

Chevron U.S.A. Inc.

2410 Camino Ramon, San Ramon, California • Phone (415) 842-9500 Mail Address: P.O. Box 5004, San Ramon, CA 94583-0804



Marketing Operations

D. Moller Manager, Operations S. L. Patterson Area Manager, Operations C. G. Trimbach Manager, Engineering

December 15, 1989

Rafat Shahid Alameda County Environmental Health Department 80 Swan Way #200 Oakland, California 94621

> Re: Former Chevron Facility #91026 3701 Broadway Oakland, California

Dear Mr. Shahid:

Enclosed are the results of the quarterly ground water sampling conducted by Weiss Associates at the above-referenced site. As indicated in the report, all water samples were analyzed for total purgeable petroleum hydrocarbons (TPPH) and aromatic hydrocarbons. Ground water samples from monitoring wells A, B-1, B-2, B-4, B-6, and B-7 contained benzene above the California Department of Health Services (DHS) maximum contaminant level (MCL) for drinking water. Ground water samples from monitoring wells B-1, B-2, and B-7 contained toluene above the DHS recommended action level for drinking water. Ground water samples from B-2 and B-7 contained ethylbenzene and xylenes above DHS MCLs. Monitoring wells B and B-3 contained free-floating hydrocarbons and were not sampled. A remediation system is being designed for the site. If you have any questions or comments, please contact Lisa Marinaro at (415) 842-9527.

I declare under penalty of perjury that, to the best of my knowledge, the information contained in the attached report is true and correct and that any recommended actions are appropriate under the circumstances.

Sincerely, D. Moller

Rv

Lisa Marinaro Engineer

LAM/wa Enclosure

cc: Don Dalke Regonal Water Quality Control Board 1111 Jackson Street Oakland, California 94607 Geologic and Environmental Services

Fax: 415-601-0112

Phone: 415-601-0111

5500 Shellmound Street, Emeryville, CA 94608

December 15, 1989

Lisa Marinaro Chevron USA P.O. Box 5004 San Ramon, CA 94583-0804

DESCRIPTION OF HICH.

Re: Former Chevron Service Station #91026 3701 Broadway Oakland, California WA Job #4-418-01

Dear Ms. Marinaro:

Weiss Associates (WA) collected ground water samples from eight monitoring wells on November 9, 1989 as part of the quarterly ground water monitoring program at former Chevron Service Station #91026 in Oakland, California (Figure 1). Monitoring wells B and B-3 contained free-floating hydrocarbons and were not sampled. Monitoring well F was bailed dry and did not recover sufficiently to sample. Wells B-5 and C have been paved over so they could not be sampled this quarter. Ground water samples from monitoring wells A, B-1, B-2, B-4, B-6 and B-7 contained benzene above the California Department of Health Services (DHS) maximum contaminant level (MCL) for drinking water. Ground water samples from monitoring wells B-2 and B-7 contained ethylbenzene and xylenes above DHS MCLs. Ground water samples from monitoring wells B-1, B-2 and B-7 contained toluene above the DHS recommended action level for drinking water.

GROUND WATER SAMPLING

Personnel: Todd Pearson and Eric Anderson WA Position: Environmental Technicians Date of sampling: November 9, 1989

Monitoring/other wells sampled: A, B-1, B-2, B-4, B-6, B-7, EA-1 and EA-2

- Wells not sampled due to presence of free-floating hydrocarbons: B, B-3
- Wells with insufficient water to sample: F
- Wells not sampled due to inaccessibility: B-5, C

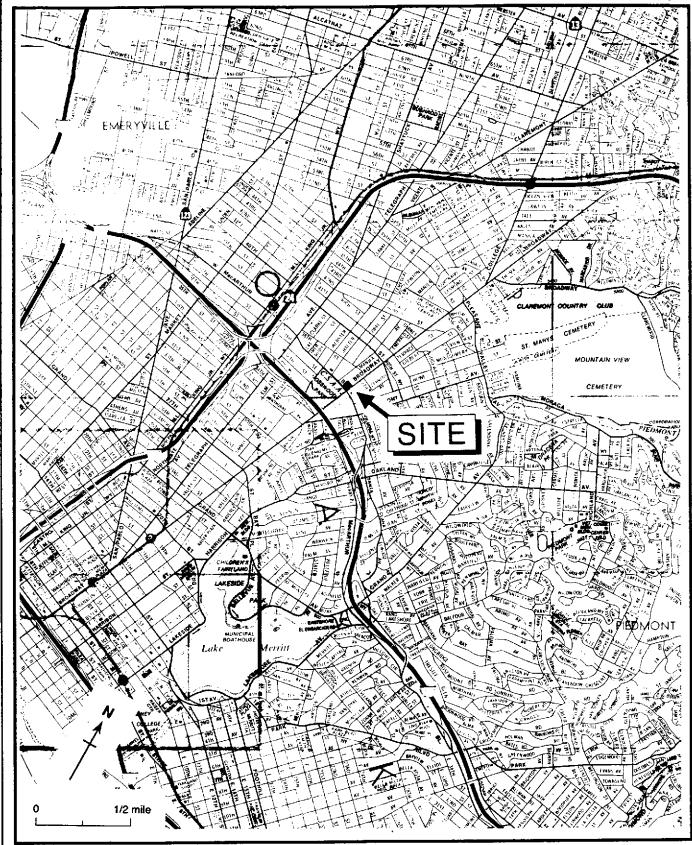


Figure 1. Site Location Map -Former Chevron Service Station #91026, 3701 Broadway, Oakland, California

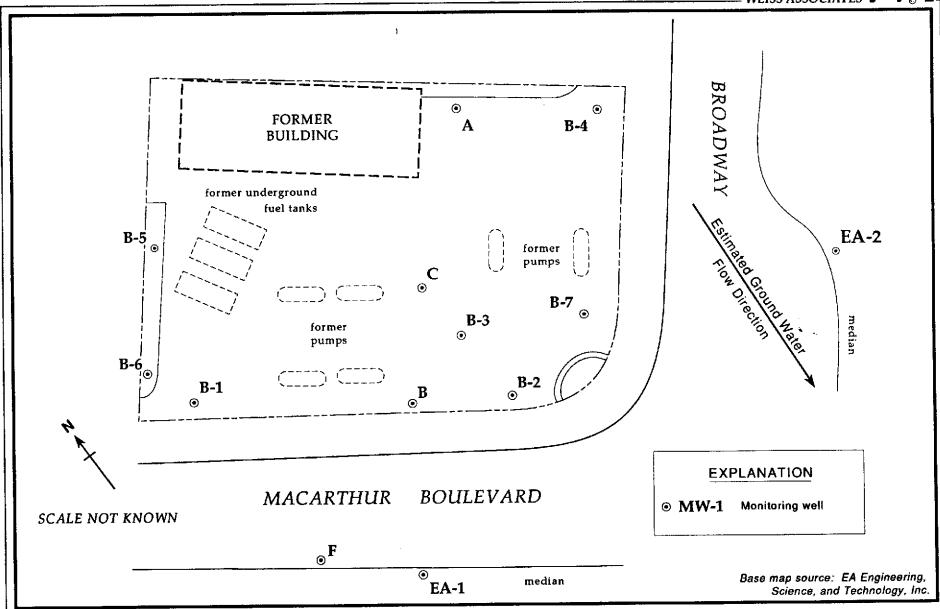


Figure 2. Monitoring Well Locations - Former Chevron Service Station #91026, 3701 Broadway, Oakland, California

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Method of purging wells:

- steam-cleaned PVC bailers
- steam-cleaned Teflon bailers
- dedicated Teflon bailers

Volume of water purged prior to sampling:

- Wells purged of about three well-casing volumes, approximately 0.75 to 30 gallons per well: A, B-1, B-2, B-4, EA-1, EA-2
- Wells purged dry; water level allowed to recover within 80% of static water level or allowed to recover for at least two hours prior to sampling: B-6, B-7

Method of ground water sample collection:

- Samples were decanted from steam-cleaned Teflon bailers.
- Samples were decanted from dedicated Teflon bailers.

Method of containing ground water samples:

• 40 ml glass, volatile organic analysis (VOA) vial, preserved with hydrochloric acid and sealed in a plastic guard bottle containing activated carbon pellets

All samples were placed in coolers and refrigerated for transport to the analytic laboratory.

Water samples were transported to:

• Superior Analytic Laboratory, Inc., Martinez, California

Date samples were received by Laboratory: November 10, 1989

Quality assurance/quality control:

A travel blank was analyzed.



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Water sample collection records and chain-of-custody forms are included as Attachments A and B, respectively.

GROUND WATER GRADIENT

The ground water gradient, as inferred from regional topography, suggests southerly ground water flow. Top-of-casing elevations were not available, therefore a ground water elevation contour map was not drawn.

CHEMICAL ANALYSES

All ground water samples were analyzed for:

- Total purgeable petroleum hydrocarbons (TPPH) by modified EPA Method 8015
- Benzene, ethylbenzene, toluene and xylenes (BETX) by EPA Method 8020

Date samples were analyzed: November 16 and 17, 1989

Analytic results for this quarter show:

- Hydrocarbon concentrations in ground water samples from monitoring wells A and
 B-4 are gnerally higher than in previous samplings.
- Benzene concentrations in ground water samples from monitoring well B-1 are lower than in previous quarters.
- Hydrocarbon concentrations in ground water samples from monitoring wells B-6 and B-7 are lower than in previous samplings.
- Toluene was detected in ground water samples from monitoring well EA-2 for the first time.
- No hydrocarbons were detected in ground water samples from monitoring well EA-1.

Free-floating hydrocarbon thicknesses of 0.08 and 0.05 ft were observed in monitoring wells B and B-3, respectively, which is consistent with historical results. The results of the water analyses are presented in Table 1 and the analytic reports are included as Attachment C.

TABLE 1. Analytic Results for Ground Water - Chevron Service Station #91026, 3701 Broadway, Oakland, California

Sample ID	Date Sampled	Analytic Lab	Analytic Method	↑₽₽₩ <	8	E -parts per billi	† on (μg/L)	X
A	5-09-89	SAL	8015/8020	11,000	260	94	<2	230
•	8-09-89	SAL	8015/8020	12,000	370	100	<1.5	240
	11-09-89	SAL	8015/8020	16,000	690	The state of the s	40	350
В	5-09-89 *							
_	8-09-89 *							
	11-09-89 *							
F	5-09-89	SAL	8015/8020	<500	<0.5	<0.5	0.6	1.0
•	8-09-89 ** 4		•••					
	11-09-89 **					•••		
A-1	ت 5-09-89	SAL	8015/8020	<500	<0.5	<0.5	<0.5	<0.5
	8-09-89	SAL	8015/8020	<500	<0.5	<0.5	<0.5	<0.5
	11-09-89	SAL	8015/8020	<500	<0.5	<0.5	<0.5	<0.5
A-2	5-09-89	SAL	8015/8020	760	<0.5	1.1	<0.5	<0.5
	8-09-89	SAL	8015/8020	<500	<0.5	<0.5	<0.5	<0.5
	11-09-89	SAL	8015/8020	<500	<0.5	<0.5	1	<0.5
-1	5-10-89	SAL	8015/8020	16,000	2,300	81	260	740
	8-09-89	SAL	8015/8020	12,000	2,600	100	340	870
	11-09-89	SAL	8015/8020	17,000	340	110	140	760
-2	5-09-89	SAL	8015/8020	170,000	30,000	2,300	8,400	12,000
	8-10-89	SAL	8015/8020	60,000	29,000	2,400	8,700	12,000
	11-09-89	SAL	8015/8020	110,000	32,000	2,800	5,500	12,000
:-3	5-10-89	SAL	8015/8020	70,000	12,000	1,400	9,500	8,900
	5-10-89 *			•				
	11-09-89 *							
3-4	5-10-89	SAL	8015/8020	3,600	840	120	34	200
	8-09-89	SAL	8015/8020	<500	4,200	370	130	260
	8-09-89 (dup)	SAL	8015/8020	5,000	4,200	400	83	250
	11-09-89	SAL	8015/8020	14,000	6,000	530	70	300
1-6	5-09-89	SAL	8015/8020	26,000	120	250	110	1,300
	5-10-89	SAL	8015/8020	19,000	470	440	150	1,400
	11-09-89	SAL	8015/8020	13,000	70	36	36	440

⁻⁻ Table 1 continues next page--



TABLE 1. Analytic Results for Ground Water - Chevron Service Station #91026, 3701 Broadway, Oakland, California (continued)

ample ID	Date Sampled	Analytic Lab	Analytic Method	₹₽₽Ħ <	В	E parts per billio	Τ on (μg/L)	X
;-7	5-10-89	SAL	8015/8020	210,000	13,000	2,000	19,000	20,000
	8-09-89	SAL	8015/8020	672,000	8,700	2,700	17,000	30,000
	11-09-89	SAL	8015/8020	150,000	7,000	1,800	12,000	16,000
ravel								
lank	5-10-89	SAL	8015/8020	<500	<0.5	<0.5	<0.5	<0.5
	8-09-89	SAL	8015/8020	<500	<0.5	<0.5	<0.5	<0.5
	11-09-89	SAL	8015/8020	<500	<0.5	<0.5	<0.5	<0.5
ailer								
llank	5-10-89	SAL	8015/8020	<500	<0.5	<0.5	<0.5	<0.5
HS MCLs				NE	1	680	100 ^a	1,750

Abbreviations:

TPPH = Total Purgeable Petroleum Hydrocarbons

B = Benzene

£ = Ethylbenzene

T = Toluene

X = Xylenes

DHS MCLs = Department of Health Services

Maximum Contaminant Level for Drinking Water

<n = Not detected at detection limit of n parts per billion</pre>

dup = Duplicate analysis

NE = Not established by DHS

a = DHS Recommended Action Level for Drinking Water

* = Not sampled due to presence of free-floating hydrocarbons

** = Not sampled because of insufficient water in the well

Analytic Laboratory:

SAL = Superior Analytical Laboratories of San Francisco and Martinez, California

Analytic Methods:

8015 = Modified EPA Method 8015, TPPH

8020 = EPA Method 8020, Purgeable Aromatic Hydrocarbons

Ms. Lisa Marinaro December 15, 1989



We appreciate the opportunity to provide hydrogeologic consulting services to Chevron and trust that this report meets your needs. If you have any questions, please call Jim Carmody or Robert Kitay.



Sincerely, Weiss Associates

Robert E. Kitay Staff Geologist

Eric M. Nichols Senior Water Resources Engineer

REK/EMN:kw

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Attachments: A - Water Sampled Collection Records

B - Chain of Custody C - Analytic Reports ATTACHMENT A
WATER SAMPLE COLLECTION RECORDS

WATER SAMPLING DATA Well Name A Date 11-9-89 Time 1145
Job Name/Number (New Oak TIC 4-4,5-01 Initials TY
Well Spring Surface Other
Location By Office
WELL DATA: Well type (Describe; M - monitoring well)
Depth to Water 15.45 ft (pump/stat) Maximum Drawdown Limit (MDL) ft
Well depth 10.06 ft (sounded) Well depth 20.06 ft (spec)
Well diameter 1 in. TOC height above ground ft Water elev. ft
Volume Evacuated: Pumped Bailed
Time: Stop 45 Formulas/Conversions
Start 130 r = well redius in ft
Total hrs/min /5 h = ht of water col in ft vol. in cyl. = wr'h
Total Evacuated gal. 7.48 salfes
Evacuation Rate gpm / Casing = 0.163 gal/ft
V ₂ casing = 0.367 gal/ft V ₂ casing = 0.653 gal/ft
Pump # and type Bailer # and type 0) / V V v s casing = 0.826 gal/ft
Hose # and type Ve" casing = 1.47 gal/ft
V8" casing = 2.61 gal/ft
Sampling Port: Rate gpm Volume gal.
Location/description
11 11
Initial height of water in casing - 4(ft; volume - 6 gal. X)
Evacuation at drawdown limit - 3 x initial volume gal.
Evacuation at sampling point - 1 x initial volume - gal.
Total to be evacuated = 2.0 gal.
Water Color: None Odor: none
Description of sediment and/or foreign matter in sample:
clear lew sortacles of time sand
Point of collection: 22 of tellow backer # AM
Depth to water during pumping ft time Sampling 19.0(ft 146 time
Pumped dry? () After gal. Recovery rate
ADDITIONAL COMMENTS, LOCATION SKETCH, ENVIRONMENTAL CONDITIONS, e.g., weather,
van running nearby, problems with equipment or sampling, etc., pump on/off
times, etc. (over).
CHEMICAL DATA
Temperature OC Thermometer # Specific Conductance umhos
pHCalibration4.0,7.0,10.0 Galibration TempOC
SAMPLES COLLECTED:
Bottle/ Filtered Preservative
Sample Cap (size, u) (specify)
ID No. A (Specify) (N = No) (R = Refrigerated) Analysis (Lab -)
5) 119-A 40ml (Specify) (11-No) H(C 2 Cx S-Ver 15-17
) III I I I I I I I I I I I I I I I I I
m1
ml — ml
ml
ml
ml
ml
m1
MT.
Bottles: P = Polyethylene: Dn = Dolympanylene: C em B = Clear/Bray Class:
Bottles: P - Polyethylene; Pp - Polypropylene; C or B - Clear/Brown Glass;
Bottles: P - Polyethylene; Pp - Polypropylene; C or B - Clear/Brown Glass; O - Other (describe) Additional Cap Codes: Py - Polyseal; V - VOA/Teflon septa; M - Metal

-REE PRODUCT, NO SAMPLE

WATER SAMPLING DATA Job Name/Number	- On blank Itt Surface Ot	/ <u>4-416-</u>			Time 1 Initials E	WA
WELL DATA: Well type Depth to Water 19.03 Well depth 19.62 Well diameter 2 in	ft (pump/s ft (sound TOC height	tat Maxis	(Describ mum Drawdown depth	pe; M ¥ : n Limit : / 0 .63	monitoring w (MDL) ft (spec) elev	ell) _ ft _ ft
Time: Stop Start Total hrs/min Total Evacuated Evacuation Rate	,05 gal.		11:39	- k · vol	mulas/Conversion: - well radius in : - ht of water col - in cyl. = \pi r^2h - 68 gal/ft^3 - casing = 0.163 ; - casing = 0.367	in ft
Pump # and type Hose # and type	Bailer	# and type	Tiffen bailer #	<u>A</u> P v4 - v6 - v8	casing = 0.653; 5" casing = 0.820; casing = 1.47; casing = 2.61;	gal/ft 6 gal/ft gal/ft gal/ft
Sampling Port: Rate Location/description		Volume	g	al.		
Initial height of war Evacuation at drawdo Evacuation at sampli Water Color: Description of sedim	wn limit = 3 x	initial v initial v	olume =	g	a1. /	19.6
Point of collection: Depth to water durin Pumped dry? We Af ADDITIONAL COMMENTS, van running nearby, times, etc. (over). CHEMICAL DATA	ng pumping ter <u>.05</u> gal. LOCATION SKET problems with	ft Recovery CH, ENVIRO equipment	time Samp rate <u>.000</u> NMENTAL CON or sampling	ling [9.2 05 gen DITIONS, etc.,	e.g., weath	er,
TemperatureOC pH Calibration			pec ific Gon 0.0 Calib			
SAMPLES COLLECTED:		ltered P	reservative			
Sample	Cap (s	ize, u) (specify)			
	_				41	Tak
ID No.	_	- No) (R - Refrige	rated)	Analysis GostBBTX	Lab <u>L7£1</u>
ID No.	(Specify) (N	- No) (R - Refrige	_ *		
ID No.	(Specify) (N	- No) (R - Refrige	_ *		
ID No.	yethylene; Pp - er (describe) des: Py - Poly	Polypropy	R - Refrige HC(B =	Clear/Brown	<u> </u>

3

WATER SAMPLING DATA	Well Name EA-1	Date 11-9-89_	Time 150
Job Name/Number	her Cabland	711 4-418-0	Initials TP
Well Spring S	urface Other		
Location	Median on	MacArthur	
WELL DATA: Well type		(Describe; M	- monitoring well)
Depth to Water (5.4		ximum Drawdown Lim	it (MDL) ft
Well depth 30149	ft (sounded) We	11 depth 30.2	ft (spec)
Well diameter '(in.			
Volume Evacuated:	umped nile Pumped	Bailed	
	2-50		Formulas/Conversions
Start 1	230		r = well redius in ft
Total hrs/min	30		h = ht of water col in ft
Total Evacuated	30 gal.		vol. in cyl. = 7/x ² h 7.48 gal/ft ³
Evacuation Rate	gpm		V2" desing = 0.163 gal/ft
	6F	1 Att (0)	V_" casing = 0.367 gal/ft
Pump # and type	Bailer # and ty	no417116765 3	V4 casing = 0.653 gal/it
Hose # and type	Darrer # and cy	pe <u>/ / / / / / / / / / / / / / / / / / /</u>	V _{4.5} casing = 0.826 gal/ft V ₆ casing = 1.47 gal/ft
nose # and cype			Vg casing = 2.61 gal/ft
Complian Double Date	Val	gal.	
Sampling Port: Rate		gar.	
Location/description			
Initial height of wat		.5	7 56 -11~37
initial neight of wat	er in casing = 1 1	7) rt; volume = =	Bar.v
Evacuation at drawoow	AN TIMIC - 2 % INTEREST	. VOIUME —	<u> </u>
Evacuation at sampling			gal.
	Total to be ev	vacuated - 2816	gal
Water Color:	re_	0dor:	1000
Description of sedime		<u> </u>	Moio, Ause
Point of collection:	End of Yerlon	* AL	/
Depth to water during	pumpingft	time Sampling	5.80ft 2757 time
Pumped dry? //// Aft	ter <u> </u>	ry rate	
ADDITIONAL COMMENTS.	LOCATION SKETCH, ENVI	RONMENTAL CONDITIO	NS, e.g., weather,
van running nearby, p	problems with equipmen	nt or sampling, etc	., pump on/off
times, etc. (over).			
CHEMICAL DATA			
Temperature CC	Thermometer #	Specific Conducta	nceumhos
	·		n Temp OC
pH Calibration		_10.0 Calibratio	n TempC
SAMPLES COLLECTED:			
	Bottle/ Filtered	Preservative	
Sample .	Cap (size, u)	(specify)	
ID No.	(Specify) (N - No)	(R - Refrigerated	Analysis Lab
5) //9-EA-1 40ml	C/U N	MCL X	pastberr 6-le
ml		,	
m1			
			
ml		· ——	
			-
ml			
			
Bottles: P - Polye	ethylene; Pp - Polypro	onvlene: C or b	- Clear/Brown Glass;
	etnylene; rp = rolypro r (describe)	oblitane, or p	- orearlarown grass'
		_ UOA /Ta£1	. M - Mo+ol
voorcroust cab code	es: Py - Polyseal; V	- AOWATELTOU Sebes	i, n - netar

WATER SAMPLING DATA Well Name EA-2 Date 11/9/89 Time 12:28	
Job Name/Number C - Oakland III / 4-418-01 Initials EWA	[
Well V Spring Surface Other	_
WELL DATA: Well type M 0 (Describe: M - monitoring well	_
)
Depth to Water 17.41 ft (pump/stat) Maximum Drawdown Limit (MDL) f	t
Well depth 30.23 ft (sounded) Well depth 30.1/ ft (spec)	
Well diameter 4 in. TOC height above ground _ ft Water elev f	t
Volume Evacuated: Pumped Pumped Bailed	
Time: Stop 12:(8 Formulas/Conversions	1
Start X 11:56 r = well radius in ft	
Total hrs/min h = ht of water col in i	Et
Total Evacuated 25 gal. 7.48 gal/ft ³	
Evacuation Rate 11 gpm V2" casing = 0.163 gal/s	
Pump # and type Bailer # and type 3" Ni # A V." casing = 0.387 gal/s	£t. 🦎
	L/ft
Hose # and type - Ve" casing = 1.47 gal/i	ft
V ₈ " casing = 2.61 gal/s	:
Sampling Port: Rate gpm Volume gal.	ř
Location/description	
1292 - 037 2	3
Initial height of water in casing = 12.82 ft; volume = 8.37 gal.	' J
Evacuation at drawdown finite - 5 x initial volume gar.	
Evacuation at sampling point = 1 x initial volume = gal.	
Water Color: Grey tuled Odor: none.	
Water Color: Greek tuled Odor: none. Description of sediment and/or foreign matter in sample: Moderate amount of	-
Description of sediment and/or foreign matter in sample: Modele Amout 4	-
Point of collection: Gild teffen baile: # A5 Depth to water during pumping ft time Sampling 23.31 ft 12:29 time Pumped dry? Alvat After 25 gal. Recovery rate	-
Point of collection: But of term barber # 15	
Depth to water during pumping it time Sampling 25.31 it 12.27 time	ie.
ADDITIONAL COMMENTS, LOCATION SKETCH, ENVIRONMENTAL CONDITIONS, e.g., weather,	
van running nearby, problems with equipment or sampling, etc., pump on/off	
times, etc. (over).	
CHEMICAL DATA	=
TemperatureOC Thermometer # Specific Conductance umhos	
	-
pH Calibration 4.0, 7.0, 10.0 Calibration Temp C	
SAMPLES COLLECTED:	
Bottle/ Filtered Preservative	
Sample Cap (size, u) (specify)	
ID No. (Specify) (N = No) (R = Refrigerated) Analysis La	_
119-EAZ 40 ml C/V N HCI R Gust BETX G	TEL
ml	
m1	
ml	
ml	
ml	
ml	
m1	
m1	
Bottles: P - Polyethylene; Pp - Polypropylene; C or B - Clear/Brown Gl	Lass;
m1	lass;

MARKET CAMPITMO DAMA	Wall Warms F	۲.	Date 1(-4-6	-u Time (035)	
WATER SAMPLING DATA Job Name/Number (well wame	1	M- 4(5-1)	Initials	
	rev. Oak	Other	7-118-0		_
	7. \ 		1-4		_
Location		proce	O (Deceribe	e; M - monitoring well	7
WELL DATA: Well type	7 Es /	Varanti Nan	· · · (Describe	Limit (MDL) f	
Depth to Water 14 C	It (pump	(Stat) Mar	cimum prawdown	ft (spec)	~
Well depth 15.5	T IT (SOU	indea) we.	LI depth 13.	Water elev. f	+
Well diameter 2 in	. TOC heigh	it above gro	ound It	water elev 1	C .
	Pumpedan led	Pumped	Bailed	-	
Time: Stop 10	<u> </u>			Formulas/Conversions	1.
Start 11	<u> </u>			r = well redius in ft h = ht of water col in t	re l
. Total hrs/min	<u> 15</u> -			- vol. in cyl. = Wr ² h	Ì
Total Evacuated	,75 gal.			7.48 gal/ft ³	. !
Evacuation Rate	.05 gpm			V ₂ " casing = 0.163 gal/: V ₃ " casing = 0.367 gal/:	EL ft
· ·			11-1	V ₄ " casing = 0.653 gal/:	£t.
Pump # and type	Baile	er # and ty	pe(<u>B</u> . 10+	_ V _{2 5} " casing = 0.826 ga	l/ft
Hose # and type				V ₆ casing = 1.47 gal/:	£t er
	_			V ₈ " casing = 2.61 gal/	. C
Sampling Port: Rate	gr	om Volume	gal	1.	ž.
Location/description	-	•			-
, -	-			5.1	2 ^
Initial height of wa	ter in casir	ng - 1,5	ft; volume	= 124 gal. K) /
Evacuation at drawdo	wn limit = 3	x initial	volume -	gal.	
Evacuation at sampli	ng point = 1	l x initial	volume -	gal.	
<u></u>	Tota	al to be ev	acuated =	73 gal.	_
Water Color: 6	rey		Odor:	ves !	. *
Description of sedim	ent and/or i	foreign mat	ter in sample:	1 Just 621	<u> </u>
hervey gard/	5:14)
Point of collection:	5 mb) mf	- terly	Vailer	(dedicated)	. /
Depth to water durin	g numning	ft	time Sampl	ing 5.15 ft 1036 tin	ie
Pumped dry? () Af	ter	al Recove	ry rate		1. 4
ADDITIONAL COMMENTS	LOCATION SI	KETCH ENVI	RONMENTAL COND	ITIONS, e.g., weather,	
van running nearby,	nroblems wit	th equipmen	t or sampling.	etc. pump on/off	_
times, etc. (over).	P10010M0 W1				* -
CHEMICAL DATA				_	
Temperature °C	Thermometer	r#	Specific Cond	uctance umhos	
· —			-		
pH Calibration	ر <u>۲</u> 4.0, _	_ <i>~</i> 7.0, _ <i>-</i>	10.0 Calibr	ation TempoC	
					•
SAMPLES COLLECTED:					
	Bottle/	Filtered	Preservative		
Sample	Сар	(size, u)	(specify)		
TD No.	(Specify)	(N - No)	(R - Refriger	ated) Analysis/ L	b C
3) //9-13/ 4(Dml	1111	· M	- H(L 12	- 1545-DEXX C	<u>~ (て)</u>

m1					
					
ml					
ml					
— ml					
					
					<u> </u>
					
ml					
D. And Land		_ 0-1		B - Clear/Brown G	lass;
· · · · · · · · · · · · · · · · · · ·	ethylene; P	• • •	pyrene; c or	B - Clear/brown G.	,
	er (describe		TIOA /M - £1 =	onto, M — Motol	
. Additional Cap Coo	ies: Py = P	orysear; V	= VUA/Terion s	septa; m = metal	ξ
		,			J.F

WATER SAMPLING DATA, Well Name B-2 Date 11-9-89 Time 0935
Job Name Mumber Chev. O. 4 TH U-118-0 Initials TO
Well Spring Surface Other
Location Corne McCourte Bushury
WELL DATA: Well type / W(Describe; M - monitoring well) Depth to Water 16.95 ft (pump (stat)) Maximum Drawdown Limit (MDL) ft
Depth to Water 16.95 ft (pump/stat) Maximum Drawdown Limit (MDL) ft Well depth ft (spec)
Well diameter 2 in. TOC height above groundft Water elevft
Volume Evacuated: Pumped Bailed
Time: Stop 0938 Formulas/Conversions
Start 0425 r = well redius in ft
Total hrs/min h = ht of water col in ft vol. in cyl. = #r^h
Total Evacuated /() gal. Fivacuation Rate 2 gpm 7.48 sal/ft 7.48 sal/ft 7.48 sal/ft
Evacuation Rate gpm V ₂ " casing = 0.163 gal/ft V ₃ " casing = 0.367 gal/ft
Pump # and type Bailer # and type ded W. V4" casing = 0.653 gal/ft V4.5" casing = 0.653 gal/ft V4.5" casing = 0.826 gal/ft
Hose # and type V _c " casing = 1.47 gal/ft
V ₈ " casing = 2.61 gal/ft
Sampling Port: Rate gpm Volume gal.
Location/description
Initial height of water in casing - 21 ft; volume - 134 gal 3
Initial height of water in casing - 2 ft; volume - 13 gal gal gal.
Evacuation at sampling point = 1 x initial volume = gal.
Total to be evacuated = 102 gal
Water Color: Nouge Odor: Yes
Description of sediment and/or foreign matter in sample: \\ \tag{\chi_ne} \suspended \\
= 30x2/silt, non-cavitated, not yurbid
Point of collection: For Od ded. bailer (1000) Depth to water during pumping ft time Sampling 847 ft O 30 time
Pumped dry? \(\frac{\sqrt{0}}{\sqrt{0}} \) After \(\frac{\sqrt{gal.}}{\sqrt{gal.}} \) Recovery rate \(\frac{\sqrt{3}}{\sqrt{1}} \)
ADDITIONAL COMMENTS, LOCATION SKETCH, ENVIRONMENTAL CONDITIONS, e.g., weather,
van running nearby, problems with equipment or sampling, etc., pump on/off
times, etc. (over).
CHEMICAL DATA
TemperatureOC Thermometer # Specific Conductance umhos
pH Calibration 4.0,7.0, 10.0 Calibration Temp°C
SAMPLES COLLECTED:
Bottle/ Filtered Preservative Sample Cap (size, u) (specify)
Sample Cap (size, u) (specify) ID No. (Specify) (N -/No) (R, - Refrigerated) Analysis Lab
3) 119-13-2 412ml (1V) N HILL PL (245738) x 12-10
ml — — — — — — — — — — — — — — — — — — —
ml
ml
ml
ml
· · · · · · · · · · · · · · · · · · ·

no product detected by interfere probe

B-3 11 4.84 The a	
WATER SAMPLING DATA Well Name 3-3 Date 11-9-89 Time	
Job Name/Mimber (Ve) Out III 4-418-01 Initials	
Well Spring Surface Other	
7	
(Describe: M = monitoring well)	
Depth to Water ft (pump/stat) Maximum Drawdown Limit (MDL)	
Woll depth ft (sounded) Well depth It (spec)	
Well diameter in. TOC height above ground it water elev it	
Volume Evacuated: Pumped Pumped Bailed	
Time: Stop Formulas/Conversions	
Start r = well radius in ft h = ht of water col in ft	
Total hrs/min vol. in cyl. = wrh	1
Total Evacuated gal. 7.48 sal/ft ³	1
V." CASING = U.103 SAL/ID	:
Evacuation Rate V_3^* casing = 0.367 gal/ft V_4^* casing = 0.653 gal/ft	
$\mathbf{r}_{\text{max}} = \mathbf{r}_{\text{max}} + \mathbf{r}_{\text{max}} = \mathbf{r}_{\text{max}} + \mathbf{r}_{\text{max}$	t i
V_{-}^* casing = 1.47 gal/it	
Hose # and type	;
Sampling Port: Rate gpm Volume gal.	
Sampling Port: Rategpm Volumegal. Location/description	
Initial height of water in casing - ft; volume = gal.	<u> </u>
Evacuation at drawdown limit = 3 x initial volume =gal.	
Evacuation at sampling point = 1 x initial volume = gal.	
Total to be evacuated = gal.	
Water Color: Odor:	1
Description of sediment and/or foreign matter in sample:)
Description of sediment and/of foreign according	
Point of collection:ftfime Sampling ft time	•
Depth to water during pumping to	
Pumped dry? After gal. Recovery rate ADDITIONAL COMMENTS, LOCATION SKETCH, ENVIRONMENTAL CONDITIONS, e.g., weather,	-
ADDITIONAL COMMENTS, LOCATION SKEICH, ENVIRONMENTAL COMMENTS, LOCATION SKEICH, ENVIRONMENTS, LOCATION SKEICH, LOCATION	
van running nearby, problems with equipment or sampling, etc., pump on/off	
times, etc. (over).	. * *
CHEMICAL DATA Temperature OC Thermometer # Specific Conductance umhos	
pH Calibration	
	•
SAMPLES COLLECTED:	
Bottle/ Filtered Preservative	
c. (v. v.) /D = Defricereted) Analksis Lai	
ID No. (Specify) (N = No) (R Refligerated) interpretation (N = No)	<u> </u>
~/ <u> </u>	
	
	 ··
ml — — — — — — — — — — — — — — — — —	
Clear/Brown Gl	ass:
Bottles: P - Polyethylene; Pp - Polypropylene; C or B - Clear/Brown Gl	,
0 = Other (describe)	
Additional Cap Codes: Py - Polyseal; V - VOA/Teflon septa; M - Metal	1
15.50' to product) 11 saturface aucho @ A.M	**
10.001 in 1 1 3 WI Willer face brosse C 11 = 1	1
15.55 to water 7	

WATER SAMPLING DATA Well Name 3 L Date (1-9-89 Time)
Job Name Rumber (190. 154 TT 418-01 Initials TT
Well Spring Surface Other
WELL DATA: Well type
Depth to Water 16,44 ft (pump/stat) Maximum Drawdown Limit (MDL) ft
Well depth 19.5 ft (sounded) Well depth 19.3 ft (spec)
Well diameter 2 in. TOC height above ground ft Water elev ft
Volume Evacuated: Pumped Pumped Bailed
Times Chan (1) (/)
Start [205 Formulas/Conversions r = well radius in ft
Total bre /min h = ht of water col in ft
Total Evacuated (-5 gal. vol. in cyl. = Wrh
Evacuation Rate 3 gpm V ₂ " casing = 0.163 gal/ft
A casing = 0.367 gal/ft
Pump # and type Bailer # and type 16f. # V4 casing = 0.653 gal/ft V4 casing = 0.653 gal/ft V4 casing = 0.626 gal/ft
Hose # and type Vecasing = 1.47 gal/ft
V ₈ " casing = 2.61 gal/ft
Sampling Port: Rategpm Volume gal.
Location/description
Initial height of water in casing - 2.5 h ft; volume - gal. x 3
Evacuation at drawdown limit = 3 x initial volume = gai.
Evacuation at sampling point - 1 x initial volume - gal.
Total to be evacuated = // gal.
Water Color: None Odor: Shout
Description of sediment and/or foreign matter in sample: Turke, wood-like
Socionent with time sand/silt
Point of collection: End of Terlon # L
Depth to water during pumping ft time Sampling(8.6) ft 2 2 time
Pumped dry? / After gal. Recovery rate
ADDITIONAL COMMENTS, LOCATION SKETCH, ENVIRONMENTAL CONDITIONS, e.g., weather,
van running nearby, problems with equipment or sampling, etc., pump on/off
times, etc. (over).
CHEMICAL DATA
Temperature C Thermometer # Specific Conductance umhos
pH Calibration 4.0, 7.0, 10.0 Calibration Temp °C
SAMPLES COLLECTED:
Bottle/ Filtered Preservative
Sample Cap (size, u) (specify)
ID No. (Specify) (N - No) (R - Refrigerated) Analysis Lab
3) 1/9-15-4 40m1 C/V N H(L 12 bas-belx 3-1e)
ml
ml
ml
ml
ml ml ml ml ml ml Polyethylene; Pp - Polypropylene; C or B - Clear/Brown Glass;
ml

Used as F.P.B. per E.A. (used at Pale Att as F.P.B.

	WATER SAMPLING DATA Well Name B-6 Date 11-9-89 Time 5/0
	Location West Planter
	WELL DATA: Well type (Describe: M - monitoring well)
	Depth to Water (3,85 ft (pump(stat)) Maximum Drawdown Limit (MDL) ft
	Well depth ft (sounded) Well depth ft (spec)
_	Well diameter in. TOC height above ground ft Water elev ft
£,	Volume Evacuated: Pumped Bailed
V	Time: Stop /()(0 Formulas/Conversions
0 🔨	Start 1000 r = well redices in ft
Ç	Total hrs/min b = ht of water col in ft
, a	Vol. in cyl, -mr h
Q.	Evacuation Rate gpm
) W.	/(+ V ₂ " casing = 0.367 gal/ft
<u>ک</u> ک	Pump # and type Bailer # and type \(\frac{\text{V4" casing = 0.653 gal/ft}}{\text{V4.5" casing = 0.826 gal/ft}} \)
(a)	Pump # and type Baller # and type V _{4.5} " casing = 0.826 gal/ft
~) [_]	Nose # and type Vo casing = 2.61 gal/ft
,	
	Sampling Port: Rate gpm Volume gal.
	Location/description
	$\alpha = \alpha + $
	Initial height of water in casing = 5.81 ft; volume = 15.16 galy
	Evacuation at drawdown limit = 3 x initial volume = gal.
	Evacuation at sampling point - 1 x initial volume - gal.
	Total to be evacuated - 45,49 gal.
	Water Color: None Odor: Yes
	Description of sediment and/or foreign matter in sample: Towld, wood
	Soil Renticles for sand
	Point of collection: 2nd of sal tallo Vila
1	
	Depth to water during pumpingft time Sampling [4.0] ft [5/2 time
	Pumped dry? 100 After 10 gal. Recovery rate
	ADDITIONAL COMMENTS, LOCATION SKETCH, ENVIRONMENTAL CONDITIONS, e.g., weather,
	van running nearby, problems with equipment or sampling, etc., pump on/off
	times, etc. (over).
	CHEMICAL DATA
•	TemperatureOC Thermometer # Specific Conductance umhos
	pHCalibration4.0,7.0,10.0 Calibration TempOC
ż	ph dalibracion _ 4.0, 7.0, 10.0 dalibracion lemp 0
	SAMPLES COLLECTED:
	Bottle/ Filtered Preservative
	Sample Cap (size, u) (specify)
(-	\(ID No. \(\) (Specify) (N = No) (R = Refrigerated) Analysis Lab
(3	s) (19-56 40m1 C/V N HCL IN COES-Delx 15-60)
	ml
	ml
	ml — — — — — — — — — — — — — — — — — — —
ing the second	ml
	ml
	ml
÷	m1
-	ml
	Bottles: P - Polyethylene; Pp - Polypropylene; C or B - Clear/Brown Glass;
	0 = Other (describe)
	Additional Cap Codes: Py - Polyseal: V - VOA/Teflon septa; M - Metal

ATER SAMPLING ob Name/Number ell Spring ocation ELL DATA: Well epth to Water ell depth ell diameter	r <u>Che</u> g Surf Last 1 type	v. Og ace part	KIII Other Of 10	Date //- 	<u> </u>	Time 17	
ell Spring ocation ELL DATA: Wellepth to Water ell depth	Surf East 1 type	part	of 6	7-40- 7 (Des	cribe: M =		
ocation ELL DATA: Wel epth to Water ell depth	1 type 1 lb.104	part	of 10	m (Des	cribe: M =	monitorine	wall
ELL DATA: Wel epth to Water ell depth	1 type	V		M (Des	cribe: M =	monitorine	welly
epth to Water ell depth	16.64	ft (numn		ツル (Des	cribe: M =	· monitorine	WALL
ell depth		fr (numn					
•		Tr (homb)	Stat) Mar	ximum Draw	down Limit	(MDL)	ft - \$
all diameter	19.50	ft (sou	nded) We	ll depth _	19.33	ft (spec)	
STI GISTOS CET	6 in. I	OC heigh	t above gr	ound /	ft Wate	r elev.	ft
olume Evacuat		reable led		Baile			-
			<u> </u>	. =====	-	Pa1 a (Causana)	
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	مراحب ارزا بالمسبب	<u>~</u>		- —			
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vacuation Rat	e	gpm	,				
			,	1,110	40.1 ·		
ump # and typ	e	Baile:	r # and ty	pe <u> </u>	MH		
ose # and typ	e					Vo" casing = 1.47	
	·					V ₈ " casing = 2.61	gal/ft
ampling Port	Rate	gn)	m Volume		σa?		
		6P.	- VOICE		_ 6		
weattony descr	TPCTON						٠
	£ .		-70	1' .	. u	\mathbf{A}	36
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		and a second					1,30
vacuation at	sampling p	oint = 1	x initial	volume =		gal	
,		∵ Tota	l to be ev	acuated =	12.10	gaf.	/ /
ater Color:	•	NOW	o	Odor:		MONE 1	Shows
_	sediment			ter in sam	nle:	To Mark	
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		4.0	<u> </u>	VI 4	Z AM		
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epth to water	ouring pu	mbrus —		cime 2	ambiring 🔽	107 Tr (42)	5 crine
umped dry? 4	Arter	gaga	1. Kecove	ry rate			- _
		lems wit	h equipmen	t or sampl	ing, etc.,	pumpon/of:	£
imes, etc. (ver).	* **	4 4	Married Married		The state of the s	
HEMICAL DATA		4	فيو المرا	- 3. 2000年			A G
emperature	°C The	rmometer	# 15	*Specific	Conduc Ean	e i i umh	os 🤃
			* (* ***********				
H Calil	ration	,4.0;···		.10.0 Ca	libration	Temp 13 A	20:32
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SAMPLES COLL	ECTED:			"是"上海沙			
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G3-	45.		A STATE OF THE STA	- C			9.15
-							
ID No.	(Sp	ecify)	(N – No) 🗽	Refr.	igerated).	Analysis .	
119-15-7	<u>40 ml = Z</u>	Ιυ		MCC		Destile y	<u>ا - حات)</u> و
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·							- — .
Bottles: P	ml ml	Jene: Pr	= Polymro	mylene: C	or R	Clear/Brow	n Glass;
	Star Total hrs/motal Evacuate vacuation Rat ump # and typ ose # and typ ampling Port: ocation/descr nitial height vacuation at vacuation at vacuation of coint of collect epth to water umped dry? DDITIONAL COM can running neimes, etc. (con HEMICAL DATA comperature OH Calit	vacuation at drawdown lawacuation at sampling production of sediment secription of sediment oint of collection: the secription of sediment of collection: the secription of sediment of collection: the secription of sediment of collection: the secription of collection: the secription of collection	Start Total hrs/min otal Evacuated vacuation Rate ump # and type ose # and type ampling Port: Rate ocation/description nitial height of water in casin vacuation at drawdown limit - 3 vacuation at sampling point - 1 fater Color: escription of sediment and/or for oint of collection: escription of sediment and/or for oint of collection: epth to water during pumping cumped dry? After 15 ga DDITIONAL COMMENTS, LOCATION SK van running nearby, problems with imes, etc. (over). HEMICAL DATA emperature Calibration SAMPLES COLLECTED: Bottle/ Sample ID No. 1/9-D-7 (D ml ml ml ml ml ml ml	Start Total hrs/min otal Evacuated vacuation Rate ump # and type ose # and type ampling Port: Rate ocation/description nitial height of water in casing - 26 vacuation at drawdown limit - 3 x initial vacuation at sampling point - 1 x initial vacuation at sampling point - 1 x initial vacuation of sediment and/or foreign mat oint of collection: escription of sediment and/or foreign mat oint of collection: epth to water during pumping ft umped dry? After 1 gal. Recove DDITIONAL COMMENTS, LOCATION SKETCH, ENVI van running nearby, problems with equipment imes, etc. (over). HEMICAL DATA emperature Calibration SAMPLES COLLECTED: Bottle/ Filtered Sample ID No. (Specify) (N - No) //9-D-7 (O ml ml ml ml ml ml ml ml	Start Total hrs/min otal Evacuated vacuation Rate ump # and type ose # and type ampling Port: Rate ocation/description nitial height of water in casing - 200 ft; vo vacuation at drawdown limit - 3 x initial volume - vacuation at sampling point - 1 x initial volume - vacuation at sampling point - 1 x initial volume - vacuation of sediment and/or foreign matter in sam ater Color: escription of sediment and/or foreign matter in sam oint of collection: cup Odor: espect to water during pumping ft time seputh to water during pumping ft time seputh to water during pumping of time seputh to water during pumping of the seputh to water d	Start	Start Total hrs/min otal Evacuated vacuation Rate ump # and type ose # and type ampling Port: Rate ocation/description mitial height of water in casing — 2 ft; volume — 4 2 gal. wacuation at drawdown limit — 3 x initial volume — gal. ater Color: escription of sediment and/or foreign matter in sample: Total to be evacuated — 2 ft gal. wacuation of collection: escription of sediment and/or foreign matter in sample: Total to be evacuated — 2 ft gal. water Color: escription of sediment and/or foreign matter in sample: Total to be evacuated — 2 ft gal. water Color: escription of sediment and/or foreign matter in sample: Total to be evacuated — 2 ft gal. water Color: escription of sediment and/or foreign matter in sample: Total to be evacuated — 2 ft gal. water Color: escription of sediment and/or foreign matter in sample: Total to be evacuated — 2 ft gal. water Color: escription of sediment and/or foreign matter in sample: Total to be evacuated — 2 ft gal. water Color: escription of sediment and/or foreign matter in sample: Total to be evacuated — 2 ft gal. WWC Odor: escription of sediment and/or foreign matter in sample: Total to be evacuated — 2 ft gal. WWC Odor: escription of sediment and/or foreign matter in sample: Total to be evacuated — 2 ft gal. WWC Odor: escription of sediment and/or foreign matter in sample: Total to be evacuated — 2 ft gal. WWC Odor: escription of sediment and/or foreign matter in sample: Total to be evacuated — 2 ft gal. WWC Odor: escription of sediment and/or foreign matter in sample: Total to be evacuated — 2 ft gal. WWC Odor: escription of sediment and/or foreign matter in sample: Total to be evacuated — 2 ft gal. WWC Odor: escription of sediment and/or foreign matter in sample: Total to be evacuated — 2 ft gal. WWC Odor: escription of sediment and/or foreign matter in sample: Total to be evacuated — 2 ft gal. WWC Odor: escription of sediment and/or foreign matter in sample: Total to be evacuated — 2 ft gal. WWC Odor: escription of sediment and/o

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•	MATTER SAMPLING DATA MAIL NAME - DATA /1-9-89	Time 0700
	WATER SAMPLING DATA Well Name Date	
	Job Name/Number Cheu. Oct III 4-418-0	Initials T
	WellSpring Surface Other	F -
	Location	
	WELL DATA: Well type (Describe; M	- monitoring well)
	Depth to Water ft (pump/stat) Maximum Drawdown Limit	It (MDL) ft
	Well depth ft (sounded) Well depth	
	Well diameter in. TOC height above ground ft Was	ter elev ft
	Volume Evacuated: Pumped Pumped Bailed	
	Time: Stop	Formulas/Conversions
	Start	r = well radius in ft
	Total hrs/min	h = ht of water col in ft vol. in cyl. = πr ² h
,	Total Evacuated gal.	7.48 gal/ft ³
	Evacuation Rate gpm	V2" casing = 0.163 gal/ft
	,	V3" casing = 0.367 gal/ft V4" casing = 0.653 gal/ft
	Pump # and type Bailer # and type	V _ c" casing = 0.825 gal/ft
\1	Hose # and type	V ₆ casing = 1.47 gal/ft V ₈ casing = 2.61 gal/ft
1/1		V ₈ " casing = 2.51 gal/ft
	Sampling Port: Rate gpm Volume gal.	;
~	Location/description	
	Initial height of water in casing = ft; volume = _	gal.
	Evacuation at drawdown limit - 3 x initial volume -	gal.
	Evacuation at sampling point = 1 x initial volume =	gal.
	Total to be evacuated -	
	Water Color: Odor:	
\sim	Description of sediment and/or foreign matter in sample:	· · · · · · · · · · · · · · · · · · ·
\mathcal{N}		
5	Point of collection:	
		fttime
	Depth to water during pumping ft time Sampling	ft' time
	Depth to water during pumping ft time Sampling Pumped dry? After gal. Recovery rate	
	Depth to water during pumping ft time Sampling Pumped dry? After gal. Recovery rate ADDITIONAL COMMENTS, LOCATION SKETCH, ENVIRONMENTAL CONDITIONAL COND	NS, e.g., weather,
	Depth to water during pumping ft time Sampling Pumped dry? After gal. Recovery rate ADDITIONAL COMMENTS, LOCATION SKETCH, ENVIRONMENTAL CONDITION van running nearby, problems with equipment or sampling, etc	NS, e.g., weather,
	Depth to water during pumping ft time Sampling Pumped dry? After gal. Recovery rate ADDITIONAL COMMENTS, LOCATION SKETCH, ENVIRONMENTAL CONDITION van running nearby, problems with equipment or sampling, etc times, etc. (over).	NS, e.g., weather,
	Depth to water during pumping ft time Sampling Pumped dry? After gal. Recovery rate ADDITIONAL COMMENTS, LOCATION SKETCH, ENVIRONMENTAL CONDITION van running nearby, problems with equipment or sampling, etc times, etc. (over). CHEMICAL DATA	NS, e.g., weather, ., pump on/off
	Depth to water during pumping ft time Sampling Pumped dry? After gal. Recovery rate ADDITIONAL COMMENTS, LOCATION SKETCH, ENVIRONMENTAL CONDITION Van running nearby, problems with equipment or sampling, etc times, etc. (over). CHEMICAL DATA Temperature OC Thermometer # Specific Conductations and the sampling of the	NS, e.g., weather, ., pump on/off nceumhos
	Depth to water during pumping ft time Sampling Pumped dry? After gal. Recovery rate ADDITIONAL COMMENTS, LOCATION SKETCH, ENVIRONMENTAL CONDITION Van running nearby, problems with equipment or sampling, etc times, etc. (over). CHEMICAL DATA Temperature OC Thermometer # Specific Conductations and the sampling of the	NS, e.g., weather, ., pump on/off nceumhos
	Depth to water during pumping ft time Sampling Pumped dry? After gal. Recovery rate ADDITIONAL COMMENTS, LOCATION SKETCH, ENVIRONMENTAL CONDITION van running nearby, problems with equipment or sampling, etc times, etc. (over). CHEMICAL DATA	NS, e.g., weather, ., pump on/off nceumhos
J ()	Depth to water during pumping ft time Sampling Pumped dry? After gal. Recovery rate ADDITIONAL COMMENTS, LOCATION SKETCH, ENVIRONMENTAL CONDITION VAN running nearby, problems with equipment or sampling, etc times, etc. (over). CHEMICAL DATA Temperature °C Thermometer # Specific Conductary PH Calibration 4.0, 7.0, 10.0 Calibration	NS, e.g., weather, ., pump on/off nceumhos
APP	Depth to water during pumping ft time Sampling Pumped dry? After gal. Recovery rate ADDITIONAL COMMENTS, LOCATION SKETCH, ENVIRONMENTAL CONDITION VAN running nearby, problems with equipment or sampling, etc times, etc. (over). CHEMICAL DATA CC Thermometer # Specific Conductation 4.0, 7.0, 10.0 Calibration 4.0, 7.0, 10.0 Calibration SAMPLES COLLECTED:	NS, e.g., weather, ., pump on/off nceumhos
A (P)	Depth to water during pumping ft time Sampling Pumped dry? After gal. Recovery rate ADDITIONAL COMMENTS, LOCATION SKETCH, ENVIRONMENTAL CONDITION van running nearby, problems with equipment or sampling, etc times, etc. (over). CHEMICAL DATA Temperature °C Thermometer # Specific Conducta pH Calibration 4.0, 7.0, 10.0 Calibration SAMPLES COLLECTED: Bottle/ Filtered Preservative	NS, e.g., weather, ., pump on/off nceumhos
TRIP PRIP	Depth to water during pumping ft time Sampling Pumped dry? After gal. Recovery rate ADDITIONAL COMMENTS, LOCATION SKETCH, ENVIRONMENTAL CONDITION van running nearby, problems with equipment or sampling, etc times, etc. (over). CHEMICAL DATA Temperature °C Thermometer # Specific Conductate pH Calibration 4.0, 7.0, 10.0 Calibration SAMPLES COLLECTED: Bottle/ Filtered Preservative Sample Cap (size, u) (specify)	NS, e.g., weather, ., pump on/off nceumhos n Tempoc
J X (P	Depth to water during pumping ft time Sampling Pumped dry? After gal. Recovery rate ADDITIONAL COMMENTS, LOCATION SKETCH, ENVIRONMENTAL CONDITIONAL running nearby, problems with equipment or sampling, etc times, etc. (over). CHEMICAL DATA OC Thermometer # Specific Conductate pH Calibration 4.0, 7.0, 10.0 Calibration SAMPLES COLLECTED: Bottle/ Filtered Preservative Cap (size, u) (specify) LD No (Specify) (N - No) (R - Refrigerated)	NS, e.g., weather, ., pump on/off nceumhos n Tempoc
J X (D)	Depth to water during pumping ft time Sampling Pumped dry? After gal. Recovery rate ADDITIONAL COMMENTS, LOCATION SKETCH, ENVIRONMENTAL CONDITIONAL running nearby, problems with equipment or sampling, etc times, etc. (over). CHEMICAL DATA OC Thermometer # Specific Conductation Calibration 4.0, 7.0, 10.0 Calibration SAMPLES COLLECTED: Bottle/ Filtered Preservative Cap (size, u) (specify) ID No (Specify) (N - No) (R - Refrigerated 2) // 9-2 // ml	NS, e.g., weather, ., pump on/off nceumhos n Tempoc
J K (P	Depth to water during pumping ft time Sampling Pumped dry? After gal. Recovery rate ADDITIONAL COMMENTS, LOCATION SKETCH, ENVIRONMENTAL CONDITIONAL running nearby, problems with equipment or sampling, etc times, etc. (over). CHEMICAL DATA Temperature °C Thermometer # Specific Conductary Specific Conductary Specific Conductary Sample	NS, e.g., weather, ., pump on/off nceumhos n Tempoc
J X ID	Depth to water during pumping ft time Sampling Pumped dry? After gal. Recovery rate ADDITIONAL COMMENTS, LOCATION SKETCH, ENVIRONMENTAL CONDITION van running nearby, problems with equipment or sampling, etc times, etc. (over). CHEMICAL DATA Temperature °C Thermometer # Specific Conductate pH Calibration 4.0, 7.0, 10.0 Calibration SAMPLES COLLECTED: Bottle/ Filtered Preservative Cap (size, u) (specify) ID No (Specify) (N - No) (R - Refrigerated) Description (Specify) (N - No) (R - Refrigerated)	NS, e.g., weather, ., pump on/off nceumhos n Tempoc
(TRIP	Depth to water during pumping ft time Sampling Pumped dry? After gal. Recovery rate ADDITIONAL COMMENTS, LOCATION SKETCH, ENVIRONMENTAL CONDITIONAL Trunning nearby, problems with equipment or sampling, etc times, etc. (over). CHEMICAL DATA OC Thermometer # Specific Conductary Specific Conductary Specific Conductary Sample Sample Sample Sample Sample Sample Sample Sample Specify Sp	NS, e.g., weather, ., pump on/off nceumhos n Tempoc
() X ()	Depth to water during pumping ft time Sampling Pumped dry? After gal. Recovery rate ADDITIONAL COMMENTS, LOCATION SKETCH, ENVIRONMENTAL CONDITIONAL TURNING nearby, problems with equipment or sampling, etc times, etc. (over). CHEMICAL DATA Temperature °C Thermometer # Specific Conductation A.0, 7.0, 10.0 Calibration SAMPLES COLLECTED: Bottle/ Filtered Preservative Cap (size, u) (specify) LID No (Specify) (N - No) (R - Refrigerated	NS, e.g., weather, ., pump on/off nceumhos n Tempoc
() X ()	Depth to water during pumpingfttime Sampling Pumped dry? Aftergal. Recovery rate ADDITIONAL COMMENTS, LOCATION SKETCH, ENVIRONMENTAL CONDITIONAL Trunning nearby, problems with equipment or sampling, etc times, etc. (over). CHEMICAL DATA OC Thermometer # Specific Conductary Specific Conductary Specific Conductary Sample Sample Sample Sample Sample Sample Sample Sample Specify Spe	NS, e.g., weather, ., pump on/off nceumhos n Tempoc
CARID C	Depth to water during pumpingfttime Sampling Pumped dry? After gal. Recovery rate ADDITIONAL COMMENTS, LOCATION SKETCH, ENVIRONMENTAL CONDITIONAL Trunning nearby, problems with equipment or sampling, etc times, etc. (over)	NS, e.g., weather, ., pump on/off nceumhos n Tempoc
5 (TRIP	Depth to water during pumping ft time Sampling Pumped dry? After gal. Recovery rate ADDITIONAL COMMENTS, LOCATION SKETCH, ENVIRONMENTAL CONDITIONAL TRANSPORT OF TOWNS WITH EQUIPMENT OF SAMPLING, etc times, etc. (over). CHEMICAL DATA Temperature	NS, e.g., weather, ., pump on/off nceumhos n Tempoc
J KIP	Depth to water during pumping ft time Sampling Pumped dry? After gal. Recovery rate ADDITIONAL COMMENTS, LOCATION SKETCH, ENVIRONMENTAL CONDITIONAL Tunning nearby, problems with equipment or sampling, etc times, etc. (over). CHEMICAL DATA Temperature	NS, e.g., weather, ., pump on/off nceumhos n Tempoc
J X D	Depth to water during pumping ft time Sampling Pumped dry? After gal. Recovery rate ADDITIONAL COMMENTS, LOCATION SKETCH, ENVIRONMENTAL CONDITIONAL TRANSPORT OF TOWNS WITH EQUIPMENT OF SAMPLING, etc times, etc. (over). CHEMICAL DATA Temperature	NS, e.g., weather, ., pump on/off nceumhos n Tempoc
J X D	Depth to water during pumping ft time Sampling Pumped dry? After gal. Recovery rate ADDITIONAL COMMENTS. LOCATION SKETCH. ENVIRONMENTAL CONDITIONAL running nearby, problems with equipment or sampling, etc times, etc. (over). CHEMICAL DATA Temperature	NS, e.g., weather, ., pump on/off nceumhos n Tempoc Analysis
JA JOI	Depth to water during pumping	NS, e.g., weather, ., pump on/off nceumhos n Tempoc Analysis
JAK D	Depth to water during pumping ft time Sampling Pumped dry? After gal. Recovery rate ADDITIONAL COMMENTS, LOCATION SKETCH, ENVIRONMENTAL CONDITIONAL Tunning nearby, problems with equipment or sampling, etc times, etc. (over). CHEMICAL DATA Temperature	NS, e.g., weather, ., pump on/off nceumhos n Tempoc Analysislab
J. (J. R.P.	Depth to water during pumping	NS, e.g., weather, ., pump on/off nceumhos n Tempoc Analysislab

Chain-of-Custody Record

Chevron Facility Number 91026 Chevron Facility Number 91026 Consultant Project Number 97.748-01 Consultant Name Weiss Associates Address 298 Mc(lose St, Och., (494604) Fax Number (415) 465-1265 Project Contact (Name) J.m. (asmody (Phone) (415) 465-1100								Chevron Contact (Name) (Phone) Laboratory Name Contract Number My 6d w C 0244 - 9- X Samples Collected by (Name) Todd Pearson Fric Auders Collection Date Kollybau Signature											
Sample Number	ab Number		Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Type G = Grab C = Composite	Тте	Sample Preservation	lced	Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline	Modified EPA 8015 Total Petro, Hydrocarb. as Gasoline + Diosel	503 Oil and Grease	Arom. Volatiles - BTXE Soil: 8020/Wtr.: 602	Arom. Volatiles - BTXE Soil: 8240/Wtr.: 624	Total Lead a DHS-Luft o	EDB DHS.AB 1803 pag				Remarks
119-A			<u>ო</u>	<	6	1145	14ch	7	1							∔			
114-3-1			3	W	6	635	HCL	Y_	<u> </u>										
119-3-2			3	w	6	0435	HCL	4	<u>/</u>										
119-B-4			3	W	6	12/0	HCL	L	<u> </u>	<u></u>						[
119-8-6			3	3	6	1510	1tc 1	4	\\\			"							
119-8-7			3	W	b	1450		ए	/	1		-	,						
			3	W	6	1300	HCL	Ÿ											
EA-1 EA-2	 		3	w	6	1228	HCI	Y	1./										
				· ·		 	1,66	'					/						
119-21			2	W	6	0770	non e												
Relinguished B	Signate	irje) Loui	ced in	Organiza	tion	1	Date/Time//	5 R	ceived By	(Sig)at	All C	261		nization		Date	/Time		Turn Around Time (Circle Choice)
Relinquished By Relinquished By Relinquished By	(Signal)	ure)		Organiza	<u>e(S <</u> tion から		Date/Time/62000 //-9-5-9 Date/Time ////c/3-9 Date/Time		eceived By	(Signat	ure)		Orga جر ک	nization		Date Date	/Time / <i>0/8</i> /Time	•	24 Hrs 48 Hrs 5 Days 10 Days
Algar.	bel	all	1				L(11				<u></u>		7	10/81		MS 51.16

SUPERIOR ANALYTICAL LABORATORY INC.

825 ARNOLD, STE. 2 • MARTINEZ, CALIFORNIA 94553 • (415) 229-1512

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 80241 DATE RECEIVED: 11/10/89 CLIENT: Weiss Associates DATE REPORTED: 11/17/89

CLIENT JOB NO.: 4-418-01

Page 1 of 2

Doto

Lab Number	Customer	Sample :	Identificati	on	Dat Analy		Date Sampled		
80241- 1	119-A			······································	11/16	189	11/09/89		
80241- 2	119-B-1				11/16		11/09/89		
80241- 3	119-B-2				11/16		11/09/89		
80241- 4	119-B-4				11/17		11/09/89		
80241- 5	119-B-6				11/16	/89	11/09/89		
80241- 6	119-B-7				11/17	/89	11/09/89		
80241- 7	EA-1				11/16	/89	11/09/89		
80241- 8	EA-2				11/16		11/09/89		
80241- 9	119-21				11/16	5/89	11/09/89		
Laboratory Nu	ımber:	80241	80241 2	80241	80241	802 5			
ANALYTE LIST		Amount	s/Quantitati	on Limits	(ug/L)				
OIL AND GREAS	SE:	NA	NA	NA	NA	. NA			
TPH/GASOLINE		16000	17000	110000	14000	130	00		
TPH/DIESEL RA	NGE:	NA	NA	NA	NA	NA			
BENZENE:		690	340	32000	6000	70			
TOLUENE:		10	140	5500	70	36			
ETHYL BENZENE	G:	180	110	2800	530	36			
XYLENES:		350	760	12000	300	440)		
Laboratory Nu	umber:	80241 6	80241 7	80241 8	80241 9				
ANALYTE LIST									
OIL AND GREAS	SE:	NA	NA	NA	NA				
TPH/GASOLINE		150000	ND<500	ND<500	ND<500				
TPH/DIESEL RA		NA	NA	NA	NA				
BENZENE:		7000	ND<0.5	ND<0.5	ND<0.5				
TOLUENE:		12000	ND<0.5	1	ND<0.5				
ETHYL BENZENE	₫:	1800	ND<0.5	ND<0.5	ND<0.5				
XYLENES:		16000	ND<0.5	ND<0.5	ND<0.5				

SUPERIOR ANALYTICAL LABORATORY INC.

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CERTIFICATE OF ANALYSIS

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS
Diesel by Modified EPA SW-846 Method 8015
Gasoline by Purge and Trap: EPA MEthod 8015/5030
ANALYSIS FOR BENZENE, TOLUENE, ETHYL BENZENE & XYLENES
by EPA SW-846 Methods 5030 and 8020

Page 2 of 2 QA/QC INFORMATION SET: 80241

NA = ANALYSIS NOT REQUESTED

ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT

ug/L = part per billion (ppb)

OIL AND GREASE ANALYSIS By Standard Methods Method 503E:
Duplicate RPD NA
Minimum Detection Limit in Water: 5000ug/L

Modified EPA Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Water: 1000ug/L
Daily Standard run at 200mg/L; RPD Diesel = NA
MS/MSD Average Recovery = NA: Duplicate RPD = NA

8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Water: 500ug/L
Daily Standard run at 2mg/L; RPD Gasoline = 4%
MS/MSD Average Recovery = 97%: Duplicate RPD = 1%

8020/BTXE

Minimum Quantitation Limit in Water: 0.50ug/L Daily Standard run at 20ug/L; RPD = <15% MS/MSD Average Recovery = 90%: Duplicate RPD = <8%

dientiff,

Labortory Manager

SAN FRANCISCO

MARTINEZ