

GETTLER-RYAN INC.

TRANSMITTAL

TO: Ms. Karen Streich

Chevron Products Company

P.O. Box 6004

San Ramon, California 94583

DATE:

May 30, 2002

PROJ. #:

DG92960H.4CT1-1

SUBJECT: Chevron Station #9-2960

2416 Grove Way

Castro Valley, California

FROM:

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Mr. Dean Nielsen, Business Administrator, First Presbyterian Church, 2490 Grove Way, Castro Valley, CA 94546 If you have any questions please call me in Rancho Cordova at 916.631.1300. Thank you,

Tony





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No. 7211

MONITORING WELL INSTALLATION AND SOIL BORING REPORT

at
Chevron Service Station #9-2960
2416 Grove Way
Castro Valley, California

Report No. DG92960H.4CT1-1 Delta Project No. DG92-960-H

Prepared for:

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

Prepared by:

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May 30, 2002

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chevron Service Station #9-2960 2416 Grove Way Castro Valley, California

Report No. DG92960H.4CT1-1 Delta Project No. DG92-960-H

INTRODUCTION

At the request of Chevron Products Company (Chevron), Delta Environmental Consultants, Inc. (Delta) network associate Gettler-Ryan Inc. (GR) installed one groundwater monitoring well and drilled three soil borings at the former Chevron Station #9-2960, located at 2416 Grove Way in Castro Valley, California. The work was performed to evaluate remaining petroleum hydrocarbons in soil and groundwater near the former underground storage tanks (USTs) and dispenser islands, and to define the lateral extent of dissolved hydrocarbons in groundwater upgradient of former monitoring well C-2. The scope of work included: obtaining the required well and soil boring permits; updating a site safety plan; installing one monitoring well and drilling three soil borings; collecting soil samples from the well and soil borings for description and possible analysis; surveying the newly installed well; developing and sampling the new well; analyzing groundwater and selected soil samples; arranging for disposal of waste material; and preparing a report documenting the findings of the investigation. This work was originally proposed in Delta's, Work Plan for Monitoring Well Installation, dated November 6, 2001, Work Plan Addendum for Monitoring Well Installation and Soil Boring, dated December 13, 2001, and Work Plan Addendum #2, dated January 14, 2002, and was approved by the Alameda County Health Care Services Agency (ACHCSA) in a letter dated January 29, 2002.

SITE DESCRIPTION

The subject site is located on the northeast corner of the intersection of Grove Way and Redwood Road in Castro Valley, California (Figure 1). Former service station facilities consisted of a station building, four underground storage tanks (USTs), and two fuel dispenser islands. Locations of pertinent site features are shown on Figure 2.

PREVIOUS ENVIRONMENTAL WORK

1986: In October, EMCON Associates (EMCON) installed four groundwater monitoring wells (C-1 through C-4) at the subject site. The highest concentrations of petroleum hydrocarbons were detected in groundwater samples collected from well C-1.

1987: In March, GR began monthly groundwater monitoring of the wells at the subject site (C-1 through



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- 1989: In October, GR began quarterly groundwater monitoring and sampling at the site. During the initial sampling event, well C-1 contained 0.91 feet of separate-phase hydrocarbons (SPH).
- In January, GR began interim recovery of the SPH from C-1. Bailing and pumping of SPH continued on a monthly basis until January 1995.

 In August, GeoStrategies, Inc. installed three offsite wells (C-5, C-6, and C-7) to delineate the lateral extent of dissolved petroleum hydrocarbons in groundwater at the subject site.
- In November, Weiss Associates installed and initiated operation of a groundwater and soil vapor extraction system at the subject site. Operation of the system continued through 1996. Approximately 8,900 pounds of petroleum hydrocarbons were removed during the system's operation. The system was turned off and dismantled in 1997 after graphs revealed asymptotic behavior of Total Petroleum Hydrocarbon (TPH) concentrations removed, and approval was issued from ACHCSA.
- 1997: In January, semi-annual monitoring and sampling was initiated at the site for all monitoring wells (C-1 through C-7). Groundwater monitoring wells were put on a first and third quarter monitoring and sampling schedule and have continued on the same schedule to date.

 In February, GR observed Bay Area Exploration Services, Inc. (BAE) drill six on-site borings (B-1 through B-6) to investigate the soil near the former product piping and dispenser island areas. In April, GR observed BAE abandon one offsite groundwater monitoring well (C-5).
- 1998: In September, at the request of the ACHCSA and Alameda County Public Works Agency (ACPWA) to facilitate the Redwood Road widening project, BAE destroyed onsite groundwater monitoring wells C-1, C-2, and C-3, and abandoned soil vapor and groundwater extraction well RW.

One well existed downgradient of the site (C-7), prior to this phase of field work. Wells C-4 and C-6 were paved over and are currently not monitored and sampled.

Discussion

On January 8, 2002, well C-7, which is located downgradient of the former on-site source areas, was monitored and sampled as part of the regularly scheduled, semi-annual event. The groundwater sample was analyzed for Total Petroleum Hydrocarbons as gasoline (TPHg) by EPA Method 8015M, and for benzene, toluene, ethylbenzene, total xylenes (BTEX), and methyl tert-butyl ether (MtBE) by EPA Method 8021B. None of these analytes were reported in the sample. In the previous semi-annual event on July 10, 2001, the groundwater sample from well C-7 was non-detect for TPHg and BTEX, and also MtBE, tert-butyl alcohol (TBA), ethyl tert-butyl ether (EtBE), diisopropyl ether (DIPE), and tert-amyl methyl ether (TAME) by EPA Method 8260.

Prior to being paved over and lost, wells C-4 and C-6, which were last sampled on January 8, 1999, and February 1, 2000, respectively, were non-detect for TPHg, BTEX, and MtBE. Before being abandoned in 1997 and 1998, wells C-3 and C-5 were non-detect for TPHg, BTEX, and MtBE.

Prior to being abandoned in July 1998, wells C-1 and C-2 contained concentrations of TPHg and benzene at 9,900 and 10,000 parts per billion (ppb), and 1,500 and 1,100 ppb, respectively. Historically, groundwater flow has been consistently to the west-southwest. Depth-to-water has ranged from approximately 14 to 20 feet below surface grade (bsg). Historic groundwater analytical data are presented in Tables 1 and 2.

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The dissolved hydrocarbon plume at the site appears delineated and stable, and centered around former wells C-1 and C-2, near the western boundary of the site.

In 1997, subsurface assessment work by GR indicated that residual hydrocarbons in soil at the site appeared limited in extent, mainly beneath the former dispenser islands. The residual hydrocarbons present consisted mainly of TPHg, with trace concentrations of benzene. Historical soil analytical data are presented in Table 3

FIELD ACTIVITIES

To further evaluate the concentrations of the dissolved petroleum hydrocarbons in the vicinity of former wells C-1 and C-2, and to define the lateral extent of dissolved hydrocarbons upgradient of former well C-2, GR installed one groundwater monitoring well and drilled three soil borings at the locations shown on Figure 2. Field work was conducted in accordance with GR's Field Methods and Procedures (Appendix A) and Delta Site Safety Plan #DG92960H.4CT1, dated February 7, 2002. Drilling permits W02-0053 and W02-0054 were obtained from the ACPWA. Underground Service Alert (USA) was notified prior to drilling at the site. Copies of the permits are included in Appendix B.

Well Installation and Soil Boring Advancement

On February 8, 2002, a GR geologist observed Gregg Drilling Inc. (C57-485165) drill and install one monitoring well (C-8) and drill three soil borings (B-7, B-8, and B-9) at the locations shown on Figure 2. A hand auger was used to clear the first five feet of each borehole for underground utilities. A truck-mounted drill rig using 8-inch-diameter hollow stem augers was used to drill the well boring to 25 feet bsg, and the soil borings from 20 to 25 feet bsg. A GR geologist prepared logs of the borings, and the logs are presented in Appendix B. A GR geologist observed the drilling activities. Soil samples were collected from the well and soil borings at five-foot intervals for description and preparation of a log, and for possible chemical analysis. Grab groundwater samples were collected from borings B-7 through B-9 for chemical analysis. Boring logs are included in Appendix B. A copy of the Well Driller's Report for well C-8 is included in Appendix B.

Well C-8 was constructed of 2-inch-diameter polyvinyl chloride (PVC) casing to a depth of 25 feet bsg. The bottom 15 feet of the well was screened with 0.02-inch machine-slotted casing. Lonestar #3 sand was placed in the annular space from the bottom of the boring to approximately 2 feet above the well screen (approximately 8 feet bsg). The well was then sealed with hydrated bentonite followed by neat cement. A water-resistant well box installed in concrete was placed over the well. An expandable waterproof well cap with lock was placed on the top of the well casing. Well construction details are shown on the boring log in Appendix B.

Soil cuttings generated during drilling activities were placed on-site in properly labeled 55-gallon drums pending disposal. One 4-point composite sample (SP-1-4) was collected from the drummed soil for disposal characterization. Stockpile sampling procedures are presented in Appendix A.

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Well Development, Monitoring, and Sampling

Well C-8 was developed and sampled on March 26, 2002. Depth-to-water was measured and the well was checked for the presence of separate phase hydrocarbons (SPH). SPH were not observed in the well. The well did not de-water during development. The newly installed well had abundant silt and required additional purging prior to becoming clear. Following development, a groundwater sample was collected from the well. Purge water generated during development and sampling procedures was transported by Chevron's contractor Integrated Wastestream Management, Inc. (IWM) for disposal at McKittrick. Well development procedures are included in Appendix A. A copy of the well development/monitoring and sampling field data sheet is included in Appendix C.

Wellhead Survey

Following installation of the well, the elevation was surveyed by Morrow Surveying (California license #5161). Top of casing and well box elevation was measured relative to Mean Sea Level (MSL) utilizing Alameda County Benchmark (BM#259). GPS measurements including longitude and latitude, horizontal coordinates of the well, and other site-specific details were also established. The surveyor's report is included in Appendix D.

RESULTS OF THE SUBSURFACE INVESTIGATION

Soil encountered during this investigation generally consisted of poorly and well graded gravel with clay and sand, poorly graded sand, and silty sand to a maximum explored depth of 25 feet bsg. Groundwater was first encountered at approximately 12 to 15 feet bsg as indicated by wet soil samples, but static water level adjusted to approximately 18 feet bsg, as measured in the well and boreholes. Based on the groundwater monitoring data collected on March 26, 2002, the water table beneath the site is at approximately 15.5 feet bsg, which is consistent with historical data. Detailed descriptions of the soil encountered during drilling are presented on the boring logs in Appendix B.

CHEMICAL ANALYTICAL RESULTS

A total of eleven soil samples from the well and soil borings, the composite soil sample from the drummed soil cuttings, and four groundwater samples were submitted under chain-of-custody for chemical analysis. All samples were analyzed by Lancaster Laboratories (ELAP No. 2116). Soil samples from the soil borings and the drummed soil cuttings were analyzed for TPHg by EPA Method 8015M, and BTEX, and MtBE by EPA Method 8021B. The drummed soil cuttings were also analyzed for lead by EPA Method 6010B. Groundwater samples were analyzed for TPHg, BTEX, and MtBE by EPA Methods 8015M/8021B, and oxygenating compounds MtBE, TBA, DIPE, EtBE, and TAME by EPA Method 8260B. Copies of the laboratory analytical reports and chains-of-custody forms are included in Appendix E.

Soil Analytical Results

TPHg, BTEX, or MtBE were not reported in any of the soil samples collected from soil borings B-7 and B-9. TPHg were reported in well boring C-8 in a sample collected at 14.5 feet bsg at concentrations of 4.3 parts per

Chevron Service Station #9-2960 2416 Grove Way Castro Valley, California 5 of 5

million (ppm). TPHg were reported in a sample from boring B-8 at 10 feet bsg at concentrations of 24 ppm. Soil chemical analytical results are summarized in Table 3.

Groundwater Analytical Results

TPHg and benzene were reported in the grab groundwater samples collected from soil borings B-7 and B-8 at concentrations of 260 and 8,600, and 0.73 and 25 ppb, respectively. TPHg or BTEX were not detected in the groundwater samples from soil boring B-9. Oxygenates were not reported in the grab groundwater samples collected from borings B-7, B-8, B-9, or well C-8. No analytes were reported in the grab groundwater sample collected from B-9. TPHg and benzene were reported in the groundwater sample collected from monitoring well C-8 at concentrations of 11,000 and 380 ppb, respectively. Groundwater chemical analytical data are summarized in Table 4.

WASTE DISPOSAL

Drummed soil cuttings were removed from the site on March 21, 2002, by IWM for disposal at Republic Services Vasco Road Landfill in Livermore, California. A copy of the disposal confirmation form is included in Appendix B.

CONCLUSIONS

The purpose of this investigation was to evaluate remaining petroleum hydrocarbons in soil and groundwater near the former USTs and dispenser islands, and to define the lateral extent of dissolved hydrocarbons in groundwater upgradient of former monitoring well C-2.

Hydrocarbon impact to soil ranging from a depth of 6.5 to 15 feet bsg (vadose zone) in the vicinity of borings B-7, B-8, B-9, and well C-8 is negligible. Additional assessment of soil is not warranted at this site.

Dissolved hydrocarbons or oxygenates were not detected in grab groundwater samples collected from soil boring B-9, located upgradient of former well C-2 and soil boring B-8. Low concentrations of TPHg and benzene were reported in the grab groundwater sample collected from soil boring B-7, located downgradient of the former southern dispenser island, which suggests a limited area of impact supported by historic groundwater data from wells C-3 and C-4 (Table 1). Dissolved hydrocarbons were reported in groundwater samples from B-8 and C-8.

The dissolved hydrocarbon plume is delineated, and appears to be stable and possibly attenuating.

Based on data from this and previous site investigations, and because no sensitive receptors are present in the immediate area of the plume, GR recommends that quarterly monitoring and sampling be implemented for well C-8 for three more quarters analyzing for TPHg, BTEX, and MtBE by EPA Methods 8015M and 8021B. Concentration trends in C-8 will be evaluated after three quarters of monitoring and sampling to determine if additional site work is warranted.

Table 1
Groundwater Monitoring Data and Analytical Results

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	SPHT (ft.)	SPH REMOVED (gallons)	TPH-G (ppb)	B (ppb)	T (pph)	E (ppb)	X (pph)	MTBE (ppb)
C-1						•					
10/23/86	153.36		••			3,100	6,400	3,700		4,300	
09/10/87	153.36					120,000	25,000	60,000	13,000	56,000	•-
10/03/90	153.36	134.69	18.67								
10/25/90	153.36	135.22	18.71	0.71	••			=-			
01/22/91	153.36	135.22	18.70	0.70							
02/21/91	153.36	135.44	18.62	0.88			·				
04/01/91	153.36	136.47	16.91	0.03				 ·			
04/11/91	153.36	136.49	16.90	0.04					••		
07/01/91	153.36	135.75	17.61	0.00							
09/24/91	153.36	135.17	18.98	0.99							
10/23/91	153.36	135.03	19.32	1.24							
11/22/91	153.36	134.53	18.83	0.97							
01/09/92	153.36	136.10	17.26								
03/06/92	153.36	137.16	16.69	0.61							
06/04/92	153.36	136.44	17.10	0.22					••		
09/28/92	153.36		18.71	0.77							
12/17/92	153.36		17.54	0.45							
04/29/93	153.36	137.50	16.40	0.68						 -	
07/26/93	153.36	136.92	16.85	0.51				·			
10/22/93	153.36	135.55	17.83	0.03							
01/24/94	153.36				·			•			
	153.36	136.01	17.76	0.51							
04/11/94		135.95	17.76	0.06							
07/01/94	153.36	135.24	18.18	0.08	·					·	
10/06/94	153.36		16.79	0.08	0.039					· 	
01/11/95	153.36	136.63 139.23	14.13			44,000	410	100	130	5,400	
04/07/95	153.36		16.52			16,000	96	81	53	1,000	
07/20/95	153.36	136.84	16.52 16.14			59,000	150	36	16	56	-
09/22/95	153.36	137.22		•-		29,000	4,500	1,100	520	1,900	<250
01/02/96	153.36	137.43	15.93			7,200	1,300	340	130	390	••
04/26/96	153.36	137.31	16.05			7,200	1 1200	, , , , ,			

Table 1
Groundwater Monitoring Data and Analytical Results

Former Chevron Service Station #9-2960

2416 Grove Way Castro Valley, California

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WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	SPHT (fi.)	SPH REMOVED (gallons)	TPH-G (ppb)	B (pph)	T (pph)	E (ppb)	X (pph)	MTBE (pph)
	·············								,		
C-1 (cont)											
77/22/96	153.36	143.14	10.22			7,300	2,500	170	360	520	
10/17/96	153.36	137.64	15.72			19,000	3,400	59	360	430	
)1/23/97	153.36	138.91	14,45		·	15,000	2,900	390	250	480	
7/10/97	153.36	137.19	16.17			13,000	2,100	69	200	380	
)1/15/98	153.36	INACCESSIB	LE		••						
11/16/98	153.36	138.63	14.73			4,700	1,200	<20	140	40	
07/09/98	153.36	138.14	15.22			9,900	1,500	60	150	170	
ABANDONED											
							•				
C-2											
10/23/86	151.84					30,000	2,700	1,900		1,500	
09/10/87	151.84					14,000	2,600	2,900	500	1,200	
10/16/89	151.84					600	260	34	1.7	41	
)1/04/90	151.84					2,600	470	150	23	130	
04/05/90	151.84		<u>.</u>	**		500	280	29	6.3	19	
07/02/90	151.84					2,400	670	110	17	76	
10/03/90	151.84								 		
10/05/90	151.84	135.24	16.60			1,300	390	47	9.0	58	
01/22/91	151.84	135.15	16.69			2,600	680	88	29	130	
02/21/91	151.84	135.53	16.31								.
04/01/91	151.84	136.76	15.08					-			
04/01/91	151.84	136.61	15.23								. <u></u>
07/01/91	151.84	135.88	15.96							 63	
09/24/91	151.84	135.33	16.51			3,600	1,400	63	6.9	63	
10/23/91	151.84	135.18	16.66						 .		-
11/22/91	151.84	135.47	16.37								
	151.84	136.28	15.56			7,100	770	740	190	690	
01/09/92	151.84	137.47	14.37			3,200	250	230	59	220	
03/06/92 06/04/92	151.84	136.80	15.04			1,500	< 0.5	180	42	130	•-

Table 1
Groundwater Monitoring Data and Analytical Results

	Castro Valley, California												
WELL ID/	TOC	GWE	DTW	SPHT	SPH REMOVED	TPH-G	B	T	E (ppb)	X (pph)	MTBE (ppb)		
DATE	(ft.)	(msl)	(ft.)	(ft.)	(gallons)	(ppb)	(pph)	(pph)	(220)	(1)(1)	(γρυ)		
C-2 (cont)													
09/28/92	151.84	135.44	16.40			6,400	940	230	57	220			
12/17/92	151.84	136.46	15.38			1,500	370	160	6.0	25			
04/29/93	151.84	136.87	14.97			1,800	690	120	74	140			
07/29/93	151.84	136.92	14.92			4,300	1,500	96	29	96			
10/22/93	151.84	136.03	15.81			820	560	57	15	58			
01/24/94	151.84			••									
04/11/94	151.84	136.49	15.35			2,000	240	48	36	110			
07/01/94	151.84	136.44	15.40			370	55	12	3.1	8.6	•=		
10/06/94	151.84	135.84	16.00			150	47	4.8	1.8	5.4			
01/11/95	151.84	137.06	14.78			52	0.65	<0.5	<0.5	<0.5			
04/07/95	151.84	138.93	12.91			1,500	260	64	52	85			
07/20/95	151.84	136.81	15.03			3,000	500	100	96	110	- -		
09/22/95	151.84	137.05	14.79			2,000	630	120	20	79			
01/02/96	151.84	137.37	14.47			1,900	240	110	58	180	<12		
04/26/96	151.84	137.97	13.87			1,300	340	190	44	120			
04/20/96	151.84	136.73	15.11			3,700	1,100	140	150	330	••		
	151.84	136.80	15.04			22,000	3,900	1,600	350	1,800			
10/17/96		138.86	12.98	••		2,000	260	48	7 6	94			
01/23/97	151.84		14.63			5,100	710	200	190	380			
07/10/97	151.84	137,21				_		••					
01/15/98	153.36	INACCESSIBL				7,600	1,600	130	320	650			
01/16/98	151.84	138.61	13.23			10,000	1,100	410	180	410			
07/09/98	151.84	138.17	13.67			10,000	.,						
ABANDONEI	D												
C-3								24		20			
10/23/86	154.13			-		3,300	49	24	<2.0	<2.0			
09/10/87	154.13					200	110	2.6		16			
10/16/89	154.13					900	640	4.2	1.6	7.0			
01/04/90	154.13					920	430	7.0	6.0	7.0	· ••		

Table 1
Groundwater Monitoring Data and Analytical Results

WELL ID/	тос	GWE	DTW	SPHT	SPH REMOVED	TPH-G	В	T	E	X	МТВЕ
DATE	(ft.)	(msl)	(ft.)	(ft.)	(gallons)	(ррь)	(ppb)	(pph)	(ррв)	(ppb)	(pph)
C-3 (cont)											
04/05/90	154.13		**			930	690	3.4	5.1	4.8	
07/02/90	154.13					1,700	590	11	4.8	9.4	
10/03/90	154.13	134.97	19.16								
10/25/90	154.13	134.85	19.28			750	510	2.0	6.0	5.0	
01/22/91	154.13	134.95	19.18			430	260	2.0	2.0	5.0	
)1/22/91	154.13	134.95	19.18			400	250	2.0	2.0	5.0	
)2/21/91	154.13	135.25	18.88								
04/01/91	154.13	136.54	17.59								
)4/11/91	154.13	136.32	17.81								
07/01/91	154.13	135.57	18.56					·			
9/24/91	154.13	135.01	19.12			260	52	0.7	0.8	2.2	
0/23/91	154.13	134.89	19.24								
1/22/91	154.13	135.10	19.03								
)1/09/92	154.13	135.90	18.23			240	120	0.9	< 0.5	1.6	
)3/06/92	154.13	137.09	17.04			230	68	1.2	1.2	1.3	
06/04/92	154.13	136.34	17.79			80	36	0.6	0.5	0.7	
09/28/92	154.13	135.13	19.00			84	49	<0.5	<0.5	1.5	
12/17/92	154.13	135.95	18.18			220	30	<0.5	<0.5	<0.5	
04/29/93	154.13	135.35	18.78			380	12	0.6	<0.5	<1.5	
07/26/93	154.13	136.41	17.72			800	38	1.1	<0.5	<1.5	
10/22/93	154.13	135.63	18.50			200	64	0.6	<0.5	<1.5	
01/24/94	154.13	135.62	18.51		**	<50	<0.5	<0.5	<0.5	<0.5	
04/11/94	154.13	136.09	18.04			100	3.6	2.1	<0.5	2.3	
07/01/94	154.13	136.01	18.12		-	140	3.7	1.2	<0.5	1.0	
10/06/94	154.13	135.50	18.63			<50	<0.5	<0.5	<0.5	<0.5 <0.5	
01/11/95	154.13	137,01	17.12			<50	<0.5	<0.5	<0.5	<0.5 <0.5	
04/07/95	154.13	138.34	15.79	'		<50	<0.5	<0.5	<0.5	3.5	
07/20/95	154.13	136.37	17.76			<50	1.5	1,9	<0.5		
09/22/95	154.13	136.58	17.55			<50	<0.5	<0.5	<0.5	<0.5	<2.5
01/02/96	154.13	136.88	17.25			<50	<0.5	<0.5	<0.5	1.1	<4.3

Table 1
Groundwater Monitoring Data and Analytical Results
Former Chevron Service Station #9-2960

					Cubti	o · unoj, cumo					,
WELL ID/	TOC	GWE	DTW	SPHT	SPH REMOVED	TPH-G	В	Т	E	x	МТВЕ
DATE	(ft.)	(msl)	(fi.)	(fi.)	(gallons)	(ppb)	(pph)	(pph)	(ppb)	(pph)	(ppb)
			V	<u> </u>		·············			······		
C-3 (cont)											
04/26/96	154.13	137.42	16.71			<50	<0.5	< 0.5	<0.5	< 0.5	
07/22/96	154.13	136.50	17.63			<50	<0.5	< 0.5	< 0.5	<0.5	
10/17/96	154.13	136.33	17.80			<50	<0.5	< 0.5	<0.5	< 0.5	
01/23/97	154.13	138.33	15.80			<50	<0.5	< 0.5	< 0.5	<0.5	
07/10/97	154.13	136.63	17.50			<50	<0.5	<0.5	< 0.5	< 0.5	
01/15/98	154.13	137.98	16.15		. 	<50	<0.5	< 0.5	<0.5	< 0.5	
01/16/98	154.13	138.04	16.09		J	REGAUGE					
07/09/98	154.13	137.57	16.56			<50	< 0.5	< 0.5	< 0.5	< 0.5	
ABANDONED)	•									
C-4											
10/23/86	156.00					570	3.0	4.0		5.0	
09/10/87	156.00				••	500	3.0	<0.5	< 0.5	<0.5	
10/16/89	156.00		••			<500	12	1.0	<0.5	0.8	
01/04/90	156.00	- -				<500	5.0	<0.5	< 0.5	0.9	
04/05/90	156.00					<50	6.6	<0.5	<0.5	0.7	
07/02/90	156.00					71	4.1	<0.5	< 0.5	< 0.5	
10/03/90	156.00	**				**	· 				
10/25/90	156.00	135.57	20.43			<50	2.0	<0.5	< 0.5	<0.5	
01/22/91	156.00	135.50	20.50			<50	3.0	<0.5	< 0.5	< 0.5	
02/21/91	156.00	135.77	20.23							••	40
04/01/91	156.00	136.97	19.03	••							
04/11/91	156.00	136.95	19.05							 .	- -
07/01/91	156.00	136.10	19.90								
09/24/91	156.00	135.59	20.41			87	1.6	<0.5	<0.5	<0.5	
10/23/91	156.00	135.47	20.53				<u> </u>				
11/22/91	156.00	135.65	20.35								
01/09/92	156.00	136.46	19.54			51	4.3	<0.5	<0.5	<0.5	
01/09/92	156.00	136.46	19.54	••		<50	4.8	<0.5	<0.5	<0.5	
GITUTITZ	1.70,00	150.40	• > • • • •								

Table 1 Groundwater Monitoring Data and Analytical Results

					Cubii	o runoj, cumo					
WELL ID/	TOC	GWE	DTW	SPHT	SPH REMOVED	TPH-G	В	T	E	X	MTBE
DATE	(fl.)	(msl)	(ft.)	(fi.)	(gallons)	(ppb)	(pph)	(pph)	(ppb)	(pph)	(pph)
dana a managan da mana											
C-4 (cont)						_		a s	<0.5	<0.5	
03/06/92	156.00	137.74	18.26			<50	0.8	<0.5	<0.5	0.7	
06/04/92	156.00	137.08	18.92			<50	<0.5	<0.5	<0.5	<0.5	
09/28/92	156.00	135.69	20.31			<50	<0.5	<0.5	<0.5	<0.5	
12/17/92	156.00	136.43	19.57	••		<50	<0.5	<0.5	<0.5	<1.5	
04/29/93	156.00	138.22	17.78			<50	<0.5	<0.5			
07/26/93	156.00							 	 .o.e	<1.5	
08/18/93	156.00	137.09	18.91			<50	<0.5	<0.5	<0.5	4.3	
10/22/93	156.00	136.61	19.39			<50	2.9	2.1	1.1		
01/24/94	156.00	136.58	19.42			<50	<0.5	<0.5	<0.5	<0.5	
04/11/94	156.00	136.86	19.14			<50	< 0.5	0.6	<0.5	0.5	
07/01/94	156.00	136.80	19.20			<50	<0.5	<0.5	<0.5	<0.5	
10/06/94	156.00	136.26	19.74			<50	<0.5	<0.5	<0.5	<0.5	
01/11/95	156.00	139.70	16.30			<50	<0.5	<0.5	<0.5	<0.5	
04/07/95	156.00	139.49	16.51			<50	<0.5	<0.5	<0.5	<0.5	- -
04/07/95	156.00	137.20	18.80			<50	<0.5	< 0.5	<0.5	<0.5	
	156.00	137.26	18.74			<50	<0.5	< 0.5	<0.5	<0.5	 -0.5
09/22/95		137.65	18.35			<50	1.6	1.8	0.95	4.1	<2.5
01/02/96	156.00		17.57			<50	<0.5	<0.5	<0.5	<0.5	
04/26/96	156.00	138.43	19,00			<50	<0.5	<0.5	<0.5	<0.5	
07/22/96	156.00	137.00				<50	<0.5	<0.5	< 0.5	<0.5	
10/17/96	156.00	136.96	19.04			<50	<0.5	<0.5	<0.5	<0.5	
01/23/97	156.00	139.31	16.69			SAMPLED ANN					
07/10/97	156.00	137.46	18.54			<50	1.0	1.4	< 0.5	3.5	
01/15/98	156.00	143.92	12.08			REGAUGE					
01/16/98	156.00	138.84	17.16				••				
07/09/98	156.00	138.29	17.71				<0.5	<0.5	<0.5	< 0.5	
01/08/99	156.00	139.19	16.81			<50				#6	
07/09/99	156.00	UNABLE TO									
02/01/00	156.00	UNABLE TO									
08/21/00	156.00	UNABLE TO	LOCATE - P	AVED OVER		-					

Table 1
Groundwater Monitoring Data and Analytical Results

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	SPHT (ft.)	SPH REMOVED (gallons)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (pph)	MTBE (pph)
C-4 (cont)											
01/25/01	156.00	UNABLE TO	LOCATE - F	PAVED OVER							
07/10/01	156.00			PAVED OVER					••		
01/08/02	156.00	UNABLE TO	LOCATE -	PAVED OVER		••			. 		
C-5										·	
10/03/90	153.38	135.60	17.78		••	<50	<0.5	<0.5	<0.5	<0.5	
10/25/90	153.38	135.46	17.92			<50	<0.5	< 0.5	<0.5	< 0.5	
11/09/90	153.38	135.46	17.92			<50	<0.5	<0.5	<0.5	<0.5	
01/22/91	153.38	135.58	17.80			<50	<0.5	< 0.5	<0.5	< 0.5	
02/21/91	153.38	135.87	17.51					••			
04/01/91	153.38	137.07	16.31								
04/11/91	153.38	137.02	16.36				 ,				
07/01/91	153.38	136.26	17.12						•		
09/24/91	153.38	135.68	17.70			<50	<0.5	<0.5	<0.5	<0.5	
09/24/91	153.38	135.68	17.70			<50	<0.5	<0.5	<0.5	<0.5	
10/23/91	153.38	135.56	17.82								
11/22/91	153.38	135.77	17.61								 .
01/09/92	153.38	136.34	17.04			<50	<0.5	0.7	<0.5	<0.5	
03/06/92	153.38	137.62	15.76	<u></u> ·		<50	<0.5	<0.5	<0.5	<0.5	
06/04/92	153.38	136.98	16.40			<50	<0.5	<0.5	<0.5	<0.5	
09/28/92	153.38	135.80	17.58	***		<50	<0.5	<0.5	<0.5	<0.5	
12/17/92	153.38	136.56	16.82			<50	<0.5	<0.5	<0.5	<0.5	
04/29/93	153.38	138.14	15.24	••		<50	<0.5	<0.5	<0.5	<1.5	
07/26/93	153.38	137.08	16.30		 .	<50	<0.5	<0.5	<0.5	<1.5	•=
10/22/93	153.38	136.30	17.08			52	2.3	2.7	1.1	5.2	
01/24/94	153.38	136.25	17.13			<50	<0.5	<0.5	<0.5	<0.5	
04/11/94	153.38	136.75	16.63			<50	<0.5	0.7	<0.5	0.6	
07/01/94	153.38	136.73	16.65			<50	<0.5	<0.5	<0.5	<0.5	
10/06/94	153.38	136.16	17.22			<50	<0.5	<0.5	<0.5	<0.5	,

Table 1
Groundwater Monitoring Data and Analytical Results

					Castro	valley, Camo	4111 <i>a</i>				
WELL ID/	TOC	GWE	DTW	SPHT	SPH REMOVED	TPH-G (ppb)	B (pph)	T (pph)	E (ppb)	X (pph)	MTBE (ppb)
DATE	(ft.)	(msl)	(ft.)	(ft.)	(gallons)	(1910)	<u> PVV)</u>	V			
C-5 (cont)											÷
01/11/95	153.38	137.41	15.97		alle	<50	<0.5	<0.5	<0.5	<0.5	
04/07/95	153.38	139.37	14.01			<50	<0.5	<0.5	<0.5	<0.5	••
07/20/95	153.38	137.17	16.21			<50	<0.5	<0.5	<0.5	0.61	
09/22/95	153.38	137.07	16.31			62	<0.5	<0.5	<0.5	<0.5	
01/02/96	153.38	137.56	15.82			<50	<0.5	<0.5	<0.5	<0.5	<2.5
04/26/96	153.38	138.41	14.97			<50	<0.5	<0.5	<0.5	<0.5	
07/22/96	153.38	137.06	16.32			<50	< 0.5	<0.5	<0.5	<0.5	
10/17/96	153.38	136.88	16.50			<50	<0.5	<0.5	<0.5	<0.5	
01/23/97	153.38	139.18	14.20			<50	<0.5	<0.5	<0.5	<0.5	
ABANDONE		11.7110					,				
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,											
C-6							<0.5	<0.5	<0.5	<0.5	
10/03/90	152.84	134.70	18.14			<50	<0.5	1.0	<0.5	<0.5	
10/25/90	152.84	134.55	18.29	, 		<50	<0.5	<0.5	<0.5	<0.5	
11/09/90	152.84	134.58	18.26			<50	<0.5	<0.5	<0.5	< 0.5	
01/22/91	152.84	134.69	18.15			<50					
02/21/91	152.84	134.92	17.92						· 		
04/01/91	152.84	135.73	17.11					 			,
04/11/91	152.84	135.83	17.01								
07/01/91	152.84	135.12	. 17.72					<0.5	<0.5	<0.5	
09/24/91	152.84	135.72	17.12			<50	<0.5				••
10/23/91	152.84	134.59	18.25								
11/22/91	152.84	134.79	18.05						<0.5	<0.5	
01/09/92	152.84	135.42	17.42			<50	<0.5	<0.5	<0.5	<0.5	
03/06/92	152.84	136.33	16.51			<50	<0.5	<0.5	<0.5	<0.5	
	152.84	135.83	17.01			<50	<0.5	<0.5	<0.5	<0.5	
06/04/92	152.84	134.84	18.00			<50	<0.5	<0.5		<0.5	
09/28/92	152.84	135.58	17.26			<50	<0.5	<0.5	<0.5 <0.5	<1.5	
12/17/92	152.84	136.61	16.2.3			<50	<0.5	<0.5	<0.5	~11.0	
04/29/93	134,04	1,70,01							•		

Table 1
Groundwater Monitoring Data and Analytical Results
Former Chevron Service Station #9-2960

					SPH						
WELL ID!	TOC	GWE	DTW	SPHT	REMOVED	TPH-G	В	T	E	X	MTBE
DATE	(ft.)	(msl)	(ft.)	(ft.)	(gallons)	(pph)	(pph)	(ppb)	(ppb)	(pph)	(ppb)
C-6 (cont)											
07/29/93	152.84	135.88	16.96			<50	<0.5	<0.5	<0.5	<1.5	
10/22/93	152.84	135.38	17.46			74	7.4	6.1	3.3	9.7	
01/24/94	152.84	135.38	17.46			<50	<0.5	< 0.5	<0.5	< 0.5	
04/11/94	152.84	135.64	17.20			<50	<0.5	<0.5	< 0.5	<0.5	
07/01/94	152.84	135.66	17.18			<50	<0.5	<0.5	< 0.5	<0.5	
10/06/94	152.84	135.19	17.65			<50	<0.5	<0.5	< 0.5	< 0.5	
01/11/95	152.84	136.18	16.66			<50	<0.5	<0.5	<0.5	. <0.5	
04/07/95	152.84	137.25	15.59			<50	<0.5	<0.5	<0.5	< 0.5	
07/20/95	152.84	135.80	17.04			<50	<0.5	<0.5	<0.5	<0.5	
09/22/95	152.84	135.74	17.10			<50	<0.5	<0.5	< 0.5	<0.5	
01/02/96	152.84	136.08	16.76			<50	<0.5	<0.5	< 0.5	<0.5	<2.5
04/26/96	152.84	136.64	16.20			<50	<0.5	<0.5	< 0.5	<0.5	
07/22/96	152.84	135.79	17.05			<50	<0.5	<0.5	<0.5	<0.5	
10/17/96	152.84	135.62	17.22			<50	<0.5	<0.5	<0.5	<0.5	**
01/23/97	152.84	136.99	15.85			<50	<0.5	<0.5	<0.5	<0.5	
07/10/97	152.84	135.95	16.89			<50	<0.5	<0.5	<0.5	<0.5	
01/15/98	152.84	136.64	16.20			<50	<0.5	<0.5	<0.5	<0.5	**
01/15/28	152.84	136.74	16.10			REGAUGE					
07/09/98	152.84	136.71	16.13			<50	<0.5	<0.5	<0.5	<0.5	
01/08/99	152.84	137.57	15.27			<50	<0.5	<0.5	<0.5	<0.5	
	152.84	136.60	16.24	**		<50	<0.5	<0.5	<0.5	<0.5	<5.0
07/09/99	152.84	136.57	16.27			<50	<0.5	<0.5	<0.5	<0.5	<5.0
02/01/00				PAVED OVER							
08/21/00	152.84			AVED OVER							-
01/25/01	152.84			PAVED OVER							
07/10/01 01/08/02	152.84 152.84			PAVED OVER	t						

Table 1
Groundwater Monitoring Data and Analytical Results

					Casuc	vaney, Cant	/i ii ta				
WELL ID/	TOC	GWE	DTW	SPHT	SPH REMOVED	TPH-G	В	T	E	x	мтве
DATE	(ft.)	(msl)	(ft.)	(ft.)	(gallons)	(ppb)	(pph)	(pph)	(ррБ)	(pph)	(pph)
***************************************	**************************************										
C-7											
10/03/90	155.34	134.52	20.82			<50	<0.5	<0.5	< 0.5	<0.5	
10/25/90	155.34	134.43	20.91			<50	<0.5	1.0	<0.5	<0.5	
11/09/90	155.34	134.40	20.94			<50	<0.5	<0.5	<0.5	< 0.5	
01/22/91	155.34	133.84	21.50			<50	4.0	<0.5	<0.5	< 0.5	
02/21/91	155.34	134.63	20.71	••							
04/01/91	155.34	135.34	20.00	••							
04/11/91	155.34	135.29	20.05								
07/01/91	155.34	134.82	20.52								
09/24/91	155.34	134.52	20.82	=+	••	<50	<0.5	<0.5	<0.5	<0.5	
10/23/91	155.34	134.43	20.91								
11/22/91	155.34	134.55	20.79								
01/09/92	155.34	135.18	20.16			<50	<0.5	<0.5	<0.5	0.9	
03/06/92	155.34	135.92	19.42			<50	<0.5	<0.5	<0.5	<0.5	
06/04/92	155.34	135.53	19.81		- -	250	< 0.5	<0.5	<0.5	<0.5	
09/28/92	155.34	134.69	20.65			<50	<0.5	<0.5	< 0.5	<0.5	
12/17/92	155.34	135.32	20.02			<50	<0.5	< 0.5	< 0.5	<0.5	
04/29/93	155.34	136.19	19.15		·	<50	<0.5	<0.5	< 0.5	<1.5	
07/26/93	155.34	135.57	19.77			<50	<0.5	<0.5	< 0.5	<1.5	
10/22/93	155.34	135.17	20.17								
01/24/94	155.34	135.11	20.23			<50	< 0.5	<0.5	<0.5	<0.5	
	155.34	135.39	19.95			<50	<0.5	<0.5	<0.5	<0.5	
04/11/94	155.34	135.42	19.92			<50	<0.5	<0.5	<0.5	<0.5	•-
07/01/94		135.03	20.31			<50	<0.5	<0.5	<0.5	<0.5	**
10/06/94	155.34	135.98	19.36			<50	<0.5	<0.5	<0.5	<0.5	
01/11/95	155.34		18.50			<50	<0.5	<0.5	<0.5	<0.5	
04/07/95	155.34	136.84	19.88			<50	<0.5	<0.5	<0.5	<0.5	
07/20/95	155.34	135.46			w=	<50	<0.5	<0.5	< 0.5	<0.5	
09/22/95	155.34	135.38	19.96	**		<50	<0.5	<0.5	< 0.5	<0.5	<2.5
01/02/96	155.34	135.64	19.70			<50	<0.5	<0.5	<0.5	<0.5	
04/26/96	155.34	136.17	19.17			<50	<0.5	<0.5	< 0.5	<0.5	. ==
07/22/96	155.34	135.49	19.85								

Table 1
Groundwater Monitoring Data and Analytical Results

					Cas	uo vancy, Cam	Ollia				
*****	444				SPH						
WELL ID/ DATE	TOC (fl.)	GWE (msl)	DTW	SPHT	REMOVED	TPH-G	B	T (pph)	E	Χ	MTBE
DAIL	UL)	(11181)	(ft.)	(ft.)	(gallons)	(ppb)	(ppb)	(220)	(ppb)	(pph)	(ppb)
C-7 (cont)											
10/17/96	155,34	135.34	20.00			<50	<0.5	<0.5	<0.5	<0.5	
01/23/97	155.34	136.44	18.90			<50	<0.5	<0.5	< 0.5	<0.5	
07/10/97	155.34	135.58	19.76			<50	<0.5	<0.5	<0.5	< 0.5	
01/15/98	155.34	136.02	19.32			<50	<0.5	<0.5	< 0.5	< 0.5	
01/16/98	155.34	136.14	19.20	**		REGAUGE					4-
07/09/98	155.34	136.02	19.32			<50	< 0.5	<0.5	< 0.5	<0.5	
01/08/99	155.34	136.83	18.51			<50	<0.5	<0.5	<0.5	<0.5	
07/09/99	155.34	136.16	19.18			<50	<0.5	<0.5	< 0.5	<0.5	<5.0
02/01/00	155.34	136.21	19.13	••		< 50	<0.5	<0.5	< 0.5	<0.5	<5.0
08/21/00	155.34	136.16	19.18	0.00	0.00	<50	<0.50	< 0.50	< 0.50	< 0.50	<2.5
01/25/01	155.34	136.09	19.25	0.00	0.00	<50.0	< 0.500	< 0.500	< 0.500	< 0.500	<2.50
07/10/01	155.34	136.17	19.17	0.00	0.00	<50	<0.50	< 0.50	<0.50	< 0.50	<2.5/<2.0 ¹
01/08/02	155.34	136.31	19.03	0.00	0.00	<50	<0.50	<0.50	<0.50	<1.5	<2.5
TRIP BLANK	ζ										
10/03/90						<50	<0.5	<0.5	<0.5	< 0.5	
10/25/90			'			<50	<0.5	<0.5	<0.5	<0.5	
11/09/90		••				<50	<0.5	<0.5	<0.5	<0.5	
01/22/91						<50	<0.5	<0.5	<0.5	<0.5	
09/24/91						<50	<0.5	<0.5	<0.5	< 0.5	
01/09/92						<50	<0.5	<0.5	<0.5	<0.5	
03/06/92				••	==	<50	<0.5	<0.5	<0.5	<0.5	
06/04/92						<50	<0.5	<0.5	<0.5	< 0.5	·
09/28/92		••				<50	<0.5	<0.5	<0.5	<0.5	
12/17/92	••					<50	<0.5	<0.5	<0.5	< 0.5	••
04/29/93				••	**	<50	<0.5	<0.5	<0.5	<1.5	
07/26/93						<50	<0.5	<0.5	<0.5	<1.5	
10/22/93		 				<50	<0.5	<0.5	<0.5	<1.5	
01/24/94		 	<u></u>	••		<50	<0.5	<0.5	<0.5	<0.5	·
U1124/74											

Table 1 Groundwater Monitoring Data and Analytical Results Former Chevron Service Station #9-2960

WELL ID/	TOC	GWE	DTW	SPHT	SPH REMOVED	TPH-G	В	T	E	X	MTBE
DATE	(ft.)	(msl)	(ft.)	(ft.)	(gallons)	(pph)	(ррв)	(pph)	(ppb)	(ppb)	(pph)
TRIP BLANK	(cont)										
04/11/94	••				••	<50	<0.5	< 0.5	<0.5	<0.5	
07/01/94		 .				<50	<0.5	<0.5	< 0.5	<0.5	
10/06/94						<50	< 0.5	<0.5	<0.5	<0.5	
01/11/95						<50	< 0.5	<0.5	<0.5	< 0.5	
)4/07/95						<50	<0.5	<0.5	<0.5	<0.5	
07/20/95						<50 、	<0.5	<0.5	<0.5	<0.5	
09/22/95					<u></u>	<50	<0.5	< 0.5	<0.5	<0.5	
01/02/96						<50	<0.5	<0.5	<0.5	< 0.5	
)4/26/96						<50	<0.5	<0.5	<0.5	<0.5	
)7/22/96						<50	<0.5	<0.5	<0.5	<0.5	
10/17/96						<50	<0.5	<0.5	<0.5	<0.5	
01/23/97						<50	<0.5	<0.5	<0.5	<0.5	
07/10/97						<50	< 0.5	< 0.5	<0.5	<0.5	
01/15/98			**			<50	< 0.5	<0.5	<0.5	<0.5	
07/09/98						<50	<0.5	<0.5	<0.5	< 0.5	
01/08/99		. -		4-		<50	<0.5	<0.5	<0.5	<0.5	
02/01/00					_	<50	<0.5	<0.5	<0.5	<0.5	<5.0
						<50	<0.50	<0.50	< 0.50	< 0.50	<2.5
08/21/00		₹-				<50.0	< 0.500	< 0.500	< 0.500	< 0.500	<2.50
01/25/01				 		<50	<0.50	< 0.50	<0.50	< 0.50	<2.5
07/10/01											
QA 01/08/02			••			<50	<0.50	<0.50	<0.50	<1.5	<2.5

Table 1

Groundwater Monitoring Data and Analytical Results

Former Chevron Service Station #9-2960 2416 Grove Way Castro Valley, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to August 21, 2000, were compiled from reports prepared by Blaine Tech Services, Inc.

TOC = Top of Casing

TPH-G = Total Petroleum Hydrocarbons as Gasoline

(ppb) = Parts per billion

(ft.) = Feet

B = Benzene

-- = Not Measured/Not Analyzed

GWE = Groundwater Elevation

T = Toluene

QA = Quality Assurance

(msl) = Mean sea level

E = Ethylbenzene

DTW = Depth to Water

X = Xylenes

SPHT = Separate Phase Hydrocarbons Thickness

MTBE = Methyl tertiary butyl ether

MTBE by EPA Method 8260.

Table 2

Groundwater Analytical Results - Oxygenate Compounds

Former Chevron Service Station #9-2960 2416 Grove Way Castro Valley, California

WELL ID	DATE	TBA (ppb)	MTBE (ppb)	DIPE (pph)	ETBE (ppb)	TAME (pph)
C-7	07/10/01	<20	<2.0	<2.0	<2.0	<2.0

EXPLANATIONS:

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

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds

Table 3 - Soil Chemical Analytical Results

Former Chevron Service Station #9-2960 2416 Grove Way Castro Valley, California

	Sample	Sample	TPHg	В	T	E	X	MtBE	Lead
Sample ID	Depth (ft)	Date	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ррт)	(ppm)
Historical									
C-5-9.5	9.5	8/27/1990	<1	< 0.05	< 0.05	< 0.05	< 0.05		
C-6-15.0	15	8/27/1990	<1	< 0.05	< 0.05	< 0.05	< 0.05		
C-6-20.5	20.5	8/27/1990	< 1	< 0.05	< 0.05	< 0.05	< 0.05		
C-7-14.5	14.5	8/27/1990	<i< td=""><td>< 0.05</td><td>< 0.05</td><td>< 0.05</td><td>< 0.05</td><td></td><td></td></i<>	< 0.05	< 0.05	< 0.05	< 0.05		
B1-3	3	2/5/1997	1,200	1.5	< 0.50	4.1	18		
B1-5.5	5.5	2/5/1997	<1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050		
B1-11	11	2/5/1997	<1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050		
BI-16	16	2/5/1997	2,300	13	64	32	160		
B2-6	6	2/5/1997	<1.0	< 0.0050	0.011	< 0.0050	0.015		
B2-11	11	2/5/1997	2	<0.0050	< 0.0050	0.0055	0.018		
B2-15.5	15.5	2/5/1997	330	0.30	0.63	0.81	1.6		
B3-6	6	2/5/1997	<1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050		
B3-11	11	2/5/1997	<1.0	< 0.0050	< 0.0050	< 0.0050	0.01		
B3-15.5	15.5	2/5/1997	3.4	0.0062	0.0078	< 0.0050	0.075		
B4-4.5	4.5	2/5/1997	<1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	•••	
B4-10.5	10.5	2/5/1997	<1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050		
B4-15.5	15.5	2/5/1997	<1.0	< 0.0050	< 0.0050	< 0.0050	0.0052		***
B5-6	6	2/5/1997	<1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050		
B5-10	10	2/5/1997	<1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050		
B5-16	16	2/5/1997	<1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050		
B5-18.5	18.5	2/5/1997	7.5	1,0	0.87	0.20	0.63		
B6-2.5	2.5	2/5/1997	560	< 0.25	0.47	2.7	8.3		
B6-6	6	2/5/1997	<1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050		
B6-11	11	2/5/1997	3.3	< 0.0050	< 0.0050	0.0082	0.06		
B6-16	16	2/5/1997	<1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050		
B6-18.5	18.5	2/5/1997	580	< 0.50	0.83	5.1	32		
Recent									
B-7-S-6.5	6.5	2/8/2002	<1.0	< 0.0050	< 0.0050	< 0.0050	< 0.015	< 0.050	
B-7-S-10	10	2/8/2002	<1.0	< 0.0050	< 0.0050	< 0.0050	< 0.015	< 0.050	
B-7-S-15	15	2/8/2002	<1.0	< 0.0050	< 0.0050	< 0.0050	< 0.015	< 0.050	
B-8-S-6	6	2/8/2002	<1.0	< 0.0050	< 0.0050	< 0.0050	< 0.015	< 0.050	
B-8-S-10	10	2/8/2002	24	< 0.0050	< 0.020	< 0.050	66	< 0.050	
B-9-S-6.5	6.5	2/8/2002	<1.0	< 0.0050	< 0.0050	< 0.0050	< 0.015	< 0.050	
B-9-S-10	10	2/8/2002	<1.0	< 0.0050	< 0.0050	< 0.0050	< 0.015	< 0.050	
B-9-S-15	15	2/8/2002	<1.0	< 0.0050	< 0.0050	< 0.0050	< 0.015	< 0.050	
C-8-S-6.5	6.5	2/8/2002	<1.0	< 0.0050	< 0.0050	< 0.0050	< 0.015	< 0.050	
C-8-S-10	10	2/8/2002	<1.0	< 0.0050	< 0.0050	< 0.0050	< 0.015	< 0.050	
C-8-S-14.5	14.5	2/8/2002	4.3	<0.0050	< 0.0050	< 0.0050	< 0.015	< 0.050	
SP-1-4-S		2/26/2002	2.6	< 0.0050	<0.0050	< 0.0050	< 0.015	< 0.050	8.0

Explanation:

TPHg = Total Petroleum Hydrocarbons as gasoline TPHd = Total Petroleum Hydrocarbons as diesel

B = Benzene

T = Toluene

E = Ethylbenzene

X = Total xylenes

MtBE = Methyl tert-butyl ether

ppm = parts per million

Analytical Methods for Samples Collected 2/8/2002 and 2/26/2002

TPHg by EPA Method 8015M

BTEX/MtBE by EPA Method 8021B

Lead by EPA Method 6010B

Analytical Laboratory for Samples Collected 2/8/2002 and 2/26/2002

Lancaster Laboratories (ELAP # 2116)

Table 4- Groundwater Chemical Analytical Results

Former Chevron Service Station #9-2960

2416 Grove Way

Castro Valley, California

	Sample	TPHg	В	T	Е	Х	MtBE*	TBA	ETBE	DIPE	TAME
Sample ID	Date	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
B-7-W	2/8/2002	260	0.73	0.71	<2.0	3.9	<2.5/<0.5	<5.0	<0.5	<0.5	<0.5
B-8-W	2/8/2002	8,600	25	15	390	490	<25.0/<0.5	<5.0	< 0.5	<0.5	<0.5
B-9-W	2/8/2002	<50.0	<0.50	< 0.50	< 0.50	<1.5	<2.5/<0.5	<5.0	<0.5	<0.5	<0.5
C-8-W	3/26/2002	11,000	380	130	120	530	<25/<2	<100	<2	<2	<2

Explanation:

TPHg = Total Petroleum Hydrocarbons as gasoline

B = Benzene

T = Toluene

E = Ethylbenzene

X = Total xylenes

MtBE = Methyl tert-butyl ether

TBA = Tert-butyl alcohol

ETBE = Ethyl tert-butyl ether

D1PE = Di-isopropyl ether

TAME = Tert-amyl methyl ether

ppb = parts per billion

* = Analyzed by EPA Methods 8021B/8260B

Analytical Methods:

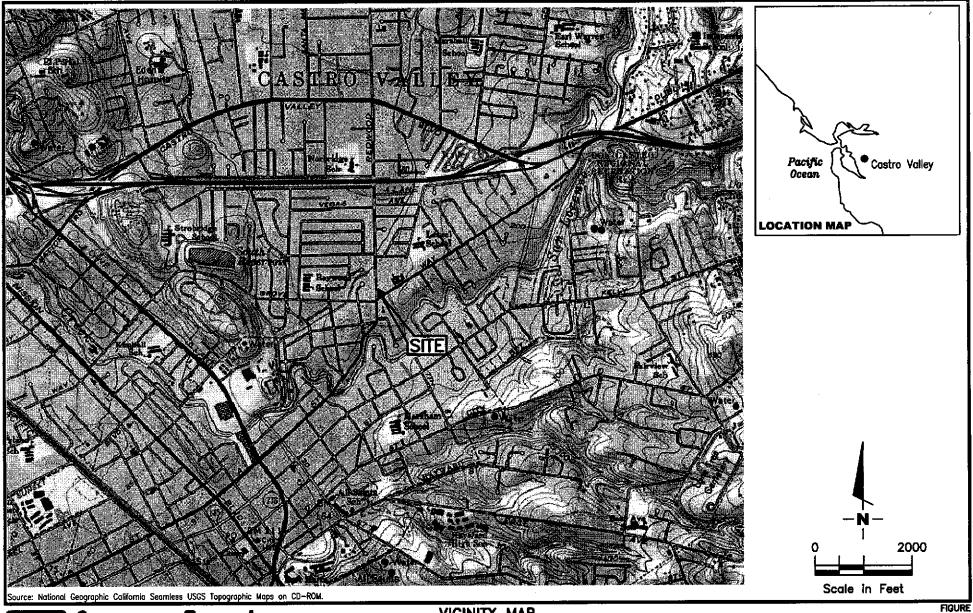
TPHg by EPA Method 8015M

BTEX/MtBE by EPA Method 8021B

Oxygenates by EPA Method 8260B

Analytical Laboratory:

Lancaster Laboratories (ELAP # 2116)





PROJECT NUMBER

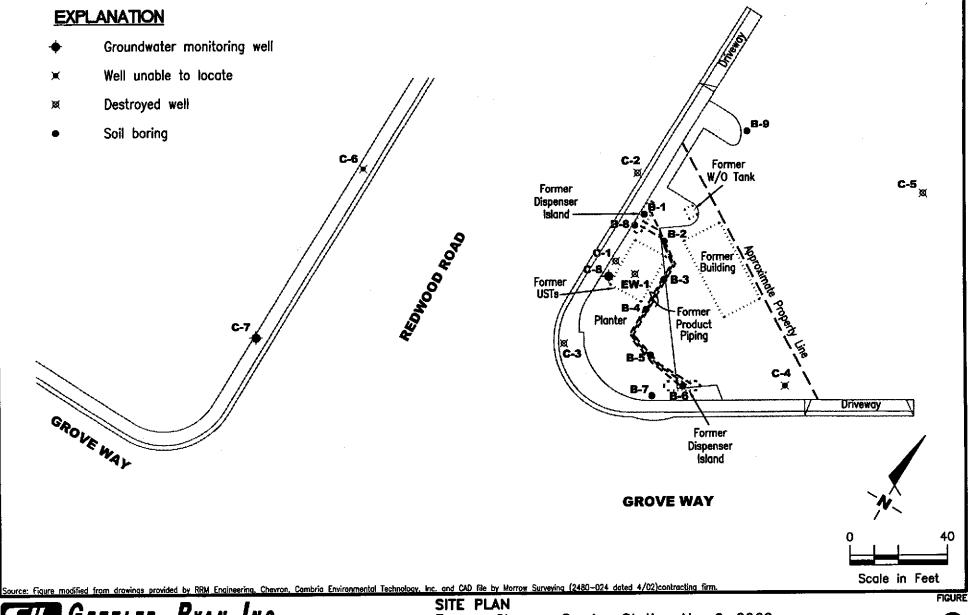
VICINITY MAP

Former Chevron Service Station No. 9—2960 2416 Grove Way Castro Valley, California

DATE 11/01 REVISED DATE

DG92960G.3C01 FILE NAME: P:\ENVIRO\CHEVRON\9-2960\VIC-9-2960.DWG | Layout Tab: Vic Map

REVIEWED BY



GETTLER - RYAN INC.

6747 Sierre Ct., Suite J
Dublin, CA 94568 (925) 551-7555

Former Chevron Service Station No. 9—2960 2416 Grove Way Castro Valley, California

2

PROJECT NUMBER
DG92960H.4CT1

REVIEWED BY

DATE 5/02

REVISED DATE

GETTLER-RYAN INC.

FIELD METHODS AND PROCEDURES WELL INSTALLATION

Site Safety Plan

Field work performed by Gettler-Ryan Inc. (GR) is conducted in accordance with GR's Health and Safety Plan and the Site Safety Plan. GR personnel and subcontractors who perform work at the site are briefed on the contents of these plans prior to initiating site work. The GR geologist or engineer at the site when the work is performed acts as the Site Safety Officer. GR utilizes a photoionization detector (PID) to monitor ambient conditions as part of the Health and Safety Plan.

Collection of Soil Samples

Collection, preservation, and analysis of samples is performed in accordance with the California Code of Regulations Title 23, Division 3, Chapter 16, *Underground Tank Regulations* (June 2001), the Central Valley Regional Water Quality Control Board's *Tri-Regional Board Staff Recommendations for Preliminary Investigation And Evaluation Of Underground Tank Sites* (August 1990), Environmental Protection Agency SW-846 Methods (November 2000), and local agency guidelines.

Well borings are drilled by a California-licensed well driller. A GR geologist is present to observe the drilling, collect soil samples for description, physical testing, and chemical analysis, and prepare a log of the exploratory soil boring under the supervision of a California Registered Geologist. Soil samples are collected from the soil boring with a split-barrel sampling device fitted with 2-inch-diameter, clean brass tubes or stainless steel liners. The sampling device is driven approximately 18 inches with a 140-pound hammer falling 30 inches. The number of blows required to advance the sampler each successive 6 inches is recorded on the boring log. The encountered soils are described using the Unified Soil Classification System (ASTM 2488-93) and the Munsell Soil Color Chart or GSA Rock Color Chart.

After removal from the sampling device, soil samples for chemical analysis are covered on both ends with teflon sheeting, capped, labeled, and placed in a cooler with blue ice for preservation to $4^{\circ}C \pm 2^{\circ}C$. A chain-of-custody form is initiated in the field and accompanies the selected soil samples to a California state-certified hazardous material testing laboratory. Samples are selected for chemical analysis based in part on:

- a. depth relative to underground storage tanks and existing ground surface
- b. depth relative to known or suspected groundwater
- c. depth relative to areas of known hydrocarbon impact at the site
- d. presence or absence of contaminant migration pathways
- e. presence or absence of discoloration or staining
- f. presence or absence of obvious gasoline hydrocarbon odors
- g. presence or absence of organic vapors detected by headspace analysis

Field Screening of Soil Samples

A PID is used to perform headspace analysis in the field for the presence of organic vapors from the soil sample. This test procedure involves removing some soil from one of the sample tubes not retained for chemical analysis and immediately covering the end of the tube with a plastic cap, or by placing a small amount of the soil to be screened in a sealable plastic bag. The soil is warmed in the sun to allow organic compounds in the sample to volatilize. The PID probe is inserted into the headspace inside the tube

through a hole in the plastic cap or through the wall of the plastic bag. Headspace screening results are recorded on the boring log. Headspace screening procedures are performed and results recorded as reconnaissance data. GR does not consider field screening techniques to be verification of the presence or absence of hydrocarbons.

Construction of Monitoring Wells

Monitoring wells are constructed in the well borings with Schedule 40 polyvinyl chloride (PVC) casing. All joints are thread-joined; no glues, cements, or solvents are used in well construction. The screened interval is constructed of machine-slotted PVC well screen, which generally extends from the total well depth to a point above the groundwater. An appropriately sized sorted sand is placed in the annular space adjacent to the entire screened interval. A bentonite transition seal is placed in the annular space above the sand, and the remaining annular space is sealed with neat cement or cement grout.

Wellheads are protected with water-resistant traffic-rated vault boxes placed flush with the ground surface. The top of the well casing is sealed with a locking waterproof cap. A lock is placed on the well cap to prevent vandalism and unintentional introduction of materials into the well.

Measurement of Water Levels

The top of the newly installed well casing is surveyed by a California-licensed Land Surveyor to mean sea level (MSL). The surveyor also obtains the horizontal coordinates of the well location including GPS longitude and latitude. Depth-to-groundwater in the well is measured from the top of the well casing with an electronic water-level indicator. Depth-to-groundwater is measured to the nearest 0.01-foot, and referenced to MSL.

Well Development and Sampling

The purpose of well development is to improve hydraulic communication between the well and the surrounding aquifer. Prior to development, each well is monitored for the presence of floating product and the depth-to-water is recorded. Wells are then developed by alternately surging the well with a vented surge block, then purging the well with a pump or bailer to remove accumulated sediments and draw groundwater into the well. Development continues until the groundwater parameters (temperature, pH, and conductivity) have stabilized.

Storing and Sampling of Drill Cuttings

Drill cuttings are either drummed, or stockpiled on and covered with plastic sheeting, and samples are collected and analyzed for disposal classification on the basis of one composite sample per 100 cubic yards of soil. Drill cuttings samples are composed of four discrete soil samples, each collected from an arbitrary location. The four discrete samples are then composited at the laboratory prior to analysis.

Each discrete drill cuttings sample is collected by removing the upper 3 to 6 inches of soil, and then driving the stainless steel or brass sample tube into the stockpiled material by hand, mallet, or drive sampler. The sample tubes are then covered on both ends with Teflon sheeting, capped, labeled, and placed in a cooler with blue ice for preservation. A chain-of-custody form is initiated in the field and accompanies the selected soil samples to the analytical laboratory.

GETTLER-RYAN INC.

FIELD METHODS AND PROCEDURES SOIL BORINGS

Site Safety Plan

Field work performed by Gettler-Ryan Inc. (GR) is conducted in accordance with GR's Health and Safety Plan and the Site Safety Plan. GR personnel and subcontractors who perform work at the site are briefed on the contents of these plans prior to initiating site work. The GR geologist or engineer at the site when the work is performed acts as the Site Safety Officer. GR utilizes a photoionization detector (PID) to monitor ambient conditions as part of the Health and Safety Plan.

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Soil borings are drilled by a California-licensed well driller. A GR geologist is present to observe the drilling, collect soil samples for description, physical testing, and chemical analysis, and prepare a log of the exploratory soil boring under the supervision of a California Registered Geologist. Soil samples are collected from the soil boring with a split-barrel sampling device fitted with 2-inch-diameter, clean brass tube or stainless steel liners. The sampling device is driven approximately 18 inches with a 140-pound hammer falling 30 inches. The number of blows required to advance the sampler each successive 6 inches is recorded on the boring log. The encountered soils are described using the Unified Soil Classification System (ASTM 2488-93) and the Munsell Soil Color Chart or GSA Rock Color Chart. Upon completion of drilling, the boring is backfilled to approximately 1 foot below ground surface with neat cement placed using a tremie pipe and pump, then filled to ground surface with concrete or native material.

After removal from the sampling device, soil samples for chemical analysis are covered on both ends with teflon sheeting, capped, labeled, and placed in a cooler with blue ice for preservation to $4^{\circ}C \pm 2^{\circ}C$. A chain-of-custody form is initiated in the field and accompanies the selected soil samples to a California state-certified hazardous material testing laboratory. Samples are selected for chemical analysis based in part on:

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T-609 P.002/006 F-345



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION 399 ELMHURST ST. HAYWARD CA. 94644-1195 PHONE (510) 670-5554 FAX (510)782-1939

DRILLING PERMIT	APPLICATION
LOCATION OF PROJECT Z4/C GROVE WAY, CASTED VAILEY, CA	PERMIT NUMBER NO2-0053 WELL NUMBER APN
(Former CHEVRON #9-2960)	PERMIT CONDITIONS Circled Permit Requirements Apply
CLIENT Name CHEVRON Products Compacy Address R.O. Box GOD4 Phone N/A Clip SAN RAMAN, CA Zip 97583-0904 APPLICANT Namo Teny Mikaciel / Gettler-Rim Inc. Fax 1960 G31-1317 Address 2/40 Gold Camp DR. Phone M/O G31-1300 p. 19 Clip Shille 1701 Roxx hp Geodova Zip 95670	A. GENERAL 1. A permit application should be submitted to as to arrive at the ACPWA office five days prior to proposed starting date. 2. Submit to ACPWA within 60 days after completion of fermitted original Department of Water Resources—Well Completion Report. 2. Permit is void if project not begun within 90 days of approval date B. WATER SUPPLY WELLS 1. Minimum surface and thickness is two inches of
TYPE OF PROJECT Well Construction / General Li Cathodia Protection !? General Li Water Supply th Contamination Monitoring Well Destruction [] PROPOSED WATER SUPPLY WELL USE New Domestic !3 Replacement Domestic []	coment grout placed by trans. 2. Minimum seni depth is 50 feet for municipal and Industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved. C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS 1. Minimum surface and thiologues is two inches of coment grout placed by tremic.
Municipal () Infrastion Industrial () Other MA () DRILLING METIOD: Mud Rotary () Air Rotary () Auger ()	2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet. D. GEOTECHNICAL. Backfill bore hole by fremin with coment great of femon growts and mixture. Upper two-three feet replaced in kin or with compacted cuttings.
DRILLER'S NAME Woodward Desting INC. Gregg	E. CATHODIC Pill hole made some with concrete placed by tremis. P. WRI.I. DESTRUCTION
DRILLER'S LICENSH NO. C-5 X # 7/00 79	Sond a map of work site. A separate permit is required for wells deeper than 45 feet. (G.) SPECIAL CONDITIONS A.
WELL PROJECTS Drill Mele Diamoter 8 in. Depth 25 ft. Surface Seal Depth 27 ft. Owner's Well Number C-8	NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for generations and contamination investigations.
GEOTECHNICAL PROJECTS Number of Borings Hole Diameterin. Depthn. ESTIMATED STANTING DATE	APPROVED WILL DATE
I hereby agree to comply with all requirements of this permit and Alumeda County	Ordinunco No. 73-68.
APPLICANT'S SIGNATURE VONES MURACICH (GERLY - ROMETURE) PLRASE PRINT NAME TOUT MIKACICH (GERLY - ROMETURE) IS	01/18/02 Revs-13-00

sjan-21-02 11:14am From-Gettler-Ryan Inc OCT-29-01 MON 03:40 PM ALAMEDA COUNTE CAM HARAN

+9166311317 T-608 P.003/006 F-345 TIME THE WAY



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION 399 ELMHURST ST, HAYWARD CA. 94544-1395 PHONE (\$10) 670-5554 FAX (510)782-1939

CONTRACT	
DRILLING PERMIT	APPLICATION
FOR APPLICANT TO COMPLETE LOCATION OF PROJECT 24/(a GEOVE WAY, CASTEO VAILEY, CA	PERMIT NUMBER WO2-0054 PERMIT CONDITIONS
CLIENT Name CHEVRON Froducts Company Address RO, Box GOOF Phone N/A Cly SAN RAMON, CA Zip 945 B3-0904 APPLICANT Name Jany Mikacich / Gettler - Rem Tuc. Pen (976) G31-1317 Address 3/40 Gold Camp DR. Phone (46) G31-1300 +19 Cly Suite 170, Rakho Cardova Zip 956 70	A. GENERAL 1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date. 2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources—Well Completion Report. 3. Permit is void if project not begun within 90 days of approval date. B. WATER SUPPLY WELLS 1. Minimum purface seal thickness is two inches of cament grout placed by tremic.
TYPE OF PROJECT Well Construction Cathodic Protection It General Water Supply Mentering Well Destruction PROPOSED WATER SUPPLY WELL USE New Domestic It Replacement Domestic Municipal It Replacement Domestic It Industrial It Other DRILLING METHOD: Mud Relary It Air Retary It Auger	2. Minimum seal depth is 50 feet for municipal and industrial walls or 20 feet for demestic and intigation wells unless a lesser depth is specially approved. C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS 1. Minimum surface seal thickness is two inches of tennent grout placed by tremis. 2. Minimum and depth for mentioning wells is the maximum depth practicable or 20 feet. D. GEOTECHNICAL Backfill bore hole by tremis with coment grout or comes grout/sand mixture. Upper two-three feet replaced in kir or with compacted cultings.
DRILLER'S NAME LAND WARD DE THE THE GIVEY DRILLER'S LICENSE NO. C-57 F 7/00 79 WELL PROJECTS Drill Hole Diagnolog in. Maximum	E. CATHODIC Pill hole mode 2000 with concrete placed by tremie. F. WELL DESTRUCTION Send a map of work site. A separate permit is required for wells deeper than 45 feet. G. SPECIAL CONDITIONS AT A SHACKED. NOTERS One application must be pubmitted for each well or well.
Casing Digaster In. Depth R. Sur(see Seal Depth R. Owner's Well Number CECTECHNICAL PROJECTS Number of Borings In. Depth ZO R. ESTIMATED STARTING DATE 02/09/02 ESTIMATED COMPLETION DATE 02/09/02	destruction. Multiple borings on one application are acceptable for geolochnical and contamination investigations. APPROVED DATE DATE
APPLICANT'S SIGNATURE Vory Mikacich (GETER - REGULTER) PLEASE PRINT NAME TONY MIKACICH (GETER - REGULTER)	01/18/02

	MAJOR DIVI	SIONS			TYPICAL NAMES
		CLEAN GRAVELS		GW	Well graded gravels with or without sand, little or no fines
SIEVE	GRAVELS MORE THAN HALF	WITH LITTLE OR NO FINES		GP	Poorly graded gravels with or without sand, little or no fines
SOILS NO. 200 SII	COARSE FRACTION IS LARGER THAN NO. 4 SIEVE SIZE	ODANTI È MITH		GM	Silty gravels, silty gravels with sand
1	:	GRAVELS WITH OVER 15% FINES		GC	Clayey gravels, clayey gravels with sand
COARSE—GRAINED AN HALF IS COARSER THAN		CLEAN SANDS		SW	Well graded sands with or without gravel, little or no fines
COARSE THAN HALF IS	SANDS	WITH LITTLE OR NO FINES		SP	Poorly graded sands with or without gravel, little or no fines
C MORE THAN	MORE THAN HALF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE SIZE	SANDS WITH		SM	Silty sands with or without gravel
2	NU. 4 SIEVE SIZE	OVER 15% FINES		sc	Clayey sands with or without gravel
SIEVE				ML	Inorganic silts and very fine sands, rock flour, silts with sands and gravels
1LS 200	l.	D CLAYS		CL	Inorganic clays of low to medium plasticity, clays with sands and gravels, lean clays
z	LIQUID LIMIT !	50% OR LESS		OL	Organic silts or clays of low plasticity
ত ∾	1	ID CLAYS		МН	Inorganic silts, micaceous or diatomaceous, fine sandy or silty soils, elastic silts
FINE- THAN HALF		EATER THAN 50%		СН	Inorganic clays of high plasticity, fat clays
MORE TH	Light Dimit Offi			ОН	Organic silts or clays of medium to high plasticity
	HIGHLY ORGAN	IC SOILS		PT	Peat and other highly organic soils
	PID Volati	le vapors in ppr	n		Observed contact
(2.	5YR 6/2) Soil o	color according Color Charts (19	to Mun	sell	Inferred contact
l RI		le drive hamme			No soil sample recovered "Undisturbed" sample
	140	pounds falling 3 required to dri	0 inch	es.	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □
	1 foc	ot are indicated	on the	logs.	
	IIA GETTI	er - Ryan	Inc		UNIFIED SOIL CLASSIFICATION ASTM D 2488-85
	6747 Sierro Ct. Dublin, CA 9456	, Suite J 88 (925)	551-755		AND KEY TO SAMPLING DATA

Gettler-Ryan, Inc.		Log of Boring C-8			
ROJECT: Former Chevron Service Station No.	9-2960	LOCATION: 2416 Grove Way, Castro	Valley, California		
R PROJECT NO.: DG92960H.4CT1		CASING ELEVATION:			
ATE STARTED: 02/08/02		WL (ft. bgs): 18.0 DATE: 02/08/02	TIME: 10:00		
ATE STARTED. 02/08/02		WL (ft. bgs): DATE:	TIME:		
RILLING METHOD: 8 in. Hollow Stem Auger		TOTAL DEPTH: 25 feet			
RILLING COMPANY: Gregg Drilling		GEOLOGIST: Tony Mikacich			
OWS/FT. * OWS/FT. * AMPLE NUMBER AMPLE INT. RAPHIC LOG OIL CLASS		GEOLOGIC DESCRIPTION	WELL DIAGRAM		
3	CLAY (CL) - b 10% fine sand,	prown (7.5YR 4/4), moist, hard; 90% clay, trace of coarse sand.	au i		
	CLAYEY GRAV moist, dense; (fine sand.	/EL (GC) - light olive brown (2.5Y 5/6), 60% fine to coarse gravel, 30% clay. 10%	blank schedule 40 PVC — Manual Manual Contek—— neat cemen		
	(GP-GC) - di dense; 60% s medium sand,		2" blank sci		
- 12- 52 >50 C-8-14.5'	brown (2.5Y fine gravel, :	D GRAVEL WITH SAND (GW) — light olive 5/6), moist, very dense; 60% subrounded 35% medium to coarse sand, 5% clay.	(0.020 inch) ————————————————————————————————————		
16————————————————————————————————————	(GP-GC) - 30% medium	ADED GRAVEL WITH CLAY AND SAND brown (7.5YR 4/4), wet; 60% fine gravel, a sand, 10% clay.	machine slotted PVC (0.020 i		
20-	POORLY GR dark grayis	RADED SAND WITH GRAVEL (SP) – very sh brown (2.5Y 3/2), wet.			
24- >50 SM	dense; 759 Bottom of	ND (SM) - olive brown (2.5Y 4/4), wet, very % fine sand, 25% silt. boring at 25 feet bgs. verted to equivalent standard penetration ot.)	s Mateur		

JOB NUMBER: DG92960H.4CT1

	Gettler-Ryan, Inc.						Log of Boring B-7				
ROJE	·CT·	Form	er Chevro	n Service	e Statio	n No. 9-2960	LOCATION: 2416 Grove Way, Castro Valle	ey, California			
			: DG929			<u>-</u>	SURFACE ELEVATION:				
			02/08/				WL (ft. bgs): DATE: TIME	·			
			: 02/08/				WL (ft. bgs): 24.0 DATE: 02/08/02 TIME	: 15:15			
			00: <i>8 in.</i>		tem Aug	ner ·	TOTAL DEPTH: 25 feet				
			NY: Gre				GEOLOGIST: Tony Mikacich				
(feet)	(mdd) GId	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT. GRAPHIC LOG	SOIL CLASS		GEOLOGIC DESCRIPTION	REMARKS			
4-	<u>I</u>	18	<u> </u>	9	CL	CLAY WITH SAN stiff; 75% clay, trace of iron ox	ID (CL) – brown (7.5YR 4/4), moist, very 25% fine to medium sand, trace of micas, kidation.	Boring backfilled with neat cement to ground surface.			
-	0	18	B-7-6.5'			plasticity; 80% oxidation.	to grayish brown (10YR 5/2), becomes medium clay, 20% fine sand, no micas, no iron				
8	7	62	B-7-10°			CLAY WITH GRA moist, hard; 70 sand.	AVEL (CL) – dark grayish brown (10YR 4/2), % clay, 20% fine to coarse gravel, 10% medium				
12-		48	B-7-15°		GP	POORLY GRADE brown (10YR 4 20% fine to me	ED GRAVEL WITH SAND (GP) — dark grayish //2), moist, dense; 80% fine to medium gravel, dium sand.				
16-	-				GC	CLAYEY GRAV 20% clay. 20%	EL WITH SAND (GC) – wet; 60% fine gravel, % medium sand.				
20- 24	-		B-7-W			l	ring at 25 feet bgs.	Grab groundwater sample B-7-W.			
28	1				·	(* = Convert blows/foot.)	ted to equivalent standard penetration	Page 1			

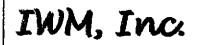
JOB NUMBER: DG92960H.4CT1

Page 1 of 1

	G	ett	ler-R	yan	, Inc.		LOG of Boring B-8 LOCATION: 2416 Grove Way, Castro Valley, California SURFACE ELEVATION:				
PO.I	ECT.	Form	er Chevro	n Ser	vice Statio	n No. 9-2960					
			: DG928								
			02/08/				WL (ft. bgs): DATE: TIME:				
	ATE FINISHED: 02/08/02						WL (ft. bgs): 18.0 DATE: 02/08/02 TIM	E: 11:36			
					w Stem Aug	ger	TOTAL DEPTH: 20 feet				
	LING			gg Dr			GEOLOGIST: Tony Mikacich				
UEPTH (feet)	PIO (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG SOIL CLASS		GEOLOGIC DESCRIPTION	REMARKS			
						Gravelly clay, t	orawn.	-			
- - 4-				\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	SP-SM	POORLY GRADE (7.5YR 4/3), d of micas.	ED SAND WITH SILT (SP-SM) - light brown lense; 90% fine to medium sand, 10% silt, trace	Boring backfilled with neat cement to ground surface			
- 8-	0	41	B-8-6'		GC	(IAYR 4/2), ma	EL WITH SAND (GC) – dark grayish brown bist, medium dense; 60% subrounded fine barse sand, 15% clay.				
	32	21	B-8-10'			graver, 20% cu	ignise serio, ione ordy.				
12-		30			GW-GM	WELL GRADED dense: 60% fir	GRAVEL WITH SILT SAND (GW-GM) - wet, ne gravel, 30% medium sand, 10% silt.				
16-	- -		B-8-W			Ť.		Grab groundwater sample B-8-W.			
20·				-	1 11 1		ring at 20 feet bgs. ted to equivalent standard penetration				
28											

•	G	ett	ler-R	yan, I	Inc.		Log of Boring B	-9
PROJE	ECT:	Form	er Chevro	n Servic	e Statio	n No. 9-2960	LOCATION: 2416 Grove Way, Castro Valle	ey, California
			: DG929				SURFACE ELEVATION:	
			02/08/				WL (ft. bgs): DATE: TIME	
			: 02/08/				WL (ft. bgs): 18.0 DATE: 02/08/02 TIME	: 13:40
			D: 8 in.		Stem Aug	er	TOTAL DEPTH: 20 feet	
			NY: Gre				GEOLOGIST: Tony Mikacich	
DEPTH (feet)	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT. GRAPHIC LOG	SOIL CLASS		GEOLOGIC DESCRIPTION	REMARKS
						Asphalt paving -		1
4-					CL	CLAY WITH GRA' moist, hard; 70% sand.	VEL (CL) - light olive brown (2.5Y 5/6), clay, 25% fine to coarse gravel, 5% medium	Boring backfilled with neat cement to ground surface.
8-	1 12	46	B-9-10'		SP	(2.5Y 4/3), mois	D SAND WITH GRAVEL (SP) — olive brown st, dense; 60% fine to medium sand, 40% fine el, trace of clay.	
12-					SM	SILTY SAND (S dense; 80% fine	SM) - olive brown (2.5Y 4/3), wet, very to medium sand, 20% silt.	
-	_	70	B-9-15'		GC	CLAYEY GRAVE gravel, 30% cla	L WITH SAND (SC) - wet, very dense; 50% y. 20% sand.	
16- -		 - 	B-9-W		GP	POORLY GRADE 80% fine to coa	D GRAVEL WITH SAND (GP) - wet, dense; arse gravel, 20% medium sand.	Grab groundwater sample 8-9-W.
20-	-	31			ML	20% clay. Bottom of bork	ive brown (2.5Y 4/3), wet, very stiff; 80% silt, ng at 20 feet bgs.	
24-								
Ī								

JOB NUMBER: DG92960H.4CT1



INTEGRATED WASTESTREAM MANAGEMENT, INC. 950 AMES AVENUE, MILPITAS, CA 95035 PHONE: 408.042.8955 FAX: 408.042.1499

CERTIFICATE OF DISPOSAL

Ι

Generator Name:

Chevron Products Company

Address:

6001 Bollinger Canyon Road

San Ramon, CA 94583

Contact:

Bob Cochran 925-842-9500

Phone:

Address:

Chevron #9-2960

2416 Grove Way

Castro Valley, CA

Facility Contact:

Facility Name:

Tony Mikacich, Gettler-Ryan

Phone:

916-631-1300

92097-DS IWM Job #: 4 Drum(s) of Description of Waste: Non-Hazardous Soil March 21, 2002 Removal Date: **RSVRL210302** Ticket #:

Transporter Information

Name:

IWM, Inc.

Address:

950 Ames Avenue

Milpitas, CA 95035

Phone:

(408) 942-8955

Disposal Facility Information

Republic Services Vasco Road Landfill

Name: Address:

4001 N. Vasco Road

Livermore, CA 94550

Phone:

(925) 447-0491

IWM, INC. CERTIFIES THAT THE ABOVE LISTED NON-HAZARDOUS WASTE WILL BE TREATED AND DISPOSED AT THE DESIGNATED FACILITY IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.

William T. DeLon

William 2.

Of Low

Authorized Representative (Print Name and Signature)

3/21/02

Date

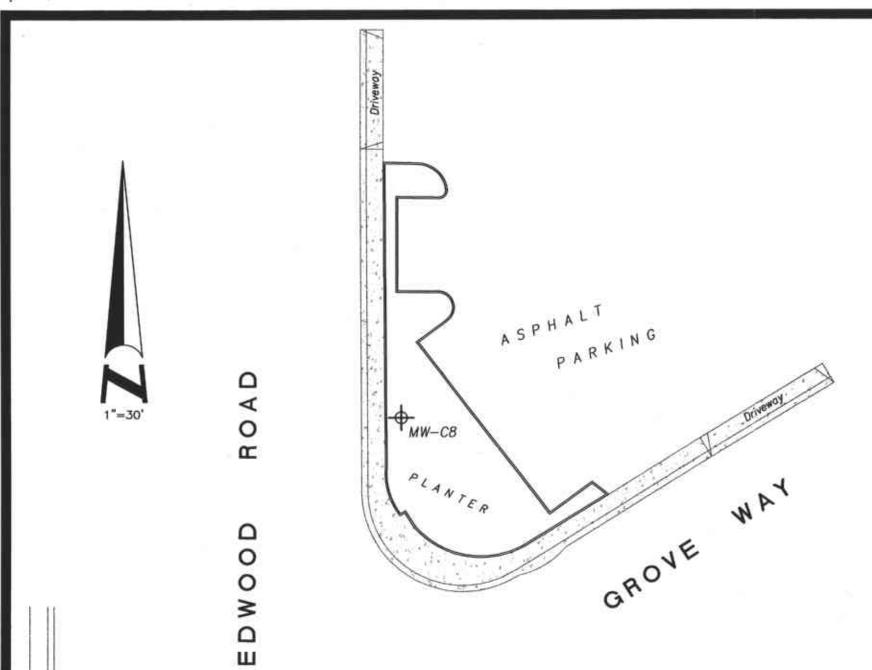
CONFIDENTIAL

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

REMOVED

FIELD DATA SHEET

Depth 23.26 ft. Volume Textor (VF)	ty Former Chevron #9-296 ess: 2416 Grove Way	Date:
Diameter Pool Parison Depth Depth Depth Disposable Bailer Disposable Bailer Stack Suction Grundos Other: Ot	Castro Valley, CA	Sampler.
Diameter 2 in. Productivaterit: 2 in. Thickness: Pr. Iproductivaterit: 4 = 0.66 Thickness: Pr. Iproductivate	Well ID	
Column C	Diameter	Thickness: Ft. (product/water): [gall]
	Il Depth	Volume 2° = 0.17
Disposable Bailer Bailer Stack Suction Grundfos Other 2"Statuless Bailer Other 2"Statuless Bailer Fressure Bailer Grab Sample Other: Water Color: Leven Than Class 4 Weather Color: Leven Than Class 4 Well de-water? Wolume Gall Fine Volume (gal) J.S. S. 16 J.S. S. J.S. S. 16 J.S. S. J.S. S. J.S. S. J.S. J.S. S. J.S. S. J.S. S. J.S. J.S. S. J.S. S. J.S. S. J.S. J.S. J.S.	Th III Angrei	VF
STECK Suction Grandfos Other 2" Smiles 24.16K Other	rge Disposable Bailer	Sampling Equipment: Disposable Bailet
Grundfos Other 2"SPINALSS BALLE Other: Other	Stack	Pressure Bailer Dadoy MCDT
Section Time: 1255 Weather Conditions Theochol Th	Curry March	· · · · · · · · · · · · · · · · · · ·
mpling Time: 140 Water Color: 1000 Theolegal Cook: 140 Theolegal Theolegal Cook: 140 Theolegal Theolegal Cook: 140 Theolegal T	/255_	
Time Volume (gal.) // Soc / S / S / S / S / S / S / S / S / S /	mpling Time: 1410	Water Color: Keren The Charge Odor: 42
Time Volume pH Conductivity Temperature D.O. ORP (gal.) /SOC /.5 8.16 //64 72.1 /SOC 3.0 7.56 //86 70.0 310 4.5 7.82 /242 71.0 314 6.0 4.77 /2/3 71.2 320 7.5 7.64 /202 71.6 322 7.0 7.31 /2.10 91.4 322 10.5 7.28 12.52 70.3 1324 12.0 7.38 12.52 70.3 1324 12.0 7.38 12.52 70.3 1326 /3.5 7.20 12.44 6.7.9 1326 /3.5 7.20 12.44 6.7.9 INDICATE LABORATORY INFORMATION SAMPLE ID IN - CONTAINER REFRIG. PRESERV. TYPE LABORATORY THE GARLES ANALYSES	rging Flow Rate: 2.0	· \/Alima* 190/
Time Volume (gal.) PH Conductivity purhos/cm	d well de-water?	
1500 1.5 1.6 1.8C 20.0 1504 3.0 2.5C 1.8C 20.0 310 4.5 2.82 1.242 2.0 314 6.0 2.77 1213 71.2 320 7.5 7.64 1202 71.6 1321 7.0 7.31 1210 91.4 322 10.5 2.28 1266 20.1 322 10.5 2.38 1252 20.3 1324 12.0 2.38 1252 40.3 1326 13.5 7.20 12.4 69.9 1340 26.5 7.16 1216 69.8 TOTAL WELL DEPTH AFTER DEVEloPEMENT = 24.65 LABORATORY INFORMATION SAMPLE ID 181- CONTAINER REFRIG. PRESERV. TYPE LABORATORY ANALYSES		Conductivity Temperature (mg/L) (mV) (ppm)
310 4.5 1.82 /242 71.0 310 4.5 1.82 /242 71.0 314 6.0 1.77 /2/3 71.2 320 7.5 7.64 /202 71.6 1321 7.0 7.31 /2/0 91.4 1322 /0.5 7.28 /266 70.1 1324 /2.0 7.38 /2.52 10.3 1324 /2.0 7.38 /2.52 10.3 1326 /3.5 7.20 /2.54 69.8 1340 26.5 7.16 /2/0 69.8 TOTAL WELL DEPTH AFTER DEVEloPEMENT = 24.65 LABORATORY INFORMATION SAMPLE ID IN- CONTAINER REFRIG. PRESERV. TYPE LABORATORY ANALYSES	<u>/</u>	
314 6.0 4.77 1202 71.6 320 7.5 7.64 1202 71.6 7.821 1210 71.4 7.821 1210 71.4 7.821 1266 70.1 322 10.5 7.28 1252 70.3 1324 12.0 7.38 12.52 70.3 1326 13.5 7.20 12.54 6.7.9 1326 13.5 7.20 12.54 6.7.9 13.40 26.5 7.16 1210 6.7.8	7 67	
320 7.5 7.64 1202 71.6 1321 7.0 7.31 1210 91.4 322 10.5 7.28 1266 70.1 1324 12.0 7.38 1252 70.3 1326 13.5 7.20 12.4 69.8 1340 26.5 7.16 1216 69.8 LABORATORY INFORMATION LABORATORY INFORMATION SAMPLE ID IM - CONTAINER REFRIG. PRESERV. TYPE LABORATORY TOTAL WELL DEPTH AFTER DEVElopement = 24.65 LABORATORY INFORMATION SAMPLE ID IM - CONTAINER REFRIG. PRESERV. TYPE LABORATORY ANALYSES	4 22	
1321 7.0 7.31 12.10 7.4 1322 10.5 7.28 12.66 70.1 1324 12.0 7.38 12.52 70.3 1326 13.5 7.20 12.54 69.8 1340 26.5 7.16 12.16 69.8 TOTAL WELL DEPTH AFTER DEVELOPEMENT = 24.65 LABORATORY INFORMATION SAMPLE ID IN CONTAINER REFRIG. PRESERV. TYPE LABORATORY ANALYSES	2 /- 1	4 1202 71.6
322 10.5 7.28 12.50 70.3 1324 12.0 7.38 12.52 70.3 1326 13.5 7.20 12.4 69.9 1340 26.5 7.16 12.10 69.8 TOTAL WELL DEPTH AFTER DEVEloPEMENT = 24.65 LABORATORY INFORMATION SAMPLE ID IN - CONTAINER REFRIG. PRESERV. TYPE LABORATORY TOTAL WELL DEPTH AFTER DEVEloPEMENT = 24.65 LABORATORY INFORMATION SAMPLE ID IN - CONTAINER REFRIG. PRESERV. TYPE LABORATORY TOTAL WELL DEPTH AFTER DEVEloPEMENT = 24.65 LABORATORY INFORMATION SAMPLE ID IN - CONTAINER REFRIG. PRESERV. TYPE LABORATORY TOTAL WELL DEPTH AFTER DEVELOPEMENT = 24.65 LABORATORY INFORMATION SAMPLE ID IN - CONTAINER REFRIG. PRESERV. TYPE LABORATORY TOTAL WELL DEPTH AFTER DEVELOPEMENT = 24.65 LABORATORY INFORMATION SAMPLE ID IN - CONTAINER REFRIG. PRESERV. TYPE LABORATORY TOTAL WELL DEPTH AFTER DEVELOPEMENT = 24.65 LABORATORY INFORMATION SAMPLE ID IN - CONTAINER REFRIG. PRESERV. TYPE LABORATORY TOTAL WELL DEPTH AFTER DEVELOPEMENT = 24.65 LABORATORY INFORMATION SAMPLE ID IN - CONTAINER REFRIG. PRESERV. TYPE LABORATORY TOTAL WELL DEPTH AFTER DEVELOPEMENT = 24.65 LABORATORY INFORMATION	1321 7.0 7.31	
1324 12.0 7.38 12.54 (69.9) 1326 13.5 7.20 12.54 (69.8) 1340 26.5 7.16 1216 (69.8) TOTAL WELL DEPTH AFTER DEVELOPEMENT = 24.65 LABORATORY INFORMATION SAMPLE ID IN - CONTAINER REFRIG. PRESERV. TYPE LABORATORY TON-G/RIEX/MIRE	366 703	203
1326 73.5 T. 10 1216 69.8 1340 26.5 7.16 1216 69.8 TOTAL WELL DEPTH AFTER DEVELOPEMENT = 24.65 LABORATORY INFORMATION SAMPLE ID IN - CONTAINER REFRIG. PRESERV. TYPE LABORATORY ANALYSES TON-G/RIEX/MISE		(99
TOTAL WELL DEPTH AFTER DEVELOPEMENT = 24.65 LABORATORY INFORMATION SAMPLE ID IN - CONTAINER REFRIG. PRESERV. TYPE LABORATORY TON-G/RIEX/MIRE	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	166
SAMPLE ID IN - CONTAINER REFRIG. PRESERV. TYPE LABORATORY	216	
SAMPLE ID IN - CONTAINER REFRIG. PRESERV. TYPE	1340 26.5 7.16	
C-8 (0X UDANTAL 4 HUL CHARLESTEE (5) 0x75 82600	TOTAL WELL DEPTH AFTER I	LABORATORY INFORMATION LABORATORY ANALYSES
	TOTAL WELL DEPTH AFTER I	REFRIG. PRESERV. TYPE LABORATOR
	TOTAL WELL DEPTH AFTER I	REFRIG. PRESERV. TYPE LABORATORY TPH-G/RIEX/MIRE



ON NORTH	HING	EASTING	ELEV (PVC)	ELEV (BOX)
120000000000000000000000000000000000000		6106291.9 6106404.1	155.08 153.41	155.51 153.81
ATITUDE	LON	IGITUDE		
7. 6843740 7. 6846489				
	20754 20755 ATITUDE 7. 6843740	2075487.2 2075585.4 ATITUDE LON 7. 6843740 -122	2075487.2 6106291.9 2075585.4 6106404.1 ATITUDE LONGITUDE	2075487.2 6106291.9 155.08 2075585.4 6106404.1 153.41 ATITUDE LONGITUDE 7. 6843740 -122. 0737288

BASIS OF COORDINATES AND ELEVATIONS:

COORDINATES ARE CALIFORNIA STATE PLANE ZONE 3 COORDINATES FROM GPS OBSERVATIONS USING UNIVERSITY OF CALIFORNIA BAY AREA DEFORMATION CORS STATION OBSERVATION FILES AND BASED ON THE CALIFORNIA SPATIAL REFERENCE CENTER DATUM, REFERENCE EPOCH 2000.35.

COORDINATE DATUM IS NAD 83(1986).

DATUM ELLIPSOID IS GRS80.

REFERENCE GEOID IS NGS99.

CORS STATIONS USED WERE CHAB AND WINT

ELEVATIONS BASED ON ALAMEDA COUNTY BENCHMARK NO. 259. BRASS DISC TOP OF CONCRETE GUARD RAIL & RETAINING WALL ABUTMENT ALONG E. SIDE "A" STREET AND ON CL ± N. 6TH STREET EXTENDED. ELEVATION=138.79'

Monitoring Well Survey
Prepared for:
GETTLER - RYAN INC.

(IN FEET) 1 inch = 30 ft.

MW-C7

Former Chevron Service Station No. 9-2960 2416 Grove Way Castro Valley Alameda County California



1450 Harbor Blvd. Ste. D West Sacramento California 95691 (916) 372-8124 tom@morrowsurveying.com Date: April, 2002 Scale: 1" = 30' Sheet 1 of 1 Revised: Field Book: MW-7 Dwg. No. 2480-024

SJP



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

SAMPLE GROUP

The sample group for this submittal is 796509. Samples arrived at the laboratory on Tuesday, February 12, 2002. The PO# for this group is 99011184 and the release number is BAUHS.

Client Description			<u>Lancaster</u>
C-8-S-6.5-020208	Grab	Soil	3772204
-8-S-10-020208	Grab	Soil	3772205
3-S-14.5-020208	Grab	Soil	3772206
8-S-6-020208	Grab	Soil	3772207
3-S-10-020208	Grab	Soil	3772208
8-W-020208	Grab	Water	3772209
9-S-6.5-020208	Grab	Soil	3772210
-S-10-020208	Grab	Soil	3772211
9-S-15-020208	Grab	Soil	3772212
-W-020208	Grab	Water	3772213
'-S-6.5-020208	Grab	Soil	3772214
7-S-10-020208	Grab	Soil	3772215
7-S-15-020208	Grab	Soil	3772216
7-W-020208	Grab	Water	3772217

METHODOLOGY

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

1 COPY TO

Chevron Products Company

Attn: Tony Mikacich





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

Respectfully Submitted,

Steven A. Skiles St. Chemist



3772214 Lancaster Laboratories Sample No.

Collected: 02/08/2002 14:14

by TM

Account Number: 10992

Submitted: 02/12/2002 09:05 Reported: 02/26/2002 at 16:17

Discard: 03/06/2002 B-7-S-6.5-020208

Grab

Soil

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

Facility# 92960

GRRC

2416 Grove-Castro Valley T0600100318 B-7

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01726	TPH-GRO - Soils					
01727	TPH-GRO - Soils The reported concentration of T gasoline constituents eluting p start time. The analysis for volatiles was in methanol. The reporting lim	rior to the C6	(n-hexane) TPH-G	RO range preserved	mg/kg	25
02160	BTEX/MTBE					
02174 02177 02178 02182 02199	Benzene Toluene Ethylbenzene Total Xylenes MTBE The analysis for volatiles was in methanol. The reporting lim				mg/kg mg/kg mg/kg mg/kg mg/kg	25 25 25 25 25 25

		Laboratory	Chro	nıc⊥e		
CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01726	TPH-GRO - Soils	N. CA LUFT Gasoline Method	1	02/13/2002 23:38	Steven A Skiles	25
02160 01150	BTEX/MTBE GC VOA Soil Prep	SW-846 8021B SW-846 5035	1 1	02/13/2002 23:38 02/13/2002 01:12	Steven A Skiles Stephanie A Selis	25 n.a.



Lancaster Laboratories Sample No. 3772215

Collected:02/08/2002 14:22

by TM

Account Number: 10992

Submitted: 02/12/2002 09:05

Reported: 02/26/2002 at 16:17

Discard: 03/06/2002

B-7-S-10-020208

Grab

Soil

Chevron Products Company 6001 Bollinger Canyon Road Building L PO Box 6004

San Ramon CA 94583-0904

Facility# 92960

GRRC

2416 Grove-Castro Valley T0600100318 B-7

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01726	TPH-GRO - Soils					
01727	TPH-GRO - Soils The reported concentration of Tr gasoline constituents eluting pr start time. The analysis for volatiles was p in methanol. The reporting limit	rior to the C6	(n-hexane) TPH-G sample which was	RO range preserved	mg/kg	25
02160	BTEX/MTBE					
02174 02177 02178 02182 02199	Benzene Toluene Ethylbenzene Total Xylenes MTBE The analysis for volatiles was in methanol. The reporting lim				mg/kg mg/kg mg/kg mg/kg mg/kg	25 25 25 25 25 25

		Laboratory	Chro:	nicle		
CAT		-		Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01726	TPH-GRO - Soils	N. CA LUFT Gasoline	1	02/14/2002 00:15	Steven A Skiles	25
		Method			a) 2 01-11-a	25
02160	BTEX/MTBE	SW-846 8021B	1	02/14/2002 00:15	Steven A Skiles	
01150	GC VOA Soil Prep	SW-846 5035	1	02/13/2002 01:13	Stephanie A Selis	n.a.



Lancaster Laboratories Sample No. SW 3772216

Collected:02/08/2002 14:30 by TM

Account Number: 10992

Submitted: 02/12/2002 09:05 Reported: 02/26/2002 at 16:17 Chevron Products Company 6001 Bollinger Canyon Road Building L PO Box 6004

Discard: 03/06/2002

Grab Soil

San Ramon CA 94583-0904

B-7-S-15-020208
Facility# 92960

GRRC

2416 Grove-Castro Valley T0600100318 B-7

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01726	TPH-GRO - Soils					
01727	TPH-GRO - Soils The reported concentration of Tigasoline constituents eluting prostart time. The analysis for volatiles was printed in methanol. The reporting limit	cior to the C6	(n-hexane) TPH-GI sample which was	RO range preserved	mg/kg	25
02160	BTEX/MTBE					
02174 02177 02178 02182 02199	Benzene Toluene Ethylbenzene Total Xylenes MTBE The analysis for volatiles was in methanol. The reporting lim				mg/kg mg/kg mg/kg mg/kg mg/kg	25 25 25 25 25 25

Dilution	
Factor	
25	
25 n.a.	
	25 25





Lancaster Laboratories Sample No. SW 3772207

Collected: 02/08/2002 11:01 by TM Account Number: 10992

Submitted: 02/12/2002 09:05 Reported: 02/26/2002 at 16:16

Discard: 03/06/2002

B-8-S-6-020208

Grab

Soil

C) Designation Common

Chevron Products Company 6001 Bollinger Canyon Road Building L PO Box 6004

San Ramon CA 94583-0904

Facility# 92960 GRRC

2416 Grove-Castro Valley T0600100318 B-8

CAT No.	Analysis Name TPH-GRO - Soils	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01727	TPH-GRO - Soils The reported concentration of T gasoline constituents eluting p start time. The analysis for volatiles was in methanol. The reporting lim	rior to the C6 performed on a	(n-hexane) TPH-G	RO range preserved	mg/kg	25
02160	BTEX/MTBE					
02174	Benzene	71-43-2	N.D.	0.0050	mg/kg	25
02177	Toluene	108-88-3	N.D.	0.0050	mg/kg	25
02178	Ethylbenzene	100-41-4	N.D.	0.0050	mg/kg	25
02182	Total Xylenes	1330-20-7	N.D.	0.015	mg/kg	25
02199	MTBE	1634-04-4	N.D.	0.050	mg/kg	25
	The analysis for volatiles was in methanol. The reporting lim					

		Laboratory	Chro:	nicle		
CAT		_		Analysis	•	Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01726	TPH-GRO - Soils	N. CA LUFT Gasoline Method	1	02/14/2002 01:36	Stephanie A Selis	25
02160	BTEX/MTBE	SW-846 8021B	1	02/14/2002 01:36	Stephanie A Selis	25
01150	GC VOA Soil Prep	SW-846 5035	1	02/13/2002 01:07	Stephanie A Selis	n.a.





Lancaster Laboratories Sample No. SW 3772208

Collected:02/08/2002 11:09

by TM

Account Number: 10992

Submitted: 02/12/2002 09:05 Reported: 02/26/2002 at 16:17

Discard: 03/06/2002 a

B-8-S-10-020208

Grab

Soil

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

GRRC

Facility# 92960

2416 Grove-Castro Valley T0600100318 B-8

As Received Dilution Method As Received CAT Factor Units CAS Number Result Detection Analysis Name No. Limit 01726 TPH-GRO - Soils 25 mg/kg 1.0 n.a. 24. 01727 TPH-GRO - Soils The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately. 02160 BTEX/MTBE 0.0050 mg/kg 71-43-2 N.D. 02174 Benzene 0.020 mg/kg 25 N.D. 108-88-3 02177 Toluene 25 0.050 mg/kg 100-41-4 N.D. 02178 Ethylbenzene 25 0.015 mg/kg 1330-20-7 66. 02182 Total Xylenes 25 mg/kg 0.050 MTRE 1634-04-4 N.D. 02199

in methanol. The reporting limits were adjusted appropriately.

Due to the presence of interferents near their retention time, normal

The analysis for volatiles was performed on a sample which was preserved

Due to the presence of interferents near their retention time, normal reporting limits were not attained for the compounds listed below. The presence or concentration of these compounds cannot be determined below the reporting limits due to the presence of these interferents.

toluene ethylbenzene

State of California Lab Certification No. 2116

Laboratory Chronicle



Lancaster Laboratories, Inc. 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. SW 3772208

Collected: 02/08/2002 11:09 by TM

Submitted: 02/12/2002 09:05 Reported: 02/26/2002 at 16:17

Discard: 03/06/2002

B-8-S-10-020208

Grab

Soil

Account Number: 10992

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

Facility# 92960 GRRC

2416 Grove-Castro Valley T0600100318 B-8

CAT		Analysis				
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01726	TPH-GRO - Soils	N. CA LUFT Gasoline Method	1	02/14/2002 02:13	Stephanie A Selis	25
02160	BTEX/MTBE	SW-846 8021B	1	02/14/2002 02:13	Stephanie A Selis	25
01150	GC VOA Soil Prep	SW-846 5035	1	02/13/2002 01:08	Stephanie A Selis	n.a.



Lancaster Laboratories Sample No. SW 3772210

Collected:02/08/2002 13:01

by TM

Account Number: 10992

Submitted: 02/12/2002 09:05

Reported: 02/26/2002 at 16:17 Discard: 03/06/2002

B-9-S-6.5-020208

Grab

Soil

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

Facility# 92960

GRRC

2416 Grove-Castro Valley T0600100318 B-9

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01726	TPH-GRO ~ Soils					
01727	TPH-GRO - Soils The reported concentration of T gasoline constituents eluting p start time. The analysis for volatiles was in methanol. The reporting lim	rior to the C6 performed on a	(n-hexane) TPH-G	RO range preserved	mg/kg	25
02160	BTEX/MTBE					
02174 02177 02178 02182 02199	Benzene Toluene Ethylbenzene Total Xylenes MTBE The analysis for volatiles was in methanol. The reporting lim				mg/kg mg/kg mg/kg mg/kg mg/kg	25 25 25 25 25 25

		Laboratory	Chro:	nicle		
CAT	Analysis					
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01726	TPH-GRO - Soils	N. CA LUFT Gasoline Method	1	02/14/2002 02:50	Stephanie A Selis	25
02160	BTEX/MTBE	SW-846 8021B	1	02/14/2002 02:50	Stephanie A Selis	25
01150	GC VOA Soil Prep	SW-846 5035	1	02/13/2002 01:09	Stephanie A Selis	n.a.





Dilution

Lancaster Laboratories Sample No. SW 3772211

Collected: 02/08/2002 13:20 by TM Account Number: 10992

Submitted: 02/12/2002 09:05 Reported: 02/26/2002 at 16:17

Discard: 03/06/2002

B-9-S-10-020208

Grab

Soil

Chevron Products Company

6001 Bollinger Canyon Road Building L PO Box 6004 San Ramon CA 94583-0904

Facility# 92960 2416 Grove-Castro Valley T0600100318 GRRC

CAT
No. Analysis Name

CAS Number Result

As Received Method

Detection Units

B-9

Factor Limit 01726 TPH-GRO - Soils 25 1.0 mg/kg N.D. 01727 TPH-GRO - Soils The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately. 02160 BTEX/MTBE 0.0050 mq/kq 25 N.D. 02174 Benzene 71-43-2 25 0.0050 mq/kq 02177 108-88-3 N.D. Toluene 25 0.0050 mg/kg N.D. 02178 Ethylbenzene 100-41-4 25 0.015 mg/kg N.D. 02182 Total Xylenes 1330-20-7 25 0.050 mg/kg N.D. 1634-04-4 02199

The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately.

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT	Analysis					
No. 01726	Analysis Name TPH-GRO - Soils	Method N. CA LUFT Gasoline	Trial# 1	Date and Time 02/13/2002 22:23	Analyst Steven A Skiles	Factor 25
02160 01150	BTEX/MTBE GC VOA Soil Prep	Method SW-846 8021B SW-846 5035	1	02/13/2002 22:23 02/13/2002 01:10	Steven A Skiles Stephanie A Selis	25 n.a.



Lancaster Laboratories Sample No. 3772212

Collected: 02/08/2002 13:28

by TM

Account Number: 10992

Submitted: 02/12/2002 09:05

Reported: 02/26/2002 at 16:17

Chevron Products Company 6001 Bollinger Canyon Road Building L PO Box 6004

San Ramon CA 94583-0904

Discard: 03/06/2002 B-9-S-15-020208

Grab

Soil

Facility# 92960

GRRC

2416 Grove-Castro Valley T0600100318 B-9

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01726	TPH-GRO - Soils					
01727	TPH-GRO - Soils The reported concentration of Tigasoline constituents eluting postart time. The analysis for volatiles was pin methanol. The reporting limit	cior to the C6	(n-hexane) TPH-G sample which was	RO range preserved	mg/kg	25
02160	BTEX/MTBE					
02174	Benzene	71-43-2	N.D.	0.0050	mg/kg	25
02177	Toluene	108-88-3	N.D.	0.0050	mg/kg	25
02178	Ethylbenzene	100-41-4	N.D.	0.0050	mg/kg	25 .
02182	Total Xylenes	1330-20-7	N.D.	0.015	mg/kg	25
02199	MTBE	1634-04-4	N.D.	0.050	mg/kg	25
	The analysis for volatiles was print methanol. The reporting lim					

		Laboratory	Chro	nicle		
CAT		_		Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01726	TPH-GRO - Soils	N. CA LUFT Gasoline Method	1	02/13/2002 23:00	Steven A Skiles	25
02160 01150	BTEX/MTBE GC VOA Soil Prep	SW-846 8021B SW-846 5035	1 1	02/13/2002 23:00 02/13/2002 01:11	Steven A Skiles Stephanie A Selis	25 n.a.





Lancaster Laboratories Sample No. SW 3772204

Collected:02/08/2002 08:42

by TM

Account Number: 10992

Submitted: 02/12/2002 09:05

Reported: 02/26/2002 at 16:16

Discard: 03/06/2002

C-8-S-6.5-020208

Grab

Soil

Chevron Products Company 6001 Bollinger Canyon Road

Building L PO Box 6004 San Ramon CA 94583-0904

Facility# 92960

GRRC

2416 Grove-Castro Valley T0600100318 C-8

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01726	TPH-GRO - Soils					
01727	TPH-GRO - Soils The reported concentration of T gasoline constituents eluting p start time. The analysis for volatiles was in methanol. The reporting lim	performed on a	(n-hexane) TPH-G	RO range preserved	mg/kg	25
02160	BTEX/MTBE					
02174 02177 02178 02182 02199	Benzene Toluene Ethylbenzene Total Xylenes MTBE The analysis for volatiles was in methanol. The reporting lim				mg/kg mg/kg mg/kg mg/kg mg/kg	25 25 25 25 25 25

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT		-		Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01726	TPH-GRO - Soils	N. CA LUFT Gasoline Method	1	02/13/2002 19:18	Stephanie A Selis	25
02160	BTEX/MTBE	SW-846 8021B	1	02/13/2002 19:18	Stephanie A Selis	25
01150	GC VOA Soil Prep	SW-846 5035	1	02/13/2002 01:04	Stephanie A Selis	n.a.





Lancaster Laboratories Sample No. 3772205

Collected:02/08/2002 08:50

by TM

Soil

Account Number: 10992

Submitted: 02/12/2002 09:05 Reported: 02/26/2002 at 16:16

Discard: 03/06/2002

C-8-S-10-020208

Grab

Chevron Products Company 6001 Bollinger Canyon Road Building L PO Box 6004

San Ramon CA 94583-0904

Facility# 92960

GRRC

2416 Grove-Castro Valley T0600100318 C-8

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01726	TPH-GRO - Soils					
01727	TPH-GRO - Soils The reported concentration of Tigasoline constituents eluting postart time. The analysis for volatiles was poin methanol. The reporting limit	cior to the C6	(n-hexane) TPH-G	RO range preserved	mg/kg	25
02160	BTEX/MTBE					
02174 02177 02178 02182 02199	Benzene Toluene Ethylbenzene Total Xylenes MTBE The analysis for volatiles was point methanol. The reporting limits				mg/kg mg/kg mg/kg mg/kg mg/kg	25 25 25 25 25 25

		Laboratory	Chro:	nicle		
CAT			Analysis			Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01726	TPH-GRO - Soils	N. CA LUFT Gasoline Method	1	02/14/2002 00:22	Stephanie A Selis	25
02160	BTEX/MTBE	SW-846 8021B	1	02/14/2002 00:22	Stephanie A Selis	25
01150	GC VOA Soil Prep	SW-846 5035	1	02/13/2002 01:05	Stephanie A Selis	n.a.





Lancaster Laboratories Sample No. SW 3772206

Collected:02/08/2002 09:00

by TM

Account Number: 10992

Submitted: 02/12/2002 09:05 Reported: 02/26/2002 at 16:16 Chevron Products Company 6001 Bollinger Canyon Road

Discard: 03/06/2002

Building L PO Box 6004

C-8-S-14.5-020208

Grab Soil

San Ramon CA 94583-0904

Facility# 92960

GRRC

2416 Grove-Castro Valley T0600100318 C-8

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01726	TPH-GRO - Soils					
01727	TPH-GRO - Soils The reported concentration of T gasoline constituents eluting p start time. The analysis for volatiles was in methanol. The reporting lim	rior to the C6 performed on a	(n-hexane) TPH-G sample which was	RO range preserved	mg/kg	25
02160	BTEX/MTBE					
02174 02177 02178 02182 02199	Benzene Toluene Ethylbenzene Total Xylenes MTBE The analysis for volatiles was in methanol. The reporting lim				mg/kg mg/kg mg/kg mg/kg mg/kg	25 25 25 25 25 25

		Laboratory	Chro:	nicle		Dilution
CAT	Analysis					
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01726	TPH-GRO - Soils	N. CA LUFT Gasoline Method	1	02/14/2002 00:59	Stephanie A Selis	25
02160	BTEX/MTBE	SW-846 8021B	1	02/14/2002 00:59	Stephanie A Selis	25
01150	GC VOA Soil Prep	SW-846 5035	1	02/13/2002 01:06	Stephanie A Selis	n.a.



Lancaster Laboratories Sample No. WW 3772217

Collected:02/08/2002 15:15

by TM

Account Number: 10992

Submitted: 02/12/2002 09:05

Chevron Products Company 6001 Bollinger Canyon Road

Reported: 02/26/2002 at 16:17

Building L PO Box 6004 San Ramon CA 94583-0904

Discard: 03/06/2002 B-7-W-020208

Grab

Water

Facility# 92960

GRRC

2416 Grove-Castro Valley T0600100318 B-7

GWB-7

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor				
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	cior to the C6	(n-hexane) TPH-G for the project.	RO range A LCS/LCSD	ug/l	1				
02159	BTEX, MTBE									
02161 02164 02166 02171 02172	161 Benzene 71-43-2 0.73 0.50 ug/l 164 Toluene 108-88-3 0.71 0.50 ug/l 166 Ethylbenzene 100-41-4 N.D. 2.0 ug/l 171 Total Xylenes 1330-20-7 3.9 1.5 ug/l									
01595	Oxygenates by 8260B					-				
02010 02011 02013 02014 02015	Methyl t-butyl ether di-Isopropyl ether Ethyl t-butyl ether t-Amyl methyl ether t-Butyl alcohol	1634-04-4 108-20-3 637-92-3 994-05-8 75-65-0	N.D. N.D. N.D. N.D. N.D.	0.5 0.5 0.5 0.5	ug/l ug/l ug/l ug/l ug/l	1 1 1 1				





Page 2 of 2

Lancaster Laboratories Sample No. WW 3772217

Collected:02/08/2002 15:15

by TM

Account Number: 10992

Submitted: 02/12/2002 09:05

Reported: 02/26/2002 at 16:17

Discard: 03/06/2002

B-7-W-020208

Grab

Water

Chevron Products Company 6001 Bollinger Canyon Road Building L PO Box 6004

San Ramon CA 94583-0904

Facility# 92960

GRRC

2416 Grove-Castro Valley T0600100318 B-7

GWB-7

Laboratory Chronicle

CAT	Analysis								
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor			
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	02/13/2002 16:16	Melissa-Ann S McAlpine	1			
02159	BTEX, MTBE	SW-846 8021B	1	02/13/2002 16:16	Melissa-Ann S McAlpine	1			
01595	Oxygenates by 8260B	SW-846 8260B	1	02/20/2002 00:24	Patricia L Nolt	1			
01146	GC VOA Water Prep	SW-846 5030B	1	02/13/2002 16:16	Melissa-Ann S McAlpine	n.a.			
01163	GC/MS VOA Water Prep	SW-846 5030B	1	02/20/2002 00:24	Patricia L Nolt	n.a.			



Lancaster Laboratories Sample No. 3772209

Collected:02/08/2002 11:36

by TM

Account Number: 10992

Submitted: 02/12/2002 09:05 Reported: 02/26/2002 at 16:17

Discard: 03/06/2002 B-8-W-020208

Grab

Water

Chevron Products Company 6001 Bollinger Canyon Road Building L PO Box 6004

San Ramon CA 94583-0904

As Received

Facility# 92960

GRRC

2416 Grove-Castro Valley T0600100318 B-8

GWB-8

				VP Vecetied		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters The reported concentration of Tigasoline constituents eluting properties that time. The vial submitted for volatile of analysis. Due to the volation appropriate for the laboratory receipt.	GRO range 2 at the time is not	ug/l	10		
02159	BTEX, MTBE					
02161	Benzene	71-43-2	25.	5.0	ug/l	10
02164	Toluene	108-88-3	15.	5.0	ug/l	10
02166	Ethylbenzene	100-41-4	390.	5.0	ug/l	10
02171	Total Xylenes	1330-20-7	490.	15.	ug/l	10
02172	Methyl tert-Butyl Ether	1634-04-4	N.D.	25.	ug/l	10
	The vial submitted for volatile of analysis. Due to the volati appropriate for the laboratory receipt. Due to the presence of an inter reporting limit was not attaine presence or concentration of the presence of this interferent.	le nature of t to adjust the ferent near it d for MTBE. T	he analytes, it spH at the time of spH at the time of spH at the time of the spH at the	is not f sample , the normal		
01595	Oxygenates by 8260B					
02010	Methyl t-butyl ether	1634-04-4	N.D.	0.5	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	0.5	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	0.5	ug/l	1
02014	t-Amyl methyl ether	994-05-8	N.D.	0.5	ug/l	1





Page 2 of 2

Lancaster Laboratories Sample No. WW 3772209

Collected: 02/08/2002 11:36

by TM

Account Number: 10992

Submitted: 02/12/2002 09:05 Reported: 02/26/2002 at 16:17

Discard: 03/06/2002

B-8-W-020208

Grab

Water

Chevron Products Company 6001 Bollinger Canyon Road Building L PO Box 6004

San Ramon CA 94583-0904

Facility# 92960

GRRC

2416 Grove-Castro Valley T0600100318 B-8

GWB-8

As Received Dilution CAT As Received Method Units Factor CAS Number Result Detection No. Analysis Name Limit 1 ug/l 5. t-Butyl alcohol 75-65-0 N.D. 02015

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT	Analysis							
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor		
01729	TPH-GRO - Waters	N. CA LUFT Gasoline	1	02/14/2002 00:15	Melissa-Ann S McAlpine	10		
02159	BTEX, MTBE	Method SW-846 8021B	1	02/14/2002 00:15	McAlpine Melissa-Ann S McAlpine	10		
01595	Oxygenates by 8260B	sw-846 8260B	1	02/19/2002 23:03	Patricia L Nolt	1		
01146	GC VOA Water Prep	SW-846 5030B	1	02/14/2002 00:15	Melissa-Ann S McAlpine	n.a.		
01163	GC/MS VOA Water Prep	SW-846 5030B	1	02/19/2002 23:03	Patricia L Nolt	n.a.		



Lancaster Laboratories Sample No. WW 3772213

Collected: 02/08/2002 13:40 by TM Account Number: 10992

Submitted: 02/12/2002 09:05 Chevron Products Company Reported: 02/26/2002 at 16:17 6001 Bollinger Canyon Road

Discard: 03/06/2002 Building L PO Box 6004 B-9-W-020208 Grab Water San Ramon CA 94583-0904

Facility# 92960 GRRC

2416 Grove-Castro Valley T0600100318 B-9

GWB-9

					As Received		5 . 1		
	CAT			As Received	Method		Dilution		
	No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor		
	01729	TPH-GRO - Waters							
	01730	TPH-GRO - Waters The reported concentration of TP gasoline constituents eluting pr start time. The vial submitted for volatile of analysis. Due to the volatil appropriate for the laboratory t receipt.	RO range at the time s not	ug/l	1				
	02159	BTEX, MTBE							
	02161	Benzene	71-43-2	N.D.	0.50	ug/l	1 .		
	02164	Toluene	108-88-3	N.D.	0.50	ug/l	1		
	02166	Ethylbenzene	100-41-4	N.D.	0.50	ug/l	1		
	02171	Total Xylenes	1330-20-7	N.D.	1.5	ug/l	1		
	02172	Methyl tert-Butyl Ether	1634-04-4	N.D.	2.5	ug/l	1		
		The vial submitted for volatile of analysis. Due to the volatil appropriate for the laboratory treceipt.	Le nature of th	ne analytes, it i	s not				
	01595	Oxygenates by 8260B							
	02010	Methyl t-butyl ether	1634-04-4	N.D.	0.5	ug/l	1		
	02011	di-Isopropyl ether	108-20-3	N.D.	0.5	ug/l	1		
	02013	Ethyl t-butyl ether	637-92-3	N.D.	0.5	ug/l	1		
	02014	t-Amyl methyl ether	994-05-8	N.D.	0.5	ug/l	1		
	02015	t-Butyl alcohol	75-65-0	N.D.	5.	ug/l	1		





Page 2 of 2

Lancaster Laboratories Sample No. WW 3772213

Collected:02/08/2002 13:40

by TM

Account Number: 10992

Submitted: 02/12/2002 09:05 Reported: 02/26/2002 at 16:17

Discard: 03/06/2002

B-9-W-020208

Grab

Water

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

Facility# 92960

GRRC

2416 Grove-Castro Valley T0600100318 B-9

GWB-9

Laboratory Chronicle

CAT		-	Analysis							
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor				
01729	TPH-GRO - Waters	N. CA LUFT Gasoline	1	02/13/2002 21:56	Melissa-Ann S	1				
02159	BTEX, MTBE	Method SW-846 8021B	1	02/13/2002 21:56	McAlpine Melissa-Ann S	1				
02159	BIEA, MIDE	5., 040 00215	-	00, 20, 2010	McAlpine					
01595	Oxygenates by 8260B	SW-846 8260B	1	02/19/2002 22:09	Patricia L Nolt	1				
01146	GC VOA Water Prep	SW-846 5030B	1	02/13/2002 21:56	Melissa-Ann S McAlpine	n.a.				
01163	GC/MS VOA Water Prep	SW-846 5030B	1	02/19/2002 22:09	Patricia L Nolt	n.a.				



Client Name: Chevron Products Company

Group Number: 796509

Reported: 02/26/02 at 04:18 PM

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 02043A51	Sample n	umber(s):	3772209,37	72213				
TPH-GRO - Waters	N.D.	50.	ug/l	93	94	76-126	1	30
Benzene	N.D.	.5	ug/l	111	111	80-118	0	30
Toluene	N.D.	.5	ug/l	111	111	82-119	0	30
Ethylbenzene	N.D.	.5	ug/l	110	110	81-119	1	30
Total Xylenes	N.D.	1.5	ug/l	110	112	82-120	2	30
Methyl tert-Butyl Ether	N.D.	2.5	ug/l	111	109	79-127	1	30
Batch number: 02043A53	Sample n	umber(s):	3772217					
TPH-GRO - Waters	N.D.	50	ug/l	108	107	76-126	0	30
Benzene	N.D.	.5	ug/l	105	111	80-118	5	30
Toluene	N.D.	.5	ug/l	99	103	82-119	4	30
Ethylbenzene	N.D.	.5	ug/l	103	110	81-119	7	30
Total Xylenes	N.D.	1.5	ug/l	105	111	82-120	5	30
Methyl tert-Butyl Ether	N.D.	2.5	ug/l	110	110	79-127	1	30
Batch number: 02044A31	Cample n	number(s):	3772211-3	772212.37	72214-377	2216		
TPH-GRO - Soils	N.D.	1.	mq/kq	81		75-117		
Benzene	N.D.	.005	mq/kq	108		84-132		
Toluene	N.D.	.005	mg/kg	109		88-116		
Ethylbenzene	N.D.	.005	mg/kg	108		87-127		
Total Xylenes	N.D.	,015	mg/kg	109		88-120		
MTBE	N.D.	.05	mg/kg	108		64-158		
	9 .1.		2772204 2	ממפפרי	72210			
Batch number: 02044A33		number(s):		93	72210	75-117		
TPH-GRO - Soils	N.D.	1.	mg/kg	93 109		84-132		
Benzene	N.D.	.005	mg/kg	109		88-116		
Toluene	N.D.	.005	mg/kg			87-127		-
Ethylbenzene	N.D.	.005	mg/kg	111 109	•	88-120		
Total Xylenes	N.D.	.015	mg/kg	99		64-158		
MTBE	N.D.	.05	mg/kg	99		04-130		
Batch number: V020461AB	-	number(s):				77 707		
Methyl t-butyl ether	N.D.	.5	ug/l	85		77-127		
di-Isopropyl ether	N.D.	.5	ug/l	93		74-125		
Ethyl t-butyl ether	N.D.	.5	ug/l	89		74-120		
t-Amyl methyl ether	N.D.	.5	ug/l	89		71-114		
t-Butyl alcohol	N.D.	5.	ug/l	93		59-139		
Batch number: V020501AA	Sample :	number(s):	3772217					
Methyl t-butyl ether	N.D.	.5	ug/l	95		77-127		
di-Isopropyl ether	N.D.	.5	ug/l	99		74-125		
Ethyl t-butyl ether	N.D.	.5	ug/l	94		74-120		
t-Amyl methyl ether	N.D.	.5	ug/l	95		71-114		
t-Butyl alcohol	N.D.	5.	ug/l	102		59-139		

Sample Matrix Quality Control

*- Outside of specification

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



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



Page 2 of 4

Client Name: Chevron Products Company Group Number: 796509

Reported: 02/26/02 at 04:18 PM

Reported: 02/26/02 at 04.	MS	MSD	MS/MSD		RPD	BKG	DUP	DUP	Dup RPD
Analysis Name	%REC	%REC	Limits	RPD	MAX	Conc	Conc	RPD	<u>Max</u>
Batch number: 02043A51	Sample	number	(s): 377220	9,37722	213				
TPH-GRO - Waters	98	99	74-132	1	30				
Benzene	113	116	77-131	3	20				
Toluene	115	116	80-128	2	30				
Ethylbenzene	114	115	76-132	1	30				
Total Xylenes	114	114	69-140	1	30				
Methyl tert-Butyl Ether	75	163*	61-144	19	30				
Batch number: 02043A53	Sample	number	(s): 377221	7					
TPH-GRO - Waters	129		74-132						
Benzene	110		77-131						
Toluene	107		80-128						
Ethylbenzene	115		76-132						
Total Xylenes	113		69-140						
Methyl tert-Butyl Ether	117		61-144						
Batch number: 02044A31	Sample	number	(s): 377221	1-3772	212,377	2214-37722	16		
TPH-GRO - Soils	64	68	44-116	6	30				
Benzene	116	125	56-142	8	30				
Toluene	94	99	66-120	5	30				
Ethylbenzene	103	108	66-131	5	30				
Total Xylenes	97	100	67-122	4	30				
MTBE	92	101	42-163	9	30				
Batch number: 02044A33	Sample	number	(s): 377220	4-3772	208,377	2210			
TPH-GRO - Soils	71	76	44-116	7	30				
Benzene	109	115	56-142	6	30				
Toluene	88	92	66-120	5	30				
Ethylbenzene	102	107	66-131	5	30		•		
Total Xylenes	93	97	67-122	5	30				
MTBE	135	144	42-163	7	30				
Batch number: V020461AB			r(s): 377220						
Methyl t-butyl ether	68*	68*	69-134	0	30				
di-Isopropyl ether	92	96	68-133	5	30				
Ethyl t-butyl ether	89	93	73-123	5	30				
t-Amyl methyl ether	89	94	69-118	6	30				
t-Butyl alcohol	105	111	51-148	6	30				
Batch number: V020501AA	Sample	e number	r(s): 377221						
Methyl t-butyl ether	(2)	(2)	69-134	2	30				
di-Isopropyl ether	91	88	68-133	3	30				
Ethyl t-butyl ether	95	93	73-123	2	30				
t-Amyl methyl ether	96	93	69-118	3	30				
t-Butyl alcohol	101	99	51-148	3	30				

Surrogate Quality Control

Analysis Name: TPH-GRO - Waters

- *- 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.





Page 3 of 4

Client Name: Chevron Products Company

Company

Group Number: 796509

Reported: 02/26/02 at 04:18 PM

Surrogate Quality Control

Batch numb	per: 02043A51	
	Trifluorotoluene-F	Trifluorotoluene-P
3772209	120	122
3772213	97	99
Blank	97	97
LCS		99
	108	
LCSD	109	98
MS	109	99
MSD	107	102
Limits:	67-135	71-130
	Name: TPH-GRO - Waters Der: 02043A53	
	Trifluorotoluene-F	Trifluorotoluene-P
3772217	93	92
Blank	101	96
LCS	103	95
LCSD	106	95
MS	108	95
Limits:	67-135	71-130
	Trifluorotoluene-F	Trifluorotoluene-P
3772211	74	95
3772212	78	98
3772214	79	99
3772215	73	93
3772216	86	105
Blank	81	106
LCS	90	107
MS	80	97
MSD	79	96
Limits:	61-127	68-122
Analysis 1	Name: TPH-GRO - Soils	
	ber: 02044A33	
	Trifluorotoluene-F	Trifluorotoluene-P
3772204	93	98
3772205	92	99
3772206	93	99
3772207	91	96
3772208	97	95
3772210	94	103
		109
Blank	100	111
LCS	113	
MS	93	102

*- Outside of specification

96

MSD

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

104

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



Analysis Report



Page 4 of 4

Client Name: Chevron Products Company

Reported: 02/26/02 at 04:18 PM

Group Number: 796509

Surrogate Quality Control

Limits:	61-127	68-122		
	Name: Oxygenates by 8260B Der: V020461AB			
	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
3772209	96	93	95	96
3772213	94	93	95	93
Blank	96	93	94	93
LCS	102	110	104	100
MS	105	112	106	102
MSD			105	100
Limits:	86-118	80-120	88-110	86-115
	Name: Oxygenates by 8260B ber: V020501AA			
Bacch num	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
3772217	96	93	96	97
Blank	96	93	94	93
LCS	94	93	95	94
MS	96	93	94	94
MSD	97	94	94	93
Limits:	86-118	80-120	88-110	86-115

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



^{*-} Outside of specification

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

Chevron California Region Analysis Request/Chain of Custody



Acct. #: 10992	For Lancaster Laboratories use only Sample #: 3112204-11	_scr#:_//60734	
-	·	,	

								Anal	yses R	equested				
Facility #: 9-2960			Matrix						ervatic	n Codes			tive Code	\$
Site Address: 2416 Grove WAY, C	ASTRO VALLE	Y, CA.	:		#		9	H				N = HNO ₃	T = Thiosu B = NaOH	
Chevron PM: Tom BAULS Lead	Consultant: <u>De l</u>	HA ENVIRON.	\prod	yρ			Sea Cea	# 0	1				O = Other	
Consultant/Office: Gettler-Rym R	wcho Cord	OVA, CA	atole S E S	ine	A.		3	POS	1			☐ J value reporti	-	مانسال س
Consultant Prj. Mgr.: Tany MIKACI			☐ Potable ☐ NPDES	Total Number of Containers	8260 🗆 8021	χ	Silica Gel Cleanup	ates mt6e/18/fetbe	_			Must meet low possible for 82		
Consultant Phone #: (916) 631-1300 Fax #: 631-1317				jo	99	윤)	္စ္ပါ	世代				8021 MTBE Con	firmation	
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Chevron California Region Analysis Request/Chain of Custody

Lancaster Laboratories Where quality is a science.					Ac	ct. #: _			For Lancaster Laboratories use only Sample #:						only	SCR#:	//	607	34											
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Chevron PM: 16M	BANKS Lead	Consultant: <u>//</u>	EHA ENVI	<u> </u>		9 S		ers	_		TPH 8015 MOD DRO Silica Gel Cleanup	~	5 Oxygenates Mt be 184 F156								☐ J value re	portir	ng needed							
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Disk								,																						



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

SAMPLE GROUP

The sample group for this submittal is 798562. Samples arrived at the laboratory on Thursday, February 28, 2002. The PO# for this group is 99011184 and the release number is BAUHS.

Client DescriptionLancaster Labs NumberSP-1-4-S-020226NASoil3780262

METHODOLOGY

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

1 COPY TO Chevron Products Company

Attn: Tony Mikacich

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

Respectfully Submitted,

Max E. Snavel Sr. Chemist



Lancaster Laboratories Sample No. 3780262

Collected: 02/26/2002 10:50 by TM

Account Number: 10992

Submitted: 02/28/2002 09:35

Reported: 03/11/2002 at 16:13

Discard: 03/19/2002

SP-1-4-S-020226

Soil NΑ

Chevron Products Company 6001 Bollinger Canyon Road Building L PO Box 6004

San Ramon CA 94583-0904

Facility# 92960

GRD

2416 Grove Way-Castro Val T0600100318 NA

CAT			As Received	As Received Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01655	Lead	7439-92-1	8.0	0.80	mg/kg	1
01726	TPH-GRO - Soils					
01727	TPH-GRO - Soils	n.a.	2.6	1.0	mg/kg	25
	The reported concentration of T	PH-GRO does not	t include MTBE or	other		
	gasoline constituents eluting prostart time. The analysis for volatiles was properting limits.	performed on a	sample which was	preserved		
02160	BTEX/MTBE					
02174	Benzene	71-43-2	N.D.	0.0050	mg/kg	25
02177	Toluene	108-88 - 3	N.D.	0.0050	mg/kg	25
02178	Ethylbenzene	100-41-4	N.D.	0.0050	mg/kg	25
02182	Total Xylenes	1330-20-7	N.D.	0.015	mg/kg	25
02199	MTBE	1634-04-4	N.D.	0.050	mg/kg	25
	The analysis for volatiles was in methanol. The reporting lim					

		Laboratory	Chro	nicle		
CAT		,		Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01655	Lead	SW-846 6010B	1	03/05/2002 05:45	Donna R Sackett	1
01726	TPH-GRO - Soils	N. CA LUFT Gasoline	1	03/02/2002 03:41	Steven A Skiles	25
02160	BTEX/MTBE	Method SW-846 8021B	1	03/02/2002 03:41	Steven A Skiles	25
01150	GC VOA Soil Prep	SW-846 5035	1	03/01/2002 09:10	Steven A Skiles	n.a.
05708	SW SW846 TCP Dinest	SW-846 3050B	1	03/04/2002 05:45	Liana C Jones	1



Page 2 of 2

Lancaster Laboratories Sample No. SW 3780262

Collected:02/26/2002 10:50 by TM

Submitted: 02/28/2002 09:35 Reported: 03/11/2002 at 16:13

Discard: 03/19/2002

SP-1-4-S-020226

NA

Soil

Account Number: 10992

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

Facility# 92960

GRD

2416 Grove Way-Castro Val T0600100318 NA



Client Name: Chevron Products Company

Group Number: 798562

Reported: 03/11/02 at 04:13 PM

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 02059A31C	Sample n	umber(s):	3780262					
TPH-GRO - Soils	N.D.	1.	mg/kg	B2		75-117		
Benzene	N.D.	.005	mg/kg	109		84-132		
Toluene	N.D.	.005	mg/kg	109		88-116		
Ethylbenzene	N.D.	.005	mg/kg	109		87-127		
Total Xylenes	N.D.	.015	mg/kg	108		88-120		
MTBE	N.D.	.05	mg/kg	101		64-158		
Batch number: 020635708001	Sample n	umber(s):	3780262					
Lead	N.D.	.82	mg/kg	95		86-109		

Sample Matrix Quality Control

	MS	MSD	MS/MSD		RPD	BKG	DUP	DUP	Dup RPD
Analysis Name	%REC	%REC	Limits	RPD	MAX	Conc	Conc	RPD	Max
Batch number: 02059A31C	Sample	number	(s): 378026	2					
TPH-GRO - Soils	62	67	44-116	6	30				
Benzene	113	118	56-142	5	30				
Toluene	86	91	66-120	5	30				
Ethylbenzene	94	99	66-131	5	30				
Total Xylenes	87	91	67-122	5	30				
MTBE	88	92	42-163	7	30				
Batch number: 020635708001	Sample	number	(s): 378026	2					
Lead	85	83	75-125	2	20	24.5	24.9	2 (1)	20

Surrogate Quality Control

Analysis Name: TPH-GRO - Soils

Batch number: 02059A31C

	Trifluorotoluene-F	Trifluorotoluene-P	
3780262	73	91	
Blank	81	107	
LCS	94	107	
MS	78	93	
MSD	78	94	
Limits:	61-127	68-122	

*- 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.



Chevron Region Analysis Request/Chain of Custody



Lancaster Laboratories Where quality is a science.				For Lancaster Laboratories use only Acc. #: 10999 Sample #: 3780262 SCR#:								<u></u>										
Vere quality is a science.							Γ				-	analy	/ses	Red	lues	ted			\neg			(
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Chevron PM: Tom BANKS 1 Consultant/Office: Gettler - RYAN	INC./METR	aucho Cord	0 <i>VA</i>										attod		icatio		1	- 1	1	☐ Must meet low	vest detecti	
Consultant Prj. Mgr.: TONY MIKAC	ich			1	☐ Potable☐ NPDES	8	5 K	28.				\$ 3	≛ ⊓		guantification					possible for 82		unds
Consultant Prj. Mgr.: Tony MIKAC Consultant Phone #: 916 631-1300	Fax #:	631-/3/	<u>7_</u>					%	1	ç		1D Extended Rng.	iss.					İ	ŀ	8021 MTBE Con ☐ Confirm MTBE		alene
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From-Gettler-Ryan Inc

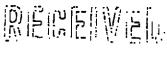
ANALYTICAL RESULTS

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



F ... 9 ----

GEHLER-RYAN INC. GENERAL CONTRACTOR

SAMPLE GROUP

The sample group for this submittal is 802112. Samples arrived at the laboratory on Friday, March 29, 2002. The PO# for this group is 99011184 and the release number is BAUHS.

Client Description

QA-T-020326 C-8-W-020326 NA Grab

Water Water Lancaster Labs Number

3796879 3796880

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,

St. Chemist



Lancaster Laboratories Sample No. WW 3796879

Collected:03/26/2002 00:00

Account Number: 10905

Submitted: 03/29/2002 09:10 Reported: 04/04/2002 at 21:11

Chevron Products Company 6001 Bollinger Canyon Road

Discard: 05/05/2002

Building L PO Box 6004 San Ramon CA 94583-0904

QA-T-020326

Facility# 92960

Water

GRD

Job# 386365

2416 GROVE WAY-CASTRO VAL TO600100318 QA

CAT No.	Analysis Name	CAS Number	As Recoived Result	As Received Method Detection Limit	Units	Dilution Factor
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters The reported concentration of gasoline constituents eluting start time.	n.a. TPH-GRO does not prior to the C6	N.D. include MTBE or (n-hexane) TPH-GR	50. other O range	ug/l	1
08214	BTEX, MTBE (8021)					
00776 00777 00776 00779 00780	Benzene Toluene Ethylbenzene Total Xylenes Methyl text-Butyl Ether	71-43-2 108-88+3 100-41-4 1330-20-7 1634-04-4	N.D. N.D. N.D. N.D.	0.50 0.50 0.50 1.5 2.5	ug/1 ug/1 ug/1 ug/1 ug/1	1 1 1 1

State of California Lab Certification No. 2116

Laboratory Chronicle

No.	Analysia Name	Method	Analysis Trial# Date and Time Analyst 1 04/02/2002 04:20		Analyst	Dilution
01729	TPH-GRO - Waters	N. CA LUFT Gasoline			Linda C Pape	Factor
08214 01146	BTEX, MTBE (8021) GC VOA Water Frep	Method SW-846 8021B SW-846 5030B	1	04/02/2002 04:20 04/02/2002 04:20	Linda C Pape Linda C Pape	1 n.a.



Lancaster Laboratories Sample No. WW 3796880

Collected:03/26/2002 14:10

by TC

Account Number: 10905

Submitted: 03/29/2002 09:10 Reported: 04/04/2002 at 21:11

Discard: 05/05/2002

Water

Chevron Products Company 6001 Bollinger Canyon Road

Building L PO Box 6004 San Ramon CA 94583-0904

As Received

Facility# 92960

C-8-W-020326

Grab Job# 386365

GRD

2416 GROVE WAY-CASTRO VAL T0600100318 C-8

C8326

CAT				400 100-00 186G		
No.	Analysis Name		As Received	Method		Dilution
	STORY NEEDS	CAS Number	Result	Detection Limit	Units	Factor
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters The reported concentration of T gasoline constituents eluting p start time. Due to the nature of the sample above the range of specification	rior to the C6 matrix, the s	(n-hexane) TPH-G	RO range	ug/l	5
08214	BTEX, MTBE (8021)					
00776	Benzene	71-43-2	380.			
00777	Toluene	105-86-3	380. 130.	0.50	ug/l	2
00778	Ethylbenzene	100-41-4	120.	0.50	ug/l	2
00779	Total Xylenes	1330-20-7	- ••	0.50	ug/1	2
00780	Methyl tert-Butyl Ether	1634~04-4	530.	1.5	ug/l	2
	Due to the presence of an income	1034-04-4	N.D. #	25.	Ug/l	2
	Due to the presence of an inter: reporting limit was not attained presence or concentration of the presence of this interferent. MTBE	i for the compa	und listed below	The		
01595	Oxygenates by 8260B					
02010	Methyl r-butyl ether	1634-04-4	N.D.	•		
02011	di-Isopropyl ether	108-20-3	N.D.	2.	ug/l	1
02013	Ethyl t-butyl other	637-92-3	N.D.	2. 2.	ug/1	1
	t-Amyl methyl ether	994-05-8	N.D.	= -	ug/l	1
02015	t-Butyl alcohol	75-65-0	N.D.	2.	ug/l	1
	_	40 -0	N.U.	100.	ug/1	1



Page 2 of 2

F-146

Lancaster Laboratories Sample No. 3796880

From-Gettier-Ryan Inc

Collected:03/26/2002 14:10

by TC

Account Number: 10905

Submitted: 03/29/2002 09:10 Reported: 04/04/2002 at 21:11

Discard: 05/05/2002

C-8-W-020326

Grab

Water

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

Facility# 92960

Job# 386365

GRD

2416 GROVE WAY-CASTRO VAL T0600100318 C-8

C8326

Laboratory Chronicle

CAT		nanora cor A	Cnro	uicte		
No. 01729	Analysis Namo TPH-GRO - Waters	Method N. CA LUFT Gasoline	Trial#	Analysis Date and Time 04/02/2002 20:54	Analyet Melissa-Ann S	Dilution Factor
08214	BTEX, MTBE (8021)	Method SW-846 8021B	1	04/02/2002 16:30	McAlpine Mclissa-Ann S	2
01595 01146	Oxygenates by 8260B GC VOA Water Prep	SW-846 8260B SW-846 5030B	1 1	04/02/2002 14:21 04/02/2002 16:30	McAlpine Roy R Mellott Jr Melissa-Ann S	ı n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	04/02/2002 14:21	McAlpine Roy R Mellott Jr	n.a.



Client Name: Chevron Products Company

Reported: 04/04/02 at 09:11 PM

Group Number: 802112

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report <u>Uni</u> ts	LCS %REC	LCSD 1REC	LCS/LCSD	RIPD	RFD Max
Batch number: 02091A51A Benzene Toluene Ethylbenzene Total Xylenes Methyl tert-Butyl Ether TPH-GRO - Waters Batch number: 02091A51B Benzene Toluene Ethylbenzene Total Xylenes Methyl tert-Butyl Ether	N.D. N.D. N.D. N.D. N.D.	umber(s): 0.5 0.5 1.5 2.5 30. umber(s): 0.5 0.5 0.5	ug/1 ug/1 ug/1 ug/1 ug/1 ug/1 ug/1 3796880 ug/1 ug/1 ug/1 ug/1	106 105 105 105 111 89		80-116 82-119 81-119 82-120 79-127 76-126 80-118 82-119 81-119 82-120		
TPM-GRO - Waters Batch number: V020911AB Methyl t-butyl ether di-Isopropyl ether Ethyl t-butyl ether t-Amyl methyl ether t-Butyl alcohol	N.D. Sample nu N.D. N.D. N.D. N.D.	2.5 50. mber(s):: 2. 2. 2. 2. 100.	ug/1 ug/1 3796880 ug/1 ug/1 ug/1 ug/1	111 89 101 97 99 99		79-127 76-126 77-127 74-125 74-120 71-114 59-139		

Sample Matrix Quality Control

Batch number: 02091A51A Sample number(s): Benzene 113 114 77-1 Toluene 113 114 80-1 Ethylbenzene 112 113 76-1 Total Xylenes 111 112 76-1 Methyl tert-Butyl Ether 115 114 61-1 TPH-GRO - Waters 97 96 74-1 Batch number: 02091A51B Sample number(s): 3 Benzene 113 114 77-1 Total Xylenes 113 114 80-1 Total Xylenes 112 113 76-1	3796879 -131 1 -128 1 -132 1 -132 1 -144 1	30 30 30 30 30 30 30	•
Benzene 113 114 77-1 Toluene 113 114 80-1 Ethylbenzene 112 113 76-1 Total Xylenes 111 112 76-1 Methyl tert-Butyl Ether 115 114 61-1 TPH-GRO - Waters 97 96 74-1 Batch number: 02091A51B Sample number(s): 3 Benzene 113 114 77-1 Toluene 113 114 80-1 Ethylbenzene 112 113 76-1 Total Xylenes 113	-131 1 -128 1 -132 1 -132 1 -144 1	30 30 30 30 30	·
Denzene			
Methyl tert-Butyl Ether 115 114 61-17 TPH-GRO - Waters 97 96 74-2: Batch number: V020911AB Sample number(s): 3 Methyl t-butyl ether 99 97 69-13 Ethyl t-butyl ether 99 99 68-13 Ethyl t-butyl ether 101 100 73-12	131 1 3 128 1 3 132 1 3 132 1 3 144 1 3 132 1 3 3796880	30 30 30 30 30 30	

*- 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.





Page 2 of 2

Client Name: Chevron Products Company

Reported: 04/04/02 at 09:11 PM

Group Number: 802112

Sample Matrix Quality Control

	MS	MSD	ms/msd		RPD	BKG	DUP	DUP	Dup
Analysis Name t-Amyl methyl ether t-Butyl alcohol	1REC 98 96	*REC 98 99	<u>Limits</u> 69-118 51-148	<u>RPD</u> 0	30 30	Conc	Conc	RPD	RPD Max

Surrogate Quality Control

Analysis Name: TPH-GRO - Waters

Batch number: 02091A51A

	Trifluorotoluene-F	Trifluorotoluene-P
3796879	101	98
Blank	102	97
LCS	112	99
MS	102	99
MSD	100	99
Limits:	67-135	71-130

Analysis Name: TPH-GRO - Waters

Batch number: 02091A51B

	Trifluorotoluene-F	Trifluorotoluene-P	
3796880	256*	111	
Blank	100	98	
LCS	112	99	
MS	102	99	
MSD	100	99	
Limits:	67-135	71~130	

Analysis Name: Oxygenates by 8260m

Batch number: V020911AB

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d\$	4-Bromofluorobenzens			
3796880 Blank LCS MS MSD	99 103 105 104 100	108 110 108 109 106	105 102 101 102 101	103 98 100 97 99			
Limits:	86-118	80-120	88-110	86-116			

*- 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.



Cnevron California Region Analysis Request/Chain of Cust

41	Lancaster Laboratories Where quality is a science.
W?	Where quality is a science.

180305°	400
. %	
240.70	

Accl. #: 10905 Sample #: 3796879-80

SCR#:

2:60-			1			Ana	lyses	Reque	stad				
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24 hour 4 day 5 day	1 / 1/ 1/	20 Un	~	Ø_	-28		430	ROCE	14: J	DON.	148	Date 3-28-07	Time -
Data Package Options (please circle II required)	Relinquished by:				_Da	le	Time		ved by:			Date	7.002/008
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