



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

90 NOV 30 AM 11:02

Marketing Operations

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

November 28, 1990

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

Re: Chevron Service Station #9-0338
5500 Telegraph Avenue/55th
Oakland, CA 94609


Dear Mr. Shahid:

Enclosed we are forwarding the Quarterly Groundwater Sampling Report dated November 27, 1990, conducted by our consultant Alton Geoscience, Inc., for the above referenced site. As indicated in the report, no detectable hydrocarbon contaminants were present in any of the monitoring wells.

Chevron will sample this site two (2) more quarters and at that time evaluate the case for closure.

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

Very truly yours,
C. G. Trimbach

By 
Nancy Vukelich

NLV/jmr
Enclosures

cc: Mr. Lester Feldman
RWQCB-Bay Area
1800 Harrison Street
Suite # 700
Oakland, CA 94612

ALTON GEOSCIENCE, INC.

November 27, 1990

Mr. Nancy Vukelich
Chevron U.S.A., Inc.
Post Office Box 5004
San Ramon, California 94583-0804

30-189

Subject: Quarterly Ground Water Monitoring Report
Chevron Station No. 9-0338
5500 Telegraph Avenue
Oakland, California

Dear Mrs. Vukelich:

In accordance with our agreement, Alton Geoscience, Inc. transmits this Quarterly Ground Water Monitoring and Sampling Report for Chevron Station No. 9-0338, located at 5500 Telegraph Avenue, Oakland, California. Figure 1 shows the site location.

Monitoring and sampling of the ground water monitoring wells were performed on October 12, 1990, in accordance with the requirements and procedures of the governing Regional Water Quality Control Board (RWQCB) and the local regulatory agencies.

FIELD PROCEDURES

Prior to purging and sampling the wells, the depth to ground water in each well was measured from the top of casing to the nearest 0.01 foot using an electronic sounder. Ground water samples were collected and observed for the presence of free product or sheen.

Water samples were collected after more than 3 casing volumes of ground water were purged from each well. Each sample was collected using a clean bailer (dedicated for each well), and then transferred to the appropriate clean sample containers for delivery to a state-certified laboratory following proper preservation and chain of custody procedures. Purged ground water was stored on site in DOT-approved, 55-gallon drums until properly disposed of offsite.

SAMPLING AND ANALYTICAL RESULTS

The results of the monitoring and laboratory analyses of the ground water samples for this quarter, as well as the results of previous quarterly monitoring and sampling events, are summarized in Table 1. Based on the previous wellhead

Ms. Nancy Vukelich
November 27, 1990
Page 2

elevation survey data and depth to water measurements collected during this monitoring event, ground water elevations and flow direction were determined, as shown in Figure 2.

No free product or sheen was noted in any of the ground water samples. The water sampling survey forms presenting the results of the field activities and observations, as well as the official laboratory reports and chain of custody records, are included in Appendix A.

SCHEDULE

The next quarterly sampling event is scheduled for January 1990. A report presenting the results of the field and analytical data is scheduled to be submitted in February 1990.

Copies of this report should be submitted to the following agencies for their review:

Regional Water Quality Control Board
San Francisco Bay Region
1800 Harrison Street, Suite 700
Oakland, California 94612

Alameda County Environmental Health
80 Swan Way, Room 200
Oakland, California 94621

Please call if you have any questions concerning this report.

Sincerely,

ALTON GEOSCIENCE, INC.



Stephan Rosen
Project Manager



Al Sevilla, R.C.E. 26392
Division General Manager

Enclosure

Table 1 - (cont'd.)
 Summary of Results of Ground Water Sampling
 Chevron Service Station 89-0338, 5500 Telegraph Avenue
 Oakland, California
 Concentrations in parts per billion (ppb)

WELL ID	DATE OF SAMPLING/ MONITORING	MAGNESIUM	MANGANESE	MERCURY	NICKEL	POTASSIUM	SODIUM	THALLIUM	VANADIUM	ANALYTICAL LAB
C-1	11/21/89	---	---	---	---	---	---	---	---	NA
C-1	03/20/90	73	81	---	50	8.7	64	5	14	NA
C-1	06/27/90	---	---	---	---	---	---	---	---	SAL
C-1D**	06/27/90	---	---	---	---	---	---	---	---	SAL
C-1*	10/12/90	---	---	---	---	---	---	---	---	SAL
C-1D**	10/12/90	---	---	---	---	---	---	---	---	SAL
C-2	11/21/89	---	---	---	---	---	---	---	---	NA
C-2	03/20/90	130	9.5	1.0	1.4	29	47	---	70	NA
C-2	06/27/90	---	---	---	---	---	---	---	---	SAL
C-2	10/12/90	---	---	---	---	---	---	---	---	SAL
C-3	11/21/89	---	---	---	---	---	---	---	---	NA
C-3	01/12/90	---	---	---	---	---	---	---	---	NA
C-3	03/20/90	130	9.2	1.0	1.7	32	49	---	79	NA
C-3	06/27/90	---	---	---	---	---	---	---	---	SAL
C-3	10/12/90	---	---	---	---	---	---	---	---	SAL
TB	03/20/90	---	---	---	---	---	---	---	---	NA
TB	06/27/90	---	---	---	---	---	---	---	---	SAL
TB*	10/12/90	---	---	---	---	---	---	---	---	SAL
RINSATE	06/27/90	---	---	---	---	---	---	---	---	SAL
RINSATE*	10/12/90	---	---	---	---	---	---	---	---	SAL

EXPLANATION OF ABBREVIATIONS:

TPH-G	: Total Petroleum Hydrocarbons as Gasoline (EPA method 8015 modified)	TOG	: Total Oil and Grease (EPA method 503D & 503E)	SAL	: Superior Analytical Laboratory
TPH-D	: Total Petroleum Hydrocarbons as Diesel (EPA method 8015 modified)	---	: Not Analyzed/Not Measured	STEL	: STEL Labs
B	: Benzene (EPA method 8020)	NA	: Not applicable/Not available	PACE	: PACE Labs
T	: Toluene (EPA method 8020)	ND	: Not Detected	MT	: Med-Tox Associates
E	: Ethylbenzene (EPA method 8020)	TB	: Trip Blank	ITC	: International Technology Corporation
X	: Xylenes (EPA method 8020)	D	: Duplicate	BCL	: Brown and Caldwell Laboratories
		ft above asl	: Feet Above Mean Sea Level		

NOTES:

1. Depth to Water level measured from top of well casing (in feet).
2. * = Samples broken by laboratory. Unable to analyze.
3. ** = C-1D Duplicate of C-1.

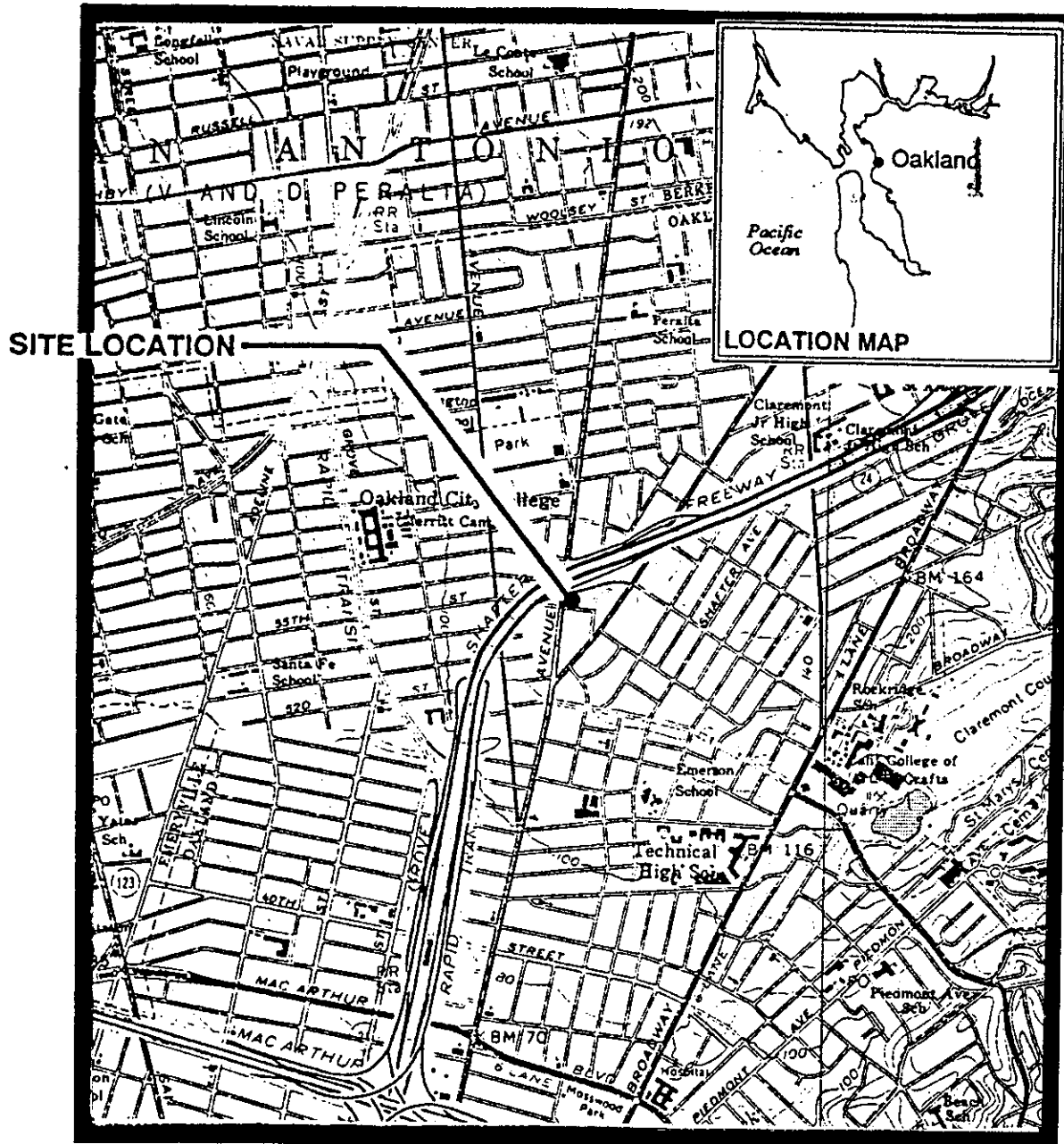


FIGURE 1. VICINITY MAP

1 2000

 APPROXIMATE SCALE IN FEET

CHEVRON SERVICE STATION NO. 9 - 0338
5500 TELEGRAPH AVENUE
OAKLAND, CALIFORNIA

PROJECT NO. 30 - 180

SOURCE: U.S.G.S. TOPOGRAPHIC



ALTON GEOSCIENCE
 1000 Burnett Ave., Ste. 140
 Concord, CA 94520



APPROIMATE SCALE IN FEET

LEGEND:



GROUND WATER MONITORING WELL

**GROUND WATER ELEVATION
(FEET ABOVE MEAN SEA LEVEL (NGVD-1929))**



**GROUND WATER ELEVATION CONTOUR
(0.10 FOOT INTERVAL)**



GENERAL DIRECTION OF GROUND WATER FLOW

Note:

Contour lines are interpretive based on fluid levels in monitoring wells measured on 10/12/90.

**FIGURE 2. GROUND WATER
ELEVATION CONTOUR
MAP**

**CHEVRON SERVICE STATION NO. 9 - 0338
5500 TELEGRAPH AVENUE
OAKLAND, CALIFORNIA,**

SOURCE: GeoStrategies Inc.:



ALTON GEOSCIENCE
1000 Burnett Ave., Ste. 140
Concord, CA 94520

APPENDIX A
FIELD SAMPLE FORMS,
OFFICIAL LABORATORY RESULTS, AND
CHAIN OF CUSTODY FORMS

JOB NUMBER 30-189
 # 90338
 JOB LOCATION Oakland

TECHNICIAN Rennis & Larry
 DATE 10/12/90

PUMPOUT <input type="checkbox"/> YES <input type="checkbox"/> NO		DATE OF LAST PUMPOUT: <u>6/27/90</u>			WEATHER: <u>Sunny</u> TIME: <u>10:15 AM</u>		COMMENTS (Notes, conditions, etc.)
WELL #	HOLD	CUT <i>Time</i>	LEVEL	TOTAL DEPTH	DEPTH TO PUMP		
	DEPTH TO WATER	DEPTH TO PUMPOUT	PROD. THICKNESS (FT)				
C-2	10.89	12:15		28.22			
C-3	11.28	12:25		27.98			
C-1	10.91	12:35		29.52			
T.B.	11:30						
Rinate	11:35						
C-1D	12:40						

2" ↓

ALTON GEOSCIENCE, INC.
Water Sampling Field Survey

WELL # C-2 PROJECT# 30-189 # 90338 LOCATION Oakland DATE 10/12/90
 SAMPLING TEAM Dennis & Larry SAMPLING METHOD: BAILER PUMP
 DECONTAMINATION METHOD: TRIPLE RINSE W/TSP AND DEIONIZED WATER
 STEAM CLEAN

WELL DATA:

DEPTH TO WATER 10.89 ft
 TOTAL DEPTH 28.22 ft
 HT. WATER COL 17.33 ft

CONVERSION	
diam	gal/ft
2 in	X0.16
3 in	X0.36
4 in	X0.65
6 in	X1.44

Volume of Water Column 2.72 gal
 Volumes to Purge 2.72 x 4 Vol
 Total Volume to Purge 10.88 gal

CHEMICAL DATA:

T (F)	SC/umhos	pH	Time	Comments	Volume (gal)
69.4	1.91	7.82	1126	Lt Brown	2
68.5	1.84	7.74	1132	" "	4
68.4	1.80	7.83	1136	" "	6
67.9	1.79	7.79	1139	" "	8
67.2	1.76	7.79	1141	" "	11
ACTUAL VOLUME PURGED					<u>11.5</u> gal

COMMENTS: Parameter X 100

ALTON GEOSCIENCE, INC.
Water Sampling Field Survey

WELL # C-3 PROJECT # 30-189 #90338 LOCATION Oakland DATE 10/12/90
 SAMPLING TEAM Dennis & Larry SAMPLING METHOD: BAILER PUMP
 DECONTAMINATION METHOD: TRIPLE RINSE W/TSP AND DEIONIZED WATER
 STEAM CLEAN

WELL DATA:

DEPTH TO WATER 11.28 ft
 TOTAL DEPTH 27.98 ft
 HT. WATER COL 16.70 ft

CONVERSION	
diam	gal/ft
2 in	X0.16
3 in	X0.36
4 in	X0.65
6 in	X1.44

Volume of Water Column 2.72 gal
 Volumes to Purge 2.72 X 4 Vol
 Total Volume to Purge 10.88 gal

CHEMICAL DATA:

T (F)	SC/umhos	pH	Time	Comments	Volume (gal)
72.8	1.50	7.83	1150	Lt Brown, Cloudy	2
69.9	1.44	7.69	1152	" "	4
68.1	1.43	7.60	1154	" "	6
68.0	1.40	7.61	1157	" "	8
68.2	1.42	7.61	1203	" "	11
ACTUAL VOLUME PURGED					<u>11.5</u> gal

COMMENTS: Parameter X 100

ALTON GEOSCIENCE, INC.
Water Sampling Field Survey

WELL # C-1 PROJECT# 30-189 #90338 LOCATION Dakland DATE 10/12/90
 SAMPLING TEAM Dennis & Larry SAMPLING METHOD: BAILER PUMP
 DECONTAMINATION METHOD: TRIPLE RINSE W/TSP AND DEIONIZED WATER
 STEAM CLEAN

WELL DATA:

DEPTH TO WATER 10.91 ft
 TOTAL DEPTH 29.52 ft
 HT. WATER COL 18.61 ft

CONVERSION	
diam	gal/ft
2 in	X0.16
3 in	X0.36
4 in	X0.65
6 in	X1.44

Volume of Water Column 3.04 gal
 Volumes to Purge 3.04 X 4 Vol
 Total Volume to Purge 12.56 gal

CHEMICAL DATA:

T (F)	SC/umhos	pH	Time	Comments	Volume (gal)
73.2	2.06	7.65	1212	Clear	3
73.1	2.06	7.77	1216	" "	6
73.0	2.08	7.78	1223	" "	9
73.1	2.05	7.81	1225	" "	12
73.0	2.07	7.80	1227	" "	13
ACTUAL VOLUME PURGED					<u>13.5</u> gal

COMMENTS: Parameters X 100

OCT 23 1990

SUPERIOR ANALYTICAL LABORATORIES, INC.

825 ARNOLD, STE. 114 • MARTINEZ, CALIFORNIA 94553 • (415) 229-1512

DOHS #319
DOHS #220

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

LABORATORY NO.: 81680
CLIENT: Alton Geoscience
CLIENT JOB NO.: 90338

DATE RECEIVED: 10/12/90
DATE REPORTED: 10/18/90

Page 1 of 2

Lab Number	Customer Sample Identification	Date Sampled	Date Analyzed
81680- 1	C-2	10/12/90	10/16/90
81680- 2	C-3	10/12/90	10/16/90
81680- 3	C-1*	10/12/90	10/16/90
81680- 4	T.B.*	10/12/90	10/16/90
81680- 5	RINSATE*	10/12/90	10/16/90
81680- 6	C-1D	10/12/90	10/16/90

Laboratory Number:	81680 1	81680 2	81680 3	81680 4	81680 5
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ANALYTE LIST	Amounts/Quantitation Limits (ug/L)				
OIL AND GREASE:	NA	NA	NA	NA	NA
TPH/GASOLINE RANGE:	ND<50	ND<50			
TPH/DIESEL RANGE:	NA	NA	NA	NA	NA
BENZENE:	ND<0.5	ND<0.5			
TOLUENE:	ND<0.5	ND<0.5			
ETHYL BENZENE:	ND<0.5	ND<0.5			
XYLENES:	ND<0.5	ND<0.5			

Laboratory Number:	81680 6
--------------------	------------

ANALYTE LIST	Amounts/Quantitation Limits (ug/L)
OIL AND GREASE:	NA
TPH/GASOLINE RANGE:	ND<50
TPH/DIESEL RANGE:	NA
BENZENE:	ND<0.5
TOLUENE:	ND<0.5
ETHYL BENZENE:	ND<0.5
XYLENES:	ND<0.5

OUTSTANDING QUALITY AND SERVICE

OCT 23 1990

SUPERIOR ANALYTICAL LABORATORIES, INC.

825 ARNOLD, STE. 114 • MARTINEZ, CALIFORNIA 94553 • (415) 229-1512

DOHS #319
DOHS #220

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
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: 81680

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; %Diff Diesel = NA
MS/MSD Average Recovery = NA: Duplicate RPD = NA

8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Water: 50ug/L
Daily Standard run at 2mg/L; %Diff Gasoline = 2
MS/MSD Average Recovery = 82%: Duplicate RPD = 1

8020/BTXE
Minimum Quantitation Limit in Water: 0.50ug/L
Daily Standard run at 20ug/L; %Diff = <15%
MS/MSD Average Recovery = 103%: Duplicate RPD = <1

*SAMPLES BROKEN BY LABORATORY. UNABLE TO ANALYZE.

Richard Srna, Ph.D.

Richard Srna
Laboratory Director

OUTSTANDING QUALITY AND SERVICE

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

81680

Chain-of-Custody Record

Chevron Facility Number # 90338 Oakland
Consultant # 3446560 Consultant # 30-189
Release Number _____ Project Number _____
Consultant Name ALTON GEOSCIENCE
Address 1000 BURNETT AVE # 140
Fax Number 415-682-8921
Project Contact (Name) STEPHAN ROSEN
(Phone) 415-682-1582

Chevron Contact (Name) Gold Randall
(Phone) 842-9625
Laboratory Name Superior
Lab Ref. Number 2646690
Samples Collected by (Name) DENNIS VERNON
Collection Date 10/12/90
Signature Dennis Vernon

Sample Number	Lab Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite	Time	Sample Preservation	Iced	Analysis To Be Performed										Remarks				
								Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline	Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline + Diesel	503 Oil and Grease	Arom. Volatiles - BTXE Soil: 8020/Wtr.: 802	Arom. Volatiles - BTXE Soil: 8240/Wtr.: 824	Total Lead DHS-Luft	ED8 DHS-AB 1803								
C-2		3	W	G	12:15	HCL	X	X			X											Run these sample in Series.
C-3		3			12:25		X															
C-1		3			12:35		X															
T.B.		1			11:30		X															
Rinse		1			11:35		X															
C-1D		2			12:40		X															

Relinquished By (Signature) <u>Dennis Vernon</u>	Organization <u>ALTON GEOSCIENCE</u>	Date/Time <u>10/12/90</u>	Received By (Signature) <u>[Signature]</u>	Organization <u>N/A</u>	Date/Time	Turn Around Time (Circle Choice) 24 Hrs 48 Hrs <u>5 Days</u> 10 Days
Relinquished By (Signature) <u>[Signature]</u>	Organization <u>ALTON</u>	Date/Time	Received By (Signature) <u>[Signature]</u>	Organization <u>N/A</u>	Date/Time	
Relinquished By (Signature) <u>[Signature]</u>	Organization <u>N/A</u>	Date/Time	Received For Laboratory By (Signature) <u>Robert [Signature]</u>	Date/Time <u>10/12/90 4:25pm</u>	Date/Time	