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

91 APR 10 AM 11:03

Marketing Operations

R. B. Bellinger
Manager, Operations
S. L. Patterson
Area, Manager, Operations
C. G. Trimbach
Manager, Engineering

5/10/91
Well was not sampled at all in 1990. This low value also happened 9/89. May or may not be "real" Time to do something about remediation. She was not on Rich Hiett's list

April 4, 1991

Mr. Rafat Shahid
Alameda County
Environmental Health
80 Swan Way, Room 200
Oakland, California 94621

Re: Former Chevron Service Station #9-4612
3616 San Leandro Street
Oakland, CA 94601

Dear Mr. Shahid:

Enclosed we are forwarding the Quarterly Groundwater Sampling Report dated April 1, 1991, conducted by our consultant Weiss Associates, at the above referenced site. As indicated in the report, hydrocarbon concentrations detected in the well has significantly reduced since the last sampling event.

Chevron has instructed Weiss Associates to permit and install additional groundwater monitor wells in the hydrogeologically downgradient and upgradient direction. A workplan will be prepared proposing these well locations and forwarded to your office for review.

If you have any questions or comments please do not hesitate to call me at (415) 842-9581.

Very truly yours,

Nancy Vukelich
Environmental Engineer

Enclosure

cc: Mr. Lester Feldman, RWQCB - Bay Area
Ms. Bette Brummett-Owen
File (9-4612Q2 Listing)

WEISS ASSOCIATES
Geologic and Environmental Services
Fax: 415-547-5043 Phone: 415-547-5420
5500 Shellmound Street, Emeryville, CA 94608

April 1, 1991

Nancy Vukelich
Chevron U.S.A., Inc.
P.O. Box 5004
San Ramon, CA 94583-0804

Re: First Quarter 1991
Ground Water Monitoring Report
Chevron Service Station #9-4612
3616 San Leandro Street
Oakland, California
WA Job #4-438-01

Dear Ms. Vukelich:

As you requested, Weiss Associates (WA) is providing this Ground Water Monitoring Report for the subject site (Figure 1). WA sampled ground water monitoring well MW-1 (Figure 2) on March 7, 1991, in accordance with the requirements and procedures of the California Regional Water Quality Control Board - San Francisco Bay Region and local regulatory agencies.

SAMPLING PROCEDURES

Prior to purging and sampling the well, WA measured the depth to ground water in the well to the nearest 0.01 ft using an electronic sounder (Table 1). We also checked the well for floating hydrocarbons or sheen. No floating hydrocarbons or sheen was detected in the well.

WA collected ground water samples for analysis after purging at least 3 well casing volumes of ground water from the well. The sample was decanted from a steam-cleaned PVC bailer into the appropriate clean sample containers and delivered to a California-certified laboratory following proper sample preservation and chain-of-custody procedures. Purged ground water was stored onsite in DOT-approved 55-gallon drums until properly disposed of offsite.

MONITORING AND ANALYTICAL RESULTS

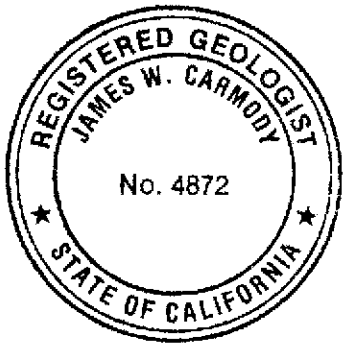
The present and historical depth to ground water measurements for the well are presented in Table 1. Since there is only one monitoring well on site, no ground water elevation contour map was prepared.

Current and historical ground water analytical results are summarized in Table 2. The water sample collection records, and the analytic results and chain-of-custody documents are included as Attachments A and B, respectively.

SCHEDULE

The Second Quarter 1991 ground water sampling is scheduled for June 6, 1991. We will submit a report presenting the field and analytical data by August 1991.

We appreciate this opportunity to provide hydrogeologic consulting services to Chevron USA and trust that this submittal meets your needs. Please call if you have any questions regarding this report.



Sincerely,
Weiss Associates

Mariette M. Shin
Staff Geologist

James W. Carmody, R.G.
Senior Project Hydrogeologist

MMS/JWC:jg

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Attachments A - Water Sample Collection Records
B - Analytic Report and Chain-of-Custody Documents

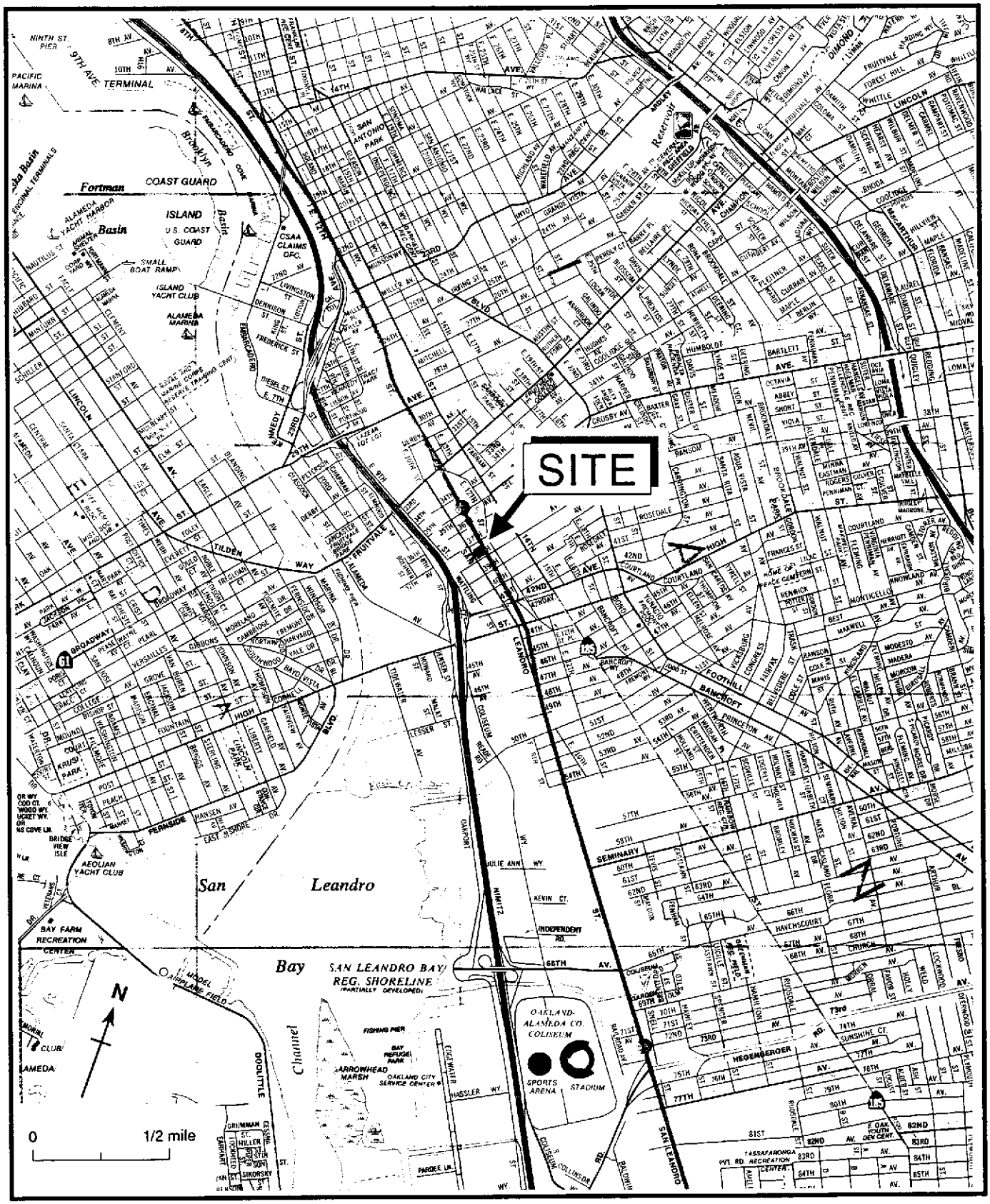

Figure 1. Site Location Map - Chevron Service Station #94612, 3616 San Leandro Street, Oakland, California

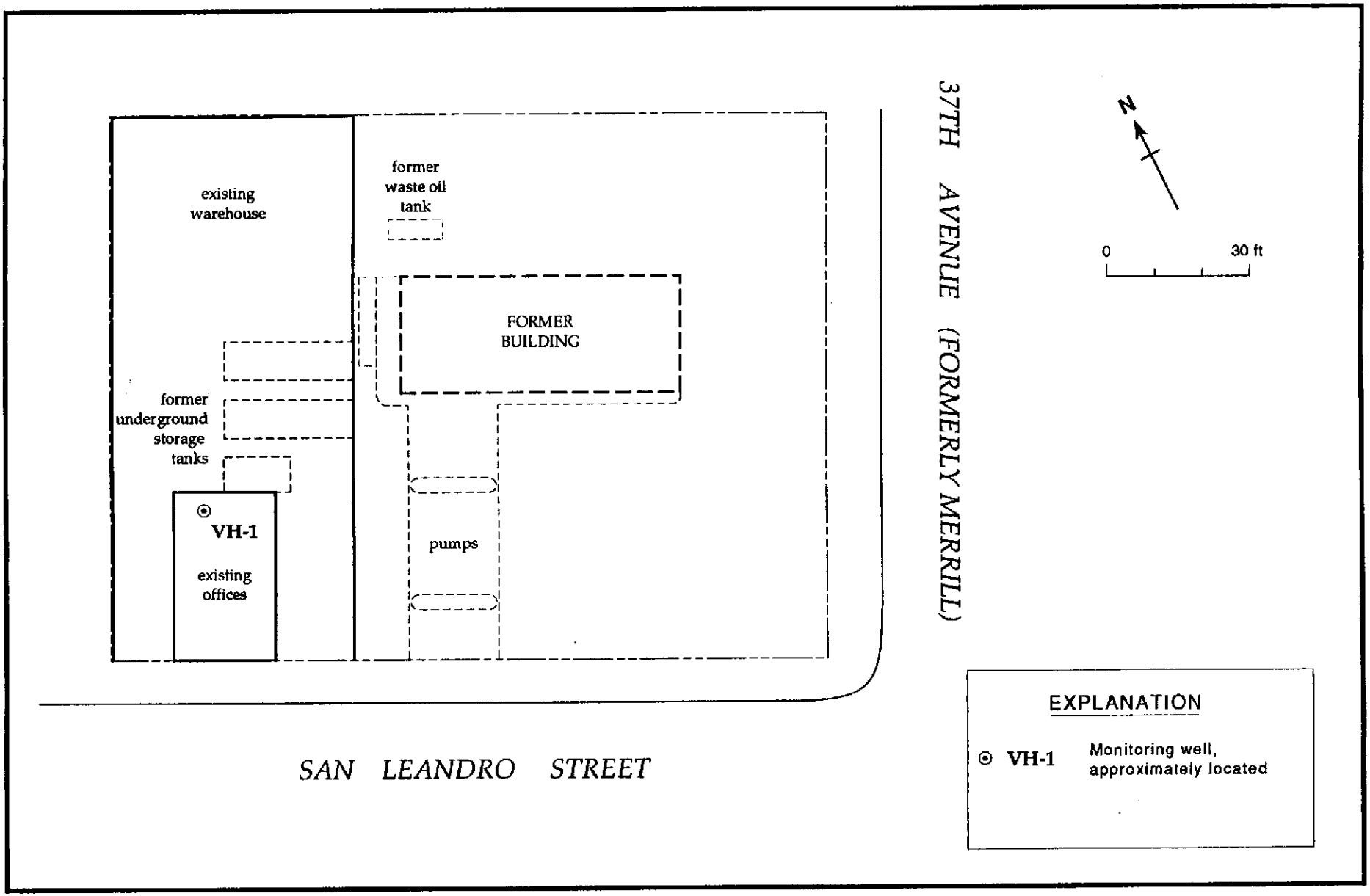

Figure 2. Monitoring Well Location - Former Chevron Service Station #94612, 3616 San Leandro Street, Oakland, California

3/21/90

TABLE 1. Analytic Results for Ground Water - Former Chevron Service Station #9-4612, 3616 San Leandro Street, Oakland, California

Sample ID	Date Sampled	Depth to Water (ft)	Analytical Lab	TPH-G	B	E	T	X	TL	C
				<----------parts per billion (µg/L)---------->						
VH-1	08-10-88	13.00	CCAS	11,000	3,300	520	200	540	43	43,000
	06-01-89	10.32	SAL	15,000	2,200	540	120	310	---	---
	09-15-89	15.69	SAL	5,600	1,900	350	90	160	---	---
	12-08-89	14.77	GTEL	11,000	1,900	270	69	99	---	---
	03-07-91	11.26	SAL	4,500	820	120	39	77	---	---
Travel Blank	06-01-89		SAL	<500	<0.5	<0.5	<0.5	<0.5	---	---
	09-15-89		SAL	<500	<0.5	<0.5	<0.5	<0.5	---	---
	03-07-91		SAL	<50	<0.5	<0.5	<0.5	<0.5	---	---
Bailer Blank	03-07-91		SAL	<50	<0.5	<0.5	<0.5	1	---	---
DHS MCLs				NE	1	680	100[a]	1,750		

Abbreviations:

TPH-G = Total Petroleum Hydrocarbons as Gasoline by Modified EPA Method 8015 or 524.2/8240
B = Benzene by EPA Method 8020 or 524.2/8240
E = Ethylbenzene by EPA Method 8020 or 524.2/8240
T = Toluene by EPA Method 8020 or 524.2/8240
X = Xylenes by EPA Method 8020 or 524.2/8240
C = Chloride by American Public Health Association Standard Method 407
TL = Total Lead by EPA Method 7421
--- = Not Analyzed
DHS MCLs = Department of Health Services Maximum Contaminant level for drinking water
[a] = DHS Recommended Action Level for drinking water

Analytical Laboratory:

CCAS = Central Coast Analytical Services of Goleta, California
SAL = Superior Analytical Laboratory of San Francisco, California
GTEL = Groundwater Technology Environmental Laboratories, Inc. of Concord California

ATTACHMENT A

WATER SAMPLE COLLECTION RECORDS

WEISS ASSOCIATES

WATER SAMPLING DATA

Well Name MW-1 Date 3/7/91 Time of Sampling 10:20

Job Name CHEV. OAKLAND IV Job Number 4-438-01 Initials DC

Sample Point Description M (M = Monitoring Well)

Location IN BATHROOM, IN BUILDING

WELL DATA: Depth to Water 11.26 ft (static) pumping @ 9:40 WLH#5 Depth to Product — ft.

Product Thickness — Well Depth 28.57 ft (spec) Well Depth — ft (sounded) Well Diameter 4 in

Initial Height of Water in Casing 17.31 ft. = volume 11.3 gal.

3 Casing Volumes to be Evacuated. Total to be evacuated 34 gal.

EVACUATION METHOD: Pump # and type — Hose # and type —

Bailer# and type 3"x4' PVC #4 Dedicated NO (Y/N)

Other —

Evacuation Time: Stop 10:14

Start 9:49

Total Evacation Time 25 min

Total Evacuated Prior to Sampling 34 gal.

Evacuation Rate 1.36 gal. per minute

Depth to Water during Evacuation — ft. — time

Depth to Water at Sampling 11.75 ft. 10:23 time

Evacuated Dry? NO After — gal. Time —

80% Recovery = —

% Recovery at Sample Time — Time —

Formulas/Conversions

r = well radius in ft.

h = ht of water col in ft.

vol. in cyl. = $\pi r^2 h$

7.48 gal/ft^3

V_2" casing = 0.163 gal/ft

V_3" casing = 0.367 gal/ft

V_4" casing = 0.653 gal/ft

$V_{4.5}$" casing = 0.826 gal/ft

V_6" casing = 1.47 gal/ft

V8 casing = 2.61 gal/ft

CHEMICAL DATA: Meter Brand/Number —

Calibration: — 4.0 — 7.0 — 10.0

Measured:

SC/µmhos	pH	T°C	Time	Volume Evacuated (gal.)
		N/A		

SAMPLE: Color Brownish Grey Odor Moderately Strong

Description of matter in sample: FINE SILT PARTICLES

Sampling Method: Decanted from brand new, undedicated PVC Bailer

Sample Port: Rate — gpm Totalizer — gal.

Time —

# of Cont.	Sample ID	Cont. Type[1]	Vol[2]	Fil[3]	Ref[4]	Preservative (specify)	Analytic Method	Turn[5]	LAB
2	031-01	W/CV	40ml	No	Yes	HCL	EPA 8015/8020	N	SAL

1 Sample Type Codes: W = Water, S = Soil, Describe Other
Container Type Codes: V = VOA/Teflon Septa, P = Plastic, C or B = Clear/Brown Glass, Describe Other
Cap Codes: PT = Plastic, Teflon lined;
2 = Volume per container; 3 = Filtered (Y/N); 4 = Refrigerated (Y/N)
5 Turnaround [N = Normal, W = 1 week, R = 24 hour, HOLD (spell)]

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

TRAVEL BLANK

WEISS ASSOCIATES

WATER SAMPLING DATA

Well Name CHEV. OAK IV Date 3/8/91 Time of Sampling 0830

Job Name — Job Number 4-438-01 Initials DC

Sample Point Description _____ (M = Monitoring Well)

Location _____

WELL DATA: Depth to Water _____ ft (static, pumping) Depth to Product _____ ft.

Product Thickness _____ Well Depth _____ ft (spec) Well Depth _____ ft(sounded) Well Diameter _____ in

Initial Height of Water in Casing _____ ft. = volume _____ gal.

_____ Casing Volumes to be Evacuated. Total to be evacuated _____ gal.

EVACUATION METHOD: Pump # and type _____ Hose # and type _____

Bailer# and type _____ Dedicated _____ (Y/N)

Other _____

Evacuation Time: Stop _____ _____ _____

Start _____ _____ _____

Total Evacation Time _____ N/A

Total Evacuated Prior to Sampling _____ gal.

Evacuation Rate _____ gal. per minute

Depth to Water during Evacuation _____ ft. _____ time

Depth to Water at Sampling _____ ft. _____ time

Evacuated Dry? _____ After _____ gal. Time _____

80% Recovery = _____

% Recovery at Sample Time _____ Time _____

Formulas/Conversions

r = well radius in ft.

h = ht of water col in ft.

vol. in cyl. = $\pi r^2 h$

7.48 gal/ft^3

V_2" casing = 0.163 gal/ft

V_3" casing = 0.367 gal/ft

V_4" casing = 0.653 gal/ft

$V_{4.5}$" casing = 0.826 gal/ft

V_6" casing = 1.47 gal/ft

V8 casing = 2.61 gal/ft

CHEMICAL DATA: Meter Brand/Number _____

Calibration: _____ 4.0 _____ 7.0 _____ 10.0

Measured:	µC/µmhos	pH	T°C	Time	Volume Evacuated (gal.)

SAMPLE: Color NONE Odor NONE

Description of matter in sample: _____

Sampling Method: _____

Sample Port: Rate ____ gpm Totalizer _____ gal.

Time _____

# of Cont.	Sample ID	Cont. Type[1]	Vol[2]	Fil[3]	Ref[4]	Preservative (specify)	Analytic Method	Turn[5]	LAB
2	031-21	V/CV	40mL	N	Y	HCL	8015/8020	N	SAL

1 Sample Type Codes: W = Water, S = Soil, Describe Other
Container Type Codes: V = VOA/Teflon Septa, P = Plastic, C or B = Clear/Brown Glass, Describe Other
Cap Codes: PT = Plastic, Teflon lined;
2 = Volume per container; 3 = Filtered (Y/N); 4 = Refrigerated (Y/N)
5 Turnaround [N = Normal, W = 1 week, R = 24 hour, HOLD (spell)]

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

BAILER BLANK

WEISS ASSOCIATES

WATER SAMPLING DATA

Well Name MW-1 Date 3/8/91 Time of Sampling 1017

Job Name CHEV. OAK. IV Job Number 4-438-01 Initials DC

Sample Point Description _____ (M = Monitoring Well)

Location _____

WELL DATA: Depth to Water _____ ft (static, pumping) Depth to Product _____ ft.

Product Thickness _____ Well Depth _____ ft (spec) Well Depth _____ ft(sounded) Well Diameter _____ in

Initial Height of Water in Casing _____ ft. = volume _____ gal.

_____ Casing Volumes to be Evacuated. Total to be evacuated _____ gal.

EVACUATION METHOD: Pump # and type _____ Hose # and type _____

Bailer# and type _____ Dedicated _____ (Y/N)

Other _____

Evacuation Time: Stop _____ _____ _____

Start _____ _____ _____

Total Evacation Time _____

Total Evacuated Prior to Sampling _____ gal.

Evacuation Rate _____ gal. per minute

Depth to Water during Evacuation _____ ft. _____ time

Depth to Water at Sampling _____ ft. _____ time

Evacuated Dry? _____ After _____ gal. Time _____

80% Recovery = _____

% Recovery at Sample Time _____ Time _____

Formulas/Conversions

r = well radius in ft.

h = ht of water col in ft.

vol. in cyl. = $\pi r^2 h$

7.48 gal/ft^3

V_2" casing = 0.163 gal/ft

V_3" casing = 0.367 gal/ft

V_4" casing = 0.653 gal/ft

$V_{4.5}$" casing = 0.826 gal/ft

V_6" casing = 1.47 gal/ft

V8 casing = 2.61 gal/ft

CHEMICAL DATA: Meter Brand/Number _____

Calibration: _____ 4.0 _____ 7.0 _____ 10.0

Measured:	SC/μmhos	pH	T°C	Time	Volume Evacuated (gal.)

SAMPLE: Color NONE Odor NONE

Description of matter in sample: NONE

Sampling Method: DECANT FROM NEW, UNDEDICATED PVC BLR FILLED W/ARROWHEAD D.I.WTR.

Sample Port: Rate ___ gpm Totalizer ___/___ gal.

Time ___/___

# of Cont.	Sample ID	Cont. Type[1]	Vol[2]	Fil[3]	Ref[4]	Preservative (specify)	Analytic Method	Turn[5]	LAB
2	031-22	w/cV	40 mL	N	Y	HCL	8015/8020	N	SAL

1 Sample Type Codes: W = Water, S = Soil, Describe Other
Container Type Codes: V = VOA/Teflon Septa, P = Plastic, C or B = Clear/Brown Glass, Describe Other
Cap Codes: PT = Plastic, Teflon lined;
2 = Volume per container; 3 = Filtered (Y/N); 4 = Refrigerated (Y/N)
5 Turnaround [N = Normal, W = 1 week, R = 24 hour, HOLD (spell)]

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

ATTACHMENT B

ANALYTIC REPORT AND CHAIN-OF-CUSTODY DOCUMENTS

SUPERIOR ANALYTICAL LABORATORY, INC.
1555 BURKE, UNIT I · SAN FRANCISCO, CA 94124 · PHONE (415) 647-2081 DOHS #1332

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 11594
CLIENT: Weiss Associates
CLIENT JOB NO.: 4-438-01

DATE RECEIVED: 03/08/91
DATE REPORTED: 03/15/91

Lab Number	Customer Sample Identification	Date Sampled	Date Analyzed
11594- 1	031-01	03/07/91	03/15/91
11594- 2	031-21	03/07/91	03/13/91
11594- 3	031-22	03/07/91	03/13/91

Laboratory Number:	11594 1	11594 2	11594 3
ANALYTE LIST	Amounts/Quantitation Limits (ug/l)		
OIL AND GREASE:	NA	NA	NA
TPH/GASOLINE RANGE:	4500	ND<50	ND<50
TPH/DIESEL RANGE:	NA	NA	NA
BENZENE:	820	ND<0.5	ND<0.5
TOLUENE:	39	ND<0.5	ND<0.5
ETHYL BENZENE:	120	ND<0.5	ND<0.5
XYLENES:	77	ND<0.5	1

SUPERIOR ANALYTICAL LABORATORY, INC.
1555 BURKE. UNIT I · SAN FRANCISCO. CA 94124 · PHONE (415) 647-2081 DOHS #1332

C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

QA/QC INFORMATION
SET: 11594

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:
Minimum Detection Limit in Water: 5000ug/L

Modified EPA-SW846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Water: 50ug/l
Standard Reference: NA

EPA-SW846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Water: 50ug/l
Standard Reference: 08/24/90

SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Water: 0.5ug/l
Standard Reference: 01/28/91

ANALYTE	REFERENCE	SPIKE LEVEL	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Oil & Grease	NA	NA	NA	NA	NA
Diesel	NA	NA	NA	NA	NA
Gasoline	08/24/90	200ng	89/88	2	63-111
Benzene	01/28/91	200ng	103/104	2	72-119
Toluene	01/28/91	200ng	100/101	1	70-116
Ethyl Benzene	01/28/91	200ng	101/101	0	73-119
Total Xylene	01/28/91	600ng	104/105	1	71-118

Richard Srna, Ph.D.
Laboratory Director

S# # 11594

Chevron U.S.A. Inc.
P.O. BOX 5004
San Ramon, CA 94583
FAX (415)842-9591

Chevron Facility Number 94612 (Oakland IV)
Facility Address 3616 San Leandro St, Oakland, CA
Consultant Project Number 4-438-01
Consultant Name WEISS ASSOCIATES
Address 5500 SHELLMOUND ST, EMERYVILLE, CA 94608
Project Contact (Name) MARIETTE STIIN
(Phone) (415)547-5420 (Fax Number) (415)547-5043

Chevron Contact (Name) NANCY VUICELICH
(Phone) (415) 842-9625
Laboratory Name SUPERIOR ANALYTICAL LAB
Laboratory Release Number 4508120
Samples Collected by (Name) D. CHARLES
Collection Date 3/7/91
Signature Paul Chl

Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Chlorinated HC (8010)	Non Chlorinated HC (8020)	Total Lead (AA)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)						Remarks
031-1	2	W	G	1020	HCL	Y	X												
031-21	2	W	G	0830	HCL	Y	X												
031-22	2	W	G	1015	HCL	Y	X												

Please initial: SMW
Samples Stored in ice: yes
Appropriate containers: yes
Samples preserved: yes
VOA's without headspace: NO
Comments: OK

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Paul Chl	Weiss Assoc	3/7/91 1850	Paul Cawlyn	Weiss Assoc.	3/8/91 8115
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Paul Cawlyn	Weiss Assoc	3/7/91 9:15			
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time
			Onyi A Onuzo	Superior Labs	3/8/91 9:20am

Turn Around Time (Circle Choice)
24 Hrs.
48 Hrs.
5 Days
10 Days
As Contracted

COC-1.DWG/11 90/HCH

Released to Secure locked area overnight.