



August 25, 1994

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

Marketing – Northwest Region Phone 510 842 9500

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

Re: Chevron Service Station #9-2506

2630 Broadway, Oakland, CA

Dear Ms. Eberle:

Enclosed is the quarterly Ground Water Sampling report dated July 15, 1994, prepared by our consultant Sierra Environmental Services for the above referenced site. Ground water samples collected were analyzed for total petroleum hydrocarbons as gasoline and BTEX. Dissolved concentrations of these constituents observed during this sampling event are consistent with historical results. Depth to ground water was measured at approximately 5.6 to 9.9 feet below grade and the direction of flow is to the north.

Our consultant, RESNA Industries, has recently installed the additional ground water monitor wells as proposed in our work plan of November 18, 1993. The report documenting field activities will be forwarded to your office shortly.

Chevron will continue to monitor and sample all wells at this site and report findings on a quarterly basis.

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:

Mr. Kevin Graves, RWQCB - Bay Area

Mr. S.A. Willer

File: 9-2506 QM4





July 15, 1994

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

Re:

Chevron Service Station #9-2506

2630 Broadway Oakland, California SES Project #1-364-04

Dear Mr. Miller:

This report presents the results of the quarterly ground water sampling at Chevron Service Station #9-2506, located at 2630 Broadway in Oakland, California. Eight wells, B-1 through B-8, were sampled (Figure 1).

On June 10, 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 checked. 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 June 10, 1994 in accordance with SES Standard Operating Procedure - Ground Water Sampling (attached). The field water sampling forms for this event are included. 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,

Argy Metta Staff Geologis

Chris J. Bramer

Sierra Environmental Services

Professional Engineer #C48846

AJM/CJB/lmo 36404QM.JL4

cc: Sheldon Nelson, CRTC

Attachments

Figure Table

SES Standard Operating Procedure Field Water Sampling Forms

Chain of Custody Document and Laboratory Analytic Reports

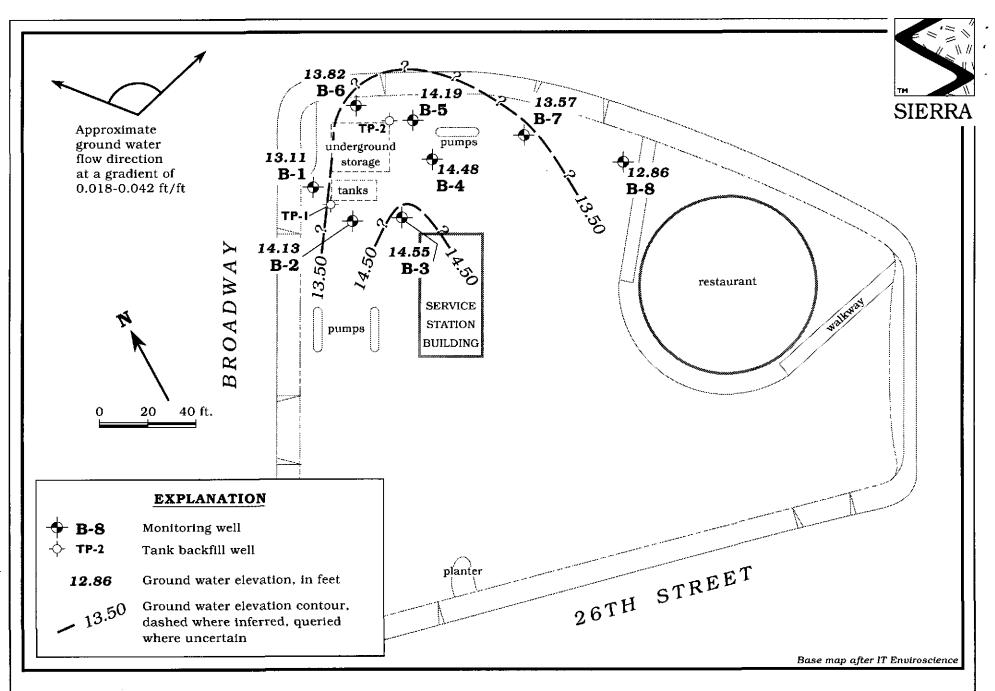


Figure 1. Monitoring Well Locations and Ground Water Elevation Contour Map - June 10, 1994 - Chevron Service Station #9-2506, 2630 Broadway, Oakland, California



Table 1. Water Level Data and Ground Water Analytic Results - Chevron Service Station #9-2506, 2630 Broadway, Oakland, California

Well ID/		DTW	GWE	Product	Analytic	TPPH(G)	В	T	E	X
TOC (ft)	Date	(ft)	(msl)	Thickness* (ft)	Method	<		ppb		
B-1/										
23.00 ¹	3/18/82	7.81	15.19	0						
	3/25/82	8.67	14.33	0						
	5/21/82	9.30	13.70	0						
	5/26/82	10.18	12.82	0						
	6/24/82	9.92	13.08	0			*			
	9/9/93	9.90	13.10	0	8015/8020	$8,800^{2}$	240	280	<2.5	<7.5
	12/2/93	9.10	13.90	0	8015/8020	1,100	100	7.9	3.4	3.9
	3/17/94	9.41	13.59	0	8015/8020	1,600	370 🦯	13	13	26
	6/10/94	9.89	13.11	0	8015/8020	1,400 /	270	24	18	78
B-2/										
22.28^{1}	3/18/82	3.83	18.45	0						
	3/25/82	5.79	16.49	0						
	5/21/82	4.85	17.43	0			*			
	5/26/82	8.53	13.75	0						
	6/24/82	8.40	13.88	0						
	9/9/93	6.46	15.82	0	8015/8020	4,700	470	630	180	590
	12/2/93	5.41	16.87	0	8015/8020	2,200	59	27	110	350
	3/17/94	7.44	14.84	0	8015/8020	1,800	52 /	33	97	320
	6/10/94	8.15	14.13	0	8015/8020	1,200/	37 /	48	20	93
B-3/										
21.78¹	3/18/82	5.65	16.13	0						
	3/25/82	5.75	16.03	0	~					
	5/21/82	5.58	16.20	0						
	5/26/82	7.99	13.79	0						
	6/24/82	7.68	14.10	0						
	9/9/93	5.99	15.79	0	8015/8020	7,800	500	760	180	720
	12/2/93	5.70	16.08	0	8015/8020	9,800	790	870	380	1,500
	3/17/94	6.50	15.28	0	8015/8020	2,400 /	88 🦯	55	74	270
	6/10/94	7.23	14.55	0	8015/8020	2,300 /	110 /	95	84	240
B-4/										
21.35 ¹	3/18/82	4.65	16.70	0						
	3/25/82	5.08	16.27	0						



Table 1. Water Level Data and Ground Water Analytic Results - Chevron Service Station #9-2506, 2630 Broadway, Oakland, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G) <	В	T ppb	E	X
		_	<u></u>			· · · ·				
B-4	5/21/82			2.5						
(cont)	5/26/82	9.21	12.14							
	6/24/82	8.22	13.13	0.5						
	9/9/93	6.09	15.26	0	8015/8020	88,000	3,200	16,000	2,000	9,500
	12/2/93	5.54	15.81	0	8015/8020	110,000	3,600	25,000	2,800	15,000
	3/17/94	6.00	15.35	0	8015/8020	60,000	_1,400	16,000	1,800	8,900
	6/10/94	6.87	14.48	0	8015/8020	25,000 /	770	880	190	1,100
B-5/										
21.53 ¹	3/18/82	5.13	16.40	0						
	3/25/82	5.27	16.26	0						
	5/21/82	4.40	17.13	0						
	5/26/82	7.55	13.98	0					~	
	6/24/82	7.27	14.26	0						
	9/9/93	6.45	15.08	0	8015/8020	110,000	1,800	1,800	6,300	25,000
	12/2/93	5.13	16.40	0	8015/8020	81,000	4,400	3,800	6,700	28,000
	3/17/94	6.55	14.98	0	8015/8020	38,000	2,100	3,100	1,800	9,100
	6/10/94	7.34	14.19	0	8015/8020	110,000	5,100 /	7,000	5,400	27,000
B-6/					•					
22.03^{1}	3/18/82	7.56	14.47	0						
22.00	3/25/82	6.08	15.95	ō						
	5/21/82	4.85	17.18	ŏ						
	5/26/82	8.31	13.72	ŏ						
	6/24/82	8.03	14.00	ő						*~-
	9/9/93	8.12	13.91	Ö	8015/8020	6.800^{2}	<0.5	< 0.5	<0.5	<1.5
	12/2/93	7.06	14.97	ő	8015/8020	320	29	<0.5	<0.5	<0.5
	3/17/94	7.57	14.46	o	8015/8020	570	× 130	6.2	4.7	14
	6/10/94	8.21	13.82	0	8015/8020 8015/8020	1,500	100	81	51	240
	6/10/94	0.21	13.82	Ū	6010/6020	1,000 /	100 /	91	31	240
B-7/				_						
19.54¹	3/18/82	4.08	15.46	0						
	3/25/82	4.00	15.54	О						
	5/21/82	3.00	16.54	0		***				
	5/26/82	4.96	14.58	О						
	6/24/82	4.90	14.64	0						



Table 1. Water Level Data and Ground Water Analytic Results - Chevron Service Station #9-2506, 2630 Broadway, Oakland, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G) <	В	T ppb	E	X
B-7	9/9/93	6.54	13.00	0	8015/8020	230	1.3	2.3	0.6	2.1
(cont)	12/2/93	6.20	13.34	0	8015/8020	190	4.7	< 0.5	1.1	1.9
	3/17/94	5.19	14.35	0	8015/8020	320	_ 15 _	3.3	1.0	3.0
	6/10/94	5.97	13.57	0	8015/8020	210 /	6.1 /	5.7	2.3	5.8
B-8/										
18.49¹	3/18/82	4.27	14.22	0						
	3/25/82	4.06	14.43	0						
	5/21/82	4.86	13.63	0						
	5/26/82	4.96	13.53	0				an art net		
	6/24/82	4.87	13.62	0						
	9/9/93	5.20	13.29	0	8015/8020	< 50	3.4	<0.5	< 0.5	<1.5
	12/2/93	5.31	13.18	0	8015/8020	<50	<0.5	<0.5	< 0.5	<0.5
	3/17/94	4.87	13.62	0	8015/8020	<50	1.7	0.5	< 0.5	0.6
	6/10/94	5.63	12.86	0	8015/8020	<50 /	<0.5 /	<0.5	<0.5	<0.5
TP-1/						•				
	9/9/93	7.33		0	8015/8020	8,500	770	890	120	590
TP-2/										
	9/9/93	6.18		0	8015/8020	13,000	2,400	3,200	380	1,900
Trip-Lab Bla	nk									
rb-lb	9/9/93				8015/8020	<50	<0.5	< 0.5	< 0.5	<1.5
	12/2/93				8015/8020	< 50	<0.5	< 0.5	< 0.5	<0.5
	3/17/94				8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	6/10/94				8015/8020	<50	<0.5	<0.5	<0.5	<0.5
Bailer Blank										
BB	9/9/93				8015/8020	< 50	<0.5	<0.5	<0.5	<1.5
	12/2/93				8015/8020	< 50	<0.5	<0.5	<0.5	<0.5
	3/17/94				8015/8020	< 50	< 0.5	< 0.5	<0.5	0.6



Table 1. Water Level Data and Ground Water Analytic Results - Chevron Service Station #9-2506, 2630 Broadway, Oakland, 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

B = Benzene

T = Toluene

E = Ethylbenzene

X = Xylenes

ppb = Parts per billion

--- = Not analyzed/Not applicable

NOTES:

Water level data prior to September 9, 1993, compiled from IT Enviroscience Progress Report, prepared for Chevron, August 2, 1982.

- Product thickness was measured on and after September 9, 1993, with an MMC flexi-dip interface probe.
- Top of casing elevations were compiled from IT Enviroscience Program Report, August 2, 1982. TOC for MW-1 was assumed to be 23 feet MSL.
- Laboratory indicates a non-typical gasoline pattern.

ANALYTIC METHODS:

8015 = EPA Method 8015/5030 for TPPH(G)

8020 = EPA Method 8020 for BTEX

36404T.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.



WATER SAMPLING D	ЭΑ	125	L
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Job Nam	- 51 - 8	Broadway	ockla	Job Numbe Bate	: 1-364	4-04	· ::::;:ie	JG	· •
Well Nun	nber <u>B</u>	- 1	<u></u>	Date 6	16/94		Well Di		
		ion/Descripti		Broad ,	lay)ec.)
Depth to	Water (sta	atic) 9.89	<u> </u>	Well Depth	4		<u></u>		
	ght of wat	er in casing		Volume	3.2 b gallons	gallons	l r l h	= well ra = ht of v	Conversions dius in ft water col. in ft
Purged W	ith <u> </u>	b pump	•	Sampled W	in <u>disp</u>	osable ba	1/67 2	ol. in cyl. .48 gal/(ር ጓ
		ory? Yes	•		V	gallo	V	casing	= 0.163 gal/ft = 0.367 gal/ft
Water leve		ling		Perc			- v,	casing casing casing	= 0.653 gal/ft g = 0.826 gal/ft = 1.47 gal/ft = 2.61 gal/ft
Pur	ge Time	Purge V	olume	Cumulative	<u> </u>		Speci	ilic Cor	nductance
Start	1		1	(gal.)	pН	Temp (°C)			x umhos/cm
3:53	3:55	3		3	7.31	24	77		× 4111103/Cii
	3:5		l.i	7.5	7.33	24	750	5	
	74:0	7.5	5	10	7.33	24	701	5	
ļ	,							-	
Water colo Description	$r = c / \epsilon$	TED Time	rial in sar	_ Odor	NOR	orged (gal.) _			
	Comment	s:							
								<u> </u>	
Sample ID	# of Cont.	Container Type	Fillered (size, u) (type	-	Refrig. (Y/N)	Lab (Init		Analysis Requested
13 - l	3	1.		HCL		Υ	SPA	,	g b tix
				 		····-	 		
			<u></u>			·	 		
				·			 		
	rpe Codes:	- Sical Fit	issy (Choir	A/Tellon septi lined cap (spec	'HV 51761' 4 ±	: !/^!\/^{!}\\\	n / m m l	•	/ 1 (re olive)



			W.	ATER SAM	IPLING I	DATA		- 7-121
Job Nan	11. 26th	E Broadway	, Ocklan	Job Kumb	1-36	4-04	sampler <u>U</u>	·
		tion/Descript		Date 6	101-1-1		Well Diamete	
		atic) 9.15					Well Depth (spec.)
Initial he	idht of wo	ter in casing	9	Well Depth			Formula	as/Conversions
35-1	- 1		•	Volume			r = well	radius in ft
Durged U	o be purg	cu L		4.5	gallon	nosabe ba	Jos vol. in c	f water col. in ft yl. = πr²h
Pumped a	or Bollad I	ca b Pump Dry? X Yes		Sampled W	11th (12)	DISTUR PA	7.48 gal. V ₂ casir	/ft² ng = 0.163 ga /ft
						3 gallo	1 17	g = 0.367 gal/ft $g = 0.653 gal/ft$
water lev	er at Sam	oling	···	_ Perc	cent Recove		− V _{4.5} ‴casi	ing = 0.826 gal/ft
0,,,,,,,,,,	47 D.1M4						V _e " casir	ng = 1.47 gal/ft ng = 2.61 gal/ft
CHEMICA	AL DATA						L	· · · · · · · · · · · · · · · · · · ·
1	ge Time	Purge V		Cumulative			Specific Co	onductance
Start				(gal.)	pН	Temp (°C)	Measurement	x umhos/cm
3:49	11. · · · · ·			1.5	6.93	23	630	
-	3:51	1,5		3	6,90	23	620.	
					<u> </u>			
				 				
SAMPLES	COLLEC	TED Time	4:26	Total	l valume n	urged (gal.) _	. 3	
Water colo	or cle							
Descriptio	n of sedin	nents or mater	rial in sam	inle: んの	<u></u>	- 	•	
		ts:						
								
						<u></u>		
Sample	# of	Container	Filtered	Preserv	alive	Refrig.	1 (2)	
ID	Cont.	Туре	(size, u)	(type		(Y/N)	Lab (Init)	Analysis Requested
3-1	3	1.		HCL		Y	SPA	11-17
						<u>-</u>	777	8-10-W
			·					
		2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						
1	i	· · · · · · · · · · · · · · · · · · ·	1.	l			1	

Container Type Codes: 1 = 40 ml clear VOA/Tellon septa: 2 = Brown glass/tellon lined cap (specify size): 3 = Clear glass/tellon lined cap (specify size): 4 = Polyethylene/polyethylene cap (specify size): 5 = Other ______: 6 = Other _____: 6 = Other ____: 6 = Other ___: 6 = Other __: 6 = Other _: 6 = Other _:



WATER	SAMPL	ANG	DATA
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Job Nam	1. 5/2	¿ Broadway	Ockla	J Lob Numby	: 1-36	4-04	s empiet	10	r T
Well Nun	nber <u>B</u>	-3		Date 6	16/94		Well Dia	meta	er 2 "
		lion/Descript	ion <u>b</u> 1	, BLDG	7		Well Der		
Depth to	Water (st	atic) $\frac{7.23}{}$	· /	Well Depth	(sounded)	17			
		der in casing		Volume 1			<u> Fo</u>	rmula	s/Conversions
	o be purg				gallons		lì :	= ht of	radius in It water col. in It
		,		Sampled W	iin diso	osabe ba		. in cy 18 gal,	/l. = πr³h
Pumped o	or Bailed I	nb Pump Dry? XYes	— No	Time 3:4:		gallo:	V ₂ "	casin	g = 0.163 gal/ft
		pling				ry	V,"	casin	g = 0.367 gal/ft g = 0.653 gal/ft
					ciic ixccove	y	–	casi,	ng = 0.826 gal/ft g = 1.47 gal/ft
CHEMICA	AT. DATA						v	casin	g = 2.61 gal/ft
	ge Time	Purge V (ga		Cumulative (gal.)		T (°C)			nductance
Start	Stop	<u> </u>	.,	(gai.)	pН	Temp (°C)		ient	x umhos/cm
3.45	1. 1			3	7.57	25	190		•
	3:4	0 1		4	7.50	15	950	• .	
1.25	<u> </u>								
					 -				
SAMPLES	COLLEC	TED Time	4:20	7 τόι äὶ	volume ni	ırged (gal.) _	4		
Water colo	r <u> </u>	ck		_			•		
Description	n of sedin	ents or mate	rial in sar			edinant			
		ts: _				<u> </u>			
		· · · · · · · · · · · · · · · · · · ·						·	•
								 .	
Sample	# of	Container	Filtered	Preserva	ativa	D - C-1-r			<u> </u>
ID	Cont.	Туре	(size, u)			Refrig. (Y/N)	Lab (Ini()		Analysis Requested
<u>ァ-ラ</u>	3	1.		HCL		<u> </u>	SPA		11-47
-							 > Q		310 00
				·			 		,
	•	N. S.					 		
· ·		A							
		J.				· · · · · · · · · · · · · · · · · · ·			

Container Type Codes: 1 = 40 ml clear VOA/Tellon septa: 2 = Brown glass/tellon lined cap (specify size);

3 = Clear glass/tellon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size);

5 = Other ______; 6 = Other ______;



WATER SAMPLING DATA

Sample Po Depth to W Initial heig Volume to Purged Wit Pumped or	int Loca Vater (sta ht of wa be purge h \$ t Bailed I at samp	tion/Descript atic)6 \{\} ter in casing_	ion Ŷ <u>1</u> No	Well Depth Volume Sampled W Time 3	(sounded) 1.63 gallons th disp After	16 gallons scrbe ba	ns r = well h = ht of vol. in cy 7.48 gal, V ₂ casin V ₃ casin V ₄ casin V ₆ c	s/Conversions radius in ft water col. in ft
Purge	e Time	Purge V	olume (Cumulative		<u> </u>	Specific Co	onductance
Start	Stop			(gal.)	рН	Temp (°C)	Measurement	
3:40	3:4	_		3	6.82	25	880	
ļ	3:4	3 1.5		4,5	6.80	25	970	<u></u>
					· - · · · · · · · · · · · · · · · · · ·			
147				· · ·				
Water color	<u> </u>	TED Time		Odor	noe	urged (gal.) _	4.5	
Sample ID	# of Cont.	Container Type	Füllered (size, u)	Preserva (type		Refrig. (Y/N)	Lab (lni()	Analysis Requested
3-	3	<u> </u>		HCL		У	SPA	glotex
				-				
			. <u>-</u>					
	e Codes	A	/ 10 10 11	aca can isnee	IIV 617711 A -	- (//) \//// () \// / ~ ~	effon lined cap e/polyethylene ca	10 10 - 1



WATER SAMPI	JNG	DATA
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Job Nam	· 26th	E Broadway	, Ockla	$ \begin{cases} \text{Lob Number} \\ \text{Date} \\ \text{B} \end{cases} $: <u>1-36</u>	4-04	canplet 🗸	G
Well Nun	nber <u>B</u>	- 5	, 	Date 6	16 94		Well Diame	ter 2 "
Sample F	oint Local	tion/Descript	ion <u>N</u> 6	of B7			Well Depth	
		atic) 7,34		Well Depth			<u> </u>	
		ter in casing	. 1	Volume	1.8	gallons	Formu	as/Conversions
Volume t	•			5.4	. dallon	.	. h = ht	radius in It
	, -	b pump		Sampled W	ith disk	posable ba	/er vol. in 7.48 ga	cyl. = πr³h
	-	Dry? X Yes		Time 3.2	8 After	45 gallo	, , , ,	ing = 0.163 gal/ft
		oling				ery	V, cas	ing = 0.367 gal/ft ing = 0.653 gal/ft
	•	<u> </u>			ciic i (ccov)		1 113 000	sing = 0.826 gal/ft ing = 1.47 gal/ft
CHEMICA	AL DATA						V. casi	ng = 2.61 gal/ft
*								
· · · · · · · · · · · · · · · · · · ·	ge Time	Purge V		Cumulative		T (90)	Specific C	onductance 🕌
Start	Stop		.,	(gal.)	рH	Temp (°C)	Measurement	x umhos/cm
3:25	<u> </u>	·		3	7.31	25	550	
	3129	3 1,5		4.5	7, 29	2.5	630.	
								<u> </u>
				e.				
L <u>.</u>						<u> </u>		
SAMPLES	COLLECT	TED Time	4:06	Total	. Volume n	urged (gal.) _	45	
		ay				e ged (guill) _		
				niple: <u>💀 🕫</u>	0 ,			
		is:	_		-			
							-	·
							· · · · · · · · · · · · · · · · · · ·	
Sample	# of	Container	Filtered	Preserv	ntina	Da (**: «		
ID	Cont.	Туре	(size. u	1	-	Refrig. (Y7N)	Lab (Init)	Analysis Requested
13-5	3	1		HCL		У	SPA	L-TA
							 >+-7	1310 W
				•			District Annual Control	
		,						

Container Type Codes: 1 = 40 ml clear VOA/Tetlon septa: 2 = Brown glass/teflon lined cap (specify size): 3 = Clear glass/teflon lined cap (specify size): 4 = Polyethylene/polyethylene cap (specify size): 5 = Other ______; 6 = Other ______; 6 = Other ______;



WATER	SAMPL	ANG	DA	ΔT.	Λ
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Job Nam	- 26th	E Broadway	, Octlan	∮ Jab Numb	: <u>1-36</u>	4-04	varipäet <u>J</u>	G
Well Nun	nber <u>B</u>	- 6 /	, 	Date	16 94	· 	Well Diamet	er <u>2</u> "
Sample I	oint Local	tion/Descript	ion <u>Co</u>	THE DE	Brade	ai + 271°	Well Depth (spec.)
Depth to	Water (sta	atic) 8.21	<u> </u>	Well Depth				
Initial he	ight of wa	ter in casing		Volume	2	gallons		as/Conversions
	o be purgo		•	6	gallon	s . i	h = ht o	radius in It I water col. in It
Purged W	/ith5 1	b pump		Sampled W	in disc	iosabk ba	/25 vol. in c	yl. = πι ² }γ
Pumped o	or Bailed [Ory? X Yes	No	Time 2!	Mter Y	s nosabe ba 5 gallo	V ₂ " cash	ng = 0.163 gal/ft ng = 0.367 gal/ft
		oling				егу	V, casir	ng = 0.653 gal/(t)
	•	0	, <u></u>		ene recorr		1 .42	ing = 0.826 gal/(t ng = 1.47 gal/(t
CHEMICA	AL DATA						V. casir	ng = 2.61 gal/st
Pur	ge Time	Purge V		Cumulative			Specific Co	onductance
Start	Stop	(gal	.)	(gal.)	pН	Temp (°C)	Measurement	
2:31	2:33			3	7.01	2.5	750	
	2,34	1.5		4.5	6.87	25	730	
								
				<u> </u>				
SAMPLES	COLLECT	ren Time	4:10	Total	volume pi	urged (gal.)	5	
Water colo	or <u>cle</u>	2ar		- Odor	nos		4	······································
Description	n of sedim	ients or mater	rial in sanı				-	-
		s;						
·								
			T				-	
Sample ID	# of	Container	Filtered	Preserva		Refrig.	Lab	Analysis
	Cont.	Туре	(size, u)	(type	2}	(Y/N)	(Init)	Requested
B-(3	1.		HCL		<u> </u>	SPA	abtix
			·					0.
						<u> </u>		
	-			 				
				 		·		
		:	· · · · · · · · · · · · · · · · · · ·					

Container Type Codes: 1 = 40 ml clear VOA/Tellon septa: 2 = Brown glass/tellon lined cap (specify size): 3 = Clear glass/tellon lined cap (specify size): 4 = Polyethylene/polyethylene cap (specify size): 5 = Other ______: 6 = Other _____: 6 = Other ____: 6 = Other ___: 6 = Other __: 6 = Other _: 6 =



WATER	SAMPL	ING	DATA
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Sample Po Depth to V Initial heig Volume to Purged Wi	Vater (staght of wat be purgethSh	dion/Descript atic) 5,97 der in casing a b Pumi Dry? Yes aticy	100 N	Sampled W	(sounded) gallons ith disp After	20 gallons	r = well h = ht of vol. in cy 7.48 gal, V ₂ " casin V ₄ casin V ₄ casin V ₄ casin V ₆ casin	s/Conversions radius in ft water col. in ft //. = \pi r^2 h
Purg	e Time	Purge V	olume	Cumulative			Specific Co	onductance
Start	Stop		I	(gal.)	pН	Temp (°C)	Measurement	
3:17	3:19			3	7.23	24	780	4.3
1	3:20			4	7.72	25	790	
	3:21	1.5		7.5	7,21	25	809	41_
Water color	of sedim	ents or mater				irged (gal.) _	•	
1								
Sample ID	# of Cont.	Container Type	Filtered (size, u)		-	Refrig. (Y/N)	Lab (Init)	Analysis Requested
							J.P.A.	J b ux
,								. • -
							,	
Container Ty	pe Codes:	T. T. T. T. T. T.		THE CHATTER DEC	1117 C17011 7 -		efion lined cap	(specify size):



WATER SAMPLING D	ЭA	\ T\/	ł
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Sample Poin Depth to Wa Initial height Volume to be Purged With Pumped or B	t Location ter (station of water purged Shb ailed Dry t samplin	in casing Pump Yes	ion by	Well Depth Volume 2 6.6 Sampled Wi	(sounded) 2 gallon:	18 gallons s nosabk ba	Well Do	cp(h (s cormula: = well r = ht of ol. in cy .48 gal/	
Depth to Wa Initial height Volume to be Purged With Pumped or B Water level al	ter (station of water spurged by both both both both both both both both	in casing	13 _x/No	Well Depth Volume 2 6.6 Sampled Will Time	(sounded) -2 gallon:	18 gallons s nosabk ba	1/es 1/2	formula: = well r = ht of ol. in cy .48 gal/	s/Conversions adius in it water col. in it it. = \pir^2h
Initial height Volume to be Purged With Pumped or B Water level at	of water purged Shb alled Dry t samplin	in casing Pump ? Yes	13 _ x No	Volume 2 4.6 Sampled Wi	gallon: gallon: ith _d is g	gallons s nosebk ba	1/es 1/2	formula: = well r = ht of ol. in cy .48 gal/	s/Conversions adius in it water col. in it it. = \pir^2h
Volume to be Purged With Pumped or B Water level al	purged Shb alled Dry t samplin	<u> </u>		Volume 2 4.6 Sampled Wi	gallon: gallon: ith _d is g	gallons s nosebk ba	1/es 1	= well r i = ht of ol. in cy '.48 gal/	adius in st water col. in st l. = nr h
Purged With Pumped or B Water level al	Shb ailed Dry t samplin	Pump ?Yes	_ x No	Time	gallon: ith <u>dis p</u> After	s 105abk ba	/er h	i = ht of ol. in cy '.48 gal/	water col. in ft il. = πr ² h 'ft ³
Pumped or B Water level al	ailed Dry I samplir	? Yes	_ x No	Time	ith <u>disg</u> After	iosabk ba	1/62 3	.48 gal/	יוני
Water level al	l samplir			Time	Alter		1/1/		
CHEMICAL I		g		Dara	_	gallor	ns v	, casin	g = 0.163 gal/ft g = 0.367 gal/ft
)ATA			PUTC	ent Recove	ery	V	casin	g = 0.653 gal/fr ng = 0.826 gal/f
· · · · · · · · · · · · · · · · · · ·	ATA						Į V,	casing	g = 1.47 gal/ft
Purge T							[g = 2.61 gal/ft
	ime	Purge V	olume	Cumulative		T	Spec	ilic Co	nductance
Start	Stop	(gal	l.)	(gal.)	pН	Temp (°C)			x umhos/ci
3/02	3:04	3		3	2.01	2.5	770		,
····	2.06	3		(_				• .	
	3:07	1.							
		 							
AMPLES CO fater colorescription of	sedimen	ts or mater		Odor	volume po		<u>7</u> :		
dditional Cor	nments:							· · ·	
		<u> </u>						<u>.</u>	
C			ı 						
- 1	f of Cont.	Container Type	Filtered	. 1	- i	Refrig.	Lab		Analysis
7-8	3	/		HCL	<u>'</u>	(Y/N)	(Init		Requested
		<u>'</u>		100			SPA		JID UX
							ļ		
			1	1	1			- 1	

Fax co	py of	Lab	Rep	ort	and	COC to	Che	vron	Со	ntac	:t: E		3	05	78	C	nair	n-c	f-(Cust	odv	-Record
Chevron U.S P.O. BOX San Ramon, (FAX (415)84	S.A. Inc. 5004 CA 94583	Chevron Focility Number 9-2506 Chevron Focility Number 9-2506 Facility Address 2630 15000 dway, Oakland Consultant Project Number 1-364-04 Consultant Name Sierra Environmental Services Address P.O. Box 2546, Martinez, CA 94553 Project Contact (Name) Ed Morales (Phone) 510-370-1280 (Fox Number) 510-370-7959 Signature J:- Great									34 80 eer											
	ž	lnera	A # Air C # Charcoal	osite ete		vo					25	tles			• Perfor	med		Ţ			Not	e: Not Bill
Sample Number	Lab Sample Number	Number of Containers	Match S - Soil A K - Water C ii	Type G = Grab C = Composite D = Discrete	• ET	Somple Preservation	load (Yes or No.)	BTEX + TPH GAS (8020 + 8015)	TPH Diesed (8015)	Oil and Gradae (5520)	Purpeable Halocarbons (8010)	Purgeable Arama (8020)	Purpachle Organics (8240)	Extractoble Organica (8270)	Hetas CACP.Ps.Zn.Ni (ICAP or AA)	· I					TB-	LB Samples
TB-LB		2	W	D		400	<u>y</u>	V													anal	42
B-1		3			4:03	1		1										ļ	ļ. <u>.</u>			18
B-2.					4:26		\bot						ļ						1			·
B-3/		-			420			4		<u> </u>				 				ļ 	<u> </u>	ļ <u></u>		
3-4-			 	 	415			1/_	ļ 				-							Π_		
3-5					4:06			LV_	ļ	ļ		Her			32	~	-179	 		<u> </u>		
B-6			 		410			<u> </u>		<u> </u>	L P	ease	Initial les Sto		, <u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>					-		
3.7				<u> </u>	3:23			$\perp \checkmark$	<u> </u>	<u> </u>						1				 - \		
B-8		\rightarrow	1	√	3:10	V	$\sqrt{}$	<u> </u>	ļ	ļ		bem!	es pre	serve	d					 - 	1	
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Relinquished by	(Signature)	M	o ₂ 9	onizotion		S/13/14	20 Red	elved B	y (Sign	oture)			Organizat	ion	Date	o/Time			Turn Ar		me (Circ Hrs.	le Choloe)
Relinquished B	(8Ignature)		Org	onization		odte/Time	Rec	elved B	y (Sign	otur•)			Progonizat	ion	Dat	/Time				6	Hre. Daye	6/13/94
Relinquished By	(Signature)		erg	anization	t	ot•/∏m•		loved F		rolory B	y (Signa		yeve		0°1	•/Time o	7:20		<		Doy- ontrooted	Jy .
						•																



Superior Precision Analytical, Inc.

1555 Burke, Unit I = San Francisco, California 94124 = (415) 647-2081 / fax (415) 821-7123

Sierra Environmental Attn: ED MORALES Project 1-364-04 Reported 06/22/94

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
30578- 1	TB-LB	06/10/94	06/16/94 Water
30578- 2	B-1	06/10/94	06/16/94 Water
30578- 3	B-2	06/10/94	06/16/94 Water
30578- 4	B-3	06/10/94	06/16/94 Water
30578- 5	B-4	06/10/94	06/20/94 Water
30578- 6	B-5	06/10/94	06/18/94 Water
30578- 7	B-6	06/10/94	06/16/94 Water
30578- 8	B-7	06/10/94	06/16/94 Water
30578- 9	B-8	06/10/94	06/16/94 Water

RESULTS OF ANALYSIS

		RESULTS OF	ANALYSIS		
Laboratory Number:	30578- 1	30578- 2	30578- 3	30578- 4	30578- 5
		<u></u>	<u> </u>	B3	BY.
					
Gasoline:	ND<50	1400	1200	2300	25000
Benzene:	ND<0.5	270	37	110	770
Toluene:	ND<0.5	24	48	95	880
Ethyl Benzene:	ND<0.5	18	20	84	190
Total Xylenes:	ND<0.5	78	93	240	1100
	_		,		
Concentration:	ug/L	ug/L	ug/L	ug/L	ug/L
- 1					
Laboratory Number:	30578- 6	30578- 7	30578- 8	305789	
	<u> 45</u>		67	- 12 X	
~ 21	4) 2		<i>3</i> (. > 0	
Gasoline:	110000	1500	210	ND<50	
Benzene:	5100	100	6.1	ND<0.5	
Toluene:	7000	81	5.7	ND<0.5	
Ethyl Benzene:	5400	51	2.3	ND<0.5	
Total Xylenes:	27000	240	5.8	ND<0.5	
Concentration:	ug/L	uq/L	uq/L	ug/L	

Page 1 of 2

Certified Laboratories

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CERTIFICATE OF ANALYSIS

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 2 of 2 QA/QC INFORMATION SET: 30578

NA = ANALYSIS NOT REQUESTED

ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT

ug/L = parts per billion (ppb)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F: Minimum Detection Limit in Water: 5000ug/L

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Water: 50ug/L

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons: Minimum Quantitation Limit for Gasoline in Water: 50ug/L

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Water: 0.5ug/L

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	120/114	5%	70-130
Benzene:	113/121	7%	70-130
Toluene:	105/113	7%	70-130
Ethyl Benzene:	99/101	2왕	70-130
Total Xylenes:	113/117	3%	70-130

Senior Chemist

Certified Laboratories