SW-846 8021B	1	03/23/2002 03:34	John B Kiser	1
01146	GC VOA Water Prep	SW-846 5030B	1	03/23/2002 03:34	John B Kiser	n.a.

#=Laboratory MethodDetection Limit exceeded target detection limit N.D.=Not detected at or above the Newporling Akemit





Page 1 of 2

Lancaster Laboratories Sample No. WW 3790636

Collected:03/15/2002 11:43

by TC

Account Number: 10905

Submitted: 03/19/2002 08:50

Reported: 04/01/2002 at 14:57

Discard: 05/02/2002

MW-2-W-020315

Grab

Water

Chevron Products Company 6001 Bollinger Canyon Road

Building L PO Box 6004

San Ramon CA 94583-0904

As Received

Facility# 94800

Job# 386383

GRD

1700 Castro St-Oakland

T0600102076 MW-2

CSMW2

CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
05553	TPH - DRO CA LUFT (Waters) According to the California LUFT Range Organics was performed by to that of our #2 fuel oil refer hydrocarbons). Site-specific MS/MSD samples wer was performed to demonstrate pre-	peak area comprence standard	parison of the same (between C10 and and and are the project	mple pattern C28 normal	ug/l	10
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters The reported concentration of TR gasoline constituents eluting pr start time. A site-specific MSD sample was r was performed to demonstrate pre	rior to the C6	(n-hexane) TPH-G for the project.	RO range A LCS/LCSD	ug/l	1
08214	BTEX, MTBE (8021)					
00776	Benzene	71-43-2	250.	0.50	ug/l	1
00777	Toluene	108-88-3	9.1	0.50	ug/l	1
00778	Ethylbenzene	100-41-4	470.	2.0	ug/l	10
00779	Total Xylenes	1330-20-7	430.	1.5	ug/l	1
00780	Methyl tert-Butyl Ether A site-specific MSD sample was n was performed to demonstrate pre		or the project.		ug/l	10

State of California Lab Certification No. 2116

Laboratory Chronicle

#=Laboratory MethodDetection Limit exceeded target detection limit
N.D.=Not detected at or above the republished pinks

MEMBER 2425 New Holland Pike

PO Box 12425 Lancaster, PA 17605-2425 717-656-2300 Fax: 717-656-2681



Page 2 of 2

Lancaster Laboratories Sample No. WW 3790636

Collected: 03/15/2002 11:43

by TC

Account Number: 10905

Submitted: 03/19/2002 08:50

Reported: 04/01/2002 at 14:57

Discard: 05/02/2002

MW-2-W-020315

Grab

Water

Chevron Products Company 6001 Bollinger Canyon Road

Building L PO Box 6004

San Ramon CA 94583-0904

Facility# 94800

Job# 386383

GRD

1700 Castro St-Oakland

T0600102076 MW-2

CSMW2

CAT	•			Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
05553	TPH - DRO CA LUFT (Waters)	CA LUFT Diesel Range Organics	1	03/27/2002 23:38	Devin M Lahr	10
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	03/23/2002 00:53	John B Kiser	i
08214	BTEX, MTBE (8021)	SW-846 8021B	1	03/22/2002 23:17	John B Kiser	10
08214	BTEX, MTBE (8021)	SW-846 8021B	1	03/23/2002 00:53	John B Kiser	1
01146	GC VOA Water Prep	SW-846 5030B	1	03/22/2002 23:17	John B Kiser	n.a.
07003	Extraction - DRO (Waters)	TPH by CA LUFT	1	03/21/2002 09:20	William P Stafford	1



Page 1 of 2

Lancaster Laboratories Sample No. 3790637

Collected:03/15/2002 12:05

by TC

Account Number: 10905

Submitted: 03/19/2002 08:50

Reported: 04/01/2002 at 14:57

Discard: 05/02/2002

MW-4-W-020315

Grab

Water

Chevron Products Company 6001 Bollinger Canyon Road

Building L PO Box 6004 San Ramon CA 94583-0904

Facility# 94800 Job# 386383

GRD

1700 Castro St-Oakland

T0600102076 MW-4

CSMW4

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
05553	TPH - DRO CA LUFT (Waters) According to the California LUFT Range Organics was performed by to that of our #2 fuel oil refer hydrocarbons). Site-specific MS/MSD samples wer was performed to demonstrate pre-	peak area comprence standard	parison of the sa (between C10 and ed for the projec	mple pattern C28 normal	ug/1	
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters The reported concentration of TP gasoline constituents eluting pr start time. A site-specific MSD sample was n was performed to demonstrate pre	cior to the C6	(n-hexane) TPH-G for the project.	RO range A LCS/LCSD	ug/1	1
08214	BTEX, MTBE (8021)					
00776	Benzene	71-43-2	5.0	0.50	ug/l	· 1
00777	Toluene	108-88-3	N.D.	0.50	ug/l	. 1
00778	Ethylbenzene	100-41-4	15.	0.50	ug/1	1
00779	Total Xylenes	1330-20-7	6.8	1.5	ug/l	1
00780	Methyl tert-Butyl Ether A site-specific MSD sample was n was performed to demonstrate pre				ug/l	10

State of California Lab Certification No. 2116

Laboratory Chronicle

#=Laboratory MethodDetection Limit exceeded target detection limit N.D.=Not detected at or above the kerolimies men BER 2425 New Holland Pike

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Lancaster Laboratories Sample No. WW 3790637

Collected:03/15/2002 12:05

by TC

Account Number: 10905

Submitted: 03/19/2002 08:50 Reported: 04/01/2002 at 14:57

Discard: 05/02/2002

MW-4-W-020315

Grab

Water

Chevron Products Company 6001 Bollinger Canyon Road

Building L PO Box 6004

San Ramon CA 94583-0904

Facility# 94800

Job# 386383

GRD

1700 Castro St-Oakland

T0600102076 MW-4

CSMW4				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
05553	TPH - DRO CA LUFT (Waters)	CA LUFT Diesel Range Organics	1	03/28/2002 00:21	Devin M Lahr	2
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	03/23/2002 00:21	John B Kiser	1
08214	BTEX, MTBE (8021)	SW-846 8021B	1	03/22/2002 22:44	John B Kiser	10
08214	BTEX, MTBE (8021)	SW-846 8021B	1	03/23/2002 00:21	John B Kiser	1
01146	GC VOA Water Prep	SW-846 5030B	1	03/22/2002 22:44	John B Kiser	n.a.
07003	Extraction - DRO (Waters)	TPH by CA LUFT	1	03/21/2002 09:20	William P Stafford	1



Page 1 of 2

Lancaster Laboratories Sample No. WW 3790638

Collected:03/15/2002 12:26

by TC

Account Number: 10905

Submitted: 03/19/2002 08:50 Reported: 04/01/2002 at 14:57

Discard: 05/02/2002

MW-7-W-020315

Grab

Water

Chevron Products Company 6001 Bollinger Canyon Road

Building L PO Box 6004 San Ramon CA 94583-0904

As Received

Facility# 94800

Job# 386383

GRD

1700 Castro St-Oakland

T0600102076 MW-7

CSMW7

			3 - B	14-41-4		
CAT			As Received	Method	• .	Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
05553	TPH - DRO CA LUFT (Waters)	n.a	N.D.	50.	ug/l	1
دددده	According to the California LUF				ug/ I	+
	Range Organics was performed by		_			
	to that of our #2 fuel oil refe	-	•	• -		
	hydrocarbons).	- Dealease	(Decreen CIO un	a cro normar		
	Site-specific MS/MSD samples we	re not submitte	ed for the proje	ct. A LCS/LCSD		
	was performed to demonstrate pr					
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
	The reported concentration of T	PH-GRO does no	t include MTBE o	r other		
	gasoline constituents eluting p	rior to the C6	(n-hexane) TPH-	GRO range		
	start time.					
	A site-specific MSD sample was	not submitted :	for the project.	A LCS/LCSD		
	was performed to demonstrate pr	ecision and ac	curacy at a batc	h level.		
08214	BTEX, MTBE (8021)					
00776	Benzene	71-43-2	N.D.	0.50	ug/l	1
00777	Toluene	108-88-3	N.D.	0.50	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.50	ug/l	1
00778	Total Xylenes	1330-20-7	N.D.	1.5	ug/1	1
00779	Methyl tert-Butyl Ether	1634-04-4	320.	2.5	ug/l	1
00760	A site-specific MSD sample was				ug/ I	1
	was performed to demonstrate pro		• •			
	was performed to demonstrate pr	cesson and act	caracy at a part	1 10,01.		
01594	BTEX + Oxygenates by 8260B					
01587	Ethanol	64-17-5	N.D.	500.	ug/l	1
02010	Methyl t-butyl ether	1634-04-4	350.	3.0	ug/l	5
02011	di-Isopropyl ether	108-20-3	N.D.	2.	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	2.	ug/1	,1
02014	t-Amyl methyl ether	994-05-8	8.	2.	ug/l	1

#=Laboratory MethodDetection Limit exceeded target detection limit
N.D.=Not detected at or above the Report of the Property of



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Lancaster Laboratories Sample No. WW 3790638

Collected: 03/15/2002 12:26 by TC Account Number: 10905

Submitted: 03/19/2002 08:50 Chevron Products Company Reported: 04/01/2002 at 14:57 6001 Bollinger Canyon Road

Discard: 05/02/2002 Building L PO Box 6004 MW-7-W-020315 Grab Water San Ramon CA 94583-0904

Facility# 94800 Job# 386383 GRD

1700 Castro St-Oakland T0600102076 MW-7

CSMW7

Method Dilution As Received CAT Factor CAS Number Result Detection Units No. Analysis Name Limit 100. ug/l 75-65-0 N.D. 02015 t-Butyl alcohol

As Received

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT		-		Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
05553	TPH - DRO CA LUFT (Waters)	CA LUFT Diesel Range	1	03/27/2002 21:04	Devin M Lahr	1
01729	TPH-GRO - Waters	Organics N. CA LUFT Gasoline Method	1	03/22/2002 23:49	John B Kiser	ı
08214	BTEX, MTBE (8021)	SW-846 8021B	1	03/22/2002 23:49	John B Kiser	1
01594	BTEX + Oxygenates by 8260B	SW-846 8260B	1	03/21/2002 19:13	Roy R Mellott Jr	1
01594	BTEX + Oxygenates by 8260B	SW-846 8260B	1	03/21/2002 19:40	Roy R Mellott Jr	5
01146	GC VOA Water Prep	SW-846 5030B	1	03/22/2002 23:49	John B Kiser	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	03/21/2002 19:13	Roy R Mellott Jr	n.a.
07003	Extraction - DRO (Waters)	TPH by CA LUFT	1	03/21/2002 09:20	William P Stafford	1

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Page 1 of 2

Client Name: Chevron Products Company

Reported: 04/01/02 at 02:57 PM

Group Number: 800788

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 020790008A	Sample nu	mber(s): 3	3790636-37	90638				
TPH - DRO CA LUFT (Waters)	N.D.	50.	ug/l	104	100	54-120	4	20
Batch number: 02081A16A	Sample nu	umber(s): 3	3790635 -37	90638				
Benzene	N.D.	0.5	ug/l	106	109	80-118	3	30
Toluene	N.D.	0.5	ug/l	106	108	82-119	2	30
Ethylbenzene	N.D.	0.5	ug/l	105	107	81-119	2	30
Total Xylenes	N.D.	1.5	ug/l	106	108	82~120	2	30
Methyl tert-Butyl Ether	N.D.	2.5	ug/l	100	102	79-127	2	30
TPH-GRO - Waters	N.D.	50.	ug/l	91	87	76-126	5	30
Batch number: V020801AA	Sample nu	mber(s): 3	790638					
Ethanol	N.D.	500.	ug/l	67		44-139		
Methyl t-butyl ether	N.D.	2.	ug/l	105		77-127		
di-Isopropyl ether	N.D.	2.	ug/l	94		74-125		•
Ethyl t-butyl ether	N.D.	2.	ug/1	109		74-120		
t-Amyl methyl ether	N.D.	2.	ug/l	112		71-114		
t-Butyl alcohol	N.D.	100.	ug/l	91		59-139		

Sample Matrix Quality Control

	ms	MSD	ms/msd		RPD	BKG	DUP	DUP	Dup RPD
Analysis Name	%REC	%REC	<u>Limits</u>	RPD	<u> MAX</u>	Conc	Conc	RPD	Max
Batch number: 02081A16A	Sample	number	(s): 379063	5-37906	38				
Benzene	111		77-131						
Toluene	111		80-128						
Ethylbenzene	110		76-132						
Total Xylenes	110		76-132						
Methyl tert-Butyl Ether	99		61-144						
TPH-GRO - Waters	104		74-132						
Batch number: V020801AA	Sample	number	(s): 379063	8					
Ethanol	57*	58*	70-130	1	30				
Methyl t-butyl ether	107	107	69-134	0	30				
di-Isopropyl ether	92	90	68-133	1	30				
Ethyl t-butyl ether	109	107	73-123	2	30				
t-Amyl methyl ether	112	110	69-118	1	30				
t-Butyl alcohol	95	89	51-148	6	30				

Surrogate Quality Control

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





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Mar I G ZOOZ

Client Name: Chevron Products Company

Group Number: 800788

Reported: 04/01/02 at 02:57 PM

Surrogate Quality Control

Analysis Name: TPH - DRO CA LUFT (Waters)

Batch number: 020790008A Orthoterphenyl

3790636	110
3790637	115
3790638	89
Blank	96
LCS	108
LCSD	102

Limits: 59-139

Analysis Name: TPH-GRO - Waters

Batch number: 02081A16A

Trifluorotoluene-P Trifluorotoluene-F 103 3790635 ខ្ល 125 115 3790636 130 3790637 101 107 82 3790638 Blank 80 105 104 121 LCS LCSD 119 103 103 MS 123 71-130 Limits: 67-135

Analysis Name: BTEX + Oxygenates by 8260B

Batch number: V020801AA

240011 11111	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene		
3790638	104	96	107	113		
Blank	107	101	108	112		
LCS	107	101	102	112		
MS	106	98	109	112		
MSD	104	101	109	112		
Limits:	86-118	80-120	88-110	86-115		

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The background result was more than four times the spike added.

