

RAFAT A. SHAHID, Assistant Agency Director

ALAMEDA COUNTY-ENV. HEALTH DEPT. ENVIRONMENTAL PROTECTION DIV. 1131 HARBOR BAY PKWY., #250 ALAMEDA CA 94502-6577 (510)567-6700

<u>April 5, 1995</u> <u>STID 401</u>

REMEDIAL ACTION COMPLETION CERTIFICATION

Mr. Mark Miller Chevron USA Products Company P.O. Box 5004 San Ramon, California 94583-0804

RE: Chevron Service Station # 9-0338 5500 Telegraph Avenue, Oakland, California 94609

Dear Mr. Miller:

This letter confirms the completion of site investigation and remedial action for one 1000 gallon waste oil underground storage tank at the above described location.

Based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the waste oil underground tank release is required.

This notice is issued pursuant to a regulation contained in Title 23, Division 3, Chapter 16, Section 2721(e) of the California Code of Regulations.

Please contact Susan L. Hugo at (510) 567-6780 if you have any questions regarding this matter.

Sincerely,

Rafat A. Shahid, Director

cc: Ariu Levi, Acting Chief, Environmental Protection - files Kevin Graves, RWQCB Mike Harper, SWRCB EMVINOHHENTAL PROTESTION

MAR 2 1 1995

Leaking Underground Fuel Storage Tank ProgramITY CONTROL BOARD

AGENCY INFORMATION

Date:

March 10, 1995

Agency name: Alameda County-HazMat

Address: 1131 Harbor Bay Parkway Phone:

City/State/Zip: Alameda, CA 94502

(510) 567-6700

Responsible staff person: Susan Hugo Title:

Sr. Hazardous Materials Spec.

CASE INFORMATION

Site facility name:

Chevron Service Station # 9-0338

Site facility address:

5500 Telegraph Ave., Oakland, CA 94609 Local Case No./LOP Case No.: 401

RB LUSTIS Case No: N/A URF filing date: 9/9/89

SWEEPS No: N/A

Responsible Parties:

Addresses:

Phone Numbers:

Chevron USA Products

P.O. Box 5004

(510) 842-9500

Company

San Ramon, CA 94583-0804

Size in <u>Tank</u> No: gal.:

Contents:

Closed in-place or removed?:

Date:

1000

Waste oil

Removed

10/5/88

fuel tank piping

Gasoline

Removed

6-7/89

RELEASE AND SITE CHARACTERIZATION INFORMATION III.

Cause and type of release: Hole present in the waste oil tank

Site characterization complete? YES

Date approved by oversight agency: 11/1/89

Monitoring Wells installed?

Number: Three (3)

Proper screened interval?

YES

Highest GW depth below ground surface: 7.03 ft Lowest depth: 11.28 ft

Flow direction: Southwest

Most sensitive current use: Site is an operating gasoline station

Are drinking water wells affected? NO Aquifer name: NA

Is surface water affected? NO

Nearest affected SW name: NA

Off-site beneficial use impacts (addresses/locations): Unknown

Report(s) on file? YES Where is report(s) filed? Alameda County 1131 Harbor Bay Parkway

Alameda, CA 94502-6577

Treatment and Disposal of Affected Material:

TT CO CHICIAC	and Dippodur or mirror	,ca macommen	
<u>Material</u>	<u>Amount</u>	Action (Treatment	<u>Date</u>
	(include units)	of Disposal w/destination)	
Tank	1 - 1000 gallon	Erickson, 255 Parr Blvd.	1988
		Richmond, CA	
Piping	100 - 200 feet	Erickson, 255 Parr Blvd.	1989
1 5		Richmond, CA	

NA Free Product Soil NA Groundwater NA Barrels NA

Leaking Underground Fuel Storage Tank Program

III. RELEASE AND SITE CHARACTERIZATION INFORMATION (Continued) Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil	(ppm)	, V	٧a	ter	(ppb)
	<u>Befor</u>	<u>re After</u>	<u> </u>	<u>3e</u>	<u>fore</u>	<u> After</u>
TPH (Gas)	800	480	*	k	280	ND
TPH (Diesel)	ND	-			ND	-
Benzene	-	2.2	4	k	0.9	ND
Toluene	-	ND	*	k	1.5	ND
Xylene	-	28 /	*	*	3	ND
Ethylbenzene	-	10	,	k	0.8	ND
Oil & Grease	ND	-			-	ND
Heavy metals	See	comments		S	dee c	omments
Volatiles (8240)	ND	-	dichloromethar	ıe	1.0	ND

^{*} The highest concentration detected in the groundwater at one time during the entire eleven monitoring events from 11/21/89 through 11/15/93.

Comments (Depth of Remediation, etc.):

One 1000 gallon steel waste oil tank was removed in October 5, 1988. Hole was present in the tank. One soil sample was collected at 8 ft. depth and analytical results showed non detect for TPH diesel, TOG, and volatile organic compounds (VOCs by 8240). The stockpiled soil also showed non detect for TPH diesel and VOCs but had 81 ppm TOG.

Between June through July 1989, fuel tank pipe lines were replaced and modified. Soil samples collected from the trenches indicated the presence of TPHqranging from 340 to 800 ppm. **Iimited overexcavation was performed and sidewall confirmation samples collected at 6.25 to 6.75 feet depth showed the following residual soil contamination: 480 ppm TPH gasoline, 2.2 ppm benzene, 10 ppm ethylbenzene, and 28 ppm xylene. Water was present at the bottom of the trenches at 6.5 feet bgs. **powever, it was not sampled.

In November 13, 1989, three soil borings were drilled (32.5 to 33 feet bgs) and converted to monitoring wells (C-1, C-2, C-3). Groundwater was encountered at approximately 23.5 to 24.5 feet in each boring and rose to about 12 feet in 24 hours inferring semi-confined conditions. Groundwater flow direction is to the west-southwest. All soil samples from the three borings were non detect for TPH gasoline and BTEX. Boring C-3 sample (within aprox. 20 ft. of the former waste oil tank) was analyzed for TOG, TPH diesel and metals in addition to TPH gasoline and BTEX. TOG and TPH diesel were not detected. However, metals were found in the soil sample from C-3 at the following concentrations: 39-74 ppm zinc, 0.6-1.4 cadmium, 12-27 ppm chromium and <10-10 ppm lead. The groundwater samples from the three wells showed non detect for TPH gasoline, and BTEX. TPH diesel, and TOG were also analyzed from water sample in well C-3 and were not detected. Metals were found in the groundwater from all the three wells at the following concentrations: nd-20 ppb cadmium, nd-1.1 ppb zinc, nd-0.12 ppb lead, 0.28-500 ppb chromium, 45-310 ppb aluminum, 11-14 ppb arsenic, 2-25

Leaking Underground Fuel Storage Tank Program

ppb barium, 85-100 ppb calcium, 3-21 ppb cobalt, 38-66 ppb copper, 84-530 ppb iron, 73-130 ppb magnesium, 9.2-81 ppb manganese, 1.0 ppb mercury, 1.4-50 ppb nickel, 8.7-32 ppb potassium, 47-64 ppb sodium, 5 ppb thallium, 14-79 ppb vanadium, and 2 ppb beryllium. The presence of the metals in soil and in groundwater does not appear to be related to the former waste oil tank and may in fact be attributed to native geologic material in the region.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? YES

Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? YES

Does corrective action protect public health for current land use? YES Site management requirements: NA

Should corrective action be reviewed if land use changes? YES

Monitoring wells Decommisioned:

Number Decommissioned: NONE Number Retained: THREE (3)

List enforcement actions taken: NA List enforcement actions rescinded: NA

v. LOCAL AGENCY REPRESENTATIVE DATA

Name: Susan L. Hugo Signature: Susan L. Hugo

Title: Sr. Hazardous Materials Specialist

Date: March 10, 1995

Reviewed by

Name: Barney Chan Signature: Barne, Cha

Title: Hazardous Materials Specialist

Date: 3/16/95

Name: Thomas Peacock

Signature:

Title: Sup. Hazardous Materials Specialist

7-16-95

RWQCB NOTIFICATION VI.

Date Submitted to RB:

RWQCB Staff Name: Kevin Graves

RB Response:

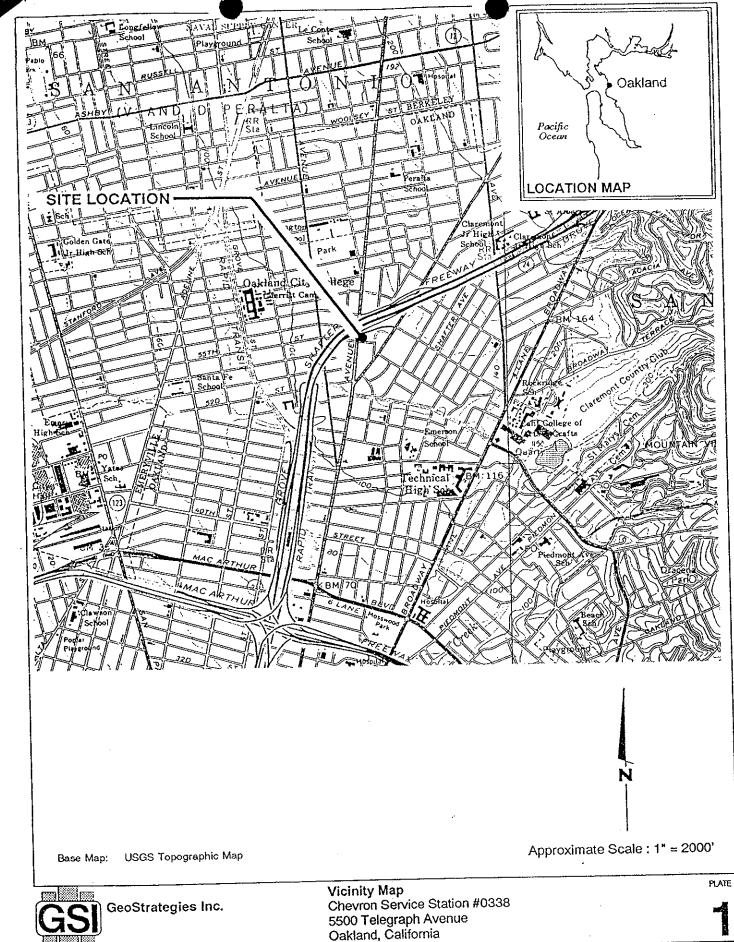
Title: Water Resources Control Engineer

Date: 3/refas

ADDITIONAL COMMENTS, DATA, ETC.

Currently, the site is an active service station with three 10,000 gallon underground storage tanks containing gasoline in operation. The three groundwater monitoring wells may be used in the future and will not be decommissioned at this time.

Aggressive source removal has occurred at this site. The potential beneficial uses of the groundwater do not appear to be threatened to a significant extent from the release that occurred at the site associated with the former waste oil tank and the former fuel pipings.

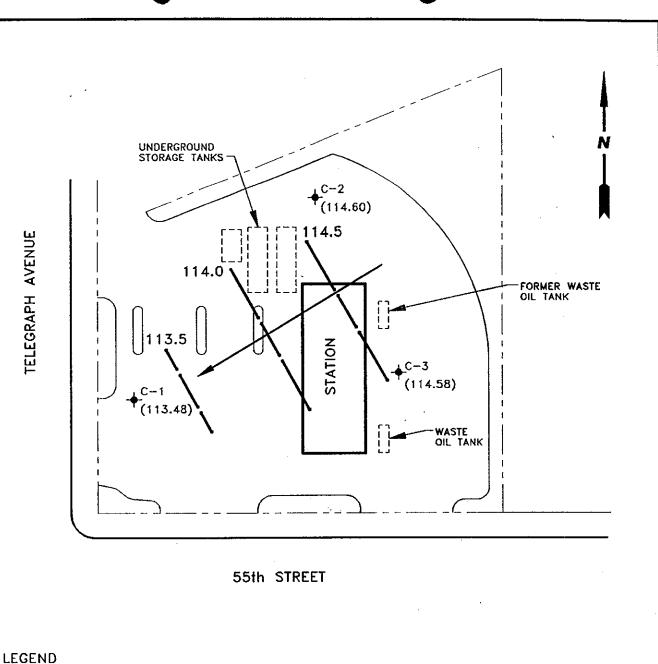


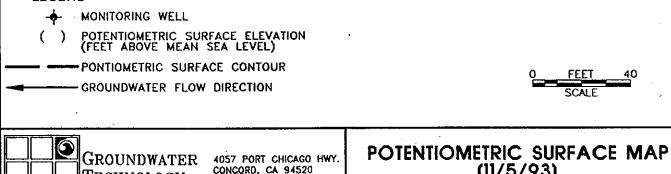
REVIEWED BY RG/CF.G

DATE

1/90

REVISED DATE





TECHN	OLOGY	(510) 671-			(11/5/93	· ·	
CLIENT: CHEVRON U.S. SERVICE STAT		JCTS CO.			RAPH AVENUE CALIFORNIA	REV. NO.:	 /9/93
PM PE/RG	DESIGNED TW	DETAILED CY	ACAD FILE:	PSMD93	PROJECT NO 020	o.: 204116	FIGURE:

TABLE 1 GROUNDWATER MONITORING DATA Chevron Service Station No. 9-0338 5500 Telegraph Avenue, Oakland, California

Well ID/ ⊟evation	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	TPH-D	TOG	TIL	HVOC	DTW (ft)	SPT (ft)	WTE (ft)
RINSATE	06/27/90	<50	<0.5	<0.5	<0.5	<0.5							
1	*10/12/90									·		 	
	12/20/90	<50	<0.5	< 0.5	< 0.5	< 0.5							
]	04/10/91	< 50	<0.5	0.6	< 0.5	< 0.5				_			_
	02/26/92	<50	<0.5	< 0.5	< 0.5	3.3					l		l i
	11/15/93	<50	< 0.5	<0.5	<0.5	<0.5							

TPH-G	=	Total petroleum hydrocarbons-as-gasoline
TPH-D	=	Total petroleum hydrocarbons-as-diesel fuel
TOG	=	Total oil and grease
TTL	=	Lead
HVOC	=	Hydrocarbon volatile organics
DTW	=	Depth to water
SPT	=	Separate-phase hydrocarbon thickness
WTE	=	Water table elevations measured to mean sea level
	=	Not applicable/not measured/not sampled
_	_	Destinate

Samples broken by laboratory.

** = Gasoline range concentrations reported. The pattern of peaks observed in the chromatogram shows only single peak in the gasoline range.

*** = Dichloromethane

GROUNDWATER TECHNOLOGY

TABLE 1
GROUNDWATER MONITORING DATA
Chevron Service Station No. 9-0338
5500 Telegraph Avenue, Oakland, California

Well ID/ ⊟evation	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	TPHD	TOG	ΠL	HVOC	DTW (ft)	SPT (ft)	WIE (ft)
	44/04/00	1500	< 0.5	<0.5	<0.5	<0.5					10.75	0.00	113.13
C-1	11/21/89	<500 <50	<0.5	< 0.5	<0.5	<0.5					9.93	0.00	113.95
400.00	03/20/90	<50 <50	<0.5	< 0.5	<0.5	<0.5			< 0.5		9.64	0.00	114.24
123.88	06/27/90	<50 <50	<0.5	< 0.5	< 0.5	< 0.5			< 0.5		9.64	0.00	114.24
	D06/27/90	<50	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	~0.0							10.91	0.00	112.97
1	*10/12/90		< 0.5	< 0.5	< 0.5	< 0.5					10.91	0.00	112.97
-	D10/12/90	<50	<0.5	0.9	0.8	3					9.76	0.00	114.12
	12/20/90	75 73	<0.5	0.6	0.7	2					9.76	0.00	114.12
4	D12/20/90		0.7	1.2	<0.5	1.0]				8.76	0.00	115.12
	04/10/91	<50 <50	0.7	1.5	<0.5 <0.5	1.5					8.76	0.00	115.12
	D04/10/91	<50 <50	< 0.5	< 0.5	<0.5	<0.5			l		8.08	0.00	115.80
]	02/26/92	<50 <50	<0.5 <0.5	< 0.5	<0.5	<0.5					8.26	0.00	115.62
	02/04/93	<50 <50	< 0.5	<0.5	<0.5	<1.5					10.04	0.00	113.84
	07/27/93	79	<0.5	<0.5 <0.5	<0.5	<1.5					10.32	0.00	113.56
1	09/22/93 11/15/93	<50	<0.5 <0.5	<0.5	<0.5	<0.5		·	-		10.40	0.00	113.48
	11/10/93	<u> </u>	70.0								40.75	0.00	114.17
C-2	11/21/89	<500	< 0.5	< 0.5	< 0.5	<0.5		-			10.75	0.00	115.48
	03/20/90	<50	< 0.5	< 0.5	< 0.5	<0.5		-			9.44	0.00	115.46
124,92	06/27/90	<50	< 0.5	< 0.5	<0.5	< 0.5]		<0.5	_	9.55	0.00	114.03
	10/12/90	<50	<0.5	< 0.5	<0.5	< 0.5	**-				10.89	0.00	115.27
	12/20/90	<50	< 0.5	< 0.5	< 0.5	< 0.5					9.65	0.00	
	04/10/91	<50	< 0.5	< 0.5	< 0.5	< 0.5					8.04	0.00	116.88
	02/26/92	<50	< 0.5	< 0.5	< 0.5	< 0.5				-	7.03	0.00	117.89
	02/04/93	<50	< 0.5	< 0.5	<0.5	< 0.5			***		7.06	0.00	117.86
	07/27/93	<50	< 0.5	< 0.5	<0.5	< 1.5					9.78	0.00	115.14
	09/22/93	<50	< 0.5	< 0.5	<0.5	< 1.5		1			9.97	0.00	114.95
	11/15/93	<50	< 0.5	< 0.5	< 0.5	< 0.5					10.32	0.00	114.60

TABLE 1
GROUNDWATER MONITORING DATA
Chevron Service Station No. 9-0338
5500 Telegraph Avenue, Oakland, California

Well ID/	Date	TPHG	Benzene	Toluene	Ethyl- benzene	Xylenes	TPH-D	TOG	TIL	HVOC	DTW (ft)	SPT · (ft)	(ft)
C-3 125.64	11/21/89 01/12/90 03/20/90 06/27/90 10/12/90 12/20/90 04/10/91 02/26/92 02/04/93 07/27/93	<500 <50 <50 <50 54 <50 <50 <50 **280 <50	<0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5	<0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5	<0.5	<0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <1.5 <1.5 <1.5	<1000 <50 	<5000 <5000 		 	11.28 	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	114.36 115.25 115.32 114.36 115.39 116.85 117.81 117.70 115.05 114.86 114.58
TRIP BLANK	09/22/93 11/15/93 03/20/90 06/27/90 *10/12/90 12/20/90 04/10/91 02/26/92 07/27/93 09/22/93 11/15/93	<50 <50 <50 <50 <50 <50 <50 <50 <50 <50	<0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5	<0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5	<0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5	<0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <1.5 <1.5 <0.5	<50 						

Page 2 of 3



Table 1
Summary of Results of Ground Water Sampling
Chevron Service Station # 9-0338
5500 Telegraph Avenue, Oakland, California

Concentrations in parts per billion (ppb)

usu	DATE OF	CADMIUM	ZINC	LEAD	CHROMIUM	DIBROMIDE	ALUMINUM	BERYLLIUM	ARSENIC	BARIUM	CALCIUM	COBALT	COPPER	LA8
	SAMPLING/	CADITION												
	MONITORING													NA
	11/21/89					ND(0.05						3	66	NA
	03/20/90		0.18	0.016	0.28	ND(0.005	45		14	25	91	3		C ^1
C-1	06/27/90	ND(0.01	0.03											
	06/27/90	ND(0.01		·										
C-16 C-1*	10/12/90													SAL
C-1D	10/12/90													SAL
C-10 C-1	12/20/90	:												SAL
	12/20/90													SAL
C-1D	04/10/91			. 										SAL
C-1	04/10/91													SHL
C-1D	04/10/91				0									
	11/21/89					ND(0.05								NA
C-2	03/20/90		1.0	0.12	0.82	ND(0.005	270		11	2.0	100	20	38	NA
C-2	06/27/90	ND(0.01	0											SAL
C-2	10/12/90	ND(0.01			.									SAL
C-2														SAL
C-2	12/20/90													SAL
C-2	04/10/91													
		20	1000.	ND (500.	500.	ND(0.05								NA
C-3	11/21/89	20.	1000.											NA
C-3	01/12/90		1.1	0.12	1.0		310	2	12	2.5	85	21	43	NA
C-3	03/20/90	ND(0.005	0.3											SAL
C-3	06/27/90	ND(0.01	0.3											SAL
C-3	10/12/90													SAL
C-3	12/20/90												1	
C-3	04/10/91												,	
	00.400.400													NA
* TB	03/20/90													SAL
18	06/27/90									~~~				SAL
T8*	10/12/90	•						′						SAL
TB	12/20/90													SAL
TB	04/10/91													
														SAL
RINSATE	06/27/90													SAL.
	10/12/90													SAL
RINSATE	12/20/90													SAL
RINSATE	04/10/91													

Table 1
Summary of Results of Ground Water Sampling
Chevron Service Station # 9-0338
5500 Telegraph Avenue, Oakland, California

Concentrations in parts per billion (ppb)

	DATE OF	IRON	MAGNESIUM	MANGANESE	MERCURY	NICKEL	POTASSIUM	SODIUM	THALLIUM	VANADIUM	LAB
WELL ID	SAMPLING/										NA
10	MONITORING								5	14	NA
	11/21/89					50	8.7	64	=		SAL
C-1	03/20/90	84	73	81							SAL
C-1	06/27/90					_ _ _					SAL
C-1	06/27/90										SAL
- C-1D	10/12/90										SAL
C-1*	10/12/90										SAL
C-1D	12/20/90										SAL
C-1	04/10/91	-									••-
C-1	04/10/91										NA
C-1D	04/10//1			-						70	NA
	11/21/89					1.4	29	47			SAL
C-2	03/20/90	450	130	9.5	1.0						SAL
C-2	06/27/90										SAL
C-2	10/12/90										SAL
C-2	12/20/90										5
C-2	04/10/91										NA
C-2	04/10/71										NA
					 -						NA
C-3	11/21/89						32	49		<i>7</i> 9	SAL
c3	01/12/90		130	9.2	1.0	1.7					
C-3	03/20/90	530									SAL
C-3	06/27/90										SAL
C-3	10/12/90							~			SAL
C-3	12/20/90										
C-3	04/10/91					•					

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								Casing installa	ation data:				
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-													
							Log of						

308 NUMBER 7263

REVIEWED BY RGICEG

DATE 11/89

REVISED DATE

ield loca	ation of bo	oring:			! <u></u>		Project No.: 7	263	Date:	11/13/89	Boring No:
							Client: C	hevron Se	vice Statio	n #0338	_ C-1
		(Se	ee Plate	2)			Location: 5	500 Telegra Dakland, Ca	aph Avenue		Sheet 2
							City: C		Driller:	Bayland	of 2
							Casing installat			Daylaria	
orilling r	nethod:	Hollow-Ś	Stem Au	ner				1			
Hole dia		8-Inch	otom Ao	901			Top of Box Ele	vation:		Datum:	
		1				<u>8</u>	Water Level				
ΛÊ	ع کو	Type of Sample	Sample	Depth (ft.)	Sample Well Detail	SO) I	Time				
P (mqq	Blows/ft or Pressure (psi)	g _r S	S P	å .	g > 2	Soil Group Symbol (USCS)	Date	 	Description		_1
	<u> </u>	0011		2					Description		
0	7	S&H	C-1	20	\vdash		·}				
	14		20.5		H		SILTY SA	AND (SM) -	dark yellow	brown (10Y	R 4/6),
	 	 		21	•		medium (dense, very	moist; 80%	very fine sa	and; 20% silt;
							no chem	ical odor.			
				22		11111	·	<u> </u>			
		ļ		-		11111	<u> </u>	1	····		
	ļ	<u> </u>		23		-					
	 	-	 	24	_	11:11:1	·				
0	4	S&H	 	-	\sqcap_{\triangledown}	[1:11.	COLOR	CHANGE t	o light gray	(7.5YR 6/0),	saturated;
	7		C-1	25	一克		organic t	ragments;	no chemica	ıl odor.	
	10		25.5				<u> </u>				
				26		<u> </u>	·	<u> </u>			
		 	<u> </u>	-	_	1:4:1:[<u>: </u>	<u>.</u>	·		
		 	-	27				 -			
	 -	 	 -	28	\dashv			<u></u>			
	 	 	 	-			SANDY	CLAY (CL)	 dark yello 	w brown (10	YR 4/4), very
	 	-	<u> </u>	29 [ll rounded g	ravels; 30%	fine sand; no
0	4	S&H]			chemica	l odor.		·	
	11	<u> </u>	C-1	30			}	<u></u>			
	20	<u> </u>	30.5	31			/			. 	
				-{``}			<u></u>				
-	10	, S&H		32			same as	above; no	chemical c	dor.	
-	19		1	7					<u></u>		
	23			33			Bottom	of sample a	t 33.0 feet.		
				╛╸╎			Bottom	of boring at	33.0 teet.		
<u> </u>			 	34	\dashv						<u> </u>
 			1	35							
<u> </u>			 	\dashv \exists		1		-			
 	+		 	36							
	1					ļ.					
				37							
								- 			
			- 	38							
 	_	 		39		1					
Remar	ke.			139							
"~"	no.										
					<u></u> . <u></u>	Log	of Boring		··		BORING
	C G	eoStrate	gies in	c.		5					
								1			C-

REVIEWED BY RGICEG

DATE 11/89 REVISED DATE

eld loca	tion of bo	ring:						Project No.:	7203		Date:	11/13/89	Boring No
								Client:	Chevro	n Sen	vice Station	1#0330	C-2
		(Se	e Plate	2)				Location:	5500 TE	Hegra	ph Avenue		Sheet 1
					•			City: Logged by:	Oaklan	u, Cal	Driller:	Bayland	of 2
								Casing instal	n.o. I			Daylana	
								Casing instal	MUVII GUIG	•			
rilling m		Hollow-S	tem Aug	ger				Top of Box B	levation:	124.	92	Datum: MS	SL
ole diar	neter:	8-Ińch					െ	Water Level			10.75		
	ال ² (وي)	- e	<u>e</u> 5	£	قِ	- 5	Soil Group Symbol (USCS)	Time	14:10		10:35		
P40 (mdd)	Blows/ft. or essure (p:	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail) led	Date	11-13		11-21-89		
- 3	Blows/ft. or Pressure (ps)	15.00	ωz	۱۵۱	"		8 6				Description		
								PAVEN	MENT SE	CTIO	N - 0.5 feet		· ·
							4. 野菜 乳素	 _					
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				_			$\left\{ \left[$						
		ļl		2				 					
	ļ			_									
				3				 			<u></u>		
	<u> </u>			4				SILT (ML) - vei	γ darl	k grayish b	rown (10 YF	3/0), med
	400	S&H	<u> </u>	•				stiff, d	v; trace	very f	ine sand; r	ootlets; ope	n voids; no
0	100 150	push	C-2	5			1111	chemi	cal odor.				
	250	pusii	5.5					 					
	230	 	- 0.0	6		Ì							_,
	 	 	<u> </u>										
		 		7]				•			
-	 	1]	1111						
				8		1							
				1.1		ļ		l	<u></u>			 	
		<u> </u>		9		-		L					
0	500	S&H		1,0		4	1	GRAN	/FLLY C	I AY (CL) - dark v	ellow brown	1 (10YR 4/
	20	 	C-2 10.5	10	-	4		hard.	moist: 3	5% an	gular grave	el; 10% fine	sand; no
	24		10.5	11		1		chem	ical odo		<u>v</u> _		
		- 	 -	- ''	-	-							
	 -	 	 	12	-		1//		***				
	+		 	┪ ̄		1	1//						
	+		1	13				/					
-		1						/					
				14		_		/					
0	9	S&H	<u> </u>			4	1//	1	oc obc	10: 00	chemical o	odor.	
	18		C-2	15		4	1//	Same	as auu	/e, 110	Gricinical C		
	20		15.5			4	1//	/					
			J.——	16	-	4	1//	<u>/</u>			<u></u>		
			<u> </u>			-{							
<u> </u>				_ 17	-								
<u> </u>			 	18	\vdash		1//			- ···			
<u> </u>				⊣ '°	'	=	199	//					
				19	,	\dashv	//		• .				
Remar	rks:			1.10									
1							1.4-	of Boring					BC

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DATE 11/89

REVISED DATE REVISED DATE

		(5	ee Plate	2)					Oakland, Ca	aph Avenue alifornia		Sheet 2
								Logged by:		Driller:	Bayland	of 2
								Casing install				
rilling n	nethod:	Hollow-9	Stem Au	ger							7-	
ole dia	neter:	8-Inch						Top of Box E	evation:	T	Datum:	
	. (%	1		2	•		Soil Group Symbol (USCS)	Water Level			<u> </u>	
O Gudd	rs (f	Type of Sample	Sample	Depth (ft.)	Sample	Well	G (5)	Time Date				
ی س	Blows/ft. or Pressure (psi)	≧%	Ø ž	\	ď	- 1	ig gr	Date	<u> </u>	Description	.1	
0	4	S&H	 				10/0/0					
	7	Jan	C-2	20			1//)				
	18		20.5	1		1	10/0/0	CLAYE	Y GRAVEL (GC) - dark y	ellow brown	(10YR 4/4),
				21]	1///	medium	dense, moi	st; 70% ang	ular to subr	ound gravel;
									y; pockets o	of calcareous	s nodules; r	no chemicai
				22		1	10/0/0	odor,				
	ļ.——	 	ļ	02	<u> </u>	-	1/1/					
	ļ.——	 	 	23	-	ł	10/0/9	 				
	 	1	 	24		Ϋ́	1/1/	<u> </u>				
0	3	S&H	1	-		1	[].[:]:	SILTY	SAND (SM)	dark yellow	brown (10Y	′R 4/6),
	3	1 2011	C-2	25			11111	medium	dense, satu	ırated; 75-80	0% very fine	sand; gray
	10		25.5	1		1		staining	around org	anic fragme	nts; no che	mical odor.
		1		26]						
]]				
			<u> </u>	27		-						
	ļ					4		}				
	ļ. <u>. </u>		ļ 	28		-{		/				
	 	 	-	29	 	-{		GRAVE	FLLYCLAY	with SAND (CL) - dark vi	ellow brown
0	7	S&H	 	 		1		(10YR	4/6), verv sti	ff, moist; 20°	% angular to	subround
	10	10011	C-2	30		1		gravel;	15% mediu	m sand; no d	chemical od	or.
	14		30.5	1		1						
				31]						
	7	S&H]		1				
	10			32		_		1				
	15					4			of sample a			
	 			33	-	-		Вопот	of boring at	3∠,5 leel.		
		 	 	34		-						
	 	-	-	- 34	\vdash	-						
	- 	 	+	35	-	-						
· · · · · · · · · · · · · · · · · · ·	1		 	٦,		1						
				36		1						
												
				<u> </u>		_]						
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				38		_						
			1		\vdash			<u> </u>	<u> </u>			
D	<u> </u>	<u> </u>		39	ــــــــــــــــــــــــــــــــــــــ							
Remark	s:							-				
States Money	4 65000						1000	Doring	<u> </u>			BORING
	TO G	eoStrate	aies Inc				Log o	Boring				DOMING
(~ II ~		J	•								C-

7263

CMP CEC 1262

11/89

eld loca	ation of b	oring:	`	. 1	•			Project No.: Client:	Chevron	Service Statio	11/13/89 n #0338	-	vio:
			a Dista	O)						egraph Avenue		- C-3	>
		(Se	e Plate	2)				City:	Oakland	, California		Sheet	1
								Logged by:	D C V	Driller:	Bayland	·	2
								Casing installa	ation data:		20,100,100		<u></u>
Orilling method: Hollow-Stem Auger Hole diameter: 8-Inch								Top of Box El	evation:	125.64	Datum: MS	5L	
ole diai		8-Inch			1			Water Level	23.5	11.28			
_	Blows/ft. or Pressure (psi)	5.0	ēē	£	9	G	Soil Group Symbol (USCS)	Time	16:00	09:57			
Old (modd)	ows/	Type of Sample	Semple	Depth (ft.)	Sample	Well Detail	50 €	Date	11-13-				
5	E 8	F 60	on Z	اقا	"		-χω		· · · · · · · · · · · · · · · · · · ·	Description			
								PAVEM	ENT SE	CTION - 2.5 feet	· · · · · · · · · · · · · · · · · · ·		
	<u> </u>]]	\vdash								
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								<u> </u>				···· ·	
				2									
	<u> </u>	-		3				ļ. — — — — — — — — — — — — — — — — — — —					
	 -			վ ՝	\vdash			<u> </u>					
	 	 		4	H			SILT (N	IL) - dark	brown (10YR	3/3), stiff, da	mp; trace	fin
0	100	S&H		1				sand; re	ootlets; r	no chemical ode	or.		
	100	push	C-3	5									
	150	1.5.5.1	5.5	1									
	 	 		6									
	1	T]						•			
	<u> </u>			7									
				↓ _				 					
	 			8			Y//	GRAVA	FLLYCI	AY (CL) - dark	ellow brown	(10YR 4)	/ 6),
	↓			9				very st	iff, moist:	20-30% fine a	ngular grave	l; oxidatio	on
0	6	S&H		վ "				stains:	no chen	nical odor.			
	12		C-3	10			1///	<u> </u>					
	18	+	10.5	┧.,			1///						
	 	 	1 - 1 - 1	 11		1	1//						
	+	1		1]							
				<u> </u> 12]		1			······································	· · · · · · · · · · · · · · · · · · ·	
	1							1					
] 13	·	1	1/4	á]					
			ļ	4.	<u> </u>	1	1/1	1					
			<u> </u>	_ 14		-	10/0/	CIAVI	Y GRAV	/EL (GC) - dark	vellow brow	n (10YR	3/4
0	4	S&H	C-3	15		1	1/1	mediu	m dense	. saturated; 75°	% angular to	subroun	d
	10		15.5	⊣ ′°	#	1		gravel	; 25% cl	ay; oxidation st	ains; no che	mical odd	or.
	10		13.3	16	3	-	10/0/	6				- ·	
	+-		 	┦``		1	1/1						
				17	7	1	1./0/	1					
	_		-				1						
	+-			_ 18	3]	19/9/	<u>/</u>					
								//		.,			
				19	9 │		<u></u>	<u> </u>					
Remar	ks:												
							Log						3OFIN

GSI JOB NUMBER

7263

REVIEWED BY AGACEG

DATE 11/89

REVISED DATE

Common C	Id locat	ion of bo	ring:)	Project No.:	7263		11/13/89	Boring No:
Clay: Oakland, California Bayland of Ceeing instinition date: Common Ceeing instinition date: C	ila icom		_					Client:	Chevror	Service C.atio	11#0338	C-3
Clayer Sand Clayer Commended Clayer Clayer Commended Clayer			(Se	e Plate	2)			·	5500 16	California		Sheet 2
Top of Box Elevation: Casing installation data Casing installation data			•							, California	Bayland	of 2
								Logged by:	H.S.Y.	·	Dayland	
Section Sect								Casing Install	ation data			
Sample S	ing m			Stem Au	ger			Top of Box E	levation:		Datum:	
0 3 S&H C-3 20.5 13 20.5 21	e dian	neter:	8-Inch									
0 3 S&H C-3 20		(isc			2		d nc					
0 3 S&H C-3 20	o €	7, Fr	pe of mpte	age.	£	d k	Sol (C		 			
0 3 S&H C-3 20	ا ق	old Reser	\~\%	ಶಿಸ	8	σ	Sympt S		<u></u>	Description	n	
CLAYEY SAND (SC) - dark yellow brown (10YR 4/6), medium dense, very moist; 70% very fine to fine sam 30% clay; gray staining around black organic fragme trace rounded gravel; no chemical odor. 22			C8.H			r -	17.77	4			.	
13	<u>⁰</u>		341	C-3	20		1///	1	,			OVD 4/6\
21 30% clay; gray staining around black organic fragme trace rounded gravel; no chemical odor. 23 24 24 25 25 25 26 27 28 27 28 28 29 25.5 26 27 28 27 28 29 28 29 27 28 29 28 29 28 29 28 29 28 29 28 29 28 29 28 29 29							///	CLAYE	Y SAND	(SC) - dark yel	low brown (1	01H 4/0),
13			 		21	•	///	mediur	n dense,	very moist; 70°	% very tine to	oio frogmen
23			 		1 [///	30% cl	ay; gray	staining around	Diack organ	ile iragineri
0 7 S&H 25.5 26 27 28 28 29 29 28 3.1 28 3.1 29 29 29 29 29 29 29 29 29 29 29 29 29			ļ		22 [1///	trace re	ounded (ravel; no chen	ilcar ouor.	
24 24 24 35 30 30 30 30 30 30 30					7 [///	X			· · · · · · · · · · · · · · · · · · ·	
0 7 S&H C-3 25 GRAVELLY SAND (SP) - dark yellow brown (10YR 3 medium dense, saturated; 70% medium to coarse satura			ļ		23		(///	/ 		<u> </u>		
0 7 S&H C-3 25 GRAVELLY SAND (SP) - dark yellow brown (10YR 3 medium dense, saturated; 70% medium to coarse satura					_ [الجزير	:]				· · · · · · · · · · · · · · · · · · ·
9					24	<u>Ş</u>		:}				
9 25.5 26 25-30% well rounded gravel; 5% fines; no chemical 27 28 28 25-30% well rounded gravel; 5% fines; no chemical 30 30.5 31 31 30.5 31 32 33 35 36 36 36 39 39	0		S&H	 				GRAV	FIIVSA	ND (SP) - dark	vellow brow	n (10YR 3/4
25-30% well rounded gravel; 5% tines; no chemical 27 28 31 32 30 17 38H 30 10 31 7 S&H 30 31 31 31 31 32 33 Bottom of sample at 32.5 feet. Bottom of boring at 32.5 feet. Bottom of boring at 32.5 feet.					_ 25			modiu	m dense	saturated: 70°	% medium to	coarse sar
27		9		25.5				25-309	% well ro	unded gravel:	5% fines; no	chemical o
Sample at 32.5 feet			J		26			25-30	70 WELLIO	unded graven		
Sample at 32.5 feet		ļ	ļ			\dashv	• • • • • • • • • • • • • • • • • • • •	.:		<u> </u>		
SANDY CLAY with GRAVEL (CL) - dark yellow brow (10YR 4/6), very stiff, moist; 35-40% medium to coa sand; 15% gravel; no chemical odor. 7 S&H 10 32 15 33 Bottom of sample at 32.5 feet. Bottom of boring at 32.5 feet. 34 35 36 37 38 38			-		- 27							
SANDY CLAY with GRAVEL (CL) - dark yellow brow (10YR 4/6), very stiff, moist; 35-40% medium to coa sand; 15% gravel; no chemical odor. 7 S&H 10 15 31 Bottom of sample at 32.5 feet. Bottom of boring at 32.5 feet. 34 35 36 37 38 38 39			- 		- 20			stiffer	at 27.5 fe	et		
0 7 S&H			 		⊣ 20∤		17/	/				
0 7 S&H		 			29			SAND	Y CLAY	with GRAVEL	(CL) - dark y	ellow brown
13		 7	S&H					(10YF	3 4/6), ve	ry stiff, moist; 3	5-40% medi	um to coars
17	<u> </u>			C-3	30			sand;	15% gra	vel; no chemic	al odor.	
7 S&H 32 1 10 32 1 15 33 Bottom of sample at 32.5 feet. Bottom of boring at 32.5 feet. 34 35 36 37 38 39										<u> </u>		
10 32 Bottom of sample at 32.5 feet. Bottom of boring at 32.5 feet. 34 35 36 37 38 38 39					31		Y//	<u> </u>		ļ		
10 32 Bottom of sample at 32.5 feet. Bottom of boring at 32.5 feet. 34 35 36 37 38 38 39		7	S&H				1//	/				
15			-		32			/				
Bottom of boring at 32.5 feet. 34 35 36 37 38 39			 		\Box			4		inlo at 32 5 fee		
34	·	1			33			Botto	m of bor	ing at 32 5 feet	<u></u>	
35								Botto	111 01 001	ing at oz.s ieet	<u> </u>	
36					34				<u></u>			
36								ļ- 				
37 38 38 39					35			<u> </u>			<u></u>	
37 38 38 39												
38 39 39					36			<u> </u>				
38					0-			ļ	,			
39		 			3/							
39					00	-		<u> </u>				
					³⁸	-	.					
	-				⊣ 20	-	1		<u> </u>			
	<u> </u>	1			09	<u>' </u>			 			
Remarks:	Hemai	rks:						•				

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0ATE 11/89

REVISED DATE

11/13/89

Boring No: