



February 13, 1995

Chevron U.S.A. Products Company 6001 Bollinger Canyon Rd., Bldg. L P.O. Box 5004 San Ramon, CA 94583-0804

Site Assessment & Remediation Group Phone (510) 842-9500

STID 39/0

DA

Ms. Juliet Shin Alameda County Health Care Services Department of Environmental Health 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577

Re: Former Chevron Service Station #9-0100 2428 Central Avenue, Alameda, CA

Dear Ms. Shin:

Enclosed is the Quarterly Ground Water Sampling report dated January 30, 1995, prepared by our consultant Sierra Environmental Services for the above referenced site. As indicated in the report, ground water samples collected were analyzed for total petroleum hydrocarbons as gasoline (TPH-G) and BTEX. Dissolved concentrations of hydrocarbons observed in the monitor wells during the past quarter are consistent with previous observations at the site. Depth to ground water was measured at approximately 6.6 to 7.1 feet below grade and the direction of flow is to the northwest.

Chevron will monitor and sample all wells at this site for one additional quarter to develop a baseline trend of hydrocarbon concentrations in ground water. At the conclusion of one year of monitoring and sampling, we will evaluate appropriate next actions.

If you have any questions or comments, please do not hesitate to contact me at (510) 842-8134.

Sincerely,

CHEVRON U.S.A. PRODUCTS COMPANY

Mark A. Miller

Site Assessment and Remediation Engineer

Enclosure

cc: Ms. B.C. Owen

Mr. Robert Stahl Stahl-Wooldridge Investment Properties 2428 Central Avenue Alameda, CA 94501 Page 2 February 13, 1995 Former SS#9-0100

> Mr. Carl A. Pendleton Vice President Northern California Special Assets Group #1415 Bank of America, NT & SA 50 California Street, Suite 740 P.O. Box 37000 San Francisco, CA 94137

Kent W. Peters, Asset Manager Bank of America, NT & SA Department 4242 333 South Beaudry Avenue, 21st Floor Los Angeles, CA 90017

File: 9-0100 QM3

Environmental Services

January 30, 1995

Mark Miller Chevron USA Products Company P.O. Box 5004 San Ramon, CA 94583

Re:

Former Chevron Service Station #9-0100

2428 Central Avenue Alameda, California SES Project #1-381-04

Dear Mr. Miller:

This report presents the results of the quarterly ground water sampling for the fourth quarter of 1994 at Chevron Service Station #9-0100, located at 2428 Central Avenue in Alameda, California. Three wells, MW-1, MW-2 and MW-3 were sampled (Figure 1).

On December 16, 1994, SES personnel visited the site. Water level measurements were collected in all site wells and all wells were checked for the presence of free-phase hydrocarbons. Free-phase hydrocarbons were not present in any of the site wells. Water level data are shown in Table 1 and ground water elevation contours are included on Figure 1.

The ground water samples were collected on December 16, 1994 in accordance with SES Standard Operating Procedure - Ground Water Sampling (attached). The field water sampling forms for this event are inleuded. All analyses were performed by Superior Precision Analytical, Inc. of San Francisco, California. Analytic results for ground water are presented in Table 1. The chain of custody document and laboratory analytic reports are attached. SES is not responsible for laboratory omissions or errors.

Thank you for allowing us to provide services to Chevron. Please call if you have any questions.

Sincerely,

Sierra Environmental Services

Richard E. (Rick) Hilton Staff Environmental Scientist

Chris J. Bramer

Professional Engineer #C48846

REH/CJB/lmo 38104QM.NO4

Attachments

Figure Table

SES Standard Operating Procedure Field Water Sampling Forms

Chain of Custody Document and Laboratory Analytic Reports



SIERRA

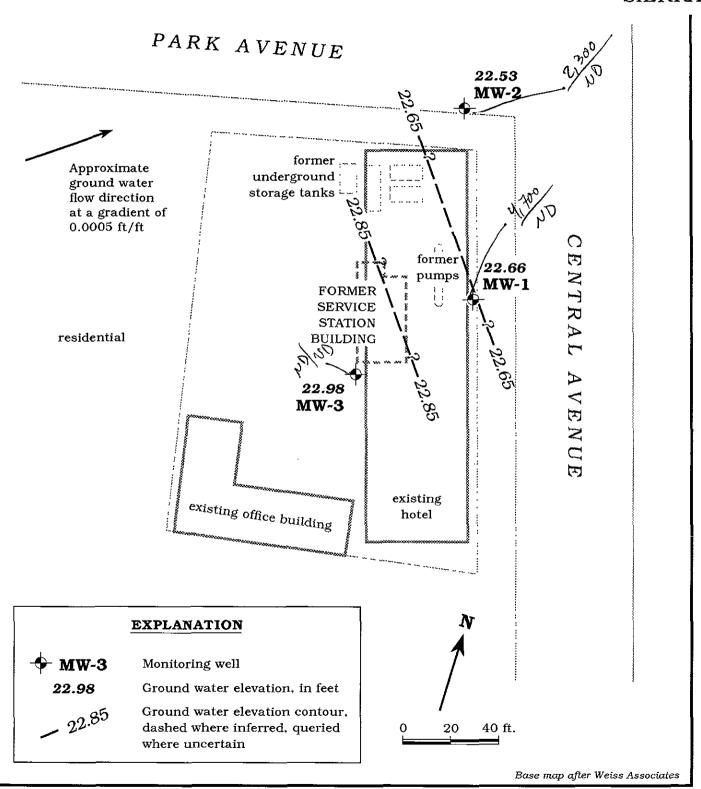


Figure 1. Monitoring Well Locations and Ground Water Elevation Contour Map - December 16, 1994 - Former Chevron Service Station #9-0100, 2428 Central Avenue, Alameda, California

1-381-04 1/13/95



Table 1. Water Level Data and Ground Water Analytic Results - Former Chevron Service Station #9-0100, 2428 Central Avenue, Alameda, California

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness*	Analytic Method	TPPH(G)	В	T pph	E	x
100 (11)	Date	(1t)	(11151)	(ft)	Wedlod			ppi		
MW-1/	3/10/94	6.79	22.44	0	8015/8020 ^{1,2}	7,400	120	120	33	72
29.23	6/21/94	7.74	21.49	0	8015/8020	5,300	140	60	21	43
	9/26/94	8.94	20.29	0	8015/8020	9,500	<250 ⁵	<250 ⁵	<250 ⁵	<250 ⁵
	12/16/94	6.57	22.66	0	8015/8020	4,700	<0.5	46	15	48
/W-2/	3/10/94	6.94	22.24	0	8015/8020 ^{2,3}	6,400	<5	64	58	17
29.18	6/21/94	7.89	21.29	0	8015/8020	1,800	23	12	6.9	32
	9/26/94	8.98	20.20	0	8015/8020	8,400	<100 ⁵	<1005	<100 ⁵	<1005
	12/16/94	6.65	22.53	0	8015/8020	2,300	<0.5	29	8.9	33
MW-3/	3/10/94	7.30	22.79	0	8015/80202,4	<50	< 0.5	<0.5	<0.5	<0.5
30.09	6/21/94	8.53	21.56	0	8015/8020	<50	< 0.5	<0.5	< 0.5	<0.5
	9/26/94	9.80	20.29	0	8015/8020	<50	< 0.5	< 0.5	< 0.5	< 0.5
	12/16/94	7.11	22.98	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
Trip Blank	3/10/94				8015/8020	<50	<0.5	0.7	< 0.5	<0.5
rb-LB	6/21/94				8015/8020	<50	< 0.5	< 0.5	< 0.5	<0.5
	9/26/94				8015/8020	<50	< 0.5	<0.5	<0.5	<0.5
	12/16/94	~~~			8015/8020	<50	<0.5	< 0.5	<0.5	<0.5



Table 1. Water Level Data and Ground Water Analytic Results - Former Chevron Service Station #9-0100, 2428 Central Avenue, Alameda, California (continued)

EXPLANATION:

DTW = Depth to water

TOC = Top of casing elevation

GWE = Ground water elevation

msl = Measurements referenced relative to mean sea level

TPPH(G) = Total Purgeable Petroleum Hydrocarbons as Gasoline

TPH(D) = Total Petroleum Hydrocarbons as Diesel

B = Benzene

T = Toluene

E = Ethylbenzene

X = Xylenes

EDB = Ethylene Dibromide

ppb = Parts per billion

--- = Not analyzed/Not applicable

ANALYTIC METHODS:

8015 = EPA Method 8015 for TPPH(G)

8020 = EPA Method 8020 for BTEX

NOTES:

March 10, 1994 water level data and groundwater analytic results were compiled from the Subsurface Investigation Report prepared for Chevron by Weiss Associates, April 13, 1994.

- Product thickness was measured on and after June 21,1994 with a MMC Flexi-Dip interface probe.
- TPH(D) was also analyzed and detected at 840 ppb. However, chromatogram does not match typical diesel pattern.
- Organic lead and EDB were also analyzed but not detected at detection limts of 4 and 0.02 ppb, respectively.
- ³ TPH(D) was also analyzed and detected at 920 ppb. However, chromatogram does not match typical diesel pattern.
- ⁴ TPH(D) was also analyzed but not detected at detection limits of 50 ppb.
- Detection limits raised due to the dilution required by a high amount of foaming in the sample.

38104T.WLG



SES STANDARD OPERATING PROCEDURE GROUND WATER SAMPLING

The following describes sampling procedures used by SES field personnel to collect and handle ground water samples. Before samples are collected, careful consideration is given to the type of analysis to be performed so that precautions are taken to prevent loss of volatile components or contamination of the sample, and to preserve the sample for subsequent analysis. Wells will be sampled no less than 24 hours after well development. Collection methods specific to ground water sampling are presented below.

Prior to sampling, each well is checked for the presence of free-phase hydrocarbons using an MMC flexi-dip interface probe. Product thickness (measured to the nearest 0.01 foot) is noted on the sampling form. Water level measurements are also made using either a water level meter or the interface probe. The water level measurements are also noted on the sampling form.

Prior to sampling, each well is purged of a minimum of three well casing volumes of water using a steam-cleaned PVC bailer, or a pre-cleaned pump. Temperature, pH and electrical conductivity are measured at least three times during purging. Purging is continued until these parameters have stabilized (i.e., changes in temperature, pH or conductivity do not exceed ±0.5°F, 0.1 or 5%, respectively).

The purge water is taken to Chevron's Richmond Refinery for disposal.

Ground water samples are collected from the wells with Chevron designated disposable bailers. The water samples are decanted into the appropriate container for the analysis to be performed. Prepreserved sample containers may be used or the analytic laboratory may add preservative to the sample upon arrival. Duplicate samples are collected from each well as a back-up sample and/or to provide quality control. The samples are labeled to include the project number, sample ID, date, preservative, and the field person's initials. The samples are placed in polyethylene bags and in an ice chest (maintained at 4°C) for transport under chain of custody to the laboratory.

The chain of custody form includes the project number, analysis requested, sample ID, date analysis and the SES field person's name. The form is signed and dated (with the transfer time) by each person who yields or receives the samples beginning with the field personnel and ending with the laboratory personnel.

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



Well Number 10	enversions as in ft or col. in
Sample Point Location/Description Depth to Water (statie) Depth to Water (statie) Depth (sounded) Initial height of water in casing Volume Sampled With Pump Purged With Pump Pumped or Bailed Dry? Water level at sampling Percent Recovery Well Depth (sounded) Formulas/Co Fallons Fallons Purged With Pump Purged With Disp Borlet V. casing = 0 V. casi	enversions as in ft or col. in
Depth to Water (statie)	s in ft er col. in ft m²h 0.163 gal/ft 0.267 gal/ft 0.653 gal/ft 0.826 gal/ft 1.47 gal/ft 2.61 gal/ft
Initial height of water in casing Volume gallons r = well radiu	s in ft er col. in ft m²h 0.163 gal/ft 0.267 gal/ft 0.653 gal/ft 0.826 gal/ft 1.47 gal/ft 2.61 gal/ft
Purged With Pump Pumped or Bailed Dry? Yes No Time After gallons Water level at sampling Percent Recovery Purge Time Purge Volume Cumulative (gal.) Purge Time Purge Volume (gal.) Start Stop (gal.) pH Temp (°C) Measurement x SAMPLES COLLECTED Time Total volume purged (gal.) Water color Odor Description of sediments or material in sample: Additional Comments:	nr ² h 0.163 gal/ft 1.367 gal/ft 0.653 gal/ft 0.826 gal/ft 1.47 gal/ft 2.61 gal/ft
Water level at sampling Percent Recovery V, casing = C V, s casing = 1 V, casing = 2 CHEMICAL DATA Purge Time Purge Volume Cumulative (gal.) pH Temp (°C) Measurement x	0.163 gal/ft 0.267 gal/ft 0.653 gal/ft 0.826 gal/ft 1.47 gal/ft 2.61 gal/ft
Water level at sampling Percent Recovery V, casing = C V, s casing = 1 V, casing = 2 CHEMICAL DATA Purge Time Purge Volume Cumulative (gal.) pH Temp (°C) Measurement x	0.367 gal/ft 0.653 gal/ft 0.826 gal/ft 1.47 gal/ft 2.61 gal/ft uctance
Water color Odor Description of sediments or material in sample: Vist casting = Vist casting = 1 Vist casting = 2 Vist	0.826 gal/ft 1.47 gal/ft 2.61 gal/ft uctance
Purge Time Purge Volume (gal.) pH Temp (°C) Specific Conductive (gal.) pH Temp (°C) Measurement x SAMPLES COLLECTED Time Total volume purged (gal.) Odor Description of sediments or material in samples. Additional Comments:	
SAMPLES COLLECTED Time Total volume purged (gal.) Water color Odor Description of sediments or material in sample: Additional Comments:	umhos/cm
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Water color Odor Description of sediments or material in sample: Additional Comments:	
Water color Odor Description of sediments or material in sample: Additional Comments:	
Water color Odor Description of sediments or material in sample: Additional Comments:	
Water color Odor Description of sediments or material in sample: Additional Comments:	
Sample # of Container Filtered Preservative Refrig. Lab ID Cont. Type (size. u) (type) (Y/N) (Init) F	Analysis Requested
	S-/BTEX



Job Name	418 Centr	al Are Alama	તલ	Job Numb	er <u>1-381-</u>	04	Sampler 1	-,L,	
_	-]		Date10	-116/94		Well Diameter		
Sample Point Location/Description (1) - side Central Aue in planter V								pec.) <u>25</u>	
Depth to Water (static) 6.57 Well Depth (sounded)									
		in casing 18	-		,00.			/Conversions adjus in ft	
Volume to	h = ht of	water col. in ft							
Purged With Pumo Sampled With Diso Couler 7.48 gal/ft ²									
Pumped or Bailed Dry? Yes No After gallons									
			• •	Per			V, casin	g = 0.653 gal/ft	
water sever	at sampm					• 7		ng = 0.826 gal/ft g = 1.47 gal/ft	
OTTONIOAI	DATA						V. casin	g = 2.61 gal/ft	
CHEMICAL	DAIA	· - 							
Purge Time Purge Volume			Cumulative (gal.)	pH	Temp-{°C}		nductance		
Start	Stop	(gal.)	'				Measurement	x umhos/cm	
1834	1836	 		<u> </u>	10.2	60.0	320		
ļ	1838	7		9	10.2	60.5	410		
- 	1840	1 2		//	10.1	60.5	380		
				<u> </u>					
						<u></u>		<u> </u>	
SAMPLES	COLLECTE	ED Time	1850	Tot	al volume p	urged (gal)	9)	•	
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				sample: <u>ligh</u>					
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Additional	Comments	7 100	/ /1 \	CI clue	<i>το</i> φ	tterve e	ne.		
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Sample ID	# of Cont.	Container Type	Filter (size.	3	rvative	Refrig. (Y/N)	Lab (Init)	Analysis	
inw-1	2)	ISIZE.		,pe) ナナ	<u> </u>	SPA	Requested	
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		•							
—									
						 			
				<u> </u>			l.,		
Container T	ype Codes:	1 = 40 ml	clear \	VOA/Tellon se	pta; 2 = E	Brown glass,	tellon lined ca	p (specify size):	
		3 = Clear gla	ass/tefl	lon lined cap (s	pecify size): 4	= Polyethyle	ne/polyethylene	ap (specify size):	
		J - Outci _				. o = Outer			



Job NameJ	1478 Cruto	ul Are Alame	<u>ાલ</u>	Job Number		•	Sampler					
Well Numb	er <u>MW</u>	1-2		Date 12,	Date 12/16/94 Well Diameter 2							
Sample Poi	nt Location	n/Description	n <u>PARK</u>	Ave Near Corner of Control Well Depth (spec.) 25								
Initial height Volume to be Purged With Pumped or	nt of water be purged h <u>Pump</u> Bailed Dry at samplin	in casing S	<u>X</u> No	Volume 2 & G Sampled Wi Time	Formulas/Cor r = well radius h = ht of water vol. in cyl. = \(\tau_{\text{c}}\) ampled With \(\text{Disp} \) \(\text{Cor} \) ime \(\text{After} \) gallons V_{\text{c}} casing = 0 V_{\text{c}} casing = 0							
Purg	e Time	Purge Vo	lume	Cumulative	<u> </u>	F	Specific Co	nductance				
Start				(gal.)	pН	Temp (*C)	Measurement					
1750	1752	3	3		10.1	57,2	910					
 	1754 3		Ç	9.9	59.1	920						
	1756 3		9	9.8	62.6	900						
								•				
Water color Description	Clean of sedime	nts or mater	ial in sa	Odor mple: <u>med .</u>	· Lych	urged (gal.) _ ccdom						
Sample ID	# of Container Filtered Cont. Type (size, u			 		Refrig. (Y/N)						
mw-2			1401		9	SPA	G-/BTEX					
Container T	ype Codes:	1 = 40 ml = 3 = Clear gla	clear VO	DA/Teflon sep	ta; 2 = E	rown glass/	teflon lined cap	(specify size):				



Job Name	1418 Cent	ral Are Alam	دراح	Job Number	<u> 1-381-</u>	04_	Sampler	· <u>L</u> .				
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Volume to				· · · · · · · · · · · · · · · · · · ·			vol. in cyl 7.48 gal/	L = m²h				
					-		V. castri	= 0.163 gal/ft				
•		ry? Yes	-				17°	g = 0.367 gal/ft g = 0.653 gal/ft				
Water level	at sampli	Ing	····	Perce	ent Recove	ry	- V ₄₅ casir	ug = 0.826 gal/ft				
							V, casin	g = 1.47 gal/ft g = 2.61 gal/ft				
CHEMICAL	L DATA	•										
Purg	e Time	Purge Vo	olume	Cumulative		6	Specific Conductance					
Start	Stop	gal.		(gal.)	pН	Temp (°C)	Measurement					
1722		3		3	18.4	58.9	5)0					
	1726	. 3		3 e6	10.3	GILL	560					
	1728			9	10.3	62.0	570					
	<u> </u>					<u> </u>	6					
SAMPLES	COLLECT	ED Time_	<u> </u>	Total	volume pr	urged (gal.)	<u> </u>					
Water color	- Clec	<u></u>										
Description	of sedim	ents or mater	ial in s	ample: light	TAN							
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Container T	ype Codes	: 1 = 40 ml	clear \	OA/Tellon sept	a: 2 = B	rown glass,	tellon lined cap	p (specify size)				

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Chevron U.S.A. In P.O. BOX 5004 San Ramon, CA 945 FAX (415)842—95	Con Con	Fao seultant f seultant h Address_	Project Hui	mborSIBOX	9-010 28 Centro 1-381- ERRA ENV 2546 MA ED MORAI 70-1280	VIRON NRTIN	IMENT	CA	SERV 945	ICES 53		Laborale	Collecton Data	Phon thum thum thum thum thum thum thum thum thum) _Y •) & SP4	19ら f f の計を	uc n 613/	7)W	ER	
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A member of ESSCON Environmental Support Service Consortium

Sierra Environmental P.O. Box 2546 Martinez, CA 94553 Date: December 27, 1994

Attn: ED MORALES

Laboratory Number

: 80297

Project Number/Name : 1-381-04

This report has been reviewed and approved for release.

Senior Chemist Account Manager



Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

Sierra Environmental Attn: ED MORALES Project 1-381-04

Reported on December 27, 1994

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LAB #	Sample ID	Sampled	Analyzed	Matrix
80297-01	TB-LB	12/16/94	12/22/94	Water
80297-02	MW-3	12/16/94	12/22/94	Water
80297-03	MW-2	12/16/94	12/22/94	Water
80297-04	MW-1	12/16/94	12/22/94	Water

RESULTS OF ANALYSIS

Laboratory Number:	80297-01	80297-02	80297-03	80297-04
Gasoline_Range	ND<50	ND<50	2300	4700
Benzene	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Toluene	ND<0.5	ND<0.5	29	46
Ethyl Benzene	ND<0.5	ND<0.5	8.9	15
Total Xylenes	ND<0.5	ND<0.5	33	48
Concentration:	ug/L	ug/L	ug/L	ug/L

Page 1 of 2

Certified Laboratories -



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CERTIFICATE OF ANALYSIS

TOTAL PETROLEUM HYDROCARBONS

QA/QC Information Laboratory Number: 80297

NA - Analysis NOT required

ND - Not Detected above quantitation limit

Matrix: Water

Analyte	Spike Recovery	RPD	Control Limits	
Gasoline Range	107/107	0	65-135	
Benzene	108/108	0	65-135	
Toluene	114/114	0	65-135	
Ethyl Benzene	114/114	0	65-135	
Total Xylenes	112/111	1	65-135	

Senior Chemist Account Manager

Page 2 of 2

Certified Laboratories -