

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



April 16, 2004

Ms. Karen Streich
Chevron-Texaco
P.O. Box 6012
San Ramon, CA 94583-2324

Mr. Aldo Guidotti
#1 Bates Blvd.
Orinda, CA 94563

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

Ms. Victoria Debenedetti
8520 Pardee Drive
Oakland, CA 94621

Dear Ms. Streich, Ms. Debenedetti and Mr. Guidotti:

Subject: Fuel Leak Site Case Closure Chevron #9-4587; 609 Oak St., Oakland, CA 94607, Case No. RO0000038

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25299.37[h]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, the Alameda County Environmental Health (ACEH) is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed.

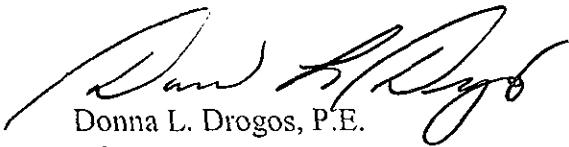
SITE INVESTIGATION AND CLEANUP SUMMARY

Please be advised that the following conditions exist at the site:

- 9.4 ppm TPHg remain in soils at this site.
- 0.58 ppb benzene, 0.83 ppb xylenes and 17 ppb MTBE remain in groundwater at this site.

If you have any questions, please call Barney Chan at (510) 567-6765. Thank you.

Sincerely,


Donna L. Drogos, P.E.
LOP Program Manager

Enclosures:

1. Case Closure Letter
2. Case Closure Summary

cc: Ms. Betty Graham, SFRWQCB
Mr. Toru Okamoto (w/enc), State Water Resources Control Board, 1001 I St.,
17th Floor, Sacramento, CA 95814-2828
Mr. Leroy Griffin, City of Oakland Fire Department, 1605 MLK Jr. Way,
Oakland, CA 94612
B. Chan (w/orig enc), D. Drogos (w/enc), R. Garcia-LaGrille (w/enc)

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Dear Ms. Streich, Ms. Debenedetti and Mr. Guidotti:

Subject: Fuel Leak Site Case Closure Chevorn #9-4587; 609 Oak St., Oakland, CA 94607, Case No. RO0000038

This letter confirms the completion of a site investigation and remedial action for the 2-10,000 gallon and 1-6,0000 gallon underground storage tank(s) formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tanks are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground storage tank(s) site is in compliance with the requirements of subdivisions (a) and (b) of Section 25299.37 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.77 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

This notice is issued pursuant to subdivision (h) of Section 25299.37 of the Health and Safety Code.

Please contact our office if you have any questions regarding this matter.

Sincerely,

Mee Ling Tung/L
Mee Ling Tung
Director
Alameda County Environmental Health

Alameda County Environmental Health

**CASE CLOSURE SUMMARY
LEAKING UNDERGROUND FUEL STORAGE TANK - LOCAL OVERSIGHT PROGRAM**

I. AGENCY INFORMATION

Date: 2/23/04

Agency Name: Alameda County Environmental Health	Address: 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502-6577	Phone: (510) 567-6765
Responsible Staff Person: Barney Chan	Title: Hazardous Materials Specialist

II. CASE INFORMATION

Site Facility Name: Chevron #9-4587			
Site Facility Address: 609 Oak St., Oakland, CA 94607 (aka 116 6 th St., Oakland 94607)			
RB Case No.: ---	Local Case No.: STID #4037	LOP Case No.: RO0000038	
URF Filing Date: 3/18/87	SWEEPS No.: ---	APN: 001-0173-009-00	
Responsible Parties		Addresses	Phone Numbers
Ms. Karen Streich Chevron-Texaco	P.O. Box 6012 San Ramon, CA 94583-2324		925-842-1589
Mr. Aldo Guidotti	#1 Bates Blvd., Orinda, CA 94563		925-254-3450
Ms. Victoria Debenedetti	8520 Pardee Dr., Oakland, CA 94621		-----

Tank I.D. No	Size in Gallons	Contents	Closed In Place/Removed?	Date
1	10,000	Gasoline	Removed	10/17/94
2	10,000	Gasoline	Removed	10/17/94
3	6,000	Gasoline	Removed	10/17/94
Piping			Removed with USTs	10/17/94

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: leak from product dispenser line and USTs		
Site characterization complete? Yes	Date Approved By Oversight Agency: -----	
Monitoring wells installed? yes	Number: 8, + 3 tank backfill, 5 DVE and 5 VE/AS wells	Proper screened interval? varies *
Highest GW Depth Below Ground Surface: 5.6' bgs	Lowest Depth: 15.3' bgs	Flow Direction: southwest to southeast
Most Sensitive Current Use: Potential drinking water source.		

* C-4, C-5, C-6, CR-1 screened 10-30' bgs, C-7 screened 7-30' bgs , wells C-1 thru C-3 of unknown construction

Summary of Production Wells in Vicinity: one domestic well was identified about 1500' up-gradient of site and one irrigation well at Laney College was noted, about 1000' cross-gradient to the northeast. The irrigation well is 8" in diameter, has a total depth of 190' and encounters water at 30'. No information is available for the up-gradient well. Due to the wells, up and cross-gradient locations, they do not appear to be conduits for any contamination from the site

Are drinking water wells affected? No	Aquifer Name: Oakland Sub basin East Bay Plain
Is surface water affected? No	Nearest SW Name: Oakland Inner Harbor over 2000' to the south
Off-Site Beneficial Use Impacts (Addresses/Locations): None	
Reports on file? Yes	Where are reports filed? Alameda County Environmental Health and City of Oakland Fire Services

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL			
Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date
Tanks	2-10,000 and 1-6000 gal	Disposed at Erickson, Richmond, CA	10/17/94
Free Product	~ 4,500 lb	Estimated to be removed by DVE	9/25/95-1/96
Soil	~300 cy 54 cy	Disposed at Redwood Landfill, Novato Disposed at Forward Landfill, Stockton	11/18/94 1/29/03
Groundwater	819,000 gallons	Disposed from gw extraction and DVE	12/93-1/96

MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS BEFORE AND AFTER CLEANUP
(Please see Attachments for additional information on contaminant locations and concentrations)

Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	Before***	After
TPH (Gas)	11000	9.4	220,000	ND
Benzene	160	ND**	38,000	0.58
Toluene	1,300	ND**	7,000	ND
Ethyl Benzene	300	ND**	3,500	ND
Xylene	1,600	ND**	14,000	0.83
Heavy Metals- (total lead)	34	34	NA	NA
MTBE (if not analyzed, explain below)*	NA	ND**	440	17

* MTBE not analyzed on initial tank removal samples in 1994, other oxygenates and lead scavengers not analyzed in groundwater samples

Comments (Depth of Remediation, etc.):

** Results from confirmation soil sample B-4 in 11/03, located within 5' of B-6 reported ND for TPHg, BTEX and MTBE at depths of 3', 6' and 10' bgs., TPHg results from boring B-2 in 11/03

*** Free product was observed in wells C-1 and CR-1 and backfill wells B and C in the 1990s prior to remediation. MTBE results are from EPA Method 8020 and have not been confirmed by EPA 8260.

Site History and Description of Corrective Actions:

This former Chevron site is located on the north side of Interstate 880, on the northwest corner of the intersection of Oak and 6th Streets. See Attachment 1. According to County Assessor's records, the site address is actually listed as 116 6th St. The site was operated as a combination gasoline service station and car wash until October 1994. The site operated three gasoline tanks, 2-10,000 and 1-6,000 gallon. As early as 1983, a fuel release was being monitored and investigated. To delineate the contaminant plume and initiate interim remedial action, three monitoring wells (C-1 through C-3) were installed on-site in July 1983. The wells were advanced to depths ranging from 12-18'. Soil type was logged as interbedded silty clay, sandy clay and sand. See attached boring logs. Three tank back-fill wells (A through C) were also installed at this time. A southeast gradient was found at this time, which is consistent with subsequent gradient results. See Attachment 2.

On March 30, 1987, after a product leak was repaired, a composite soil sample (87086T3#2 and 3) was collected from beneath the southernmost dispenser island at a depth of 7' bgs. The composite sample exhibited 1300 ppm TPHg and 150, 430, 270 ppm, BTX, respectively. See Attachment 3.

Four exploratory soil borings were drilled on September 10 & 11, 1990. Three of the borings were completed as off-site groundwater monitoring wells (C-4, C-5 & C-6) along the east side of Oak St. and the other boring was completed as onsite recovery well (CR-1) just down-gradient of well C-1. On February 1, 1991, an exploratory soil boring was completed as an off-site monitoring well, C-7 on the property on the south side of 6th St. See Attachment 4 and soil analytical results. The monitoring program initiated checked for separate-phase hydrocarbon and depth to groundwater on a weekly basis and sampled wells quarterly. Monitoring wells that exhibited separate-phase hydrocarbons were bailed during these inspections. Subsequent monitoring results from 1990-1992 reported free product in back-fill wells, B and C and in wells C-1 and CR-1. Up to 1 foot of product was noted in backfill well C-B in 1991 and 1992.

A groundwater extraction and treatment system was installed and started on November 8, 1993. The system consisted of pumping groundwater from well CR-1, treating the water through a carbon canister and discharging to the sanitary sewer. From December 1993 to January 1995 the extraction and treatment system treated 460,000 gallons of water.

On October 17, 1994 three underground gasoline storage tanks (2 - 10,000 gallon, and 1- 6,000 gallon) were removed. Soil samples taken during the removal detected up to 3,700 ppm TPHg, and 27, 200, 69 and 400 ppm BTEX, respectively. Hydrocarbon sheen was noted on the water surface in the tank pit. A water sample was not collected. Approximately 300 cubic yards of soil was excavated during the tank removal, aerated to below method detection limits and disposed of at Redwood Landfill in Novato, CA. Soil samples taken from the side-wall of the tank excavation at a depth of 9-11 feet bgs detected up to 3,700 ppm TPHg and 27, 200, 69, 400 BTEX, respectively. Up to 1,400 ppm TPHg and 5, 82, 30, 220 ppm, BTEX, respectively, was detected beneath the dispensers. Tank back-fill wells A through C were destroyed during the underground tank removals. See Attachment 5 and analytical results.

Five dual vapor extraction wells (DVE-1 through DVE-5) and five combination dual vapor extraction/air sparge wells (DVSP-1 through DVSP- 5) were drilled and completed between July 10-12,1995. See Attachment 6. The primary cleanup goals for soil boring samples were set at 100 ppm TPHg and 1 ppm benzene. Borings were to be collected later to confirm the cleanup goals had been met.

Goals for the DVE operations were set for the individual well-heads as an extraction rate of below five pounds per day or less than a total of 50 pounds of hydrocarbon removal per day from the vapor wells and achievement of asymptotic extraction rates over time. Startup of the remediation system occurred on September 25, 1995. The extraction rate was approximately 120 pounds of hydrocarbons removed per day in October 1995. The rate decreased to approximately 2 pounds per day in January 1996, and the DVE system was demobilized. During the 110 days of operation, the DVE system removed approximately 4,500 pounds of petroleum hydrocarbon. The total amount of water treated during DVE operation was 359,000 gallons.

On 12/20/95, two air sparge wells, SP6 and SP7 were advanced to enhance the existing air sparge system and to determine if soil cleanup goals had been met. See Attachment 6. Soil concentrations in SB7 had reached the proposed cleanup levels, however soil samples from SB6 at 9.7' bgs exceeded the goal. Up to 11,000 ppm TPHg and 160, 130, 300, 1600 ppm BTEX, respectively, was detected. No shallow soil sample was collected from SB6, but the PID reading from the 5' sample was 3 ppm. These two wells were advanced to 27' bgs and screened from 22-27' bgs. Air sparging continued in the seven operating sparge wells until November 1996, when the system was terminated.

To confirm completeness of remediation verification sampling was performed on June 12, 1997. Two hand augured soil samples (HA-1 and HA-2) were taken in the vadose zone near the former dispenser islands, which had previously detected TPH contamination in 1987. See Attachment 7. The five foot sample from HA-2 detected up to 2,800 ppm TPPH(g), 23 ppm benzene, 210 ppm toluene, 60 ppm ethyl-benzene, and 330 ppm xylenes. A human health risk evaluation for indoor air to commercial building was performed using 23 ppm benzene and standard building conditions and the risk was estimated to be 4E-7.

Continued....

Continued..

Using the average vadose benzene concentration from the hand auger samples and other soil concentrations above 8' bgs, an average benzene concentration was determined as 3.6 ppm. This is less than the SSTL value for soil volatilization to indoor air in a commercial setting of 4.1 ppm, calculated using site-specific data. A SSTL of 720 ppb benzene in on-site wells was also calculated which represented a 1E-6 risk for groundwater volatilization to indoor air. The off-site well, C-5, had a SSTL of 100 ppb benzene. Two years of semi-annual monitoring was performed to observe whether contaminant concentrations remained below these action levels.

On February 27, 1998, soil samples were collected from within the former car wash building after demolition had occurred. Soil samples from beneath the former conveyor belt and at the outlet end, where wash and rinse water would accumulate. All soil samples were ND for TPHg, BTEX, MTBE and halogenated volatile organic compounds. See Attachment 8 and analytical results.

On February 10-12, 1998, 12 remediation wells (DVE-1 through DVE-5, DVSP-1 through DVSP-5 and SP-6 and SP-7) were properly decommissioned by over-drilling and grouting to near surface.

On September 13, 2002, five hand auger soil borings were advanced in the area of the former dispenser island where boring HA-2 at 5' bgs reported 23 ppm benzene in 1997. Discrete samples were taken at 2.5, 5 and 7.5' bgs. The highest benzene concentration reported in these samples was 5.9 ppm in the 7.5' sample from HA-6. On January 29, 2003, the area in the vicinity of HA-2 and HA-6 was over-excavated to a depth of approximately 8.5-9'. Approximately 54 cy of hydrocarbon impacted soil was removed. Confirmation soil samples OE-1 through OE-4 were collected from each sidewall at 8.5'. Residual pollution left in place was 8.5 ppm TPHg, 0.31 ppm benzene and 0.042 ppm MTBE (OE-3-8.5). See Attachment 9 and analytical results.

On November 12, 2003, additional verification sampling was performed. Geoprobe borings (B-1 through B-4) were installed in areas of soil and groundwater contamination. Soil samples from three depths and one grab groundwater sample was collected from each boring. Boring locations were chosen to be adjacent to former residual petroleum contamination where no confirmation sampling had been done. With the exception of 9.4 ppm TPHg in B-2 @10' and 27 ppb MTBE in the water sample from B4, no other analytes were reported. See Attachments 10 and analytical data.

Groundwater monitoring was monitored semi-annually from 1998 up to 9/01. With the exception of low levels of MTBE, no TPHg or BTEX was found in any of the on-site or off-site wells. See Attachment 11 and historic groundwater monitoring results.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Yes No		
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Yes No		
Does corrective action protect public health for current land use? Alameda County Environmental Health staff does not make specific determinations concerning public health risk. However, based upon the information available in our files to date, it does not appear that the release would present a risk to human health based upon current land use and conditions.		
Site Management Requirements: None		
Should corrective action be reviewed if land use changes? No		
Monitoring Wells Decommissioned: Yes	Number Decommissioned: 15 Remediation and backfill wells	Number Retained: 8, Pending site closure
List Enforcement Actions Taken: None		
List Enforcement Actions Rescinded: None		

V. ADDITIONAL COMMENTS, DATA, ETC.**Considerations and/or Variances:**

- No over-excavation was performed within the former UST pit, however, remediation wells were installed within and adjacent to the tank pit and operated for several years. Confirmation soil and groundwater sampling in areas of previously known petroleum contamination indicate little to no residual contamination.
- Analysis for other ether oxygenates besides MTBE and lead scavengers was not performed on soil or groundwater.
- The construction of wells C-1 through C-3 is not shown on the well boring logs.
- Adequate source removal has occurred. All underground tanks, an estimated 350 cubic yards of hydrocarbon impacted soil, 819,000 gallons of impacted groundwater and an estimated 4500 pounds of hydrocarbons have been removed from the site by the DVE and AS/SVE systems. No free product has been observed in the monitoring wells in over 5 years, since the shutdown of the remediation system. Air sparging continued for two years after the DVE system was shut down enhancing natural bio-remediation.
- The site has been adequately characterized with numerous on-site and off-site wells and borings.
- A human health risk assessment by Terra Vac determined that no unacceptable risk to residual soil contaminant concentrations under the current commercial exposure scenario. Additional soil and groundwater post remediation sampling indicate that no residual contamination exceeding residential ESLs exist at the site.
- Long term monitoring indicates a stable plume, which has not migrated off-site.

Conclusion:

Alameda County Environmental Health staff believes that the levels of residual contamination do not pose a significant threat to water resources, public health and safety, and the environment based upon the information available in our files. Residual pollution is expected to biodegrade over time. A risk assessment prepared for the site and verification sampling indicates that the site does not pose a significant threat to the public. ACEH staff recommends closure for this site.

VI. LOCAL AGENCY REPRESENTATIVE DATA

Prepared by: Barney Chan	Title: Hazardous Materials Specialist
Signature: <i>Barney Chan</i>	Date: 02/24/04
Approved by: Donna L. Drogos, P.E.	Title: Supervising Hazardous Materials Specialist
Signature: <i>Donna L. Drogos</i>	Date: 02/24/04

This closure approval is based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions.

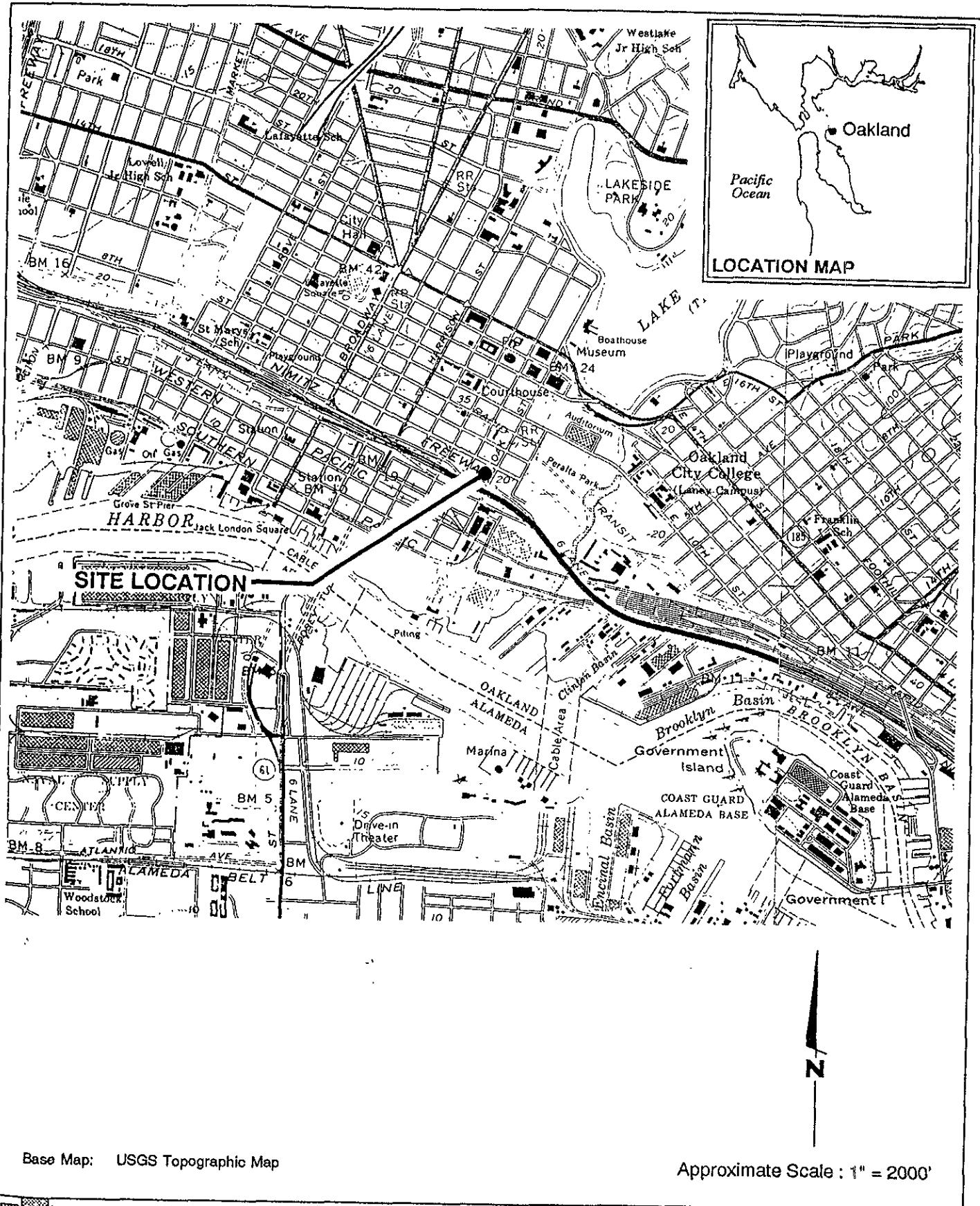
VII. REGIONAL BOARD NOTIFICATION

Regional Board Staff Name: Betty Graham	Title: Associate Water Resources Control Engineer
RB Response: Concur, based solely upon information contained in this case,	Date Submitted to RB:
Signature: <i>Betty Graham</i>	Date: 2/25/04

• **Attachments:**

1. Site Vicinity Map
2. Monitoring Wells C-1 through C-3, Tank Backfill Wells A-C
3. Dispenser Island Composite Sample
4. Offsite Wells, C-4 through C-7
5. UST and Product Piping Soil Samples
6. Dual Vapor Extraction and Vapor Sparge Wells and Soil Samples
7. Air Sparge Wells, SP-6 & SP-7 and Soil Samples
8. Soil Samples, S1 through S7, from within former Car Wash
9. Over-excavation of former Dispenser Area and Soil Samples
10. Soil Boring and Groundwater Sample Locations
11. Potentiometric Map, 9/10/01 and Historic Monitoring Data and Analytical Results and Boring Logs
12. Historic Monitoring Data and Analytical Results
13. Risk Assessment Data
14. Boring Logs

This document and the related CASE CLOSURE LETTER, shall be retained by the lead agency as part of the official site file.



GeoStrategies Inc.

JOB NUMBER
7191

REVIEWED BY RG/CEG

Vicinity Map
Chevron Service Station #458
609 Oak Street/6th Street
Oakland, California

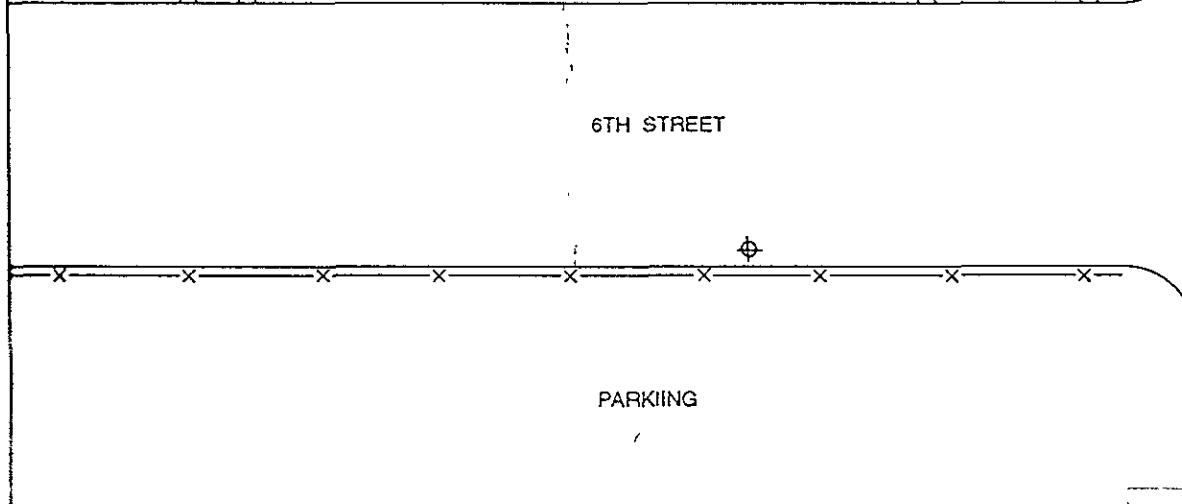
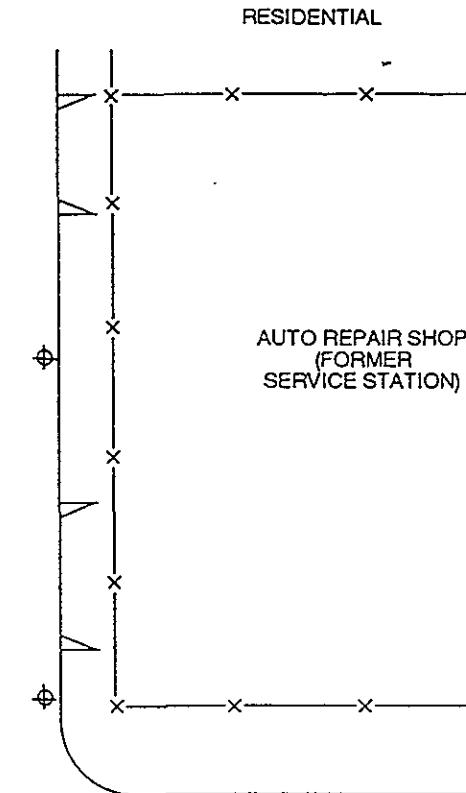
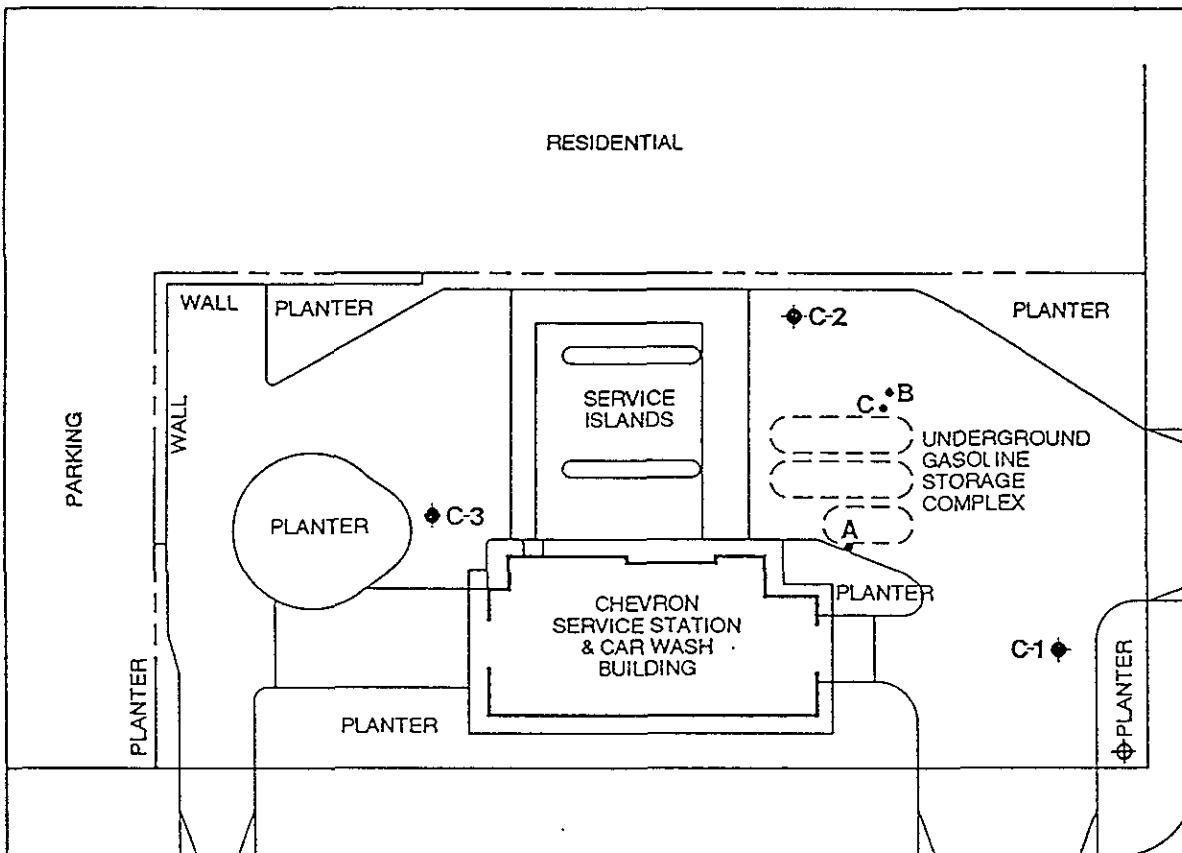
PLATE

ATTACHMENT 1

DATE
1/90

REVISED DATE

REVISED DATE



FREWAY OVERPASS

ATTACHMENT 2

Approx. Ground-water Flow Direction



BLAINE
TECH SERVICES

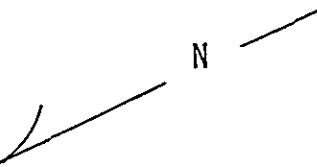
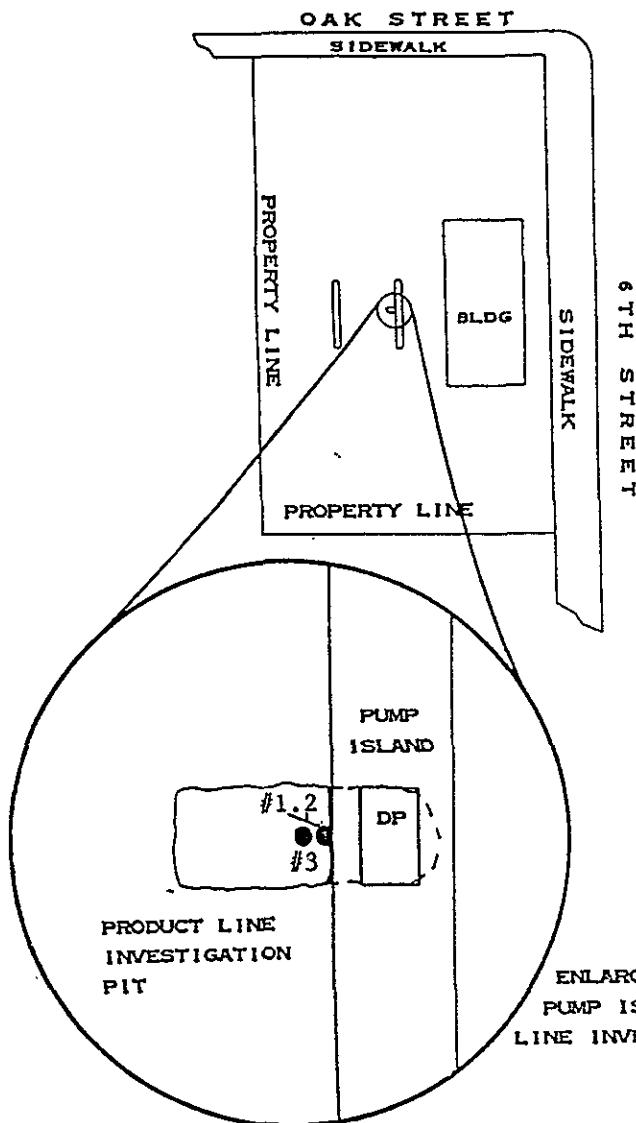
SAMPLING REPORT 87086T3 3-27-87 CHEVRON STATION 4587, 609 OAK STREET, OAKLAND, CA
Corrected 8-4-87

0' 40'

SCALE: []

MAP REF: THOMAS BROS,
ALAMEDA COUNTY
P. 9 B-6

LEGEND: DP = DISPENSER PUMP



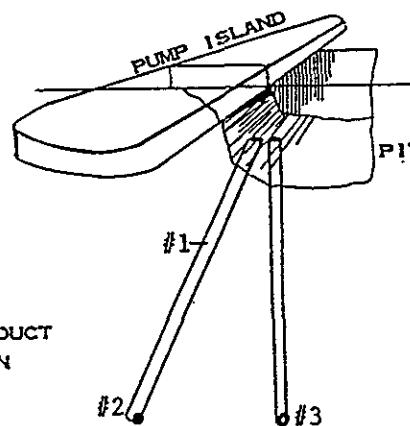
#1 AUGERED SOIL SAMPLE FROM 2.5'
100% PPM-VAPOR
ANALYSIS FOR TOTAL HYDROCARBONS (THC)
AS GASOLINE AND BENZENE, TOLUENE, AND
XYLEMES (BTX) AT TMA/NORCAL, INC.
PLACED ON HOLD

#2 AUGERED SOIL FROM 7'
100% PPM-VAPOR
ANALYSIS FOR THC AS GASOLINE AND BTX
TMA/NORCAL LAB NO. 5017-45-1

#3 AUGERED SOIL FROM 7'
100% PPM-VAPOR
ANALYSIS FOR THC AS GASOLINE AND BTX
TMA/NORCAL LAB NO. 5017-45-1

#2 AND #3 WERE COMPOSITED FOR ONE
ANALYSIS.

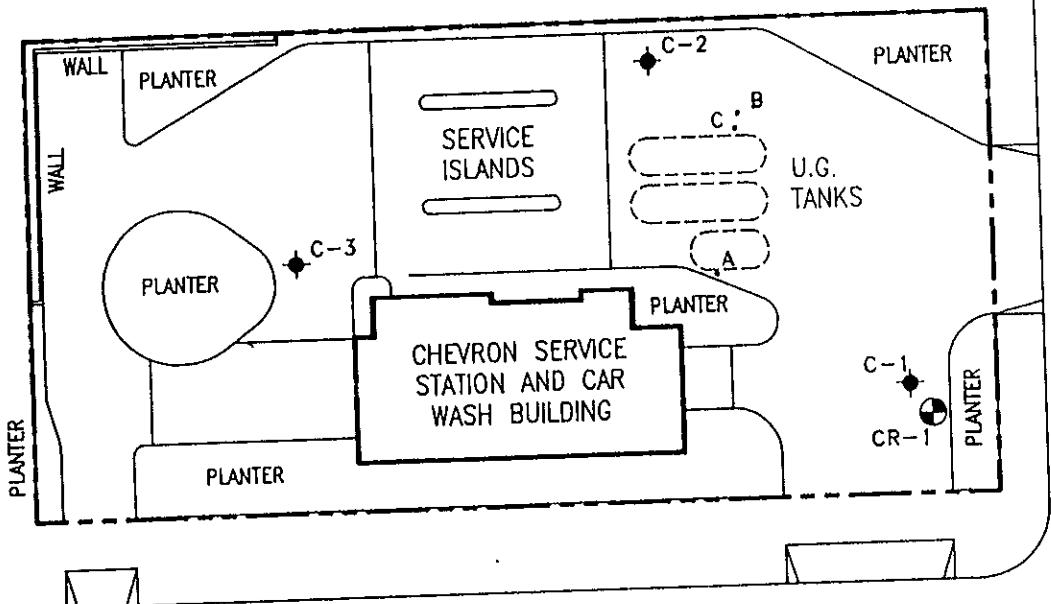
Earlier version of this
diagram erroneously said
"#1 AND #2 WERE COMPOSITED..."
Corrected August 4, 1987



SAMPLING PERFORMED BY TIM BABCOCK
DIAGRAM PREPARED BY DONNA TERESI

ATTACHMENT 3

RESIDENTIAL

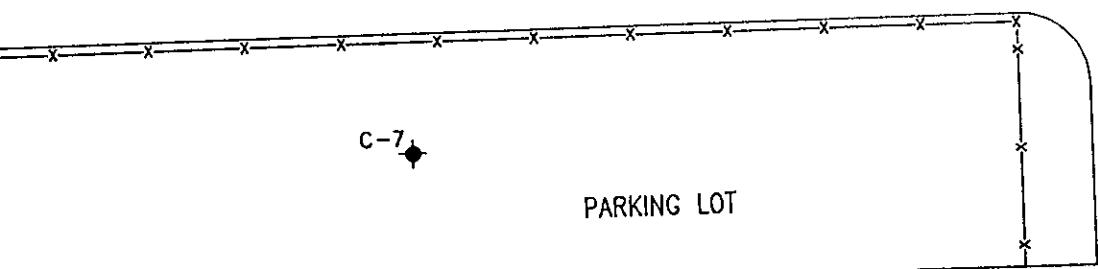


OAK STREET

C-4
C-5

AUTO
(FORMER)

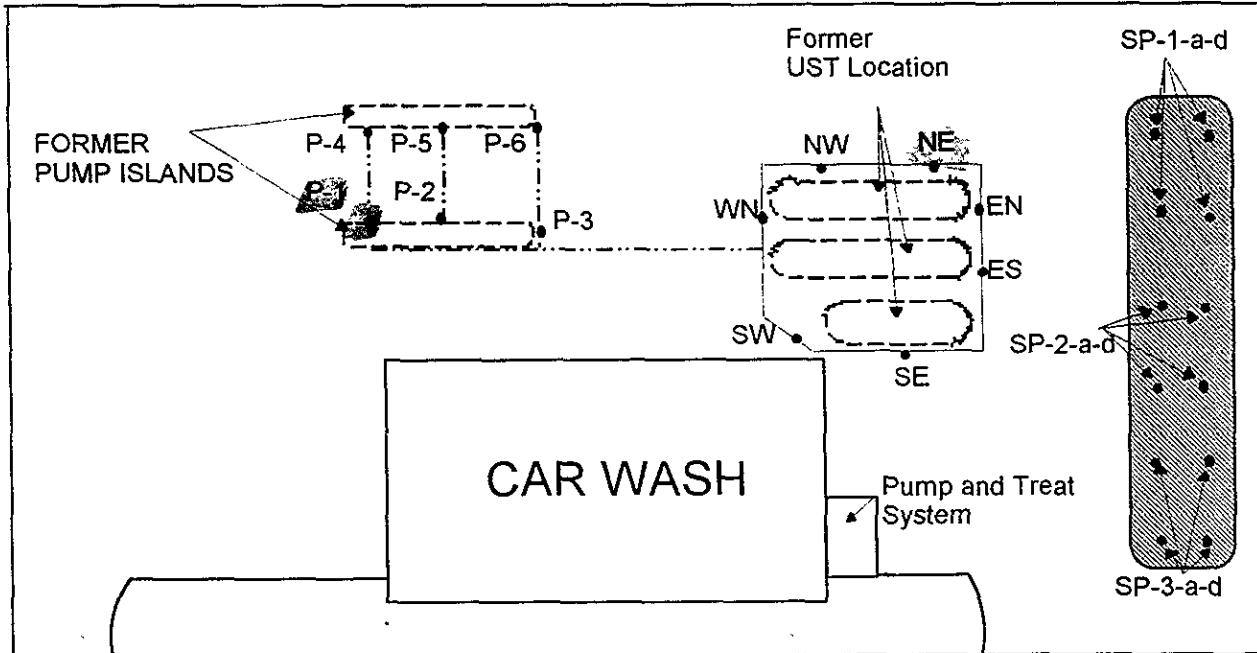
6th STREET



C-6

FREEWAY OVERPASS

ATTACHMENT 4



OAK STREET

6th STREET

EXPLANATION

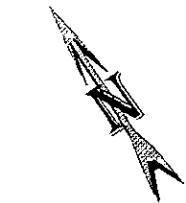
UST = Underground Storage tank

WX ● APPROXIMATE LOCATION OF EXCAVATION SOIL SAMPLE

Stockpile Soil

Former Underground Structure

Former Product Piping Location



0 5 10 15 20

Scale in feet



Touchstone
Developments
Environmental Management

SAMPLE LOCATIONS

CHEVRON SERVICE STATION NO. 9-4587
609 OAK STREET
SAN JOSE, CALIFORNIA

ATTACHMENT 5

PROJECT NO.

4587-1

DRAWN BY:

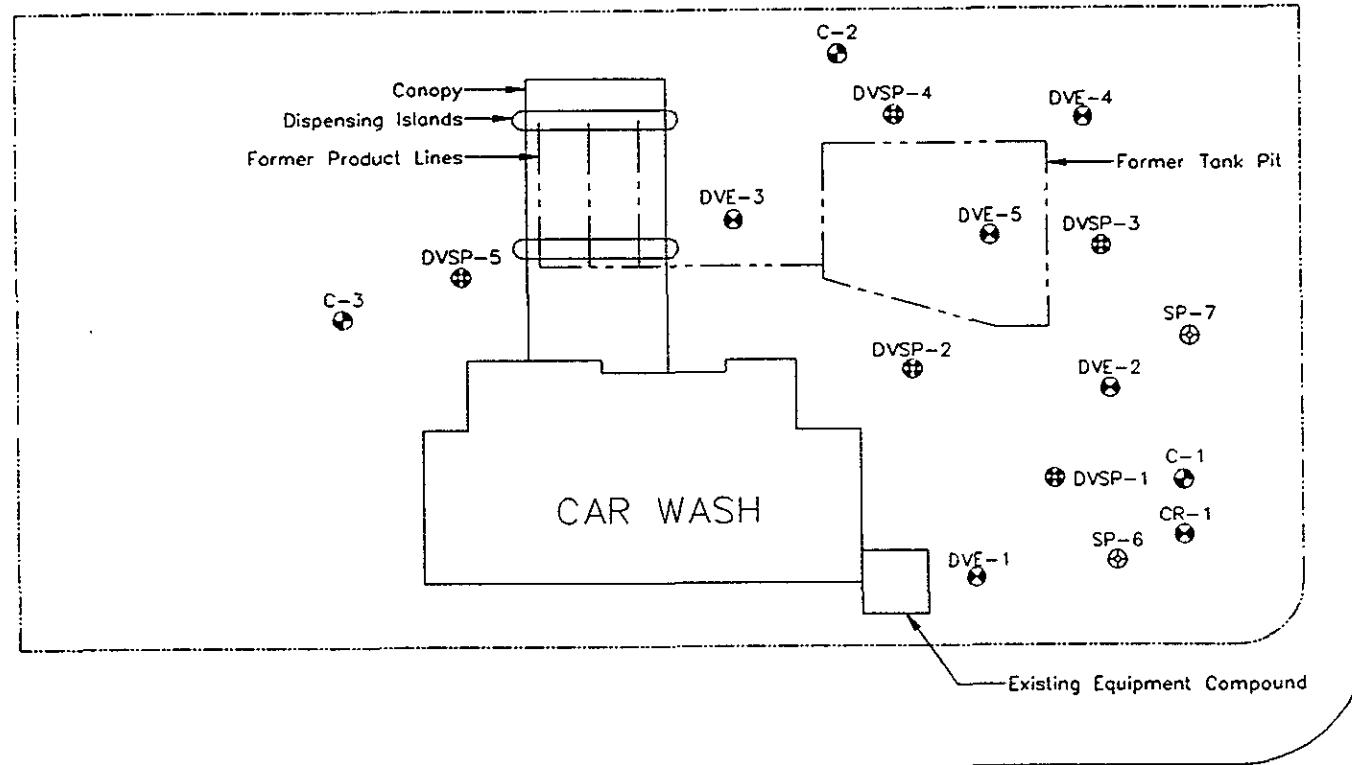
AMD

DATE

11/14/94

BASE MAP:

Groundwater Technology



6th STREET

C-1
⊕ = Monitoring Well

DVE-1
⊕ = Vapor Extraction Well

SP-7
⊕ = Sarge Well

DVSP-1
⊕ = Dual Completed Well
(entrainment extraction & sparging)

Site Map
Former Chevron Station 9-4587
609 Oak Street
Oakland, California

Project	30-0219	Drawn	JLN
Date	2/7/96	Revision	
Scale	1" = 30'	Checked	

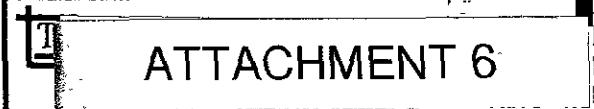


Table 1
 Soil Sample Results, mg/kg
 Chevron 9-4587, Oakland

Boring	Depth	Date	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes
87087T3#2&3	7	3/27/87	1300	150	430	na	270
C-4	10.5	9/19/90	<1	<0.05	<0.05	<0.05	<0.05
C-4	15.5	9/19/90	<1	<0.05	<0.05	<0.05	<0.05
C-5	10.5	9/19/90	<1	<0.05	<0.05	<0.05	<0.05
C-5	15.5	9/19/90	<1	<0.05	<0.05	<0.05	<0.05
C-6	9	9/19/90	<1	<0.05	<0.05	<0.05	<0.05
C-6	15	9/19/90	<1	<0.05	<0.05	<0.05	<0.05
*CR-1	5	9/19/90	<1	<0.05	<0.05	<0.05	<0.05
CR-1	10	9/19/90	<1	<0.05	<0.05	<0.05	<0.05
CR-1	15	9/19/90	<1	0.26	<0.05	<0.05	<0.05
C-7	9.5	1991	<1	<0.05	<0.05	<0.05	<0.05
C-7	15	1991	<1	<0.05	0.01	<0.05	<0.05
<i>Tank pull</i>							
SE	11.5	10/17/94	600	3.6	11	9	37
SW	9	10/17/94	18	0.093	0.16	0.36	1.2
ES	10	10/17/94	42	0.24	0.22	0.32	1.6
EN	11	10/17/94	2	0.27	0.12	0.023	0.12
NE	10.5	10/17/94	3700	27	200	69	400
NW	10.5	10/17/94	5	0.52	0.16	0.091	0.44
WN	10.5	10/17/94	40	0.2	0.12	0.8	2.4
P-1	3	10/17/94	1400	5	82	30	220
P-2	2.5	10/17/94	260	0.26	3	1.7	16
P-3	2.5	10/17/94	380	<0.1	15	5.9	39
P-4	2.5	10/17/94	410	0.36	4.4	2.3	33
P-5	2.5	10/17/94	<1	<0.005	<0.005	<0.005	<0.005
P-6	3	10/17/94	29	0.021	0.042	0.091	0.16
DVE-1	10.3	7/12/95	<1	0.31	0.098	0.025	0.12
DVE-2	14	7/11/95	7.6	1	0.032	0.43	1.3
DVE-3	10.2	7/10/95	<1	0.13	0.071	0.021	0.082
DVE-4	10.1	7/11/95	2.8	0.24	<0.005	0.1	0.16
DVE-5	18.8	7/11/95	5.6	0.045	0.055	0.26	1.3
DVSP1	15.5	7/11/95	8.5	4.2	<0.005	0.1	0.16
DVSP2	10.5	7/11/95	<1	0.066	<0.005	0.0096	<0.005
DVSP3	15.5	7/10/95	<1	0.012	0.0082	0.0074	0.045
*DVSP4	(5.5)	7/10/95	<1	<0.005	<0.005	<0.005	<0.005
DVSP5	10.5	7/12/95	700	15	8.3	25	140
SP6	9.7	12/20/95	11,000	160	1,300	300	1,600
SP6	14.7	12/20/95	4.4	0.81	0.22	0.24	0.56
*SP7	4.7	12/20/95	<1	<0.005	<0.005	<0.005	<0.005
SP7	9.3	12/20/95	1.2	<0.005	0.038	0.009	0.032
SP7	14.3	12/20/95	3.1	1.2	0.068	0.19	0.18
SP7	19.3	12/20/95	<1	<0.005	0.0086	<0.005	0.067
SP7	24.3	12/20/95	<1	<0.005	<0.005	<0.005	<0.005
*HA1-5	5	6/12/97	<1	<0.005	<0.005	<0.005	<0.005
*HA1-7	7	6/12/97	<1	<0.005	<0.005	<0.005	<0.005
*HA2-5	5	6/12/97	2800	23	210	60	330
*HA2-7	7	6/12/97	310	2.1	21	7.5	52

TABLE A
UST AND PRODUCT PIPING SAMPLING SUMMARY
 CHEVRON STATION 9-4587

UST REMOVAL SAMPLING RESULTS

SAMPLE ID	DEPTH (ft.)	LAB	DATE	TPH - gasoline (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl- benzene (ppm)	Xylene (ppm)	Total Lead (ppm)
SE	11	Superior	10/17/94	600	3.6	11	9.0	37	11
SW	9	Superior	10/17/94	18	0.093	0.16	0.36	1.2	10
ES	10	Superior	10/17/94	42	0.24	0.22	0.32	1.6	ND<2
EN	11	Superior	10/17/94	2	0.27	0.12	0.023	0.12	ND<2
NE	10.5	Superior	10/17/94	3700	27	200	69	400	ND<2
NW	10.5	Superior	10/17/94	5	0.52	0.16	0.091	0.44	13
WN	10.5	Superior	10/17/94	40	0.2	0.12	0.81	2.4	ND<2

PRODUCT PIPING REMOVAL SAMPLING RESULTS

SAMPLE ID	DEPTH (ft.)	LAB	DATE	TPH - gasoline (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl- benzene (ppm)	Xylene (ppm)	Total Lead (ppm)
P-1	3	Superior	10/17/94	1400	5	82	30	220	14
P-2	2.5	Superior	10/17/94	260	0.26	3	1.7	16	ND<2
P-3	2.5	Superior	10/17/94	380	ND<0.1	15	5.9	39	ND<2
P-4	2.5	Superior	10/17/94	410	0.36	4.4	2.3	33	12
P-5	2.5	Superior	10/17/94	ND<1	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<2
P-6	3	Superior	10/17/94	29	0.021	0.042	0.091	0.16	6

TPH-Gasoline = Total petroleum hydrocarbons calculated as gasoline

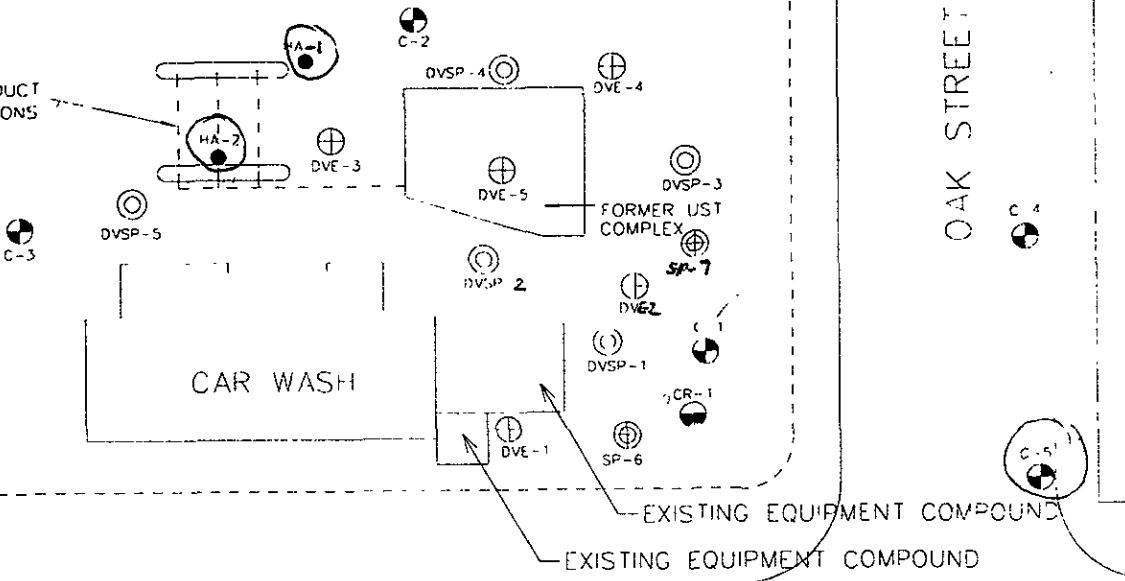
ND=Not detected at or above the laboratory detection limit



PRINTING
COMPANY

PARKING
LOT

FORMER PRODUCT
LINE LOCATIONS



LEGEND

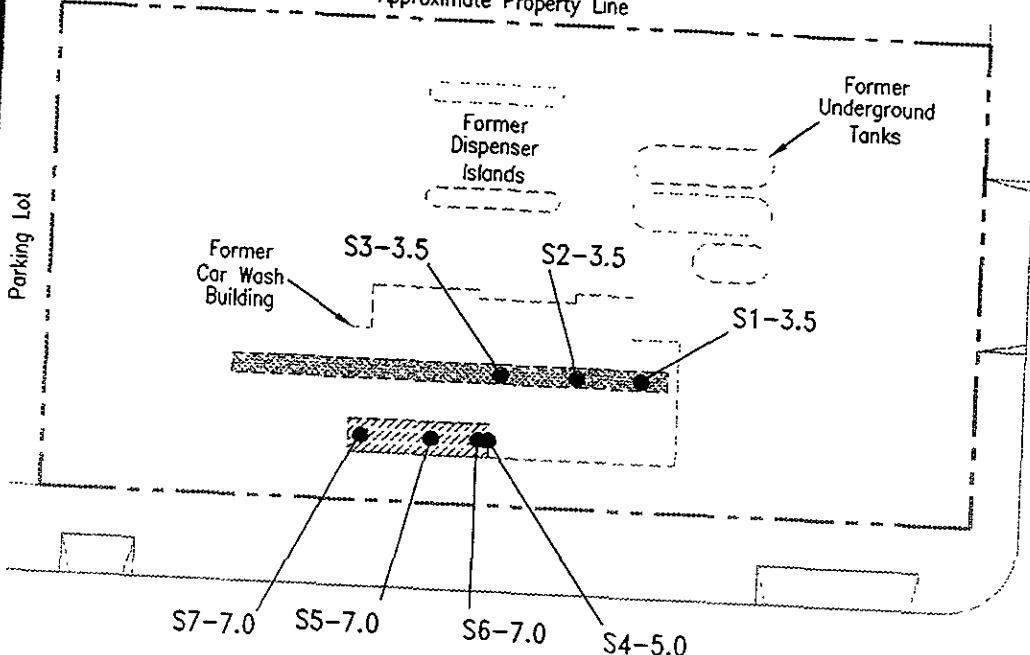
- Groundwater Monitoring Well
- Groundwater Recovery Well
- Extraction Extraction Well
- Completed Well
- Surge Well
- Former Product

Extended Site Plan
Former Chevron Station 9-4587
609 Oak Street
Oakland, California

Project	30-0219	Drawn	RJT
Date	9/12/96	Revision	
Scale	1" = .30'	Checked	

ATTACHMENT 7

Approximate Property Line



EXPLANATION

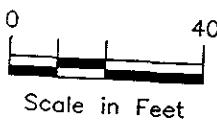
- Soil sample location
- ▨ Former reclaim pit
- ▨ Former conveyor pit

Auto Repair Shop
(Former Service Station)

6th STREET

Parking Lot

880 Freeway Off Ramp



Gettier - Ryan Inc.

6747 Sierra Ct., Suite J (510) 551-7555
Dublin, CA 94568

JOB NUMBER
346428.01

REVIEWED BY
BS

SOIL SAMPLE LOCATION MAP
Former Chevron Service Station No. 9
609 Oak Street
Oakland, California

DATE
March, 1998

REVISED DATE

ATTACHMENT 8

Table 3. Soil Sample Analytical Results, Former Chevron Service Station #9-4587, 609 Oak Street, Oakland, California.

Sample ID	Date	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	HVOs
		<			ppm		>	
S1-3.5	02/27/98	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	ND
S2-3.5	02/27/98	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	ND
S3-3.5	02/27/98	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	ND
S4-5.0	02/27/98	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	ND
S5-7.0	02/27/98	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	ND
S6-7.0	02/27/98	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	ND
S7-7.0	02/27/98	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	ND

EXPLANATION:

TPHg = Total Petroleum Hydrocarbons as gasoline

MTBE = Methyl tertiary-Butyl Ether

HVOs = Halogenated Volatile Organics

ppm = Parts per million

ND = Not detected

ANALYTICAL METHODS:

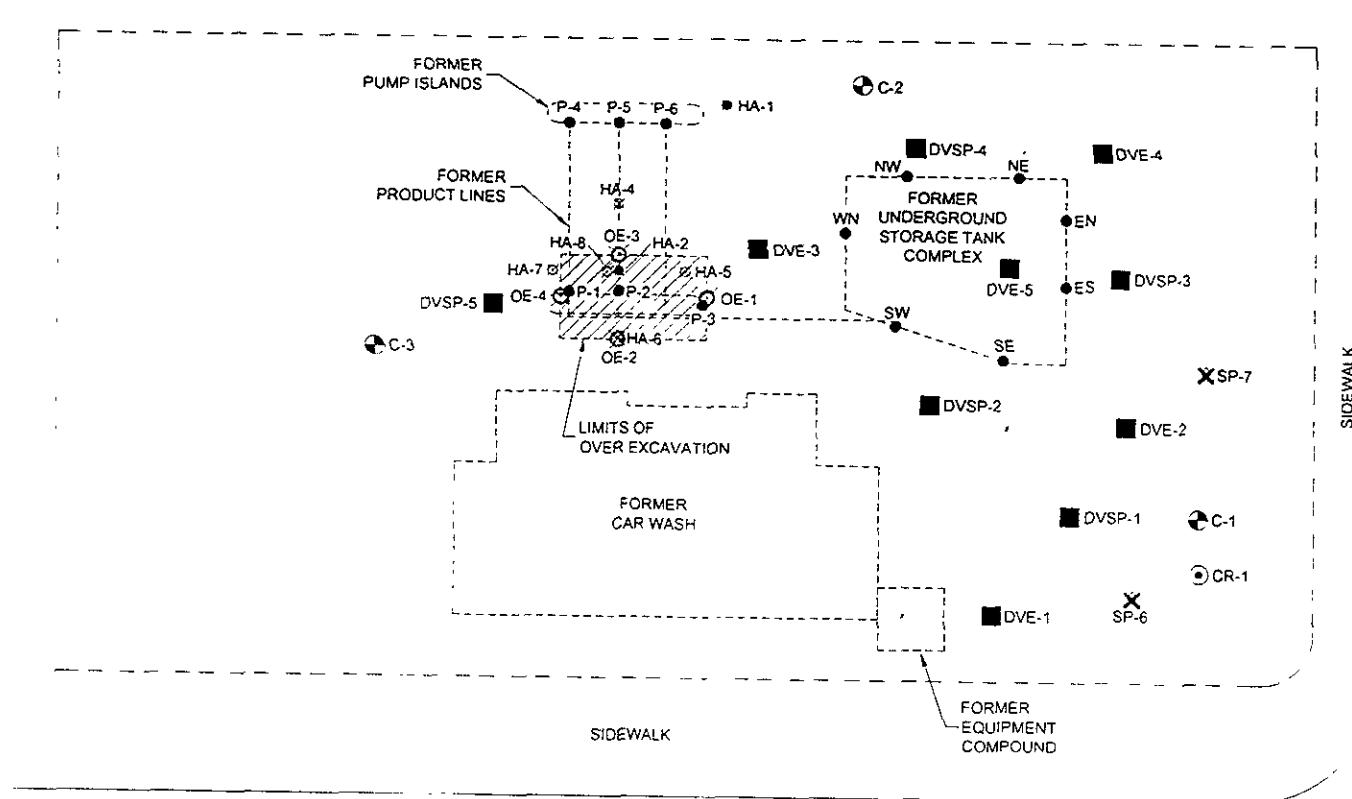
TPHg = EPA Method 8015Mod

Benzene, toluene, ethylbenzene, xylenes, MTBE = EPA Method 8020

HVOs = EPA 8010

ANALYTICAL LABORATORY:

Sequoia Analytical (ELAP #1210)



6th STREET

LEGEND

- C-1 MONITORING WELL LOCATION
- DVE-1 ABANDONED VAPOR EXTRACTION WELL LOCATION
- ✖ SP-7 ABANDONED AIR SPARGE WELL LOCATION
- DVSP-1 DUAL COMPLETION WELL LOCATION
- P-1 SOIL SAMPLE LOCATION
- HA-1 HAND AUGER SOIL BORING LOCATION
- ✖ HA-4 HAND AUGER SOIL BORING LOCATION (9/13/02)
- ☒ OE-1 OVER EXCAVATION SOIL SAMPLE COLLECTED AT 8.5' BELOW SURFACE GRADE BY DELTA ENVIRONMENTAL ON 1/29/03

0 30 FT
APPROX. SCALE

ATTACHMENT 9

SITE MAP

FORMER CHEVRON STATION NO. 9-4587
609 OAK STREET
OAKLAND, CA.

PROJECT NO DG94-587	DRAWN BY M.L. 2/11/03	Delta Environmental Consultants, Inc.
FILE NO DG94587B	PREPARED BY MAB	
REVISION NO. 3	REVIEWED BY	



TABLE 5
SOIL SAMPLE LABORATORY ANALYTICAL RESULTS

Former Chevron Service Station No. 9-4587
 609 Oak Street
 Oakland, California

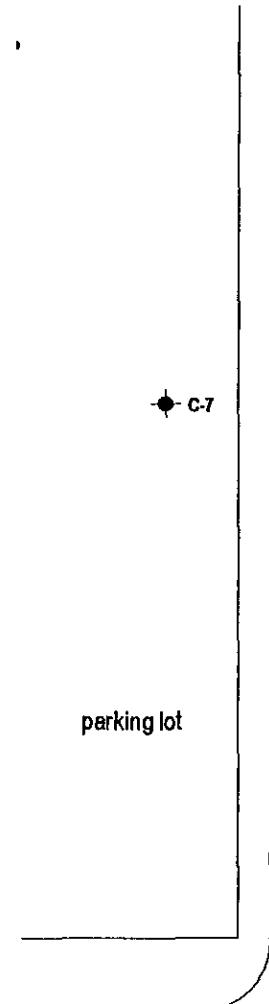
Sample ID	Date Collected	Depth (ft)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	TPH as Gasoline (mg/kg)	MTBE (mg/kg)	Total Lead (mg/kg)
Hand Auger Borings									
HA-4-S-2.5	09/13/02	2.5	<0.005	<0.005	<0.005	0.056	36	<0.050	NA
HA-4-S-5.0	09/13/02	5.0	2.1	92	50	310	1,700	<1.0	NA
HA-4-S-7.5	09/13/02	7.5	1.9	100	76	550	2,700	<2.0	NA
HA-5-S-2.5	09/13/02	2.5	<0.005	0.022	0.0087	0.058	<1.0	<0.050	NA
HA-5-S-5.0	09/13/02	5.0	<0.005	<0.005	<0.005	0.018	<1.0	<0.050	NA
HA-5-S-7.5	09/13/02	7.5	0.0099	0.061	0.12	0.94	15	<0.050	NA
HA-6-S-2.5	09/13/02	2.5	0.0079	0.092	0.14	1.5	24	<0.050	NA
HA-6-S-5.0	09/13/02	5.0	0.23	3.5	2.7	20	130	<0.50	NA
HA-6-S-7.5	09/13/02	7.5	5.9	120	44	260	1,500	<1.0	NA
HA-7-S-2.5	09/13/02	2.5	<0.005	0.020	<0.005	0.027	<1.0	<0.050	NA
HA-7-S-5.0	09/13/02	5.0	<0.005	<0.005	<0.005	<0.015	<1.0	<0.050	NA
HA-7-S-7.5	09/13/02	7.5	0.061	0.41	2.0	25	400	<0.20	NA
HA-8-S-2.5	09/13/02	2.5	<0.005	<0.005	<0.005	0.028	3.3	<0.050	NA
HA-8-S-5.0	09/13/02	5.0	<0.005	3.7	4.0	38	260	<0.20	NA
HA-8-S-8.5	09/13/02	8.5	0.15	6.2	5.6	57	540	<0.50	NA
Pre-Profile Stockpile									
HA-(4-8)-S-2.5	09/13/02	---	<0.005	<0.005	<0.005	0.051	5.7	<0.050	10.2
HA-(4-8)-S-5.0	09/13/02	---	0.25	11	8.4	57	340	<1.0	13.7
HA-(4-8)-S-7.5	09/13/02	---	1.8	57	31	220	1,300	<5.0	34.1
Post-Overexcavation									
OE-1-8.5	01/29/03	8.5	<0.05	<0.05	<0.05	<0.05	<5.0	<0.025	NA
OE-2-8.5	01/29/03	8.5	<0.05	<0.05	<0.05	<0.05	<5.0	<0.025	NA
OE-3-8.5	01/29/03	8.5	0.31	<0.05	0.29	1.4	8.5	0.042	NA
OE-4-8.5	01/29/03	8.5	<0.05	<0.05	<0.05	<0.05	<5.0	<0.025	NA

TPH-GRO = Total petroleum hydrocarbons as gasoline range organics.

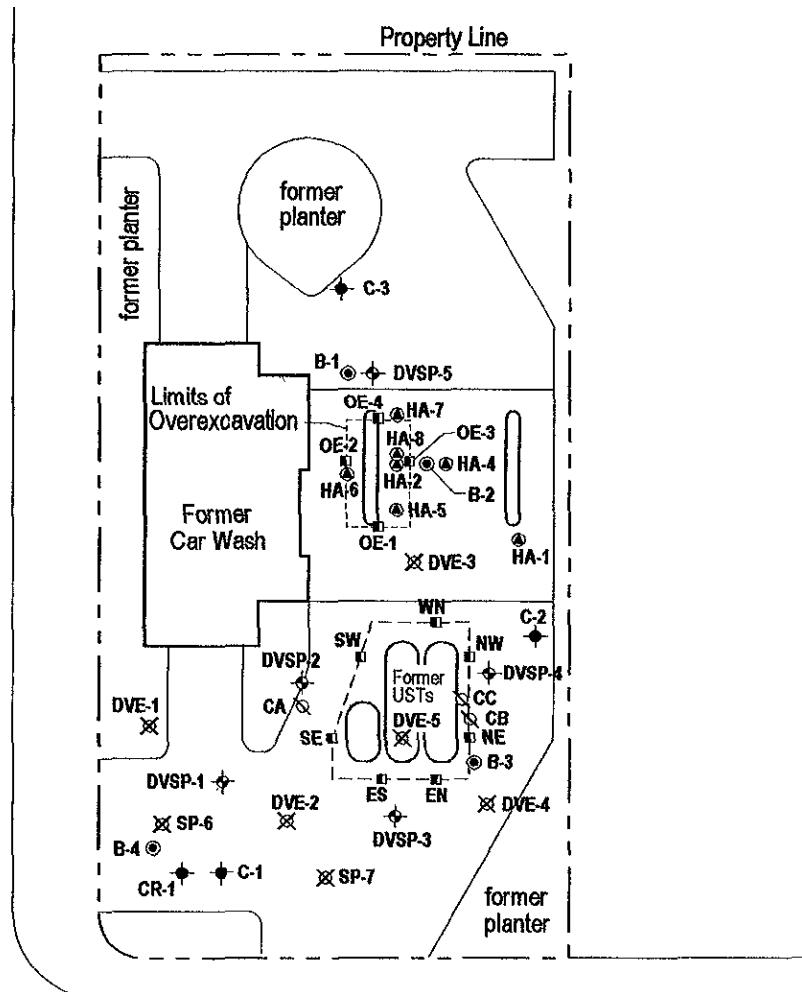
MTBE = Methyl tertiary butyl ether (analyzed by EPA Method 8260)

mg/kg = Milligrams per kilogram.

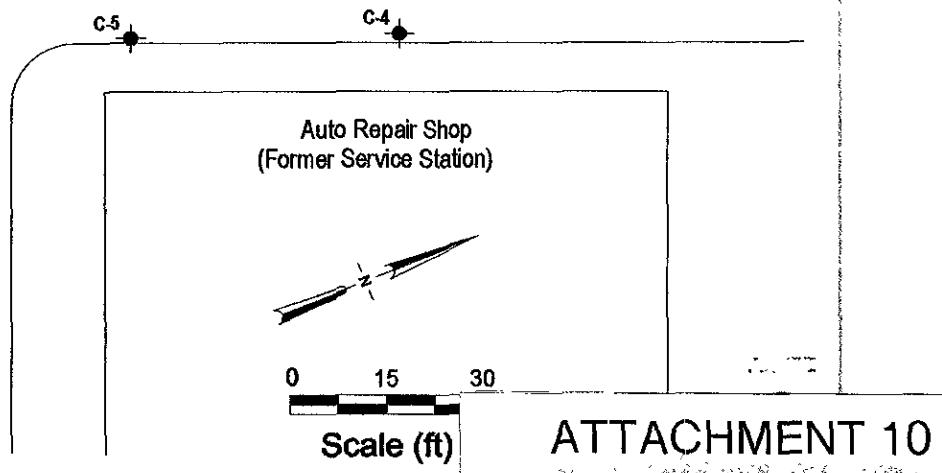
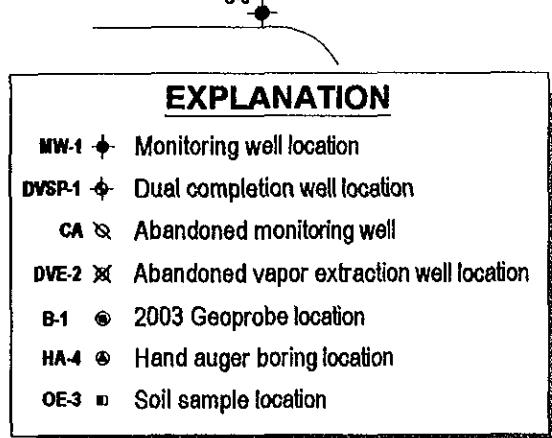
NA = Not analyzed



parking lot



OAK STREET



Former Chevron Station 9-4587
609 Oak Street
Oakland, California



C A M B R I A

**Soil Boring and Groundwater
Sample Locations**

Table 1. Analytic Results for Soil Samples - Chevron Station 9-4587, 609 Oak Street, Oakland, CA

Sample ID	Sample Depth (ft)	Sample Date	TPHg	B	T	E	X	MTBE
Concentrations reported in milligrams per kilogram mg/kg = parts per million								
B1	3	11/12/2003	<1.0	<0.001	<0.001	<0.001	<0.001	<0.001
B1	6	11/12/2003	<1.0	<0.001	<0.001	<0.001	<0.001	<0.001
B1	11	11/12/2003	<1.0	<0.001	<0.001	<0.001	<0.001	<0.001
B2	3	11/12/2003	<1.0	<0.001	<0.001	<0.001	<0.001	<0.001
B2	6	11/12/2003	<1.0	<0.001	<0.001	<0.001	<0.001	<0.001
B2	10	11/12/2003	9.4	<0.001	<0.001	<0.001	<0.001	<0.001
B3	3	11/12/2003	<1.0	<0.001	<0.001	<0.001	<0.001	<0.001
B3	6	11/12/2003	<1.0	<0.001	<0.001	<0.001	<0.001	<0.001
B3	10	11/12/2003	<1.0	<0.001	<0.001	<0.001	<0.001	<0.001
B4	3	11/12/2003	<1.0	<0.001	<0.001	<0.001	<0.001	<0.001
B4	6	11/12/2003	<1.0	<0.001	<0.001	<0.001	<0.001	<0.001
B4	10	11/12/2003	<1.0	<0.001	<0.001	<0.001	<0.001	<0.001

Abbreviations/Notes:

Total petroleum hydrocarbons as gasoline (TPHg) by EPA Method 8015M

Benzene, toluene, ethylbenzene and xylenes (BTEX) by EPA Method 8260B

Methyl tertiary butyl ether (MTBE) by EPA Method 8260B

<x = Not detected above method detection limit

CAMBRIA

Table 2. Analytic Results for Groundwater Samples - Chevron Station 9-4587, 609 Oak Street, Oakland, CA

Sample ID	Sample Date	TPHg	B	T	E	X	MTBE
Concentrations reported in micrograms per liter $\mu\text{g}/\text{kg}$ = parts per billion							
B1	11/12/2003	<50.0	<0.5	<0.5	<0.5	<0.5	<0.5
B2	11/12/2003	<50.0	<0.5	<0.5	<0.5	<0.5	<0.5
B3	11/12/2003	<50.0	<0.5	<0.5	<0.5	<0.5	<0.5
B4	11/13/2003	<50.0	<0.5	<0.5	<0.5	<0.5	27

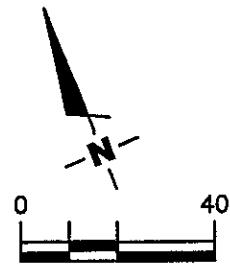
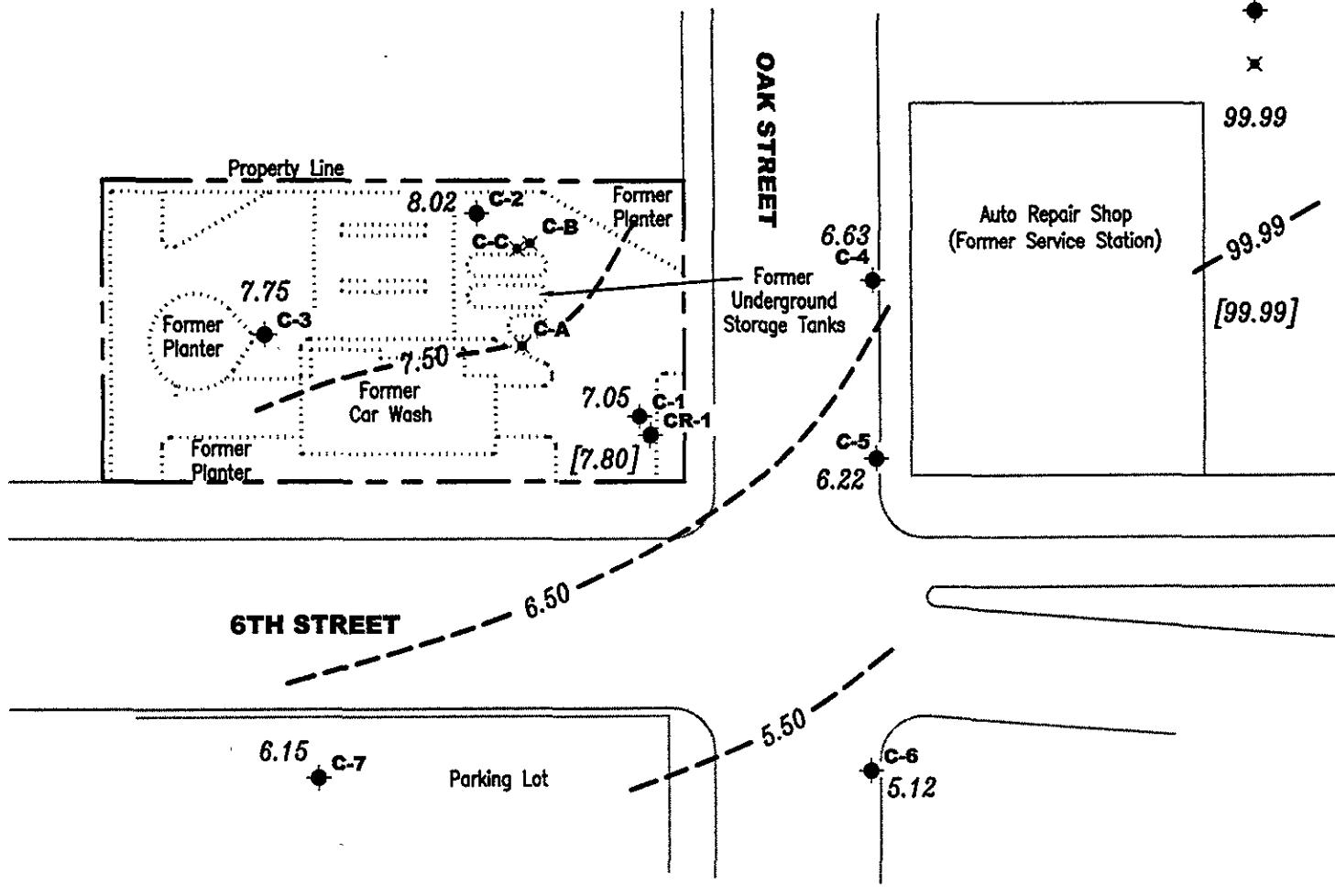
Abbreviations/Notes:

Total petroleum hydrocarbons as gasoline (TPHg) by EPA Method 8015M

Benzene, toluene, ethylbenzene and xylenes (BTEX) by EPA Method 8260B

Methyl tertiary butyl ether (MTBE) by EPA Method 8260B

<x = Not detected above method detection limit



GETTLER - RYAN INC.
6747 Sierra Ct., Suite J
Dublin, CA 94568 (925) 551-7555

PROJECT NUMBER
386428

REVIEWED BY

POTENTIOMETRIC MAP
Former Chevron Service Station #9-45
609 Oak Street
Oakland, California

DATE
September 10, 2001

REVISED DATE

ATTACHMENT 11

ATTACHMENT 12

Groundwater Monitoring Data and Analytical Results

Former Chevron Service Station #9-4587

609 Oak Street

Oakland, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	SPHT (ft.)	REMOVED (gallons)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
C-A											
12/06/89	--	--	--	--	--	44,000	20,000	66	1,600	2,220	--
10/30/90	--	--	11.20	Sheen	--	31,000	23,000	110	1,100	160	--
10/30/90	--	--	11.20	Sheen	--	30,000	23,000	150	1,000	180	--
01/14/91	--	--	11.25	--	--	12,000	30,000	540	1,400	560	--
04/03/91	--	--	9.82	--	--	59,000	33,000	2400	2,200	3,100	--
07/17/91	--	--	10.93	--	--	52,000	38,000	380	1,300	500	--
10/07/91	--	--	--	--	--	--	--	--	--	--	--
06/25/92	--	--	--	--	--	--	--	--	--	--	--
09/17/92	--	--	--	--	--	--	--	--	--	--	--
12/16/92	--	--	--	--	--	--	--	--	--	--	--
03/18/93	--	--	--	--	--	--	--	--	--	--	--
06/11/93	--	--	--	--	--	--	--	--	--	--	--
09/08/93	--	--	--	--	--	--	--	--	--	--	--
09/17/93	--	--	10.02	--	--	--	--	--	--	--	--
12/23/93	--	--	--	--	--	--	--	--	--	--	--
03/07/94	--	--	--	--	--	--	--	--	--	--	--
06/17/94	--	--	10.05	--	--	77,000	32,000	3,600	3,200	14,000	--
09/12/94	--	--	11.75	--	--	270	170	1.0	13	24	--
DESTROYED											
C-B											
12/06/89	--	--	--	0.01	--	--	--	--	--	--	--
10/30/90	--	--	11.19	0.01	--	--	--	--	--	--	--
01/14/91	--	--	11.40	0.01	--	--	--	--	--	--	--
04/03/91	--	--	9.55	1.00	--	--	--	--	--	--	--
04/04/91	--	--	10.54	1.06	--	--	--	--	--	--	--
07/17/91	--	--	10.84	0.03	--	--	--	--	--	--	--
10/07/91	--	--	11.10	0.04	--	--	--	--	--	--	--
02/04/92	--	--	10.78	0.01	--	--	--	--	--	--	--

As of 09/10/01

Table 4
Groundwater Monitoring Data and Analytical Results
Former Chevron Service Station #9-4587
609 Oak Street
Oakland, California

WELL ID/ DATE	TOC (<i>ft</i>)	GWE (<i>msl</i>)	DTW (<i>ft</i>)	SPHT (<i>ft</i>)	REMOVED (gallons)	TPH-G (<i>ppb</i>)	B (<i>ppb</i>)	T (<i>ppb</i>)	E (<i>ppb</i>)	X (<i>ppb</i>)	MTBE (<i>ppb</i>)
C-B (cont)											
03/06/92	--	--	--	--	--	--	--	--	--	--	--
04/01/92	--	--	10.33	1.02	--	--	--	--	--	--	--
06/25/92	--	--	11.20	0.68	--	--	--	--	--	--	--
09/17/92	--	--	11.07	0.13	--	--	--	--	--	--	--
12/16/92	--	--	10.41	0.38	--	--	--	--	--	--	--
03/18/93	--	--	9.19	0.05	--	--	--	--	--	--	--
06/11/93	--	--	9.54	0.70	--	--	--	--	--	--	--
09/08/93	--	--	--	--	--	--	--	--	--	--	--
09/17/93	--	--	9.85	0.52	--	--	--	--	--	--	--
12/23/93	--	--	9.37	0.20	--	--	--	--	--	--	--
03/07/94	--	--	9.24	0.85	--	--	--	--	--	--	--
06/17/94	--	--	9.38	0.02	--	--	--	--	--	--	--
09/12/94	--	--	11.13	0.49	--	--	--	--	--	--	--
DESTROYED											
C-C											
12/06/89	--	--	--	0.15	--	--	--	--	--	--	--
10/30/90	--	--	10.84	0.03	--	--	--	--	--	--	--
01/14/91	--	--	11.01	0.11	--	--	--	--	--	--	--
04/03/91	--	--	9.19	0.02	--	--	--	--	--	--	--
07/17/91	--	--	10.53	0.03	--	--	--	--	--	--	--
10/07/91	--	--	10.98	0.08	--	--	--	--	--	--	--
02/04/92	--	--	10.45	0.09	--	--	--	--	--	--	--
03/06/92	--	--	8.83	0.09	--	--	--	--	--	--	--
04/01/92	--	--	9.23	0.16	--	--	--	--	--	--	--
06/25/92	--	--	10.40	0.12	--	--	--	--	--	--	--
09/17/92	--	--	10.84	0.12	--	--	--	--	--	--	--
12/16/92	--	--	10.02	0.12	--	--	--	--	--	--	--
03/18/93	--	--	8.70	0.15	--	--	--	--	--	--	--

Table 4
Groundwater Monitoring Data and Analytical Results
Former Chevron Service Station #9-4587
609 Oak Street
Oakland, California

WELL ID/ DATE	TOC (ft)	GWE (msl)	DTW (ft)	SPHT (ft)	SPH REMOVED (gallons)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
C-C (cont)											
06/11/93	--	--	9.25	0.13	--	--	--	--	--	--	--
09/08/93	--	--	--	--	--	--	--	--	--	--	--
09/17/93	--	--	9.83	Sheen	--	--	--	--	--	--	--
12/23/93	--	--	9.66	0.07	--	--	--	--	--	--	--
03/07/94	--	--	8.93	0.28	--	--	--	--	--	--	--
06/17/94	--	--	10.13	0.03	--	--	--	--	--	--	--
09/12/94	--	--	11.20	0.13	--	--	--	--	--	--	--
DESTROYED											
C-1											
12/06/89	16.07	--	--	0.20	--	--	--	--	--	--	--
10/30/90	16.07	5.30	10.79	0.02	--	--	--	--	--	--	--
01/14/91	16.07	4.70	11.39	0.02	--	--	--	--	--	--	--
04/03/91	16.07	6.66	9.43	0.02	--	--	--	--	--	--	--
07/17/91	16.07	5.64	10.46	0.04	--	--	--	--	--	--	--
10/07/91	16.07	5.36	10.74	0.04	--	--	--	--	--	--	--
02/04/92	16.07	5.71	10.37	0.01	--	--	--	--	--	--	--
03/06/92	16.07	6.87	9.20	--	--	--	--	--	--	--	--
04/01/92	16.07	6.79	9.28	--	--	--	--	--	--	--	--
06/25/92	16.07	6.10	9.98	0.01	--	100,000	8,800	7,000	2,800	19,000	--
09/17/92	16.07	5.56	10.51	Sheen	--	--	--	--	--	--	--
12/16/92	16.07	6.26	9.81	Sheen	--	--	--	--	--	--	--
03/18/93	16.07	7.19	8.88	Sheen	--	--	--	--	--	--	--
06/11/93	16.07	6.78	9.31	0.02	--	--	--	--	--	--	--
09/08/93	16.07	--	--	--	--	--	--	--	--	--	--
09/17/93	16.07	6.37	9.72	0.02	--	--	--	--	--	--	--
12/23/93	16.07	6.58	9.49	--	--	41,000	5,400	590	710	5,600	--
03/07/94	16.07	7.32	8.96	0.26	--	--	--	--	--	--	--
06/17/94	16.07	6.39	9.70	0.02	--	--	--	--	--	--	--

Table 4
Groundwater Monitoring Data and Analytical Results
Former Chevron Service Station #9-4587
609 Oak Street
Oakland, California

WELL ID/ DATE	TOC (ft)	GWE (msl)	DTW (ft)	SPHT (ft)	SPH REMOVED (gallons)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
C-1 (cont)											
09/12/94	16.07	3.66	12.42	0.01	--	--	--	--	--	--	--
06/29/95	16.07	7.29	8.78	--	--	220,000	11,000	3,600	3,500	19,000	--
09/13/95	16.07	6.54	9.56	0.04	0.21	--	--	--	--	--	--
12/19/95	16.07	6.76	9.31	--	--	14,000	180	81	240	2,200	440
03/26/96	16.07	7.14	8.93	--	--	790	22	5.3	21	96	<12
06/10/96	16.07	7.84	8.23	--	--	NOT SAMPLED DUE TO INSUFFICIENT WATER					
09/13/96	16.07	6.55	9.52	--	--	110	0.85	<0.5	0.95	1.9	3.6
12/19/96	16.07	7.36	8.71	--	--	51	<0.5	<0.5	0.69	1.3	<2.5
03/12/98 ¹	15.48	8.67	6.81	--	--	61	1.2	1.6	0.69	6.5	<2.5
08/20/98	15.48	6.61	8.87	--	--	120	3.5	<0.5	<0.5	3.2	2.7
03/25/99	15.48	8.20	7.28	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
09/29/99	15.48	6.10	9.38	--	--	<50	<0.5	<0.5	<0.5	3.06	<2.5
02/29/00	15.48	8.09	7.39	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0
08/25/00	15.48	6.79	8.69	0.00	0.00	<50	<0.50	<0.50	<0.50	1.2	45
03/13/01	15.48	7.36	8.12	0.00	0.00	<50.0	<0.500	<0.500	<0.500	<0.500	<0.500
09/10/01	15.48	7.05	8.43	0.00	0.00	<50	0.58	<0.50	<0.50	<0.50	17
C-2											
12/06/89	16.84	--	--	--	--	16,000	250	1,200	550	1,400	--
10/30/90	16.84	5.68	11.16	--	--	28,000	3,700	1,900	1,200	4,300	--
01/14/91	16.84	5.73	11.11	--	--	24,000	3,300	1,200	1,100	4,100	--
01/14/91	16.84	5.73	11.11	--	--	30,000	3,900	1,500	1,500	5,000	--
04/03/91	16.84	7.31	9.53	--	--	12,000	1,100	840	650	1,800	--
04/03/91	16.84	7.31	9.53	--	--	14,000	1,100	990	680	1,800	--
07/17/91	16.84	6.16	10.68	--	--	13,000	1,700	560	650	1,700	--
07/17/91	16.84	6.16	10.68	--	--	14,000	1,700	640	720	1,900	--
10/07/91	16.84	5.82	11.02	--	--	25,000	3,700	1,300	1,400	3,800	--
02/04/92	16.84	6.24	10.60	--	--	16,000	2,600	300	880	1,900	--
04/01/92	16.84	7.54	9.30	--	--	15,000	1,900	300	700	1,500	--

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Former Chevron Service Station #9-4587
609 Oak Street
Oakland, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	SPH (ft.)	REMOVED (gallons)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
C-2 (cont)											
06/25/92	16.84	6.39	10.45	--	--	23,000	3,400	740	1,300	3,400	--
09/17/92	16.84	6.06	10.78	--	--	18,000	3,500	550	1,400	3,900	--
12/16/92	16.84	6.90	9.94	--	--	12,000	1,200	120	460	1,100	--
03/18/93	16.84	8.04	8.80	--	--	5,200	990	130	290	430	--
06/11/93	16.84	7.41	9.43	--	--	34,000	8,200	910	2,400	6,600	--
09/08/93	16.84	--	--	--	--	3,400	690	26	190	330	--
09/17/93	16.84	6.93	9.91	--	--	--	--	--	--	--	--
12/23/93	16.84	7.15	9.69	--	--	2,500	830	26	130	260	--
03/07/94	16.84	7.87	8.97	--	--	1,100	420	6.5	110	69	--
06/17/94	16.84	6.98	9.86	--	--	1,400	290	8.6	60	63	--
09/12/94	16.84	5.74	11.10	--	--	370	96	1.3	9.4	16	--
06/29/95	16.84	7.84	9.00	--	--	4,100	400	96	250	500	--
09/13/95	16.84	7.10	9.74	--	--	3,500	200	50	57	290	--
12/19/95	16.84	7.74	9.10	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
03/26/96	16.84	9.46	7.38	--	--	NOT SAMPLED DUE TO INSUFFICIENT WATER					
06/10/96	16.84	9.00	7.84	--	--	NOT SAMPLED DUE TO INSUFFICIENT WATER					
09/13/96	16.84	8.44	8.40	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
12/19/96	16.84	8.46	8.38	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
03/12/98 ¹	16.39	10.75	5.64	--	--	<50	<0.5	<0.5	<0.5	<0.5	4.8
08/20/98	16.39	7.55	8.84	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
03/25/99	16.39	10.20	6.19	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
09/29/99	16.39	8.13	8.26	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
02/29/00	16.39	10.11	6.28	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0
08/25/00	16.39	8.05	8.34	0.00	0.00	<50	<0.50	<0.50	<0.50	<0.50	<2.5
03/13/01	16.39	9.67	6.72	0.00	0.00	<50.0	<0.500	<0.500	<0.500	<0.500	<0.500
09/10/01	16.39	8.02	8.37	0.00	0.00	<50	<0.50	<0.50	<0.50	<0.50	<2.5

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WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	SPHT (ft.)	SPH		B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
					REMOVED (gallons)	TPH-G (ppb)					
C-3											
12/06/89	16.48	-	--	--	--	<500	<0.5	<0.5	<0.5	0.74	-
10/30/90	16.48	6.04	10.44	-	--	410	4.0	4.0	2.0	9.0	-
01/14/91	16.48	6.14	10.34	--	--	80	<0.5	<0.5	<0.5	1.0	-
04/03/91	16.48	7.47	9.01	--	--	53	<0.5	<0.5	<0.5	2.0	-
07/17/91	16.48	6.48	10.00	--	--	<50	5.9	<0.5	<0.5	<0.5	-
10/07/91	16.48	6.10	10.38	--	--	<50	<0.5	<0.5	<0.5	<0.5	-
02/04/92	16.48	6.48	10.00	--	--	<50	<0.5	<0.5	<0.5	<0.5	-
04/01/92	16.48	7.65	8.83	--	--	<50	<0.5	<0.5	<0.5	<0.5	-
06/25/92	16.48	6.63	9.85	--	--	<50	<0.5	<0.5	<0.5	<0.5	-
09/17/92	16.48	6.28	10.20	--	--	<50	<0.5	<0.5	<0.5	<0.5	-
12/16/92	16.48	7.08	9.40	--	--	<50	<0.5	<0.5	<0.5	<0.5	-
03/18/93	16.48	8.36	8.12	--	--	<50	<0.5	<0.5	<0.5	<1.5	-
06/11/93	16.48	7.89	8.59	--	--	<50	<0.5	<0.5	<0.5	<0.5	-
09/08/93	16.48	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	-
09/17/93	16.48	7.48	9.00	--	--	-	--	--	--	--	-
12/23/93	16.48	7.65	8.83	--	--	<50	<0.5	0.8	<0.5	2.9	-
03/07/94	16.48	8.29	8.19	--	--	<50	<0.5	<0.5	<0.5	<0.5	-
06/17/94	16.48	7.43	9.05	--	--	<50	<0.5	<0.5	<0.5	<0.5	-
09/12/94	16.48	INACCESSIBLE		--	--	-	-	-	-	--	-
06/29/95	16.48	8.18	8.30	--	--	<50	<0.5	<0.5	<0.5	<0.5	-
09/13/95	16.48	7.64	8.84	--	--	<50	<0.5	<0.5	<0.5	<0.5	-
12/19/95	16.48	8.02	8.46	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
03/26/96	16.48	9.01	7.47	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
06/10/96	16.48	8.23	8.25	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
09/13/96	16.48	7.46	9.02	--	--	SAMPLED ANNUALLY		-	-	-	-
12/19/96	16.48	8.44	8.04	--	--	-	--	--	--	--	-
03/12/98 ¹	16.13	9.90	6.23	--	--	<50	<0.5	<0.5	<0.5	<0.5	3.5
08/20/98	16.13	7.93	8.20	--	--	--	--	--	--	--	-
03/25/99	16.13	9.15	6.98	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
09/29/99	16.13	6.99	9.14	--	--	-	--	--	--	--	-

Table 4-
Groundwater Monitoring Data and Analytical Results
Former Chevron Service Station #9-4587
609 Oak Street
Oakland, California

WELL ID/ DATE	TOC (<i>ft.</i>)	GWE (<i>msl</i>)	DTW (<i>ft.</i>)	SPHT (<i>ft.</i>)	SPH REMOVED (gallons)	TPH-G (<i>ppb</i>)	B (<i>ppb</i>)	T (<i>ppb</i>)	E (<i>ppb</i>)	X (<i>ppb</i>)	MTBE (<i>ppb</i>)
C-3 (cont)											
02/29/00	16.13	9.01	7.12	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0
08/25/00	16.13	7.80	8.33	0.00	0.00	--	--	--	--	--	--
03/13/01 ²	16.13	8.41	7.72	0.00	0.00	<50.0	<0.500	<0.500	<0.500	<0.500	<0.500
09/10/01	16.13	7.75	8.38	0.00	0.00	SAMPLED ANNUALLY					
C-4											
12/06/89	16.53	--	--	--	--	--	--	--	--	--	--
10/30/90	16.53	4.97	11.56	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
01/14/91	16.53	5.09	11.44	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
04/03/91	16.53	6.53	10.00	--	--	150	3.0	<0.5	12	9.0	--
07/17/91	16.53	5.37	11.16	--	--	290	2.3	0.4	52	0.4	--
10/07/91	16.53	5.14	11.39	--	--	<50	<0.5	<0.5	4.6	<0.5	--
02/04/92	16.53	5.51	11.02	--	--	<50	<0.5	<0.5	2.8	<0.5	--
02/04/92	16.53	5.51	11.02	--	--	<50	<0.5	<0.5	2.5	0.5	--
04/01/92	16.53	6.70	9.83	--	--	480	4.9	<0.5	64	4.3	--
06/25/92	16.53	5.65	10.88	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
09/17/92	16.53	5.29	11.24	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
12/16/92	16.53	6.13	10.40	--	--	56	<0.5	<0.5	1.0	<0.5	--
03/18/93	16.53	7.05	9.48	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
06/11/93	16.53	6.92	9.61	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
09/08/93	16.53	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
09/17/93	16.53	6.46	10.07	--	--	--	--	--	--	--	--
12/23/93	16.53	6.70	9.83	--	--	<50	1.2	1.5	<0.5	3.2	--
03/07/94	16.53	7.33	9.20	--	--	60	0.7	1.1	6.7	1.8	--
06/17/94	16.53	6.56	9.97	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
09/12/94	16.53	5.32	11.21	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
06/29/95	16.53	7.18	9.35	--	--	<50	<0.5	<0.5	1.4	<0.5	--
09/13/95	16.53	6.60	9.93	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
12/19/95	16.53	6.98	9.55	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5

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C-4 (cont)												
03/26/96	16.53	7.99	8.54	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5
06/10/96	16.53	7.23	9.30	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	4.1
09/13/96	16.53	6.71	9.82	--	--	SAMPLED ANNUALLY	--	--	--	--	--	--
12/19/96	16.53	7.50	9.03	--	--	--	--	--	--	--	--	--
03/12/98 ¹	15.83	8.53	7.30	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5
03/12/98	15.83	6.38	9.45	--	--	--	--	--	--	--	--	--
03/25/99	15.83	7.71	8.12	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5
09/29/99	15.83	5.60	10.23	--	--	--	--	--	--	--	--	--
02/29/00	15.83	7.90	7.93	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0
08/25/00	15.83	6.74	9.09	0.00	0.00	--	--	--	--	--	--	--
03/13/01	15.83	7.38	8.45	0.00	0.00	<50.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
09/10/01	15.83	6.63	9.20	0.00	0.00	SAMPLED ANNUALLY	--	--	--	--	--	--
C-5												
12/06/89	14.70	4.73	9.97	--	--	--	--	--	--	--	--	--
10/30/90	14.70	--	--	--	--	<50	0.8	<0.5	<0.5	0.5	--	--
01/14/91	14.70	4.83	9.87	--	--	54	<0.5	<0.5	<0.5	<0.5	<0.5	--
04/03/91	14.70	5.98	8.72	--	--	1,800	330	200	52	170	--	--
07/17/91	14.70	5.07	9.63	--	--	170	120	5.3	12	20	--	--
10/07/91	14.70	4.87	9.83	--	--	<50	1.1	<0.5	<0.5	<0.5	<0.5	--
02/04/92	14.70	5.17	9.53	--	--	91	16	<0.5	2.4	2.0	--	--
04/01/92	14.70	6.13	8.57	--	--	960	200	5.4	21	33	--	--
06/25/92	14.70	5.26	9.44	--	--	800	2.5	<0.5	1.3	7.3	--	--
09/17/92	14.70	4.98	9.72	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
12/16/92	14.70	5.63	9.07	--	--	81	5.4	1.2	1.5	4.3	--	--
03/18/93	14.70	6.26	8.44	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
06/11/93	14.70	6.17	8.53	--	--	<50	1.6	<0.5	<0.5	<1.5	--	--
09/08/93	14.70	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
09/17/93	14.70	5.81	8.89	--	--	--	--	--	--	--	--	--

Table 4
Groundwater Monitoring Data and Analytical Results
Former Chevron Service Station #9-4587
609 Oak Street
Oakland, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	SPHT (ft.)	REMOVED (gallons)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
C-5 (cont)											
12/23/93	14.70	6.02	8.68	--	--	<50	5.5	1.3	0.7	4.0	--
03/07/94	14.70	6.52	8.18	--	--	460	180	21	27	70	--
06/17/94	14.70	5.89	8.81	--	--	<50	10	0.5	1.4	3.3	--
09/12/94	14.70	4.83	9.87	--	--	<50	6.4	<0.5	<0.5	<0.5	--
06/29/95	14.70	6.33	8.37	--	--	65	10	<0.5	2.3	9.1	--
09/13/95	14.70	5.90	8.80	--	--	370	41	0.76	17	50	--
12/19/95	14.70	6.22	8.48	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
03/26/96	14.70	6.97	7.73	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
06/10/96	14.70	6.40	8.30	--	--	<50	<0.5	<0.5	<0.5	<0.5	3.9
09/13/96	14.70	5.95	8.75	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
12/19/96	14.70	6.65	8.05	--	--	<50	4.2	<0.5	<0.5	<0.5	<2.5
03/12/98 ¹	14.22	7.41	6.81	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
08/20/98	14.22	5.81	8.41	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
03/25/99	14.22	6.87	7.35	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
09/29/99	14.22	4.80	9.42	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
02/29/00	14.22	6.93	7.29	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0
08/25/00	14.22	5.98	8.24	0.00	0.00	<50	<0.50	<0.50	<0.50	<0.50	<2.5
03/13/01	14.22	6.35	7.87	0.00	0.00	131	4.29	10.4	2.73	13.6	<0.500
09/10/01	14.22	6.22	8.00	0.00	0.00	<50	<0.50	<0.50	<0.50	<0.50	<2.5
C-6											
12/06/89	13.87	--	--	--	--	--	--	--	--	--	--
10/30/90	13.87	4.44	9.43	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
01/14/91	13.87	4.46	9.41	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--
04/03/91	13.87	5.21	8.66	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--
07/17/91	13.87	4.62	9.25	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--
10/07/91	13.87	4.53	9.34	--	--	67	<0.5	0.6	<0.5	0.6	--
02/04/92	13.87	4.71	9.16	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
04/01/92	13.87	5.28	8.59	--	--	<50	<0.5	<0.5	<0.5	<0.5	--

Table 4
Groundwater Monitoring Data and Analytical Results
Former Chevron Service Station #9-4587
609 Oak Street
Oakland, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	SPHT (ft.)	SPH		TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
					REMOVED (gallons)	SPH						
C-6 (cont)												
06/25/92	13.87	4.76	9.11	—	—	<50	<0.5	<0.5	<0.5	<0.5	<0.5	—
09/17/92	13.87	4.59	9.28	—	—	<50	<0.5	<0.5	<0.5	<0.5	<0.5	—
12/16/92	13.87	4.99	8.88	—	—	120	9.3	1.9	2.7	7.4	—	—
03/18/93	13.87	5.52	8.35	—	—	<50	<0.5	<0.5	<0.5	<0.5	<1.5	—
06/11/93	13.87	5.66	8.21	—	—	<50	<0.5	0.7	<0.5	<1.5	—	—
09/08/93	13.87	—	—	—	—	<50	<0.5	<0.5	<0.5	<1.5	—	—
09/17/93	13.87	5.50	8.37	—	—	—	—	—	—	—	—	—
12/23/93	13.87	5.58	8.29	—	—	<50	1.4	1.0	<0.5	3.5	—	—
03/07/94	13.87	5.87	8.00	—	—	<50	0.8	<0.5	<0.5	<0.5	<0.5	—
06/17/94	13.87	5.46	8.41	—	—	<50	<0.5	<0.5	<0.5	<0.5	<0.5	—
09/12/94	13.87	4.99	8.88	—	—	<50	<0.5	<0.5	<0.5	<0.5	<0.5	—
06/29/95	13.87	5.79	8.08	—	—	<50	<0.5	<0.5	<0.5	<0.5	<0.5	—
09/13/95	13.87	5.56	8.31	—	—	<50	<0.5	<0.5	<0.5	<0.5	<0.5	—
12/19/95	13.87	5.75	8.12	—	—	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5
03/26/96	13.87	6.19	7.68	—	—	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5
06/10/96	13.87	5.69	8.18	—	—	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5
09/13/96	13.87	5.01	8.86	—	—	SAMPLED ANNUALLY		—	—	—	—	—
12/19/96	13.87	6.04	7.83	—	—	—	—	—	—	—	—	—
03/12/98 ^a	13.23	6.13	7.10	—	—	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5
08/20/98	13.23	5.14	8.09	—	—	—	—	—	—	—	—	—
03/25/99	13.23	5.91	7.32	—	—	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5
09/29/99	13.23	3.83	9.40	—	—	—	—	—	—	—	—	—
02/29/00	13.23	6.04	7.19	—	—	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0
08/25/00	13.23	4.15	9.08	0.00	0.00	—	—	—	—	—	—	—
03/13/01	13.23	5.20	8.03	0.00	0.00	<50.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
09/10/01	13.23	5.12	8.11	0.00	0.00	SAMPLED ANNUALLY		—	—	—	—	—

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609 Oak Street
Oakland, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	SPHT (ft.)	SPH REMOVED (gallons)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
C-7											
02/07/91	15.78	5.90	9.88	--	--	<50	<0.5	0.8	<0.5	<0.5	--
04/03/91	15.78	6.74	9.04	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
07/17/91	15.78	5.92	9.86	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
10/07/91	15.78	5.68	10.10	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
02/04/92	15.78	6.04	9.74	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
04/01/92	15.78	6.82	8.96	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
06/25/92	15.78	6.16	9.62	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
09/17/92	15.78	6.03	9.75	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
12/16/92	15.78	6.37	9.41	--	--	--	--	--	--	--	--
03/18/93	15.78	7.33	8.45	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
06/11/93	15.78	7.07	8.71	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
09/08/93	15.78	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
09/17/93	15.78	6.73	9.05	--	--	--	--	--	--	--	--
12/23/93	15.78	6.93	8.85	--	--	<50	1.9	1.4	<0.5	3.6	--
03/07/94	15.78	7.35	8.43	--	--	<50	2.4	1.3	<0.5	0.6	--
06/17/94	15.78	6.71	9.07	--	--	<50	<0.5	<0.5	<0.5	1.2	--
09/12/94	15.78	5.98	9.80	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
06/29/95	15.78	7.14	8.64	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
09/13/95	15.78	6.86	8.92	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
12/19/95	15.78	7.06	8.72	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
03/26/96	15.78	7.86	7.92	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
06/10/96	15.78	7.26	8.52	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
09/13/96	15.78	6.66	9.12	--	--	SAMPLED ANNUALLY		--	--	--	--
12/19/96	15.78	7.39	8.39	--	--	--	--	--	--	--	--
03/12/98 ¹	15.36	8.64	6.72	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
08/20/98	15.36	6.11	9.25	--	--	--	--	--	--	--	--
03/25/99	15.36	7.67	7.69	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
09/29/99	15.36	5.57	9.79	--	--	--	--	--	--	--	--

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Former Chevron Service Station #9-4587
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Oakland, California

WELL ID/ DATE	TOC (ft)	GWE (msl)	DTW (ft)	SPHT (ft)	SPH		TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
					REMOVED (gallons)							
C-7 (cont)												
02/29/00	15.36	7.86	7.50	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0
08/25/00	15.36	INACCESSIBLE - OBSTRUCTION IN WELL				--	--	--	--	--	--	--
03/13/01 ²	15.36	6.78	8.58	0.00	0.00	<50.0	<0.500	<0.500	0.776	2.19	<0.500	
09/10/01	15.36	6.15	9.21	0.00	0.00	SAMPLED ANNUALLY	--	--	--	--	--	--
CR-1												
10/30/90	--	--	10.51	--	--	9,600	7,100	65	610	190	--	
01/14/91	--	--	10.29	--	--	1,500	3,200	52	190	77	--	
07/17/91	--	--	10.19	--	--	15,000	9,300	220	680	530	--	
10/07/91	--	--	10.46	--	--	17,000	7,600	50	440	68	--	
10/07/91	--	--	10.46	--	--	14,000	9,400	52	430	110	--	
02/04/92	--	--	10.12	--	--	19,000	6,100	32	350	100	--	
04/01/92	--	--	9.24	--	--	29,000	5,300	820	380	1,200	--	
06/25/92	--	--	10.03	--	--	12,000	3,300	280	210	460	--	
09/17/92	--	--	10.30	--	--	--	--	--	--	--	--	
12/16/92	--	--	9.59	Sheen	--	--	--	--	--	--	--	
03/18/93	--	--	8.82	0.05	--	--	--	--	--	--	--	
06/11/93	--	--	9.58	0.87	--	--	--	--	--	--	--	
09/08/93	--	--	--	--	--	--	--	--	--	--	--	
09/17/93	--	--	--	--	--	--	--	--	--	--	--	
12/23/93	--	--	9.02	0.02	--	--	--	--	--	--	--	
03/07/94	--	--	8.41	0.04	--	--	--	--	--	--	--	
06/17/94	--	--	--	--	--	--	--	--	--	--	--	
09/12/94	--	--	15.32	0.02	--	--	--	--	--	--	--	
06/29/95	--	--	8.67	--	--	49,000	9,400	310	2,400	7,200	--	
09/13/95	--	--	9.93	0.03	0.13	--	--	--	--	--	--	
12/19/95	--	--	8.75	--	--	19,000	880	48	1,600	3,100	4,000	
03/26/96	--	--	7.50	--	--	60	2.6	<0.5	0.86	6.3	67	
06/10/96	--	--	8.15	--	--	1,100	38	30	9.7	190	54	

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TRIP BLANK (cont)												
06/17/94	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
09/12/94	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
06/29/95	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
09/13/95	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
12/19/95	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/26/96	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5
06/10/96	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5
09/13/96	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5
12/19/96	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5
03/12/98	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5
08/20/98	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5
03/25/99	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5
09/29/99	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5
02/29/00	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0
08/25/00	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5
03/13/01	--	--	--	--	--	<50.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
09/10/01	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5

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WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	SPH		TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
				SPHT (ft.)	REMOVED (gallons)						
CR-1 (cont)											
09/13/96	--	--	9.27	--	--	77	1.1	<0.5	<0.5	<0.5	33
12/19/96	--	--	7.96	--	--	<50	0.86	<0.5	<0.5	0.62	<2.5
03/12/98 ¹	15.33	9.29	6.04	--	--	55	1.1	<0.5	<0.5	<0.5	6.0
08/20/98	15.33	7.28	8.05	--	--	110	4.1	0.9	0.94	<0.5	5.5
03/25/99	15.33	8.53	6.80	--	--	<50	<0.5	<0.5	<0.5	<0.5	2.9
09/29/99	15.33	6.37	8.96	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
02/29/00	15.33	8.48	6.85	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0
08/25/00	15.33	7.49	7.84	0.00	0.00	<50	<0.50	<0.50	<0.50	<0.50	20
03/13/01	15.33	8.12	7.21	0.00	0.00	56.6	<0.500	<0.500	<0.500	<0.500	<0.500
09/10/01	15.33	7.80	7.53	0.00	0.00	<50	<0.50	<0.50	<0.50	0.83	13
TRIP BLANK											
10/30/90	--	--	--	--	--	--	--	--	--	--	--
01/14/91	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
02/07/91	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
04/03/91	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
07/17/91	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
10/07/91	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
02/04/92	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
04/01/92	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
06/25/92	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
09/17/92	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
12/16/92	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
03/18/93	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
06/11/93	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
09/08/93	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
09/17/93	--	--	--	--	--	--	--	--	--	--	--
12/23/93	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
03/07/94	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--

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Groundwater Monitoring Data and Analytical Results
Former Chevron Service Station #9-4587
609 Oak Street
Oakland, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to August 25, 2000, were compiled from reports prepared by Blaine Tech Services, Inc.

TOC = Top of Casing

(ft.) = Feet

GWE = Groundwater Elevation

(msl) = Mean sea level

DTW = Depth to Water

SPHT = Separate Phase Hydrocarbon Thickness

SPH = Separate Phase Hydrocarbons

TPH-G = Total Petroleum Hydrocarbons as Gasoline

B = Benzene

T = Toluene

E = Ethylbenzene

X = Xylenes

MTBE = Methyl tertiary butyl ether

(ppb) = Parts per billion

-- = Not Measured/Not Analyzed

¹ Site resurveyed on May 8, 1998.

² Cleaned out roots in well.

ATTACHMENT 13

RBCA SITE ASSESSMENT

Tier 2 Worksheet 9.3

Site Name: Chevron 9-4587

Site Location: Oak Street, Oakland

Completed By: R.A. Dahl

Date Completed: 8/2/1997

1 OF 1

GROUNDWATER SSTL VALUES

Target Risk (Class A & B) 1.0E-5

MCL exposure limit?

Calculation Option: 2

Target Risk (Class C) 1.0E-5

PEL exposure limit?

Target Hazard Quotient 1.0E+0

SSTL Results For Complete Exposure Pathways ("x" if Complete)

CONSTITUENTS OF CONCERN		Representative Concentration	X	Groundwater Ingestion			X	Groundwater Volatilization to Indoor Air		X	Groundwater Volatilization to Outdoor Air		Applicable SSTL	SSTL Exceeded ?	Required CRF
CAS No.	Name	(mg/L)		Residential: 1000 feet	Commercial: (on-site)	Regulatory(MCL): 1000 feet		Residential: (on-site)	Commercial: (on-site)		Residential (on-site)	Commercial: (on-site)	(mg/L)	"■" If yes	Only if "yes" left
71-43-2	Benzene	3.5E-3	>Sol	NA	>Sol	NA	7.2E+0	NA	3.6E+2	7.2E+0	NA	3.6E+2	7.2E+0	<input type="checkbox"/>	<1

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Software: GSI RBCA Spreadsheet

Version: v 1.0

Serial: G-337-YAX-542

Table 2
 Management Plan Threshold Limits
 Former Chevron Station 9-4587
 609 Oak Street
 Oakland, CA

Well ID	Benzene Concentration Highest Observed (ppb)	Benzene Concentration 12/19/96 (ppb)	Benzene Concentration Threshold Limit (ppb)
C-1	11,000	<0.5	*720
C-2	8,200	<0.5	*720
C-5	330	4.2	100
CR-1	9400	0.9	*720
			*as average for onsite

UCL Percentile

95% (must be 0.9 or 0.95)

Analytical Data (Up to 50 Data Points)

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

30-0219

Vadose zone samples

Sample Name

Date Sampled

K_0 (mg/L)	1	2	3	4	5	6	7	8	9
VSP-7-4	DVSP-4	CR-1	na-5	na-7	na-5	na-7			
12/20/95	7/10/93	9/10/93	6/2/97	6/12/97	6/12/97	6/12/97			

0.0025	0.0025	0.023	0.0025	0.0025	23	23		
--------	--------	-------	--------	--------	----	----	--	--

Choose UCL Percentile

90% (must be 0.9 or .95)

Analytical Data (Up to 50 Data Points)

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

30-0219

Groundwater samples

Well Name

Date Sampled

	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
c1	c1	c1	c2	c2	c1	c1	c1	c1
9/13/96	3/26/96	12/19/96	9/13/96	12/19/96	3/26/96	6/10/96	9/13/96	12/19/96

0.00085	0.022	0.00026	0.00025	0.00025	0.0026	0.03	0.0011	0.00086
---------	-------	---------	---------	---------	--------	------	--------	---------

Gottlieb - Ryan Inc.

WELL BORING LOG

COMPANY: CHEVRON U.S.A.
LOCATION: 609 OAK + 6TH STs
CITY: OAKLAND

JOB #: DR - 5055
DATE: 7-13-83
WELL #: Q-2

DEPTH	SAMPLE NO.	SOIL DESCRIPTION
- 0 ft.		Concrete
- 4"		Big Aggregate
- 2'		Brown Silty Clay - Dry
- 13'		Brown Sand w/Clay - Damp
- 15'		Brown Sand w/Clay - Wet
-		
-		
-		
-		
-		
-		
-		
-		
-		
-		
-		
-		
-		
-		
-		
-		
-		
-		

FOREMAN: DAVID BYRON SHEET: 1 OF 1

Field location of boring: (See Plate 2)							Project No.: 7191	Date: 09/11/90	Boring No: C-6	
							Client: Chevron USA S.S. No. 4587			
							Location: 609 Oak Street			
							City: Oakland, California	Sheet 2 of 2		
							Logged by: R.S.Y.	Driller: Bayland		
							Casing installation data:			
Drilling method: Hollow Stem Auger							Top of Box Elevation:		Datum:	
Hole diameter: 8-inches							Water Level			
							Time			
							Date			
							Description			
FID (ppm)	Blowft. or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)			
				21						
				22						
				23						
8	S&H			24				SAND (SP) - dark yellowish brown (10YR 4/6), dense, saturated; 100% fine sand; no chemical odor.		
12		C-6-		25						
0	18		25.0	26						
				27						
				28				COLOR CHANGE to brown (10YR 5/3) at 27.5 feet.		
14	S&H			29						
26		C-6-		30						
0	38		30.0	31				Bottom of Boring at 30.0 feet. Bottom of Sample at 30.0 feet. 09/11/90		
				32						
				33						
				34						
				35						
				36						
				37						
				38						
				39						
				40						

Remarks:



GeoStrategies Inc.

Log of Boring

BORING NO.

C-6

JOB NUMBER
7191

REVIEWED BY RG/CEG
CLMP CEG 12/6/2

DATE
9/90

REVISED DATE

REVISED DATE

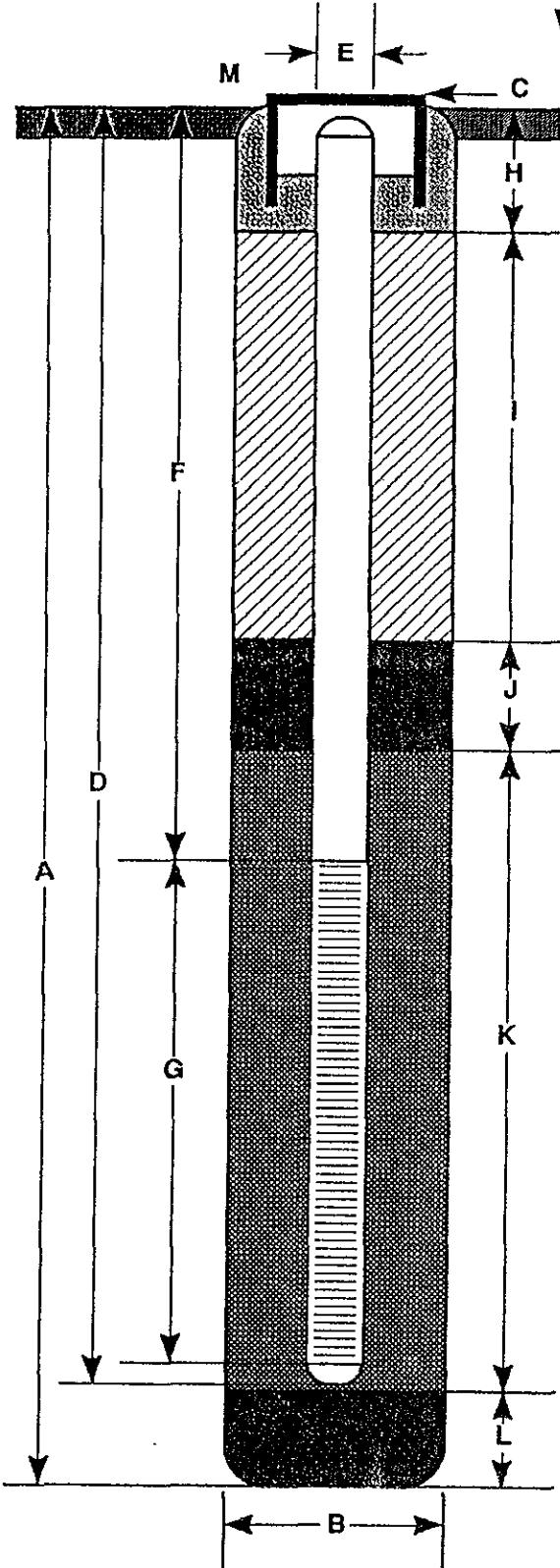
BORING NO.

Log of Boring



Boring Log						Comments:
Depth (ft)	Sample Number	Type of Sample	Blow Count or Pressure	Drill Rig	Well Detail	Description
0	500	S&H	C-6	Push	9.0	COLOR CHANGE to dark yellow (10YR 4/6) at 9.0 feet.
1						PAVEMENT SECTION 1.5 feet.
2						FILL - SAND (SP) - black (10YR 2/1), loose, dry; 95% fine sand; 5% clay; no chemical odor.
3						SAND (SP) - gray (7.5YR 5/0), dense, damp; 90% fine sand; 10% clay; no chemical odor.
4						C-6-
5	200	S&H	C-6-	Push	5.5	C-6-
6						C-6-
7	150	S&H	C-6-	Push	9.0	Push
8						
9	16	S&H	C-6-	Push	15.0	14
10						15
11						16
12						17
13						18
14	26	S&H	C-6-	Push	15.0	19
15						20
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
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49						
50						

WELL CONSTRUCTION DETAIL



- A Total Depth of Boring 30 ft.
- B Diameter of Boring 8 in.
Drilling Method Hollow Stem Auger
- C Top of Box Elevation 14.70 ft.
 Referenced to Mean Sea Level
 Referenced to Project Datum
- D Casing Length 30 ft.
Material Schedule 40 PVC
- E Casing Diameter 2 in.
- F Depth to Top Perforations 10 ft.
- G Perforated Length 20 ft.
Perforated Interval from 10 to 30 ft.
Perforation Type Factory Slotted
Perforation Size 0.020 in.
- H Surface Seal from 0.0 to 1.5 ft.
Seal Material Concrete
- I Backfill from 1.5 to 6 ft.
Backfill Material Cement Grout
- J Seal from 6 to 8 ft.
Seal Material Bentonite Pellets
- K Gravel Pack from 8 to 30 ft.
Pack Material Lonestar #2/12 Sand
- L Bottom Seal _____ ft.
Seal Material _____
- M Traffic-rated box with locking well cap.

Note: Depths measured from initial ground surface.



GeoStrategies Inc.

Well Construction Detail

WELL NO.

C-5

JOB NUMBER
7191

REVIEWED BY PG/CEG
Chad Celi 12/92

DATE
09/90

REVISED DATE

REVISED DATE

Field location of boring: (See Plate 2)							Project No.: 7191	Date: 09/10/90	Boring No:
							Client: Chevron USA S.S. No. 4587		C-5
							Location: 609 Oak Street		
							City: Oakland, California	Sheet 2	
							Logged by: R.S.Y.	Driller: Bayland	of 2
Casing installation data:									
Drilling method: Hollow Stem Auger							Top of Bore Elevation:	Datum:	
Hole diameter: 8-inches							Water Level		
P.D. (gpm)	Blows/ft. or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Time	
								Date	
Description									
0	8	S&H		20				SAND (SP) - olive (5Y 5/3), dense, saturated; 100% fine sand; no chemical odor.	
0	13		C-5-	21					
0	24		20.5	22					
				23					
				24					
0	10	S&H		25				no chemical odor.	
0	13		C-5-	26					
0	40		25.5	27					
				28					
				29					
0	14	S&H	C-5-	30				no chemical odor.	
0	32		30.0	31				Bottom of Boring at 30.0 feet.	
				32				Bottom of Sample at 30.0 feet.	
				33				09/10/90	
				34					
				35					
				36					
				37					
				38					
				39					
Remarks:									



GeoStrategies Inc.

Log of Boring

BORING NO.

C-5

JOB NUMBER
7191

REVIEWED BY RG/CEG
OCT 04 1992

DATE
9/90

REVISED DATE

REVISED DATE

Field location of boring: (See Plate 2)							Project No.: 7191	Date: 09/10/90	Boring No:
							Client: Chevron USA S.S. No. 4587		C-5
							Location: 609 Oak Street		
							City: Oakland, California	Sheet 1	
							Logged by: R.S.Y.	Driller: Bayland	of 2
Casing installation data:									
Drilling method: Hollow Stem Auger							Top of Box Elevation: 14.70	Datum: MSL	
Hole diameter: 8-inches							Water Level 13' 9.97'		
PID (gpm)	Blows/ft or Pressure (psi)	Type of Sample	Sample Number	Depth (ft)	Sample	Well Detail	Soil Group Symbol (USCS)	Date 09/10/90 10/30/90	Description
				0					PAVEMENT SECTION - 1.5 feet
				1					
				2					
				3					SAND (SP) - yellow brown (10YR 5/6), dense, moist; 95% fine sand; 5% clay; no chemical odor.
				4					
0	400	S&H push		5					
				6					COLOR CHANGE to olive gray (5Y 4/2) at 5 feet; slight increase in clay content to 10%; no chemical odor.
				7					
				8					
				9					
				10					no chemical odor.
12	S&H			11					
16		C-5-		12					
0	20	10.5		13					
				14					CLAYEY SAND (SC) - dark brown (7.5YR 4/4), medium dense, saturated; voids, 70% fine sand; 30% clay; no chemical odor
				15					
4	S&H			16					
5		C-5-		17					
0	6	15.5		18					
				19					
Remarks:									



GeoStrategies Inc.

Log of Boring

BORING NO.

C-5

JOB NUMBER
7191

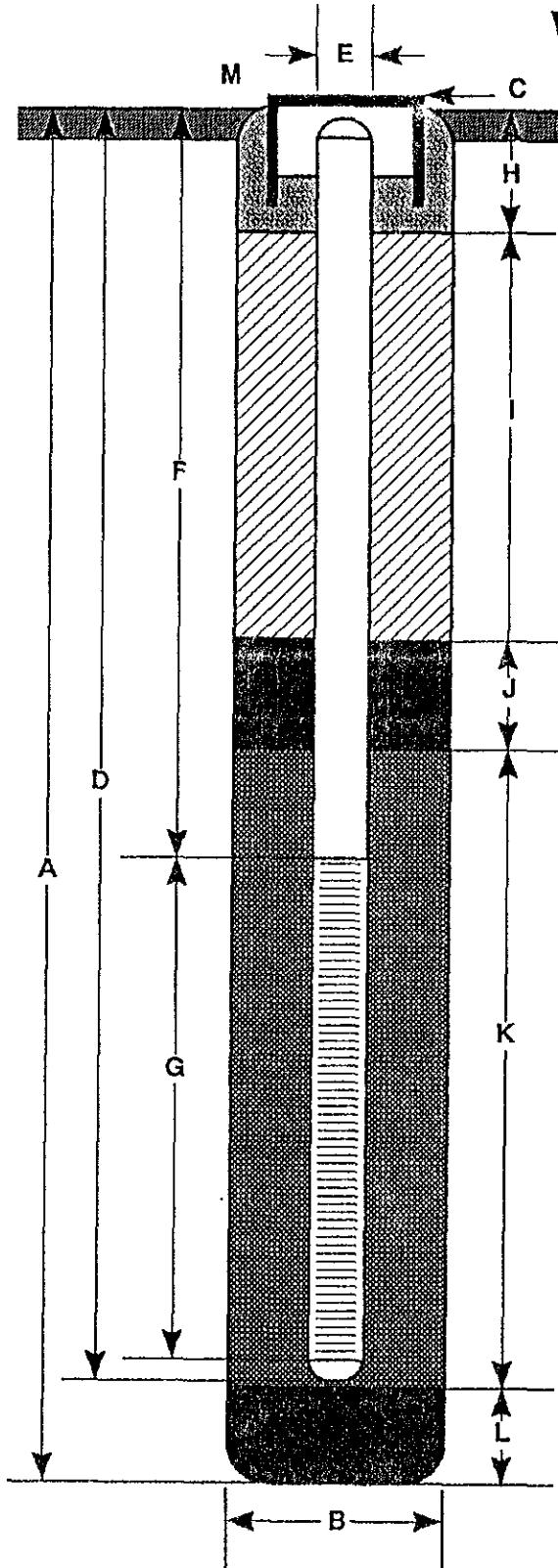
REVIEWED BY RG/CEG
FLUP 08/12/02

DATE
9/90

REVISED DATE

REVISED DATE

WELL CONSTRUCTION DETAIL



- A Total Depth of Boring 30 ft.
- B Diameter of Boring 8 in.
Drilling Method Hollow Stem Auger
- C Top of Box Elevation 16.53 ft.
 Referenced to Mean Sea Level
 Referenced to Project Datum
- D Casing Length 30 ft.
Material Schedule 40 PVC
- E Casing Diameter 2 in.
- F Depth to Top Perforations 10 ft.
- G Perforated Length 20 ft.
Perforated Interval from 10 to 30 ft.
Perforation Type Factory Slotted
Perforation Size 0.020 in.
- H Surface Seal from 0.0 to 1.5 ft.
Seal Material Concrete
- I Backfill from 1.5 to 6 ft.
Backfill Material Cement Grout
- J Seal from 6 to 8 ft.
Seal Material Bentonite Pellets
- K Gravel Pack from 8 to 30 ft.
Pack Material Lonestar #2/12 Sand
- L Bottom Seal _____
Seal Material _____
- M Traffic-rated box with locking well cap.

Note: Depths measured from initial ground surface.



GeoStrategies Inc.

Well Construction Detail

WELL NO.

C-4

JOB NUMBER
7191

REVIEWED BY RG/CEG
Clint CEC/1202

DATE
09/90

REVISED DATE

REVISED DATE

Field location of boring: (See Plate 2)							Project No.: 7191	Date: 09/10/90	Boring No: C-4
							Client: Chevron USA S.S. No. 4587		
							Location: 609 Oak Street		
							City: Oakland, California		Sheet 2 of 2
							Logged by: R.S.Y.	Driller: Bayland	
Casing installation data:									
Drilling method: Hollow Stem Auger							Top of Box Elevation:	Datum:	
Hole diameter: 8-inches							Water Level		
P.D. (ppm)	Blow/ft. or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description	
16	S&H			20				very dense; no chemical odor.	
28		C-4-		21					
0	24/4"		20.5	22					
				23					
				24				no chemical odor.	
11	S&H	C-4-		25					
0	40		25.0	26				smooth drilling at 28.0 feet.	
				27					
				28					
				29				CLAY (CL) - dark brown (10YR 4/3), stiff, moist; moderate plasticity; 80% clay; 20% silt; no chemical odor.	
12	S&H	C-4-		30	/				
0	17		30.0	31				Bottom of Boring at 30.0 feet.	
				32				Bottom of Sample at 30.0 feet.	
				33				09/10/90	
				34					
				35					
				36					
				37					
				38					
				39					

Remarks:



GeoStrategies Inc.

Log of Boring

BORING NO.

C-4

JOB NUMBER
7191REVIEWED BY RG/CEG
Clifford C. GallowayDATE
9/90

REVISED DATE

REVISED DATE

Field location of boring: (See Plate 2)							Project No.: 7191	Date: 09/10/90	Boring No:	
							Client: Chevron USA S.S. No. 4587			
							Location: 609 Oak Street			
							City: Oakland, California			
							Logged by: R.S.Y.	Driller: Bayland	Sheet 1 of 2	
Casing installation data:										
Drilling method: Hollow Stem Auger							Top of box Elevation: 16.53			
Hole diameter: 8-inches							Datum: MSL			
PID (ppm)	Blowst. or Pressure (psi)	Type of Sample	Sample Number	Depth (ft)	Sample	Well Detail	Soil Group Symbol (USCS)	Description		
				0				PAVEMENT SECTION - 1.0 feet.		
				1						
				2				SAND (SP) - dark yellow brown (10YR 4/6), dense, damp; 90% fine sand; 10% clay; no chemical odor.		
				3						
				4						
0	500	S&H push		5						
				6				COLOR CHANGE to olive gray (5Y 4/2) at 6.5 feet.		
				7						
				8						
				9						
				10				CLAYEY SAND (SC) - dark gray (7.5 YR 4/0), medium dense, damp; 65% fine sand; 35% clay; roots; slight oxidation; no chemical odor.		
0	8		10.5	11						
				12						
				13						
				14						
				15						
0	24	S&H C-4-	15.5	16				SAND (SP) - yellowish brown (10YR 5/4), dense, saturated; 95% fine sand; 5% clay; no chemical odor.		
				17						
				18						
				19						
Remarks:										



GeoStrategies Inc.

Log of Boring

BORING NO.

C-4

JOB NUMBER
7191

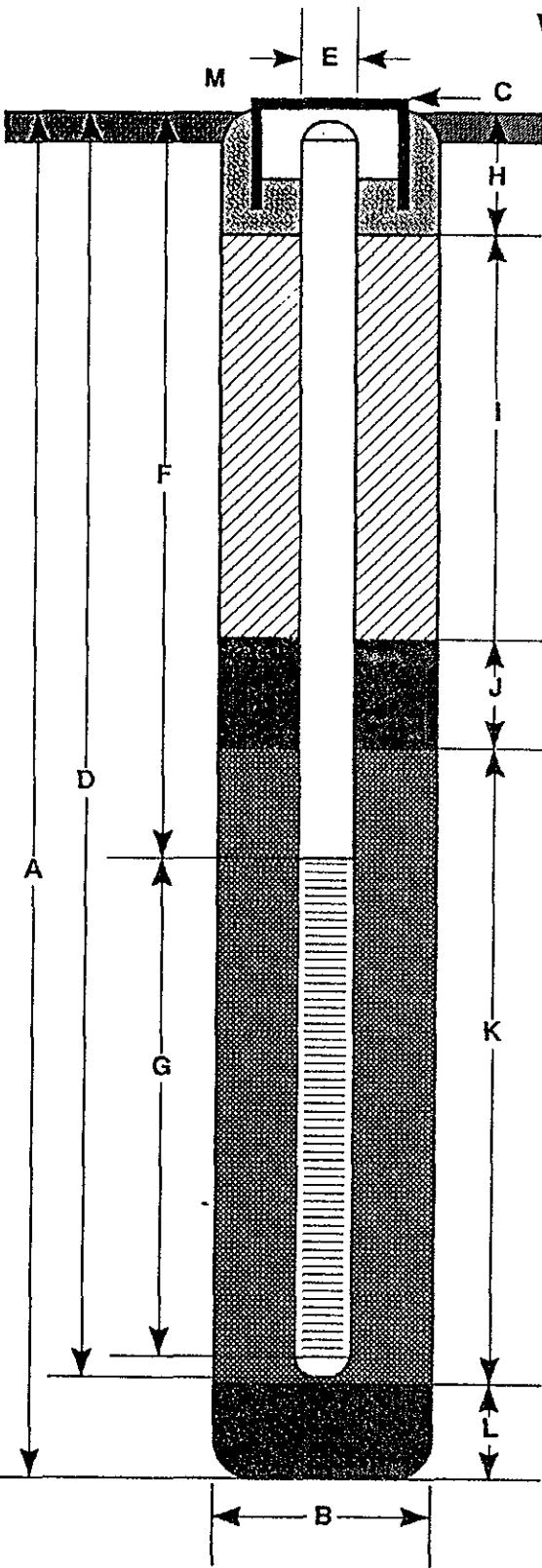
REVIEWED BY RG/CEG
CHD CEG 1202

DATE
9/90

REVISED DATE

REVISED DATE

WELL CONSTRUCTION DETAIL



- A Total Depth of Boring _____ 30 ft.
- B Diameter of Boring _____ 8 in.
Drilling Method Hollow Stem Auger
- C Top of Box Elevation _____ 13.87 ft.
 Referenced to Mean Sea Level
 Referenced to Project Datum
- D Casing Length _____ 30 ft.
Material Schedule 40 PVC
- E Casing Diameter _____ 2 in.
- F Depth to Top Perforations _____ 10 ft.
- G Perforated Length _____ 20 ft.
Perforated Interval from 10 to 30 ft.
Perforation Type Factory Slotted
Perforation Size 0.020 in.
- H Surface Seal from 0.0 to 1.5 ft.
Seal Material Concrete
- I Backfill from 1.5 to 6 ft.
Backfill Material Cement Grout
- J Seal from 6 to 8 ft.
Seal Material Bentonite Pellets
- K Gravel Pack from 8 to 30 ft.
Pack Material Lonestar #2/12 Sand
- L Bottom Seal _____ ft.
Seal Material _____
- M Traffic-rated box with locking well cap.

Note: Depths measured from initial ground surface.



GeoStrategies Inc.

Well Construction Detail

WELL NO.

C-6

JOB NUMBER
7191

REVIEWED BY PG/CEG
CWP/CWG/12/2

DATE
09/90

REVISED DATE

REVISED DATE

Field location of boring: (See Plate 2)							Project No.: 7191	Date: 09/11/90	Boring No: CR-1
							Client: Chevron USA S.S. No. 4587		
							Location: 609 Oak Street		
							City: Oakland, California	Sheet 1 of 2	
							Logged by: R.S.Y.	Driller: Bayland	
Casing installation data:									
Drilling method: Hollow Stem Auger							Top of Box Elevation:	Datum:	
Hole diameter: 8-inches							Water Level	13'	10.51'
PDI (ppm)	Blowft. or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Date	1300 10/30/90
								Description	
				1					PAVEMENT SECTION - .25 feet
				2					
				3					CLAY (CL) - olive (5Y 5/3), medium stiff, damp, trace sand, medium to high plasticity; no chemical odor.
				4					
50	S&H			5					COLOR CHANGE to gray (7.5 YR 5/0) at 4.0 feet; increase coarse sand to 20 %; weak chemical odor
50	push	CR-1-		6					
3	150		5.0	7					
				8					gravel and wood fragments at 7.0 feet.
				9					
11	S&H			10					SAND (SP) - black (10YR 2/1), medium dense, damp; 95% fine sand; 5% clay; moderate chemical odor.
8		CR-1-		11					
3	8		10.0	12					
				13					CLAYEY SAND (SC) - dark yellow brown (10YR 4/4), loose, saturated; 70% fine sand; 25-30% clay; voids; weak chemical odor.
				14					
2	S&H			15					
3		CR-1-		16					
80	4		15.0	17					
				18					SAND (SP) - dark olive (5Y 3/2), dense, saturated; 100% fine sand; no chemical odor.
				19					
10	S&H								
16		CR-1-							
23	22		20.0	20					

Remarks:



GeoStrategies Inc.

Log of Boring

BORING NO.

CR-1

JOB NUMBER
7191

REVIEWED BY PG/CEG
MWD/CEG (262)

DATE
9/90

REVISED DATE

REVISED DATE

Field location of boring: (See Plate 2)								Project No.: 7191	Date: 09/11/90	Boring No:
								Client: Chevron USA		CR-1
								Location: 609 Oak Street		
								City: Oakland, California	Sheet 2	
								Logged by: R.S.Y.	Driller: Bayland	of 2
								Casing installation data:		
Drilling method: Hollow Stem Auger								Top of Box Elevation:		
Hole diameter: 8-inches								Datum:		
P.D. (gpm)	Blowout or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description		
								Water Level		
				21						
				22						
				23						
15	S&H			24				COLOR CHANGE to dark yellow brown (10YR 4/6); no chemical odor.		
32		CR-1-								
0	38		25.0	25						
				26						
				27						
				28						
14	S&H			29				no chemical odor.		
23		CR-1								
0	38		30.0	30				Bottom of Boring at 30.0 feet. Bottom of Sample at 30.0 feet. 09/11/90		
				31						
				32						
				33						
				34						
				35						
				36						
				37						
				38						
				39						
				40						

Remarks:



GeoStrategies Inc.

Log of Boring

BORING NO.

CR-1

JOB NUMBER
7191

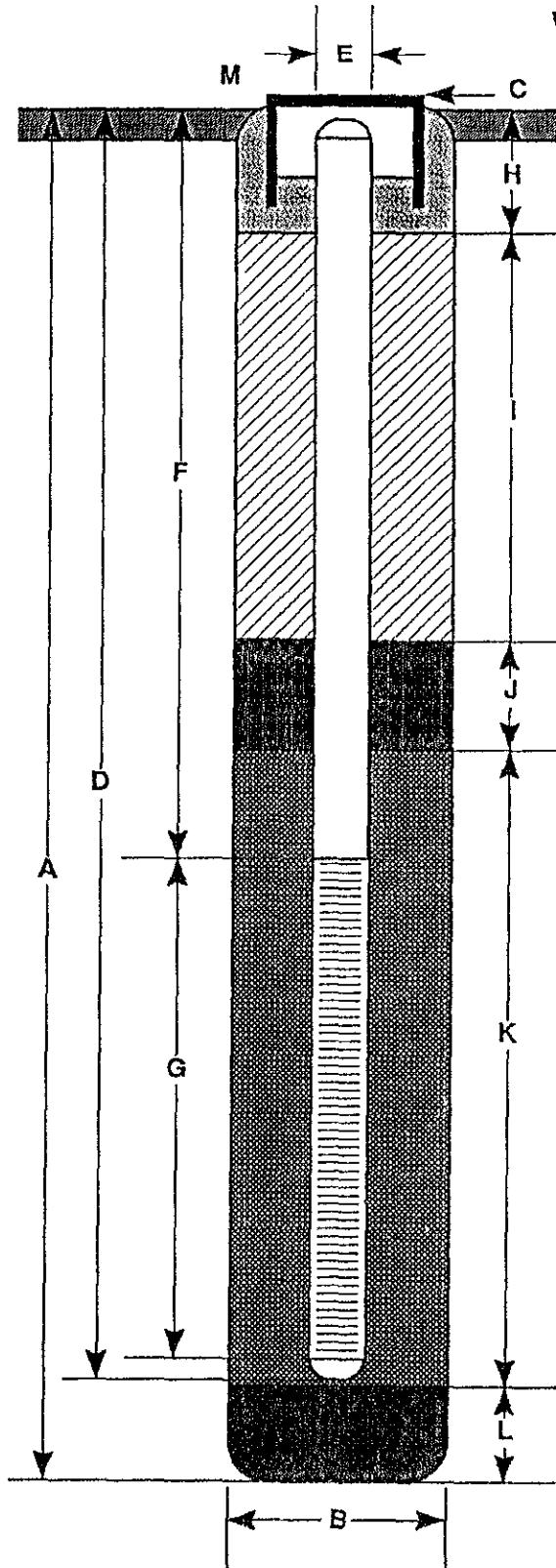
REVIEWED BY RG/CEG
CLWD/CEG/1242

DATE
9/90

REVISED DATE

REVISED DATE

WELL CONSTRUCTION DETAIL



- A Total Depth of Boring 30 ft.
- B Diameter of Boring 12 in.
Drilling Method Hollow Stem Auger
- C Top of Box Elevation _____ ft.
 Referenced to Mean Sea Level
 Referenced to Project Datum
- D Casing Length 30 ft.
Material Schedule 40 PVC
- E Casing Diameter 6 in.
- F Depth to Top Perforations 10 ft.
- G Perforated Length 20 ft.
Perforated Interval from 10 to 30 ft.
Perforation Type Continuous Wrap
Perforation Size 0.020 in.
- H Surface Seal from 0.0 to 1.5 ft.
Seal Material Cement Grout
- I Backfill from 1.5 to 6 ft.
Backfill Material Concrete Grout
- J Seal from 6 to 8 ft.
Seal Material Bentonite Pellets
- K Gravel Pack from 8 to 30 ft.
Pack Material Lonestar #2/12 sand
- L Bottom Seal _____ ft.
Seal Material _____
- M Traffic-rated vault box with locking well cap and lock

Note: Depths measured from initial ground surface.



GeoStrategies Inc.

JOB NUMBER
7191

REVIEWED BY PG/CEG
Clipper/202

Recovery Well Detail
Chevron Service Station
609 Oak Street
Oakland, California

BORING NO.

CR-1

DATE
11/90

REVISED DATE

REVISED DATE

Field location of boring: (See Plate 2)							Project No.: 719102	Date: 02/01/91	Boring No:
							Client: Chevron Service Station No. 4587		C-7
							Location: 609 Oak Street/6th Street		
							City: Oakland, California	Sheet 1 of 2	
							Logged by: RCM	Driller: Bayland	
Casing installation data:									
Drilling method: Hollow Stem Auger							Top of Box Elevation: 15.78	Datum: MSL	
Hole diameter: 8-inches							Water Level 13.5'	9.9'	
PID (ppm)	Blows/ft. or Pressure (psi)	Type of Sample	Sample Number	Depth (ft)	Sample	Well Detail	Soil Group Symbol (USCS)		
				1					
				2					
				3					
250	S&H			4					
500		C-7-4.5		5					
0	500	push		6					
				7					
				8					
				9					
0	33	S&H	C-7-10.0	10					
				11					
				12					
				13					
				14					
0	26	S&H	C-7-15.0	15					
				16					
				17					
				18					
				19					
0	4	S&H	C-7-20.0	20					
Remarks:									
* Converted to equivalent standard penetration blows/ft.									

Log of Boring

BORING NO.

C-7



GeoStrategies Inc.

JOB NUMBER
719102

REVIEWED BY RG/CEG
DHP

DATE
1/91

REVISED DATE

REVISED DATE

Field location of boring:

(See Plate 2)

Project No.:	719102	Date:	02/01/91	Boring No:
Client:	Chevron Service Station No. 4587			C-7
Location:	609 Oak Street/6th Street			
City:	Oakland, California			
Logged by:	RCM	Driller:	Bayland	Sheet 2 of 2

Casing installation data:

Drilling method: Hollow Stem Auger

Hole diameter: 8-inches

PID (ppm)	Blowst. or Pressure (ps)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Top of Box Elevation:		Datum:
								Water Level		
								Time		
								Description		
				21						
				22						
				23						
				24				dense, Fe oxide stains at 25.0 ft.		
1.5	33	S&H	C-7-25.0	25						
				26						
				27						
				28						
				29				SAND (SP) - olive brown (2.5Y 4/4), dense, saturated; 100% medium sand.		
0	38	S&H	C-7-30.0	30						
				31				Bottom of Boring at 30.0 ft. 02/01/91		
				32						
				33						
				34						
				35						
				36						
				37						
				38						
				39						
				40						

Remarks:



GeoStrategies Inc.

Log of Boring

BORING NO.

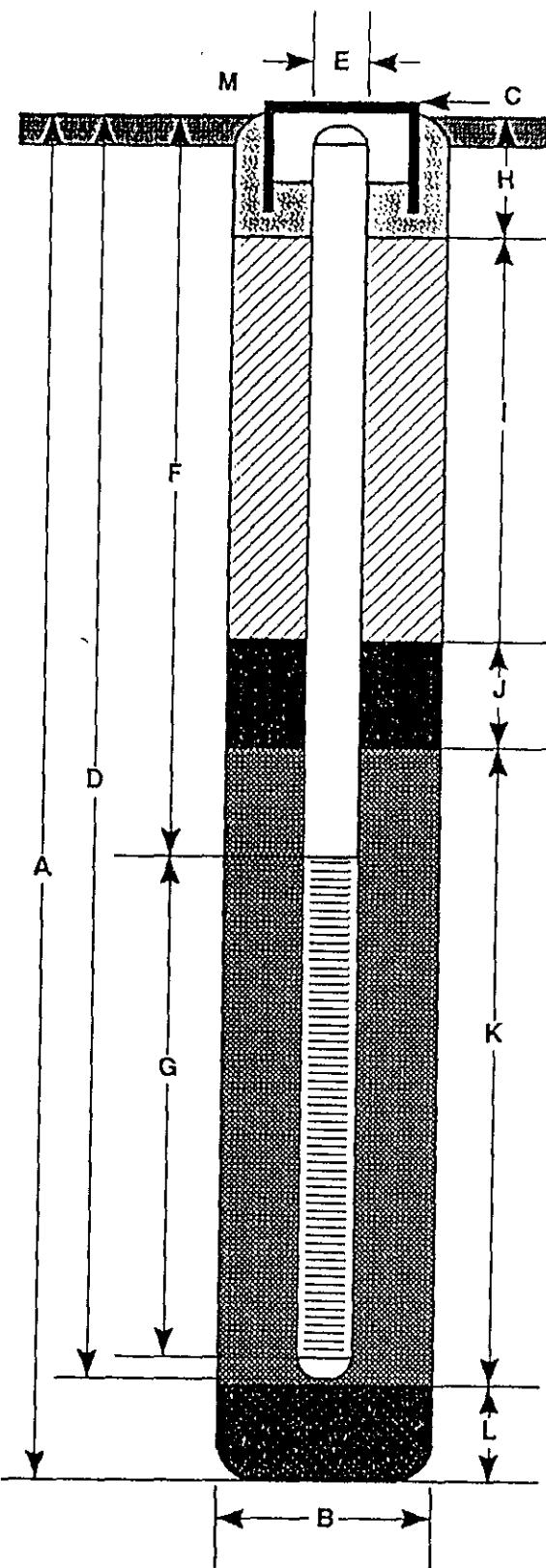
C-7

JOB NUMBER
19102REVIEWED BY PG/CEG
DHPDATE
1/91

REVISED DATE

REVISED DATE

WELL CONSTRUCTION DETAIL



- A Total Depth of Boring 30 ft.
- B Diameter of Boring 8 in.
Drilling Method Hollow Stem Auger
- C Top of Box Elevation 15.78 ft.
 Referenced to Mean Sea Level
 Referenced to Project Datum
- D Casing Length 30 ft.
Material Schedule 40 PVC
- E Casing Diameter 2 in.
- F Depth to Top Perforations 7 ft.
- G Perforated Length 23 ft.
Perforated Interval from 7 to 30 ft.
Perforation Type Factory Slotted
Perforation Size 0.020 in.
- H Surface Seal from 0 to 1.5 ft.
Seal Material Concrete
- I Backfill from 1.5 to 4 ft.
Backfill Material Concrete
- J Seal from 4 to 5 ft.
Seal Material Bentonite Pellets
- K Gravel Pack from 5 to 30 ft.
Pack Material Lonestar #2/12 sand
- L Bottom Seal _____
Seal Material _____
- M Vault box with locking cap, lock and cover

Note: Depths measured from initial ground surface.



GeoStrategies Inc.

Well Construction Detail

WELL NO.

C-7

JOB NUMBER
719102

REVIEWED BY PG/CEG
DHP

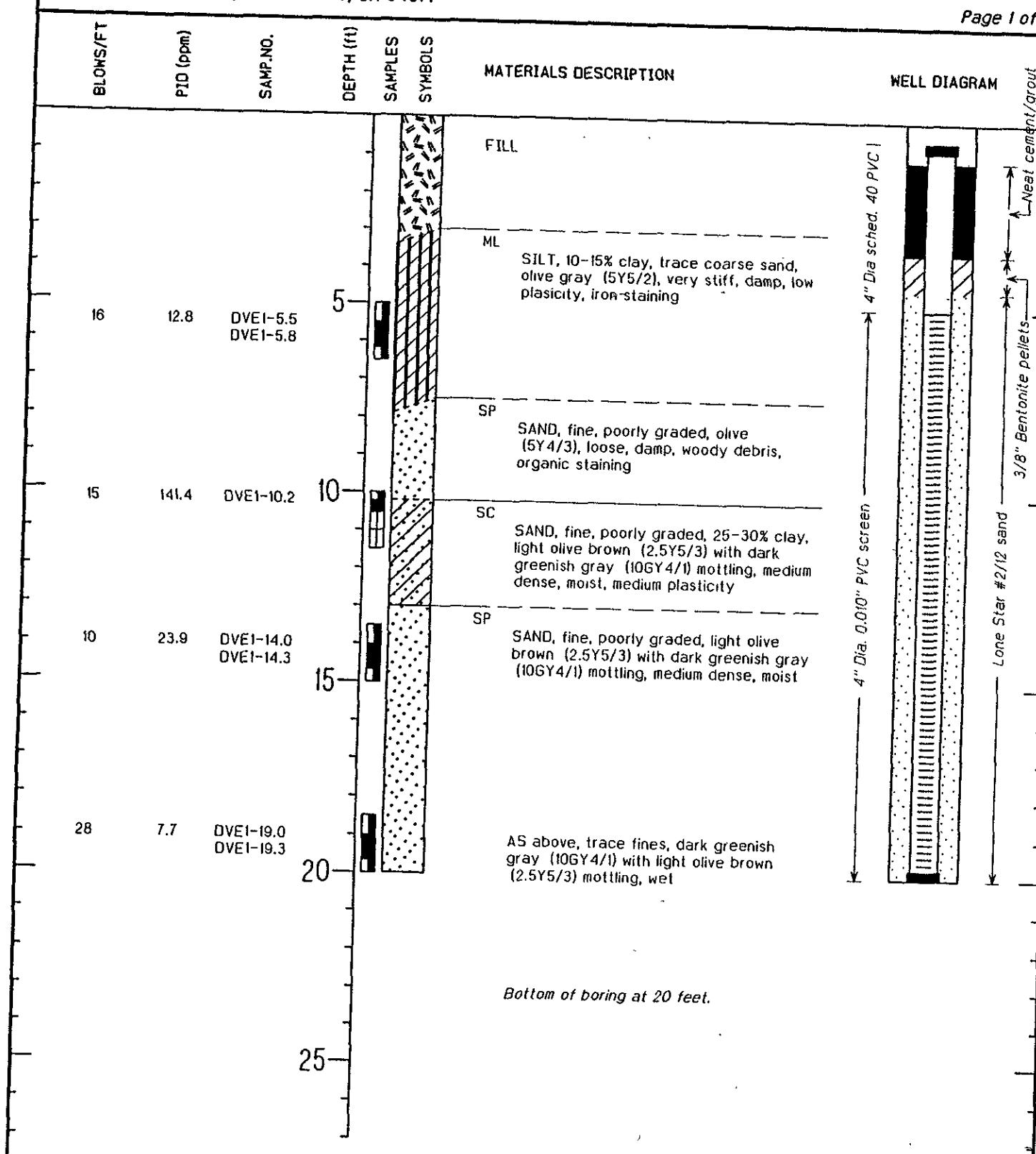
DATE
1/91

REVISED DATE
REVISED DATE

TERRA VAC CORPORATION
14798 Wicks Boulevard, San Leandro, CA 94577

LOG OF DVE-

Page 1 of



PROJECT Chevron SS #9-4587

LOCATION 609 Oak Street, Oakland

JOB NUMBER 30-0219

GEOLOGIST Cliff M. Garratt

BORING DIAMETER 10 in. dia Hollow Stem Auger

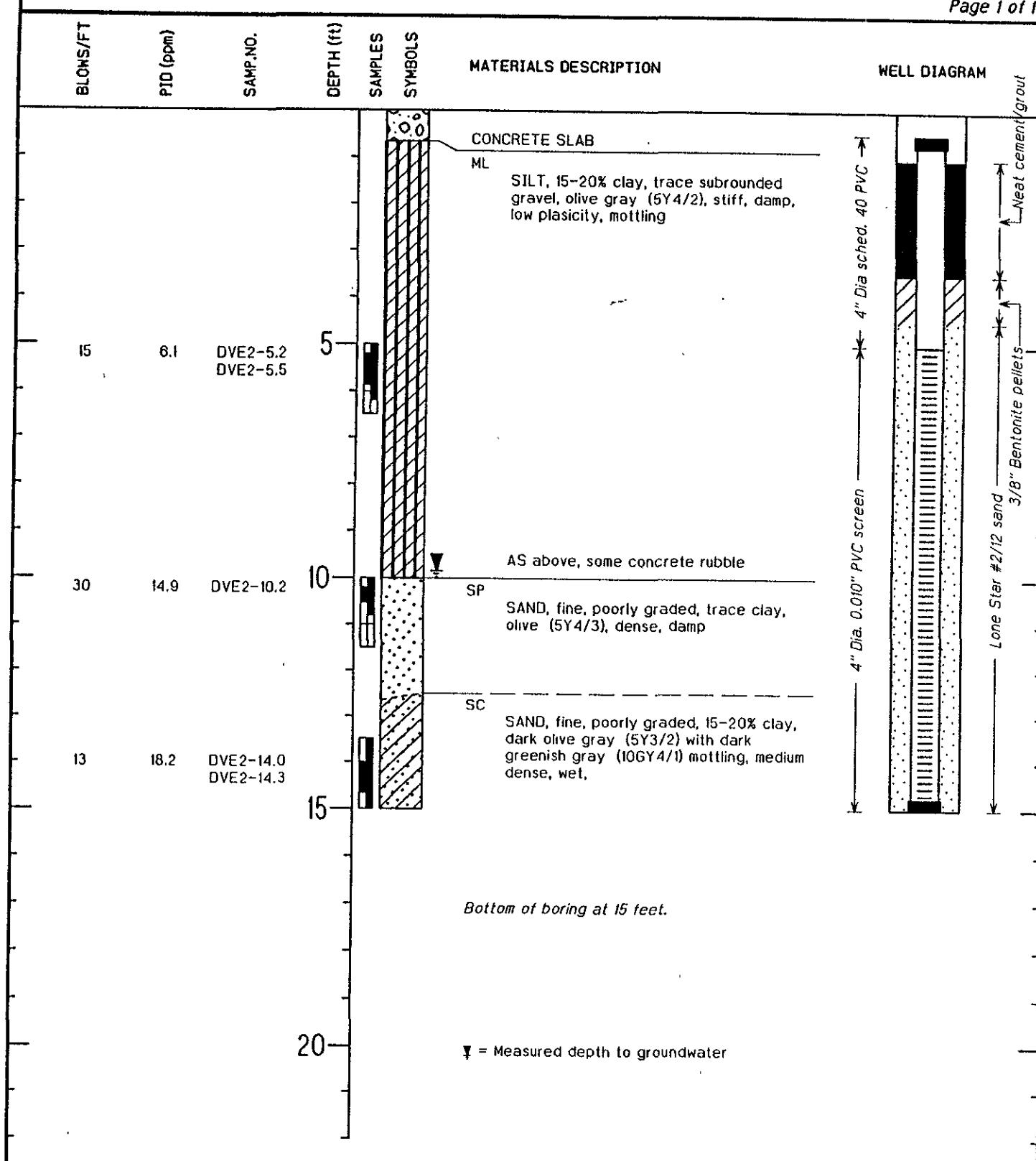
DRILLING COMPANY Spectrum Exploration

DATE DRILLED 7/12/95

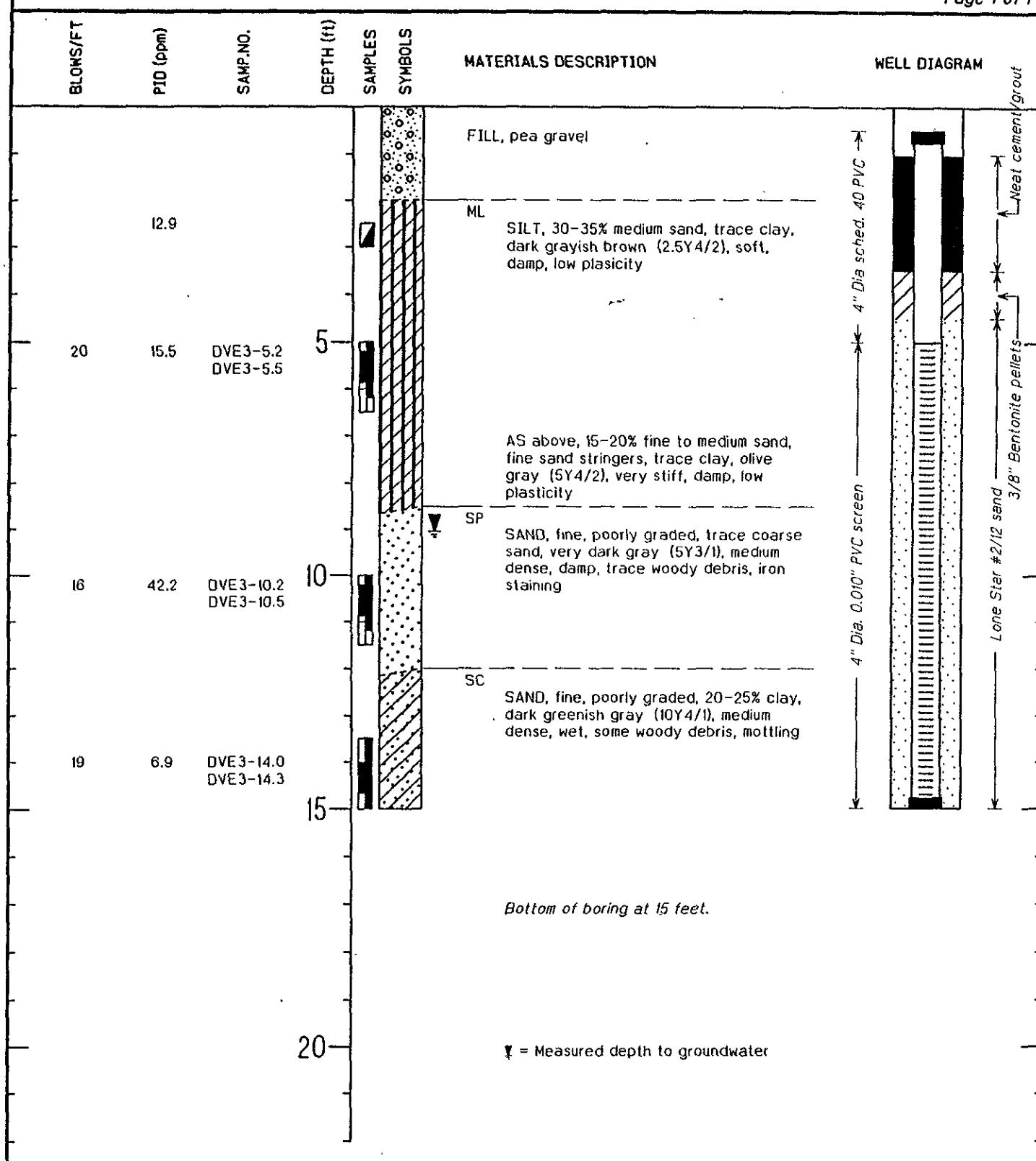
SURFACE ELEVATION Not surveyed

TOTAL DEPTH OF HOLE 20 Feet

FIRST OBSERVED GW



PROJECT	Chevron SS #9-4587	DRILLING COMPANY	Spectrum Exploration
LOCATION	609 Oak Street, Oakland	DATE DRILLED	7/11/95
JOB NUMBER	30-0219	SURFACE ELEVATION	Not surveyed
GEOLOGIST	Cliff M. Garratt	TOTAL DEPTH OF HOLE	15 Feet
BORING DIAMETER	10 in. dia Hollow Stem Auger	FIRST OBSERVED GW	

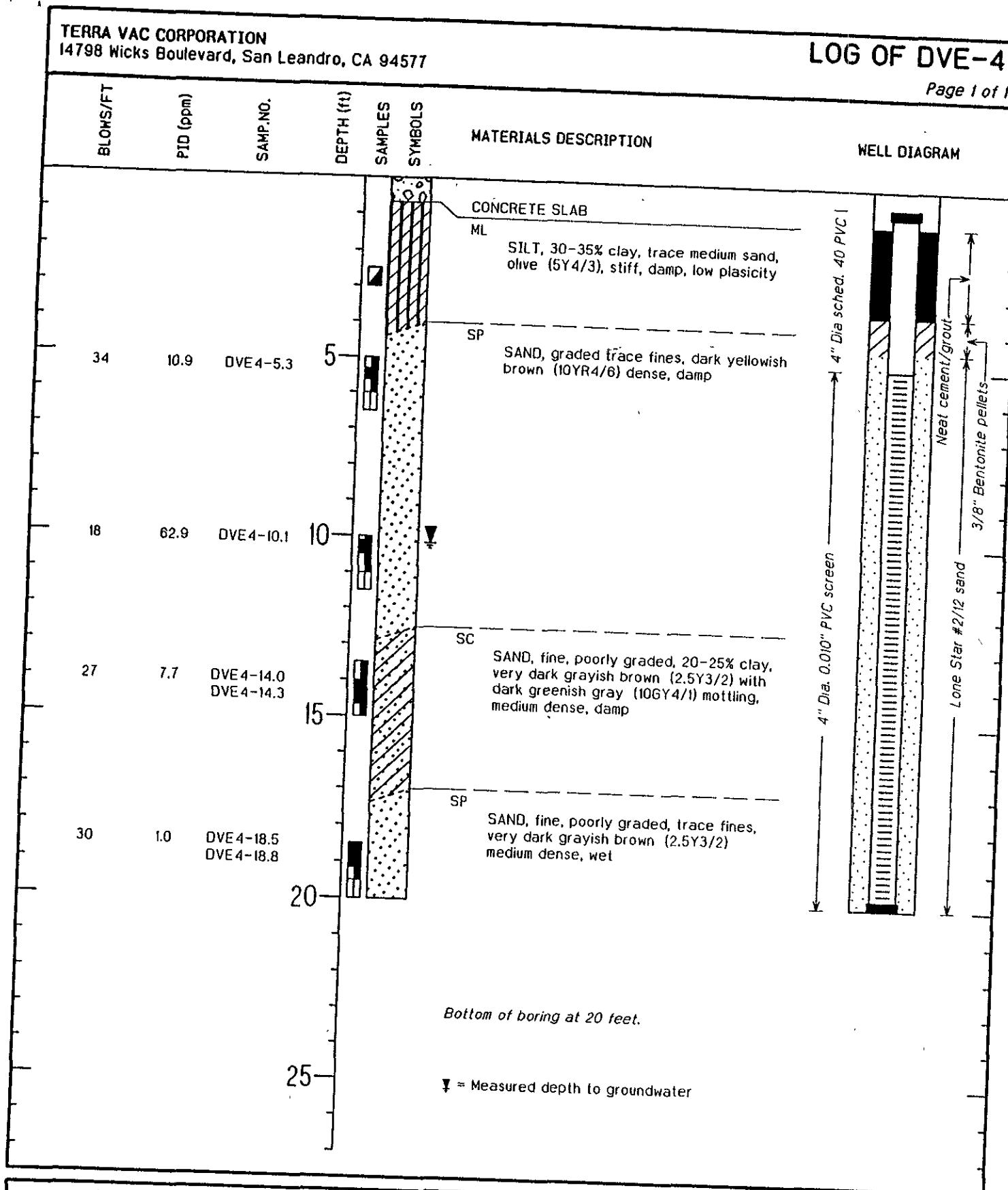


PROJECT	Chevron SS #9-4587	DRILLING COMPANY	Spectrum Exploration
LOCATION	609 Oak Street, Oakland	DATE DRILLED	7/10/95
JOB NUMBER	30-0219	SURFACE ELEVATION	Not surveyed
GEOLOGIST	Cliff M. Garratt	TOTAL DEPTH OF HOLE	15 Feet
BORING DIAMETER	10 in. dia Hollow Stem Auger	FIRST OBSERVED GW	

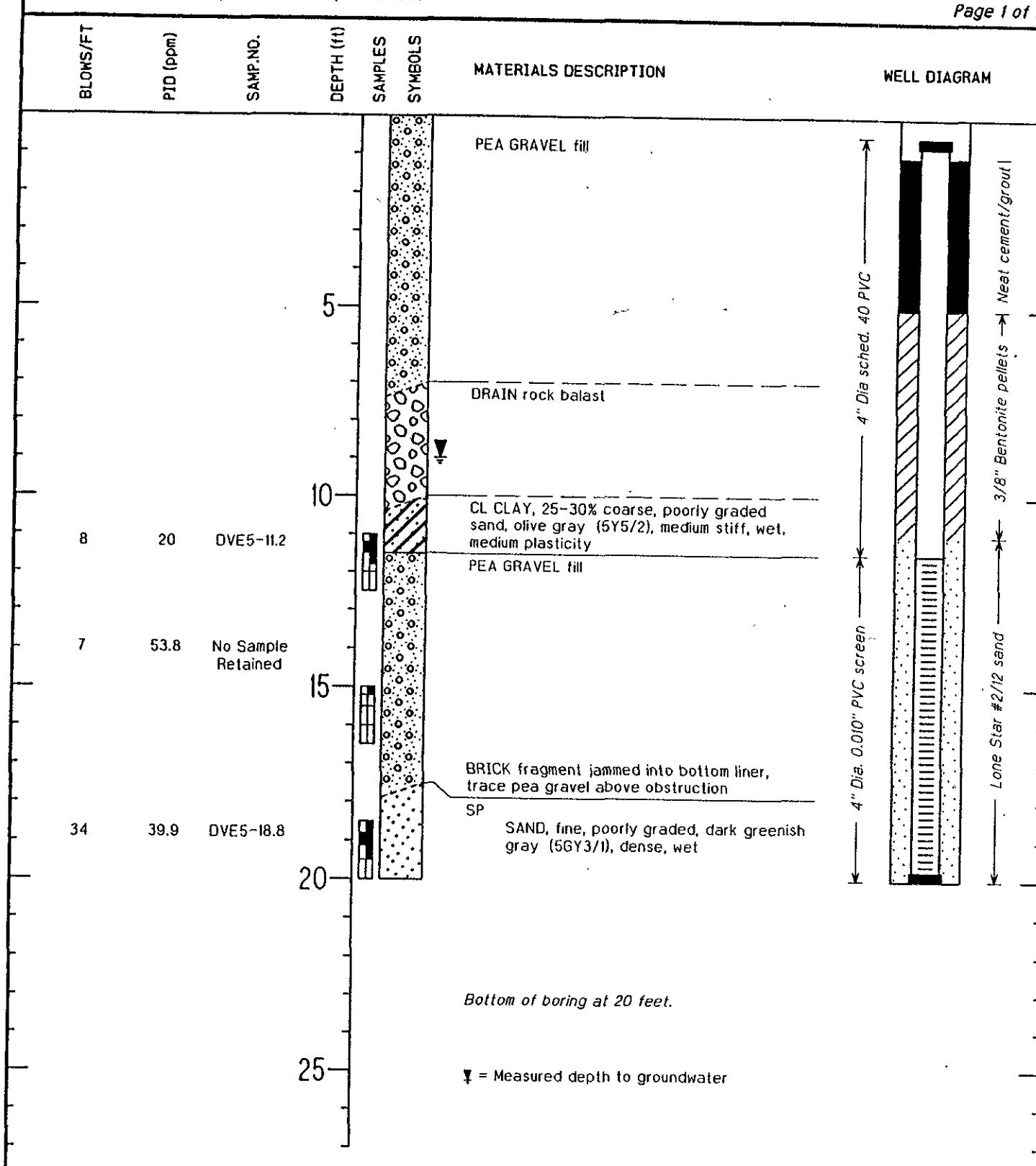
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LOG OF DVE-4

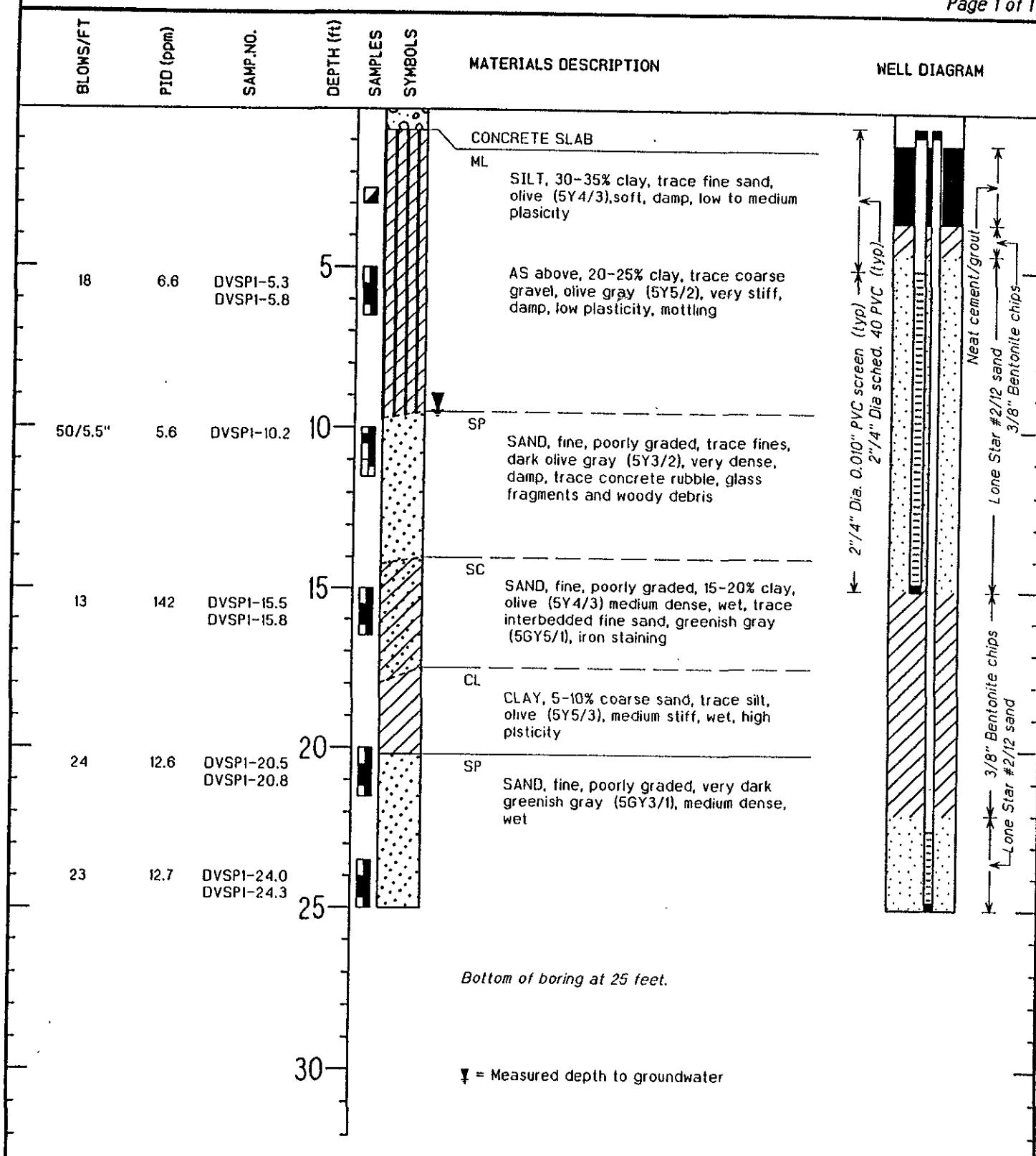
Page 1 of 1



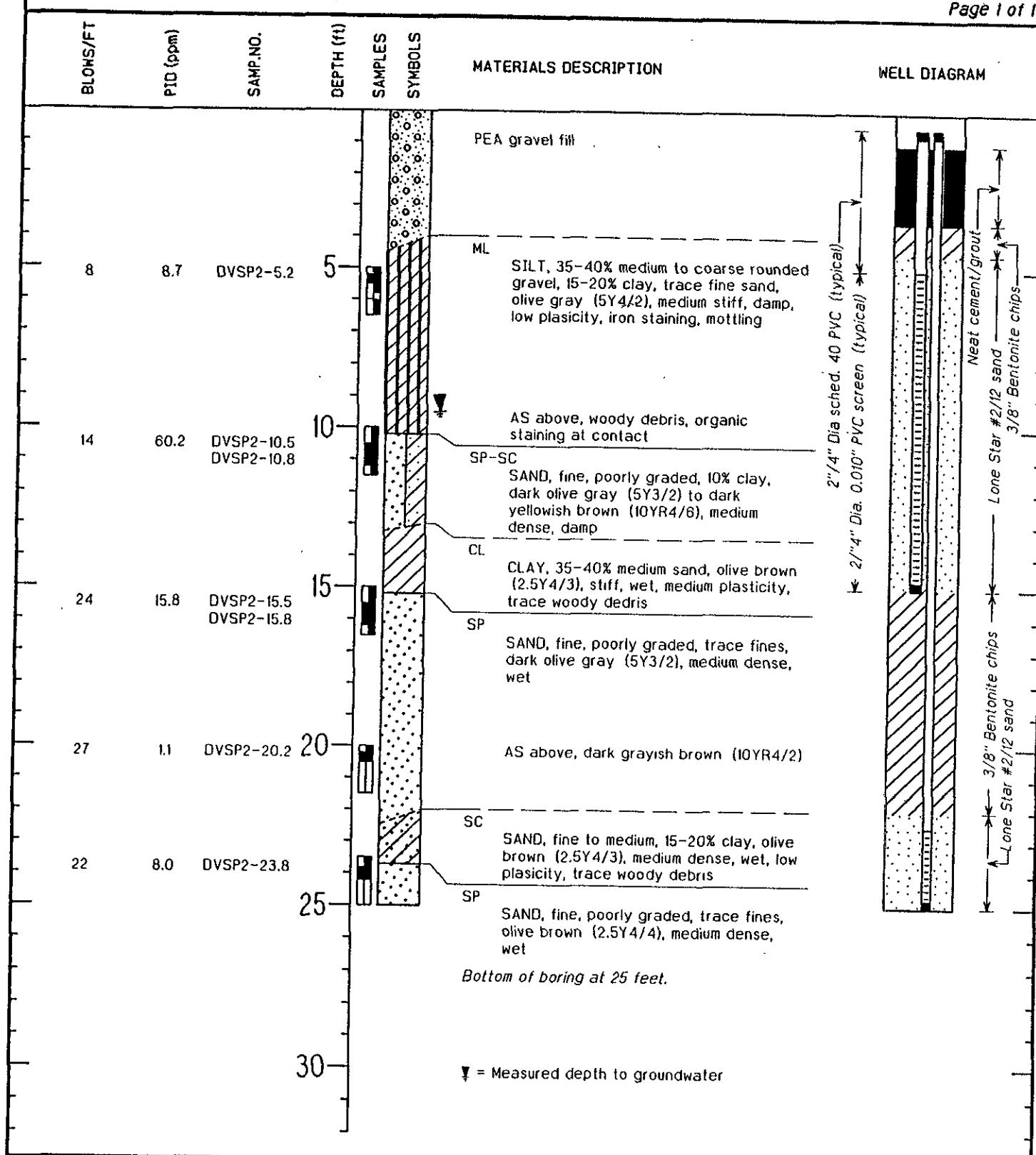
PROJECT	Chevron SS #9-4587	DRILLING COMPANY	Spectrum Exploration
LOCATION	609 Oak Street, Oakland	DATE DRILLED	7/11/95
JOB NUMBER	30-0219	SURFACE ELEVATION	Not surveyed
GEOLOGIST	Cliff M. Garrett	TOTAL DEPTH OF HOLE	20 Feet
BORING DIAMETER	10 in. dia Hollow Stem Auger	FIRST OBSERVED GW	



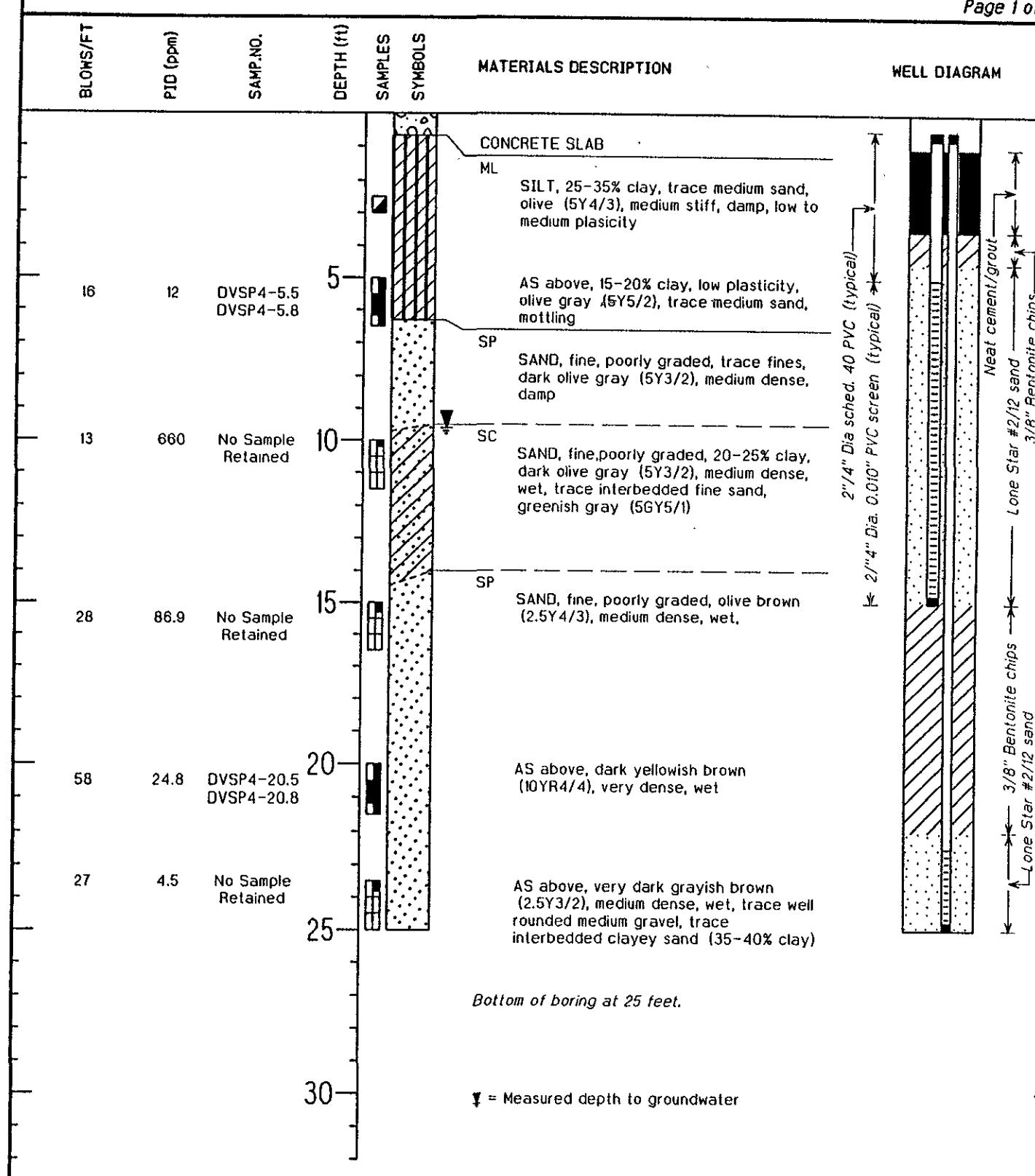
PROJECT	Chevron SS #9-4587	DRILLING COMPANY	Spectrum Exploration
LOCATION	609 Oak Street, Oakland	DATE DRILLED	7/11/95
JOB NUMBER	30-0219	SURFACE ELEVATION	Not surveyed
GEOLOGIST	Cliff M. Garratt	TOTAL DEPTH OF HOLE	20 Feet
BORING DIAMETER	10 in. dia Hollow Stem Auger	FIRST OBSERVED GW	



PROJECT	Chevron SS #9-4587	DRILLING COMPANY	Spectrum Exploration
LOCATION	609 Oak Street, Oakland	DATE DRILLED	7/11/95
JOB NUMBER	30-0219	SURFACE ELEVATION	Not surveyed
GEOLOGIST	Cliff M. Garratt	TOTAL DEPTH OF HOLE	25 Feet
BORING DIAMETER	12 in. dia Hollow Stem Auger	FIRST OBSERVED GW	



PROJECT	Chevron SS #9-4587	DRILLING COMPANY	Spectrum Exploration
LOCATION	609 Oak Street, Oakland	DATE DRILLED	7/11/95
JOB NUMBER	30-0219	SURFACE ELEVATION	Not surveyed
GEOLOGIST	Cliff M. Garratt	TOTAL DEPTH OF HOLE	25 Feet
BORING DIAMETER	12 in. dia Hollow Stem Auger	FIRST OBSERVED GW	



PROJECT Chevron SS #9-4587

LOCATION 609 Oak Street, Oakland

JOB NUMBER 30-0219

GEOLOGIST Cliff M. Garratt

BORING DIAMETER 12 in. dia Hollow Stem Auger

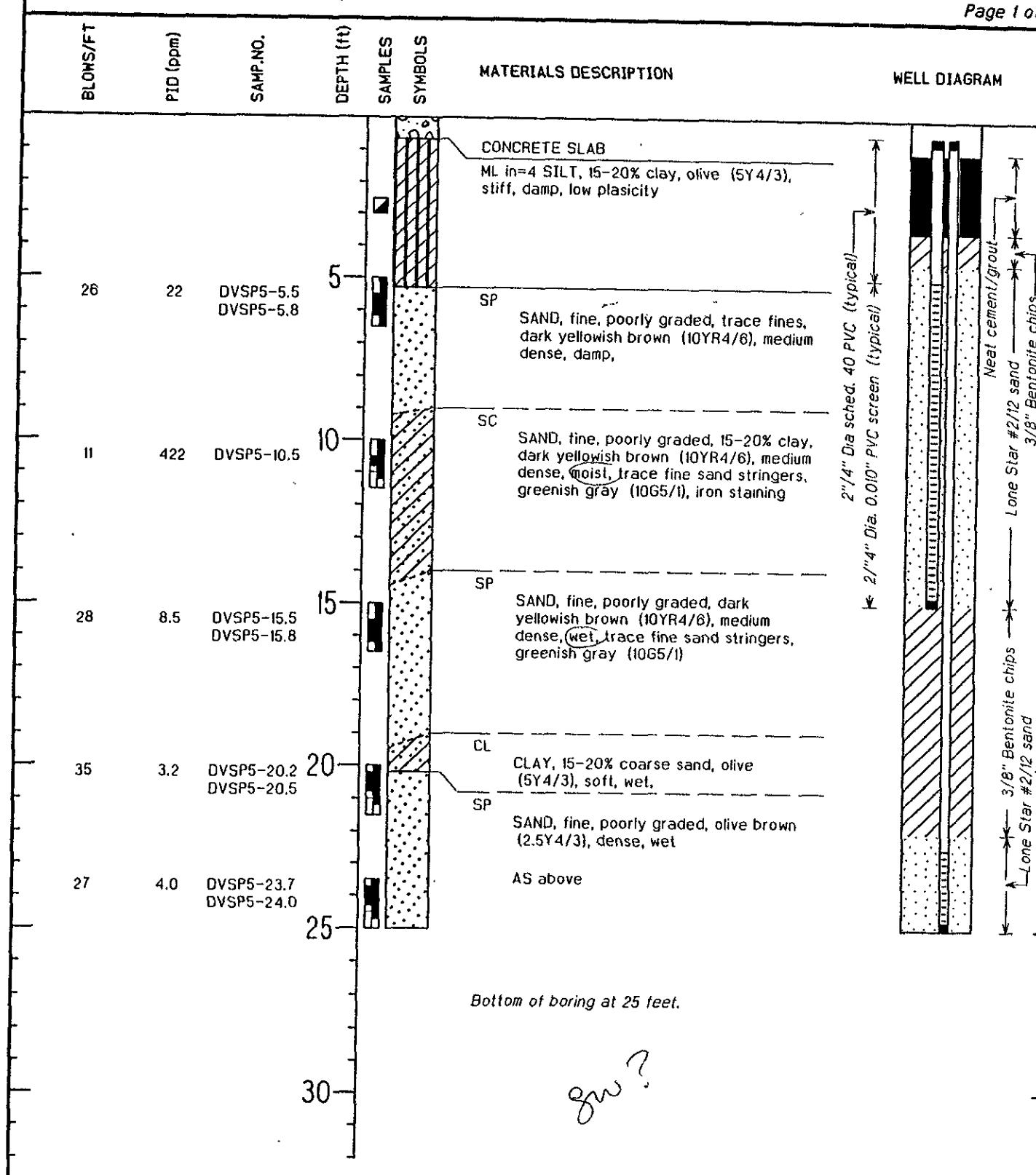
DRILLING COMPANY Spectrum Exploration

DATE DRILLED 7/10/95

SURFACE ELEVATION Not surveyed

TOTAL DEPTH OF HOLE 25 Feet

FIRST OBSERVED GW



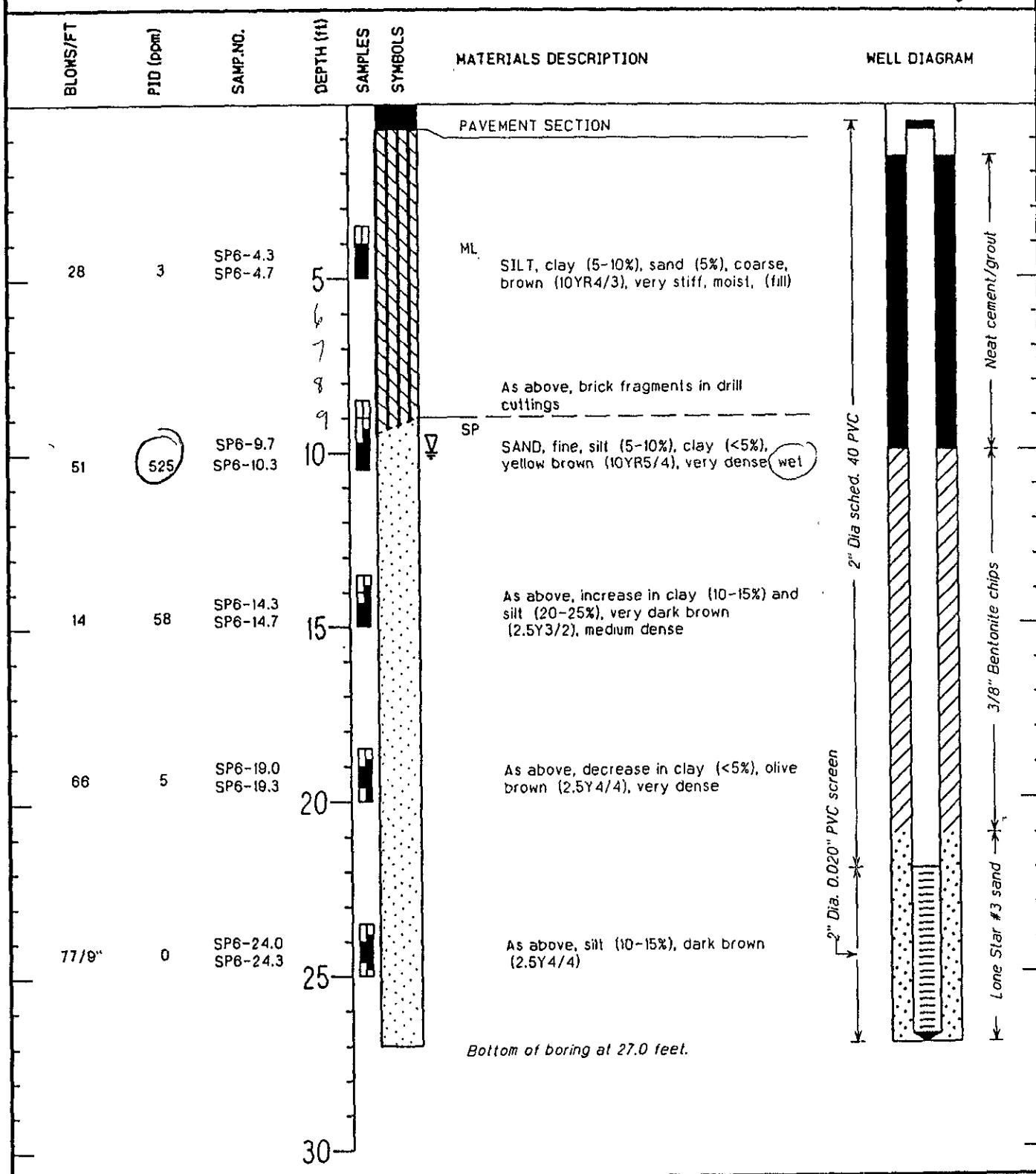
PROJECT Chevron SS #9-4587
 LOCATION 609 Oak Street, Oakland
 JOB NUMBER 30-0219
 GEOLOGIST Cliff M. Garratt
 BORING DIAMETER 12 in. dia Hollow Stem Auger

DRILLING COMPANY Spectrum Exploration
 DATE DRILLED 7/12/95
 SURFACE ELEVATION Not surveyed
 TOTAL DEPTH OF HOLE 25 Feet
 FIRST OBSERVED GW

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LOG OF AIR SPARGE WELL SP-6

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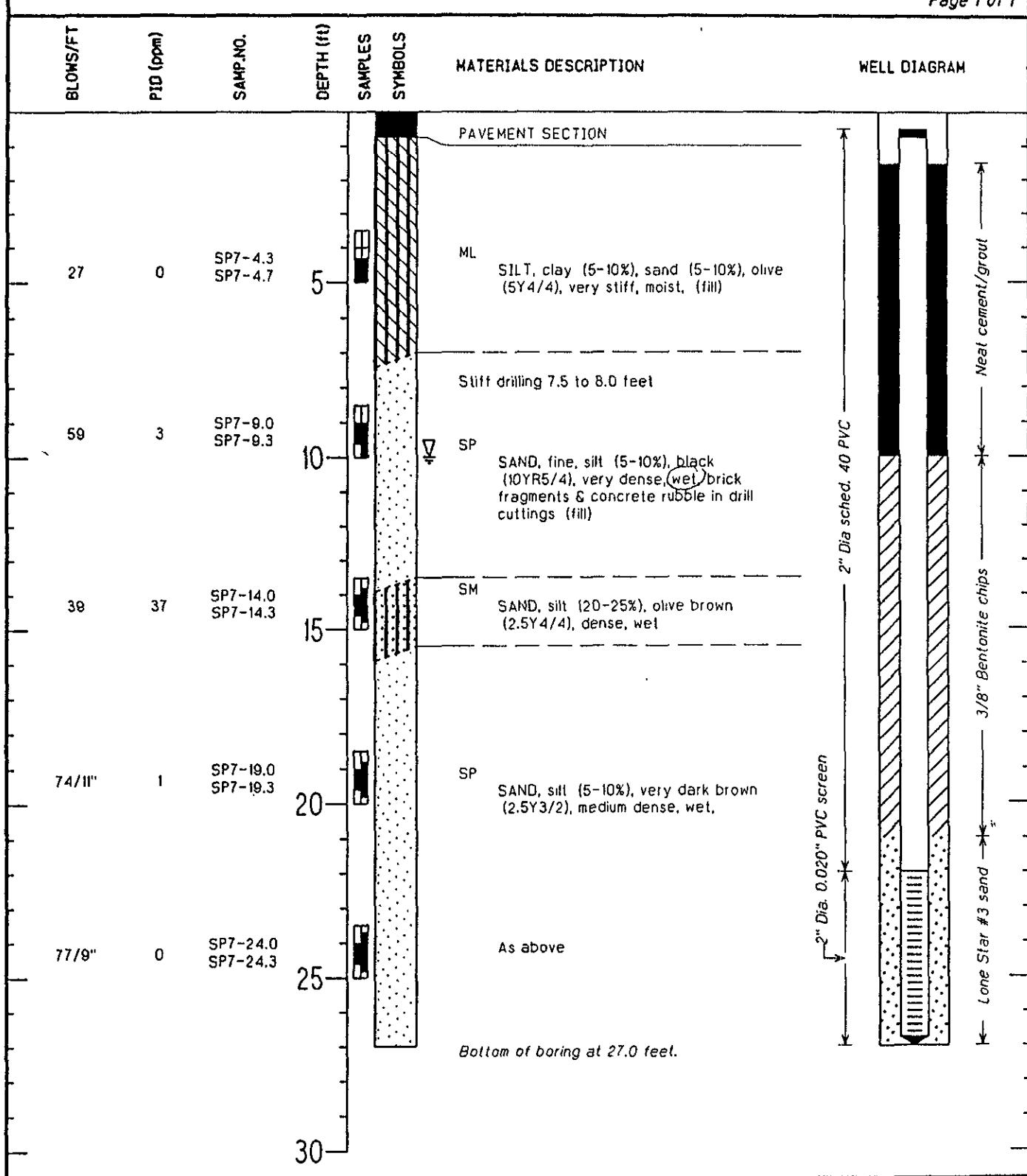


PROJECT	Chevron	DRILLING COMPANY	West Hazmat Drilling Co.
LOCATION	609 Oak Street, Oakland	DATE DRILLED	12/20/95
JOB NUMBER	30-0219	SURFACE ELEVATION	Not surveyed
GEOLOGIST	Karel L. Deltzman, R.G.	TOTAL DEPTH OF HOLE	27.0 Feet
BORING DIAMETER	8 in. dia	FIRST OBSERVED GW	10.0 Feet

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LOG OF AIR SPARGE WELL SP-7

Page 1 of 1



PROJECT	Chevron	DRILLING COMPANY	West Hazmat Drilling Co.
LOCATION	609 Oak Street, Oakland	DATE DRILLED	12/20/95
JOB NUMBER	30-0219	SURFACE ELEVATION	Not surveyed
GEOLOGIST	Karel L. Detterman, R.G.	TOTAL DEPTH OF HOLE	27.0 Feet
BORING DIAMETER	8 in. dia	FIRST OBSERVED GW	10.0 Feet