ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, Assistant Agency Director

R02887

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

April 5, 1995
STID 401

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

CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION

Agency name: **Alameda County-HazMat** Date: **March 10, 1995**
Address: **1131 Harbor Bay Parkway**
City/State/Zip: **Alameda, CA 94502** Phone: **(510) 567-6700**
Responsible staff person: **Susan Hugo** Title: **Sr. Hazardous Materials Spec.**

II. CASE INFORMATION

Site facility name: **Chevron Service Station # 9-0338**
Site facility address: **5500 Telegraph Ave., Oakland, CA 94609**
RB LUSTIS Case No: **N/A** Local Case No./LOP Case No.: **401**
URF filing date: **9/9/89** SWEEPS No: **N/A**

Responsible Parties:	Addresses:	Phone Numbers:
Chevron USA Products Company	**P.O. Box 5004 San Ramon, CA 94583-0804**	**(510) 842-9500**

Tank No:	Size in gal.:	Contents:	Closed in-place or removed?:	Date:
1	1000	Waste oil	Removed	10/5/88
	fuel tank piping	Gasoline	Removed	6-7/89

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

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? **YES** 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:

Material	Amount (include units)	Action (Treatment of Disposal w/destination)	Date
Tank	1 - 1000 gallon	Erickson, 255 Parr Blvd. Richmond, CA	1988
Piping	100 - 200 feet	Erickson, 255 Parr Blvd. Richmond, CA	1989
Free Product	NA		
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)		Water (ppb)	
	Before	After	Before	After
TPH (Gas)	800	480	* 280	ND
TPH (Diesel)	ND	-	ND	-
Benzene	-	2.2	* 0.9	ND
Toluene	-	ND	* 1.5	ND
Xylene	-	28	* 3	ND
Ethylbenzene	-	10	* 0.8	ND
Oil & Grease	ND	-	-	ND
Heavy metals	See comments		See comments	
Volatiles (8240)	ND	-	dichloromethane 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 TPHg ranging from 340 to 800 ppm. A limited 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, however, 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

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: **NO**
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** Title: **Sr. Hazardous Materials Specialist**
Signature: Susan L. Hugo Date: March 10, 1995

Reviewed by

Name: Barney Chan Title: Hazardous Materials Specialist
Signature: Barney Chan Date: 3/16/95

Name: Thomas Peacock Title: Sup. Hazardous Materials Specialist
Signature: Thomas Peacock Date: 3-16-95

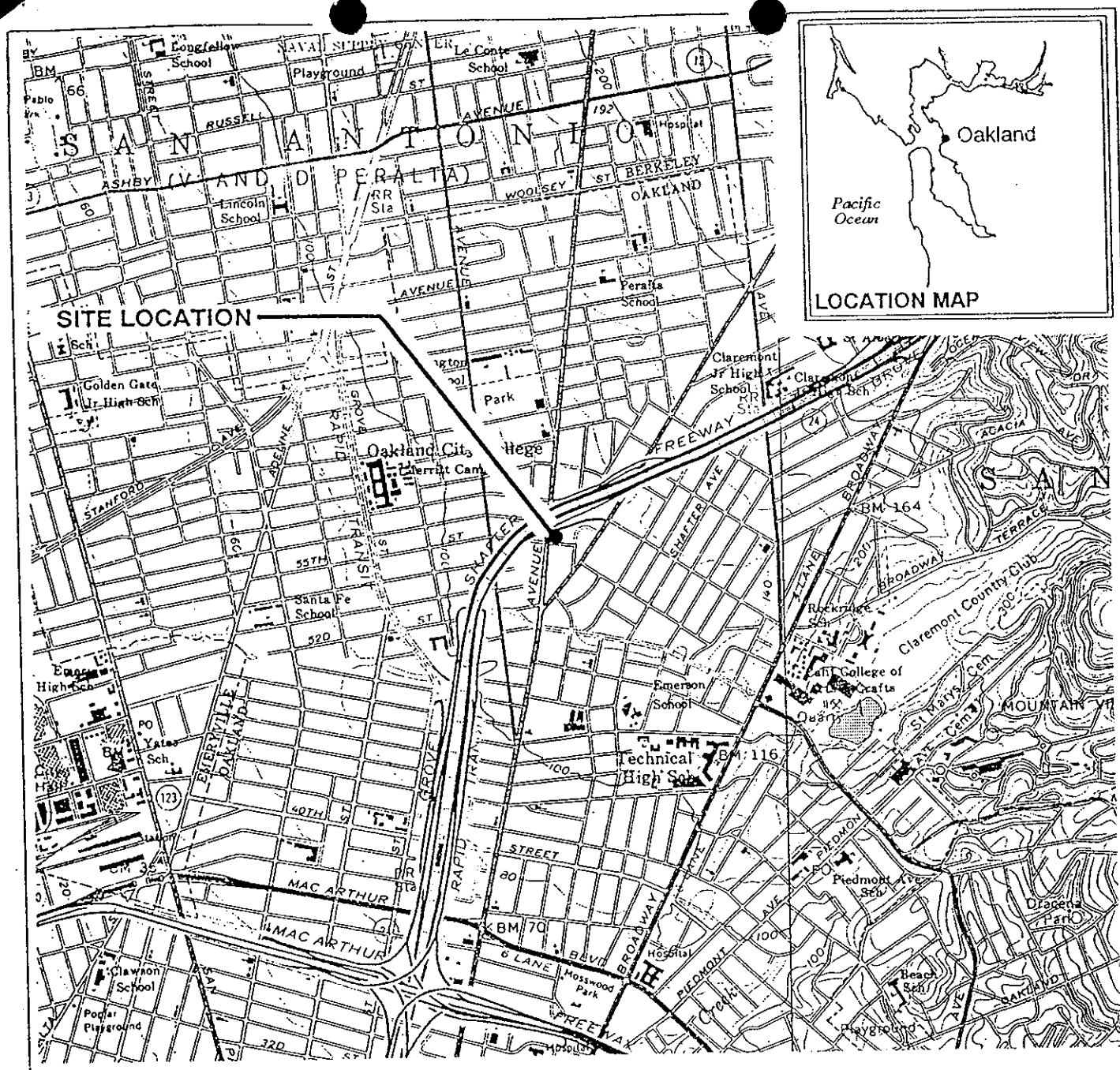
VI. RWQCB NOTIFICATION

Date Submitted to RB:
RWQCB Staff Name: Kevin Graves
RB Response: Approved
Title: Water Resources Control Engineer
Date: 3/22/95

VII. 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.



Base Map: USGS Topographic Map

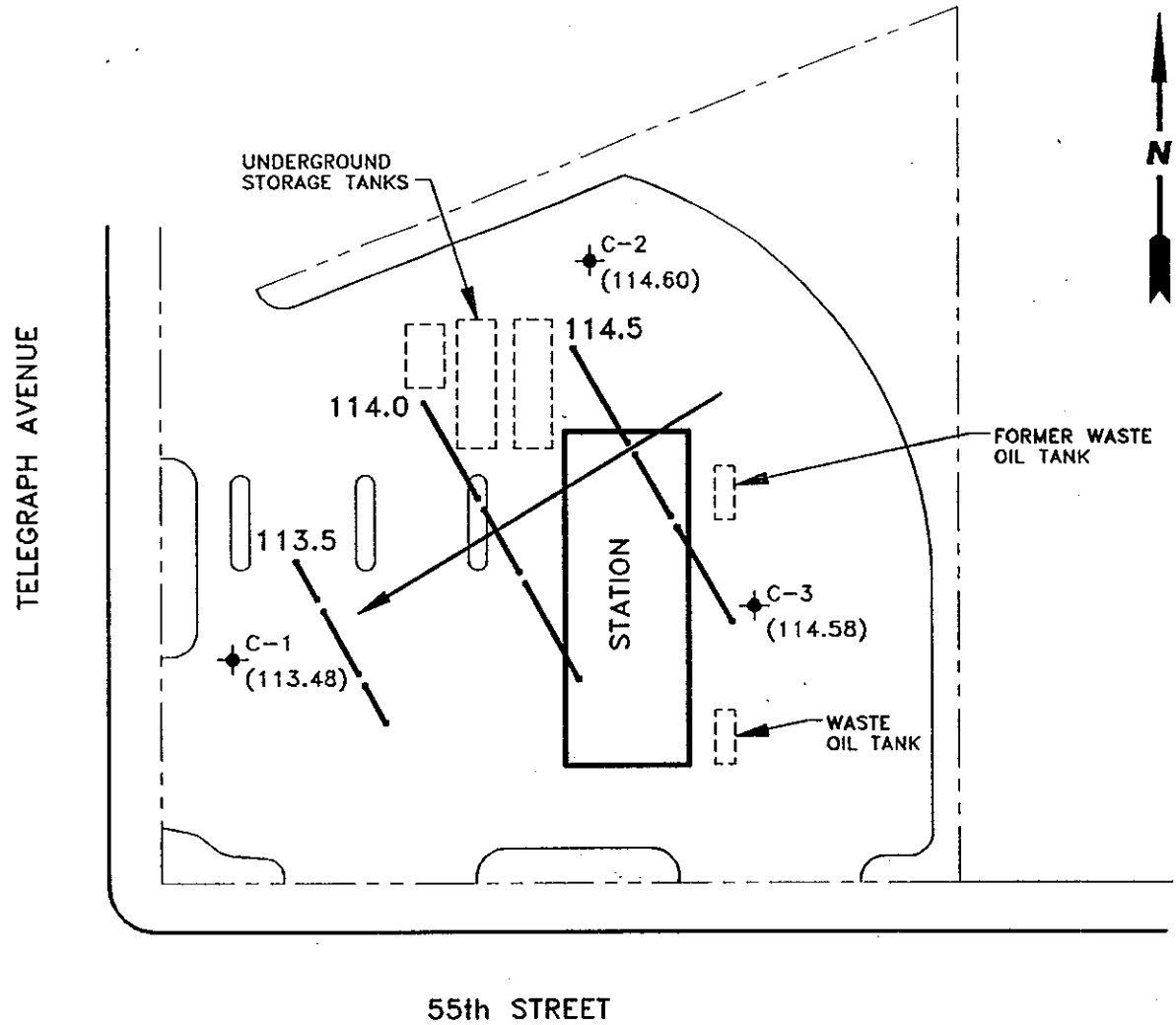
Approximate Scale : 1" = 2000'

GeoStrategies Inc.

Vicinity Map
Chevron Service Station #0338
5500 Telegraph Avenue
Oakland, California

PLATE
1

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
7263		1/90		



LEGEND

- ⌖ MONITORING WELL
- ( ) POTENTIOMETRIC SURFACE ELEVATION (FEET ABOVE MEAN SEA LEVEL)
- PONTIOMETRIC SURFACE CONTOUR
- GROUNDWATER FLOW DIRECTION

0 FEET 40
SCALE

GROUNDWATER TECHNOLOGY
4057 PORT CHICAGO HWY.
CONCORD, CA 94520
(510) 671-2387

POTENTIOMETRIC SURFACE MAP (11/5/93)

CLIENT:	LOCATION:	REV. NO.:	DATE:
CHEVRON U.S.A. PRODUCTS CO. SERVICE STATION No. 9-0338	5500 TELEGRAPH AVENUE OAKLAND, CALIFORNIA	0	12/9/93

PM	PE/RG	DESIGNED	DETAILED	ACAD FILE:	PROJECT NO.:	FIGURE:
JAW		TW	CY	PSMD93	020204116	1

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

Well ID/ Elevation	Date	TPH-G	Benzene	Toluene	Ethyl-benzene	Xylenes	TPH-D	TOG	TTL	HVOC	DTW (ft)	SPT (ft)	WTE (ft)
RINSATE	06/27/90	<50	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—	—	—
	*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	—	—	—	—	—	—	—
	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
D = Duplicate
* = 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

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

Well ID/ Elevation	Date	TPH-G	Benzene	Toluene	Ethyl-benzene	Xylenes	TPH-D	TOG	TTL	HVOC	DTW (ft)	SPT (ft)	WTE (ft)
C-1	11/21/89	<500	<0.5	<0.5	<0.5	<0.5	—	—	—	—	10.75	0.00	113.13
	03/20/90	<50	<0.5	<0.5	<0.5	<0.5	—	—	—	—	9.93	0.00	113.95
123.88	06/27/90	<50	<0.5	<0.5	<0.5	<0.5	—	—	<0.5	—	9.64	0.00	114.24
	D06/27/90	<50	<0.5	<0.5	<0.5	<0.5	—	—	<0.5	—	9.64	0.00	114.24
	*10/12/90	—	—	—	—	—	—	—	—	—	10.91	0.00	112.97
	D10/12/90	<50	<0.5	<0.5	<0.5	<0.5	—	—	—	—	10.91	0.00	112.97
	12/20/90	75	<0.5	0.9	0.8	3	—	—	—	—	9.76	0.00	114.12
	D12/20/90	73	<0.5	0.6	0.7	2	—	—	—	—	9.76	0.00	114.12
	04/10/91	<50	0.7	1.2	<0.5	1.0	—	—	—	—	8.76	0.00	115.12
	D04/10/91	<50	0.9	1.5	<0.5	1.5	—	—	—	—	8.76	0.00	115.12
	02/26/92	<50	<0.5	<0.5	<0.5	<0.5	—	—	—	—	8.08	0.00	115.80
	02/04/93	<50	<0.5	<0.5	<0.5	<0.5	—	—	—	—	8.26	0.00	115.62
	07/27/93	<50	<0.5	<0.5	<0.5	<1.5	—	—	—	—	10.04	0.00	113.84
	09/22/93	79	<0.5	<0.5	<0.5	<1.5	—	—	—	—	10.32	0.00	113.56
	11/15/93	<50	<0.5	<0.5	<0.5	<0.5	—	—	—	—	10.40	0.00	113.48
C-2	11/21/89	<500	<0.5	<0.5	<0.5	<0.5	—	—	—	—	10.75	0.00	114.17
	03/20/90	<50	<0.5	<0.5	<0.5	<0.5	—	—	—	—	9.44	0.00	115.48
124.92	06/27/90	<50	<0.5	<0.5	<0.5	<0.5	—	—	<0.5	—	9.55	0.00	115.37
	10/12/90	<50	<0.5	<0.5	<0.5	<0.5	—	—	—	—	10.89	0.00	114.03
	12/20/90	<50	<0.5	<0.5	<0.5	<0.5	—	—	—	—	9.65	0.00	115.27
	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	—	—	—	—	9.97	0.00	114.95
	11/15/93	<50	<0.5	<0.5	<0.5	<0.5	—	—	—	—	10.32	0.00	114.60

GROUNDWATER TECHNOLOGY

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

Well ID/ Elevation	Date	TPH-G	Benzene	Toluene	Ethyl-benzene	Xylenes	TPH-D	TOG	TTL	HVOC	DTW (ft)	SPT (ft)	WTE (ft)
C-3	11/21/89	<500	<0.5	<0.5	<0.5	<0.5	—	—	—	—	11.28	0.00	114.36
	01/12/90	—	—	—	—	—	<1000	<5000	—	—	—	0.00	—
125.64	03/20/90	<50	<0.5	<0.5	<0.5	<0.5	<50	<5000	—	—	10.39	0.00	115.25
	06/27/90	<50	<0.5	<0.5	<0.5	<0.5	—	—	<0.5	—	10.32	0.00	115.32
	10/12/90	<50	<0.5	<0.5	<0.5	<0.5	—	—	—	—	11.28	0.00	114.36
	12/20/90	54	<0.5	<0.5	<0.5	0.7	—	—	—	—	10.25	0.00	115.39
	04/10/91	<50	<0.5	<0.5	<0.5	<0.5	—	—	—	—	8.79	0.00	116.85
	02/26/92	<50	<0.5	<0.5	<0.5	<0.5	—	—	—	—	7.83	0.00	117.81
	02/04/93	<50	<0.5	<0.5	<0.5	<0.5	—	—	—	—	7.94	0.00	117.70
	07/27/93	**280	<0.5	<0.5	<0.5	<1.5	—	—	—	—	10.59	0.00	115.05
	09/22/93	<50	<0.5	<0.5	<0.5	<1.5	—	—	—	***1.0	10.78	0.00	114.86
	11/15/93	<50	<0.5	<0.5	<0.5	<0.5	—	—	—	—	11.06	0.00	114.58
TRIP BLANK	03/20/90	<50	<0.5	<0.5	<0.5	<0.5	<50	—	—	—	—	—	—
	06/27/90	<50	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—	—	—
	*10/12/90	—	—	—	—	—	—	—	—	—	—	—	—
	12/20/90	<50	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—	—	—
	04/10/91	<50	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—	—	—
	02/26/92	<50	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—	—	—
	07/27/93	<50	<0.5	<0.5	<0.5	<1.5	—	—	—	—	—	—	—
	09/22/93	<50	<0.5	<0.5	<0.5	<1.5	—	—	—	—	—	—	—
	11/15/93	<50	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—	—	—

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)

WELL ID	DATE OF SAMPLING/ MONITORING	CADMIUM	ZINC	LEAD	CHROMIUM	DIBROMIDE	ALUMINUM	BERYLLIUM	ARSENIC	BARIUM	CALCIUM	COBALT	COPPER	LAB
C-1	11/21/89	---	---	---	---	ND<0.05	---	---	---	---	---	---	---	NA
C-1	03/20/90	---	0.18	0.016	0.28	ND<0.005	45	---	14	25	91	3	66	NA
C-1	06/27/90	ND<0.01	0.03	---	---	---	---	---	---	---	---	---	---	SAL
C-1D	06/27/90	ND<0.01	0.03	---		---	---	---	---	---	---	---	---	SAL
C-1*	10/12/90	---	---	---	---	---	---	---	---	---	---	---	---	SAL
C-1D	10/12/90	---	---	---	---	---	---	---	---	---	---	---	---	SAL
C-1	12/20/90	---	---	---	---	---	---	---	---	---	---	---	---	SAL
C-1D	12/20/90	---	---	---	---	---	---	---	---	---	---	---	---	SAL
C-1	04/10/91	---	---	---	---	---	---	---	---	---	---	---	---	SAL
C-1D	04/10/91	---	---	---	---	---	---	---	---	---	---	---	---	SAL
					0									
C-2	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	---	---	---		---	---	---	---	---	---	---	---	SAL
C-2	12/20/90	---	---	---	---	---	---	---	---	---	---	---	---	SAL
C-2	04/10/91	---	---	---	---	---	---	---	---	---	---	---	---	SAL
C-3	11/21/89	20.	1000.	ND<500.	500.	ND<0.05	---	---	---	---	---	---	---	NA
C-3	01/12/90	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-3	03/20/90	ND<0.005	1.1	0.12	1.0	---	310	2	12	2.5	85	21	43	NA
C-3	06/27/90	ND<0.01	0.3	---	---	---	---	---	---	---	---	---	---	SAL
C-3	10/12/90	---	---	---	---	---	---	---	---	---	---	---	---	SAL
C-3	12/20/90	---	---	---	---	---	---	---	---	---	---	---	---	SAL
C-3	04/10/91	---	---	---	---	---	---	---	---	---	---	---	---	SAL
TB	03/20/90	---	---	---	---	---	---	---	---	---	---	---	---	NA
TB	06/27/90	---	---	---	---	---	---	---	---	---	---	---	---	SAL
TB*	10/12/90	---	---	---	---	---	---	---	---	---	---	---	---	SAL
TB	12/20/90	---	---	---	---	---	---	---	---	---	---	---	---	SAL
TB	04/10/91	---	---	---	---	---	---	---	---	---	---	---	---	SAL
RINSATE	06/27/90	---	---	---	---	---	---	---	---	---	---	---	---	SAL
RINSATE*	10/12/90	---	---	---	---	---	---	---	---	---	---	---	---	SAL
RINSATE	12/20/90	---	---	---	---	---	---	---	---	---	---	---	---	SAL
RINSATE	04/10/91	---	---	---	---	---	---	---	---	---	---	---	---	SAL

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)

WELL ID	DATE OF SAMPLING/ MONITORING	IRON	MAGNESIUM	MANGANESE	MERCURY	NICKEL	POTASSIUM	SODIUM	THALLIUM	VANADIUM	LAB
C-1	11/21/89	---	---	---	---	---	---	---	---	---	NA
C-1	03/20/90	84	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-1	12/20/90	---	---	---	---	---	---	---	---	---	SAL
C-1	04/10/91	---	---	---	---	---	---	---	---	---	SAL
C-1D	04/10/91	---	---	---	---	---	---	---	---	---	SAL
C-2	11/21/89	---	---	---	---	---	---	---	---	---	NA
C-2	03/20/90	450	130	9.5	1.0	1.4	29	47	---	70	NA
C-2	06/27/90	---	---	---	---	---	---	---	---	---	SAL
C-2	10/12/90	---	---	---	---	---	---	---	---	---	SAL
C-2	12/20/90	---	---	---	---	---	---	---	---	---	SAL
C-2	04/10/91	---	---	---	---	---	---	---	---	---	SAL
C-3	11/21/89	---	---	---	---	---	---	---	---	---	NA
C-3	01/12/90	---	---	---	---	---	---	---	---	---	NA
C-3	03/20/90	530	130	9.2	1.0	1.7	32	49	---	79	NA
C-3	06/27/90	---	---	---	---	---	---	---	---	---	SAL
C-3	10/12/90	---	---	---	---	---	---	---	---	---	SAL
C-3	12/20/90	---	---	---	---	---	---	---	---	---	SAL
C-3	04/10/91	---	---	---	---	---	---	---	---	---	SAL

Field location of boring:

(See Plate 2)

Project No.:	7263	Date: 11/13/89	Boring No: C-1
Client:	Chevron Service Station #0338		
Location:	5500 Telegraph Avenue		
City:	Oakland, California		Sheet 1 of 2
Logged by:	R.S.Y.	Driller: Bayland	

Casing installation data:

Drilling method: Hollow-Stem Auger

Hole diameter: 8-Inch

Top of Box Elevation: 123.88 Datum: MSL

Water Level	24.5	10.75		
Time	11:15	09:08		
Date	11-13-89	11-21-89		

PID (ppm)	Blows/ft. or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
								PAVEMENT SECTION - 2.0 feet
				1				
				2				
				3				CLAY with SAND (CL) - very dark brown (10YR 2/2), damp, medium stiff; 15% coarse sand; mottled light brown; brick and wood fragments to 3.0 feet; low plasticity; open voids; no chemical odor.
0	100	S&H		4				
	150	push	C-1					
	200		5.0	5				
				6				
				7				SILT with SAND (ML) - dark yellow brown (10YR 4/6); 15% very fine sand.
				8				
				9				
0	100	S&H						
	250	push	C-1	10				
	250		10.5					CLAYEY GRAVEL (GC) - gray (7.5YR 6/0), dense, moist; 75% angular gravel; sand stringers; pockets of silt - 2 mm; no chemical odor.
				11				
				12				
				13				
				14				
0	9	S&H						COLOR CHANGE to dark yellow brown (10YR 4/6); no chemical odor.
	12		C-1	15				
	14		15.5					
				16				
				17				
				18				less gravel at 18.0 feet; no chemical odor.
				19				

Remarks:

GSI GeoStrategies Inc.

Log of Boring

BORING NO. C-1

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
7263	CEG 1262	11/89		

Field location of boring:

(See Plate 2)

Project No.: 7263	Date: 11/13/89	Boring No: C-1
Client: Chevron Service Station #0338		
Location: 5500 Telegraph Avenue		
City: Oakland, California		Sheet 2 of 2
Logged by: R.S.Y.	Driller: Bayland	

Casing installation data:

Drilling method: Hollow-Stem Auger

Hole diameter: 8-Inch

Top of Box Elevation: Datum:

Water Level				
Time				
Date				

PID (ppm)	Blows/ft. or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
0	7	S&H		20				
	9		C-1					SILTY SAND (SM) - dark yellow brown (10YR 4/6),
	14		20.5					medium dense, very moist; 80% very fine sand; 20% silt;
				21				no chemical odor.
				22				
				23				
				24				
0	4	S&H				▽		COLOR CHANGE to light gray (7.5YR 6/0), saturated;
	7		C-1	25				organic fragments; no chemical odor.
	10		25.5					
				26				
				27				
				28				
				29				SANDY CLAY (CL) - dark yellow brown (10YR 4/4), very
0	4	S&H						stiff, moist; 10% well rounded gravels; 30% fine sand; no
	11		C-1	30				chemical odor.
	20		30.5					
				31				
	10	S&H		32				same as above; no chemical odor.
	19							
	23			33				Bottom of sample at 33.0 feet.
								Bottom of boring at 33.0 feet.
				34				
				35				
				36				
				37				
				38				
				39				

Remarks:

Log of Boring

BORING NO. C-1

GeoStrategies Inc.

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
7263	CMP CEG 1262	11/89		

Field location of boring:

(See Plate 2)

Project No.: 7263		Date: 11/13/89	Boring No: C-2
Client: Chevron Service Station #0338			
Location: 5500 Telegraph Avenue			Sheet 1 of 2
City: Oakland, California			
Logged by: R.S.Y.	Driller: Bayland		

Casing installation data:

Drilling method: Hollow-Stem Auger

Hole diameter: 8-Inch

Top of Box Elevation: 124.92 Datum: MSL

Water Level	23.0	10.75		
Time	14:10	10:35		
Date	11-13-89	11-21-89		

PID (ppm)	Blows/ft. or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
				1				PAVEMENT SECTION - 0.5 feet
				2				
				3				
				4				
0	100	S&H		5				SILT (ML) - very dark grayish brown (10 YR 3/0), medium stiff, dry; trace very fine sand; rootlets; open voids; no chemical odor.
	150	push	C-2					
	250		5.5	6				
				7				
				8				
				9				
0	500	S&H		10				GRAVELLY CLAY (CL) - dark yellow brown (10YR 4/6), hard, moist; 35% angular gravel; 10% fine sand; no chemical odor.
	20		C-2					
	24		10.5	11				
				12				
				13				
				14				
0	9	S&H		15				same as above; no chemical odor.
	18		C-2					
	20		15.5	16				
				17				
				18				
				19				

Remarks:

Log of Boring

BORING NO C-2

GeoStrategies Inc.

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
7263	CEG 1262	11/89		

Field location of boring:

(See Plate 2)

Project No.: 7263		Date: 11/13/89	Boring No: C-2
Client: Chevron Service Station #0338			
Location: 5500 Telegraph Avenue			
City: Oakland, California			Sheet 2 of 2
Logged by: R.S.Y.	Driller: Bayland		
Casing installation data:			
Drilling method: Hollow-Stem Auger			
Hole diameter: 8-Inch	Top of Box Elevation:	Datum:	
Water Level			
Time			
Date			

PID (ppm)	Blows/ft. or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
0	4	S&H		20				CLAYEY GRAVEL (GC) - dark yellow brown (10YR 4/4), medium dense, moist; 70% angular to subround gravel; 30% clay; pockets of calcareous nodules; no chemical odor.
	7		C-2					
	18		20.5					
				21				
				22				
				23				
				24		▽		
0	3	S&H						SILTY SAND (SM) - dark yellow brown (10YR 4/6), medium dense, saturated; 75-80% very fine sand; gray staining around organic fragments; no chemical odor.
	3		C-2	25				
	10		25.5					
				26				
				27				
				28				
				29				
0	7	S&H						GRAVELLY CLAY with SAND (CL) - dark yellow brown (10YR 4/6), very stiff, moist; 20% angular to subround gravel; 15% medium sand; no chemical odor.
	10		C-2	30				
	14		30.5					
				31				
	7	S&H						Bottom of sample at 32.5 feet.
	10			32				Bottom of boring at 32.5 feet.
	15							
				33				
				34				
				35				
				36				
				37				
				38				
				39				

Remarks:

GeoStrategies Inc.

Log of Boring

BORING NO. C-2

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
7263	CEG 1262	11/89		

Field location of boring:

(See Plate 2)

Project No.:	7263	Date: 11/13/89	Boring No: C-3
Client:	Chevron Service Station #0338		
Location:	5500 Telegraph Avenue		Sheet 1 of 2
City:	Oakland, California		
Logged by:	R.S.Y.	Driller: Bayland	

Casing installation data:

Drilling method: Hollow-Stem Auger

Hole diameter: 8-Inch

Top of Box Elevation: 125.64 Datum: MSL

Water Level	23.5	11.28		
Time	16:00	09:57		
Date	11-13-89	11-21-89		

PID (ppm)	Blows/ft. or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
								PAVEMENT SECTION - 2.5 feet
				1				
				2				
				3				
				4				
0	100	S&H						SILT (ML) - dark brown (10YR 3/3), stiff, damp; trace fine sand; rootlets; no chemical odor.
	100	push	C-3	5				
	150		5.5					
				6				
				7				
				8				
				9				
0	6	S&H						GRAVELLY CLAY (CL) - dark yellow brown (10YR 4/6), very stiff, moist; 20-30% fine angular gravel; oxidation stains; no chemical odor.
	12		C-3	10				
	18		10.5					
				11				
				12				
				13				
				14				
0	4	S&H						CLAYEY GRAVEL (GC) - dark yellow brown (10YR 3/4), medium dense, saturated; 75% angular to subround gravel; 25% clay; oxidation stains; no chemical odor.
	6		C-3	15				
	10		15.5					
				16				
				17				
				18				
				19				

Remarks:

Log of Boring

BORING NO. C-3

GeoStrategies Inc.

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
7263	RG/CEG 12/92	11/89		

Field location of boring:

(See Plate 2)

Project No.:	7263	Date: 11/13/89	Boring No: C-3
Client:	Chevron Service Station #0338		
Location:	5500 Telegraph Avenue		Sheet 2 of 2
City:	Oakland, California		
Logged by:	R.S.Y.	Driller: Bayland	
Casing installation data:			

Drilling method: Hollow-Stem Auger

Hole diameter: 8-Inch

Top of Box Elevation:			Datum:	
Water Level				
Time				
Date				

PID (ppm)	Blows/ft. or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
0	3	S&H		20				CLAYEY SAND (SC) - dark yellow brown (10YR 4/6), medium dense, very moist; 70% very fine to fine sand; 30% clay; gray staining around black organic fragments; trace rounded gravel; no chemical odor.
	6		C-3					
	13		20.5	21				
				22				
				23				
				24		▽		
0	7	S&H		25				GRAVELLY SAND (SP) - dark yellow brown (10YR 3/4), medium dense, saturated; 70% medium to coarse sand; 25-30% well rounded gravel; 5% fines; no chemical odor.
	9		C-3					
	9		25.5	26				
				27				
				28				stiffer at 27.5 feet
				29				
0	7	S&H		30				SANDY CLAY with GRAVEL (CL) - dark yellow brown (10YR 4/6), very stiff, moist; 35-40% medium to coarse sand; 15% gravel; no chemical odor.
	13		C-3					
	17		30.5	31				
	7	S&H		32				Bottom of sample at 32.5 feet.
	10							Bottom of boring at 32.5 feet.
	15			33				
				34				
				35				
				36				
				37				
				38				
				39				

Remarks:

Log of Boring

BORING NO. C-3

GeoStrategies Inc.

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
7263	RMP CEG 12/92	11/89		