Chevron

April 14, 1998

Chevron Products Company
6001 Bollinger Canyon Road
Building L
San Ramon, CA 94583
P.O. Box 6004
San Ramon, CA 94583-0904

Marketing – Sales West
Phone 510 842-9500

Mr. Larry Seto
Alameda County Health Care Services
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

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

Dear Mr. Seto:

Enclosed is a copy of the Well Destructions, Permit 98WR064 report that was prepared by our consultant Terra Vac for the above noted site.

This report addresses the destruction of 12 Dual Vapor Extraction (DVE) and Sparging (SP) wells at this location. These wells were utilized in the successful remediation of hydrocarbons by the DVE/SP process.

The wells were over drilled so that the casing, seal and gravel pack were removed.

If you have any questions or comments, call me at (510) 842-9136.

Sincerely,
CHEVRON PRODUCTS COMPANY

Philip R. Briggs
Site Assessment and Remediation Project Manager

Enclosure

Cc. Ms. Bette Owen, Chevron

Ms. Anne Payne, Chevron, ChvPrk V-1156

Mr. Dewey Bargiacchi
The Paris Company
8520 Pardee
Oakland, CA 94621

Mr. James M. Kimberlin
1100 Howe Avenue Apt. #421
Sacramento, CA 95825-3436

Mr. William Kimberlin
51 Eureka Street
Kensington, CA 94707

Ms. Nissa Nack
Earth Systems Consultants
47853 Warm Springs Blvd.
Fremont, CA 94539-7400

Mr. Robert Dahl
Terra Vac
1651 Alvarado Street
San Leandro, CA 94577-2636 (Less report)

9.4587

TERRA VAC
1651 Alvarado Street, San Leandro, CA 94577-2636
Tel (510) 351-8900 ❑ Fax (510) 351-0221

April 9, 1998

Mr. Alvin Kan
Alameda County Public Works Agency
Water Resources Section
951 Turner Court, Suite 300
Hayward. CA 94545-2651

Re: Well Destructions, Permit 98WR064
609 Oak Street
Oakland, California

Dear Mr. Kan:

On February 10-12, 1998, Terra Vac directed Bay Area Exploration, Inc. (License No. 522125) in the destruction of 12 wells at the above location, as per the Alameda County Public Works protocol. All wells were overdrilled so that casing, seal and gravel pack were removed. The table below shows tagged depth versus original completed depth. The overdrilled wells were then tremmie grouted with neat cement to 1-2 feet below grade and then backfilled.

Well	Tagged Depth	Constructed Depth
DVE-1	20	20
DVE-2	19.7	15
DVE-3	15	15
DVE-4	19.6	20
DVE-5	20	20
DVSP-1	25	25
DVSP-2	25	25
DVSP-3	30	30
DVSP-4	25	25
DVSP-5	25	25
SP-6	27	27
SP-7	27	27

Figure 1 is a site plan showing the wells that were abandoned, as well as remaining wells. Also attached are copies of the original well construction logs.

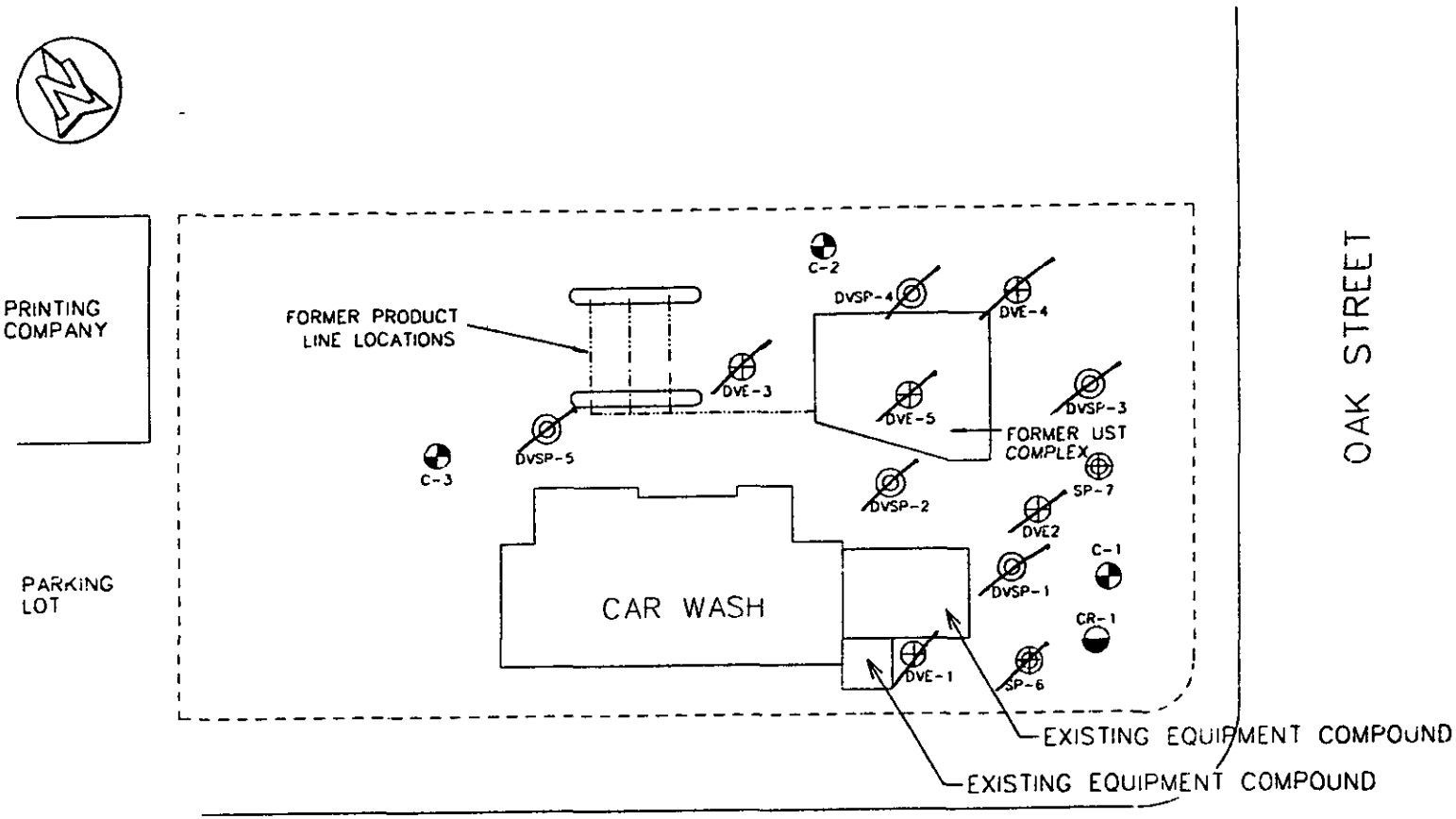
The small amount of sand pack and soils removed with overdrilling were placed on visqueen at the site. Samples from the pile were composited and analyzed for TPHg and BTEX. The laboratory report is included. Results were below detection limits and the soil was left onsite to be dispersed.

If you have any questions, comments, or need further information, please do not hesitate to contact me at (510) 351-8900.

Sincerely,
Terra Vac Corporation

Robert A. Dahl
Project Manager

cc: Phil Briggs, Chevron
30-0219.16



LEGEND

- = Groundwater Monitoring Well
- = Groundwater Recovery Well
- = Entrainment Extraction Well (Abandoned)
- = Dual Completed Well (Abandoned)
- = Sparge Well (Abandoned)

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

Project	30 0219	Drawn	RJT
Date	4/9/98	Revision	RAD
Scale	1" = 30'	Checked	

TERRA VAC
1651 Alvarado Street
San Leandro, CA 94577
(510) 351-8630 Fax 352

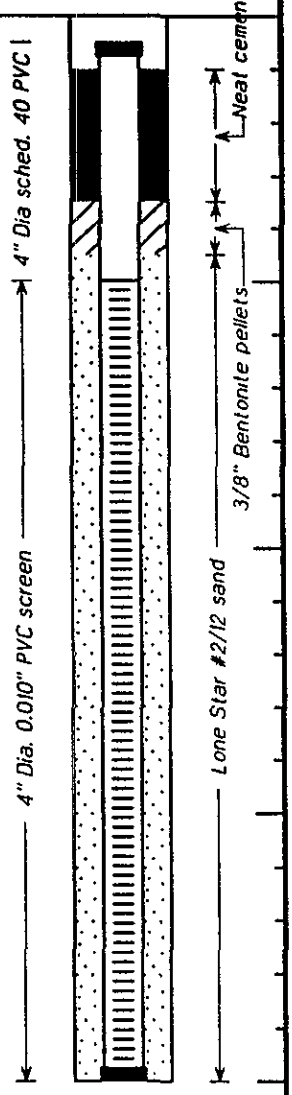
Figure 1

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

LOG OF DVE-1

BLOWS/FT	PID (ppm)	SAMP.NO.	DEPTH (ft)	SAMPLES	SYMBOLS	MATERIALS DESCRIPTION
						FILL
						ML — SILT, 10-15% clay, trace coarse sand, olive gray (5Y5/2), very stiff, damp, low plasicity, iron staining
16	12.8	DVE1-5.5 DVE1-5.8	5			
						SP — SAND, fine, poorly graded, olive (5Y4/3), loose, damp, woody debris, organic staining
15	141.4	DVE1-10.2	10			SC — SAND, fine, poorly graded, 25-30% clay, light olive brown (2.5Y5/3) with dark greenish gray (10GY4/1) mottling, medium dense, moist, medium plasticity
						SP — SAND, fine, poorly graded, light olive brown (2.5Y5/3) with dark greenish gray (10GY4/1) mottling, medium dense, moist
10	23.9	DVE1-14.0 DVE1-14.3	15			
28	7.7	DVE1-19.0 DVE1-19.3	20			AS above, trace fines, dark greenish gray (10GY4/1) with light olive brown (2.5Y5/3) mottling, wet
			25			*Bottom of boring at 20 feet.*

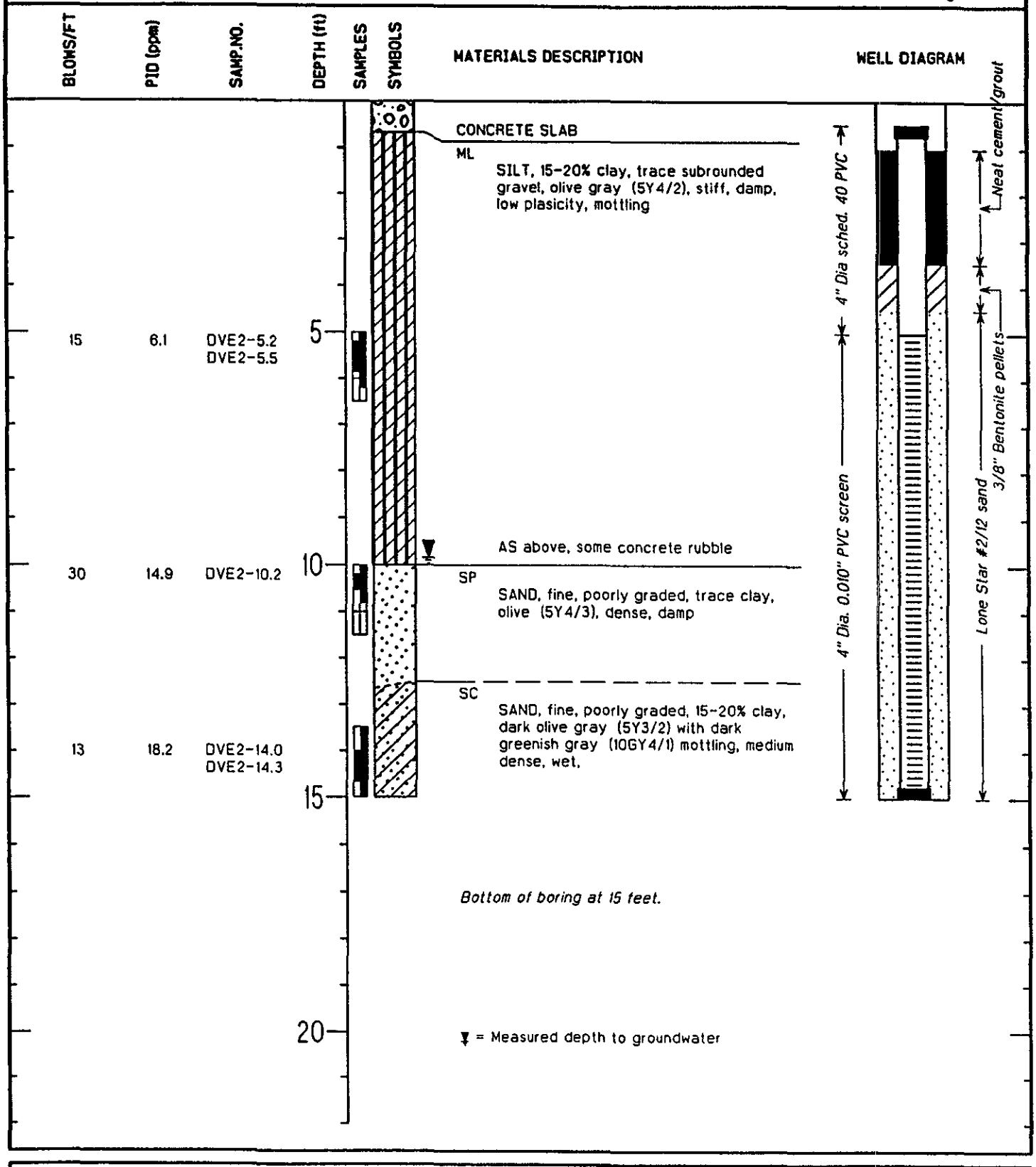
WELL DIAGRAM



PROJECT Chevron SS #9-4587	DRILLING COMPANY Spectrum Exploration
LOCATION 609 Oak Street, Oakland	DATE DRILLED 7/12/95
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

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

LOG OF DVE-2



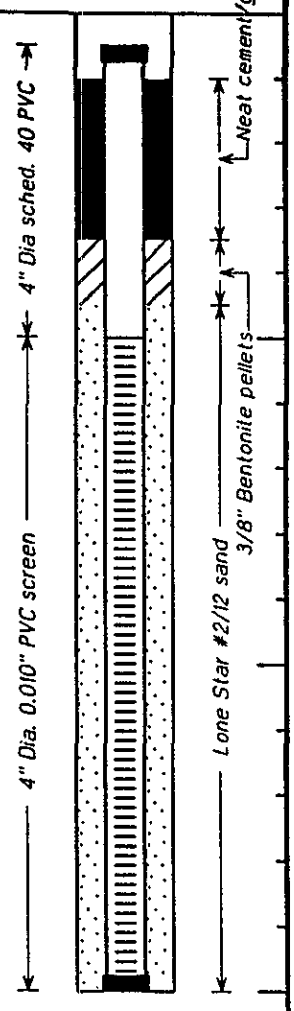
PROJECT Chevron SS #9-4587	DRILLING COMPANY Spectrum Exploration
LOCATION 609 Oak Street, Oakland	DATE DRILLED 7/11/95
JOB NUMBER 30-0219	SURFACE ELEVATION Not surveyed
GEOLOGIST Cliff M. Garratt	TOTAL DEPTH OF HOLE 15 Feet
BORING DIAMETER 10 in. dia Hollow Stem Auger	FIRST OBSERVED GW

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

LOG OF DVE-3

BLOWS/FT	PID (ppm)	SAMP.NO.	DEPTH (ft)	SAMPLES	SYMBOLS	MATERIALS DESCRIPTION
						FILL, pea gravel
	12.9					ML — SILT, 30-35% medium sand, trace clay, dark grayish brown (2.5Y4/2), soft, damp, low plasicity
20	15.5	DVE3-5.2 DVE3-5.5	5			AS above, 15-20% fine to medium sand, fine sand stringers, trace clay, olive gray (5Y4/2), very stiff, damp, low plasticity
						SP — SAND, fine, poorly graded, trace coarse sand, very dark gray (5Y3/1), medium dense, damp, trace woody debris, iron staining
16	42.2	DVE3-10.2 DVE3-10.5	10			
						SC — SAND, fine, poorly graded, 20-25% clay, dark greenish gray (10Y4/1), medium dense, wet, some woody debris, mottling
19	6.9	DVE3-14.0 DVE3-14.3	15			
						Bottom of boring at 15 feet.
			20			▼ = Measured depth to groundwater

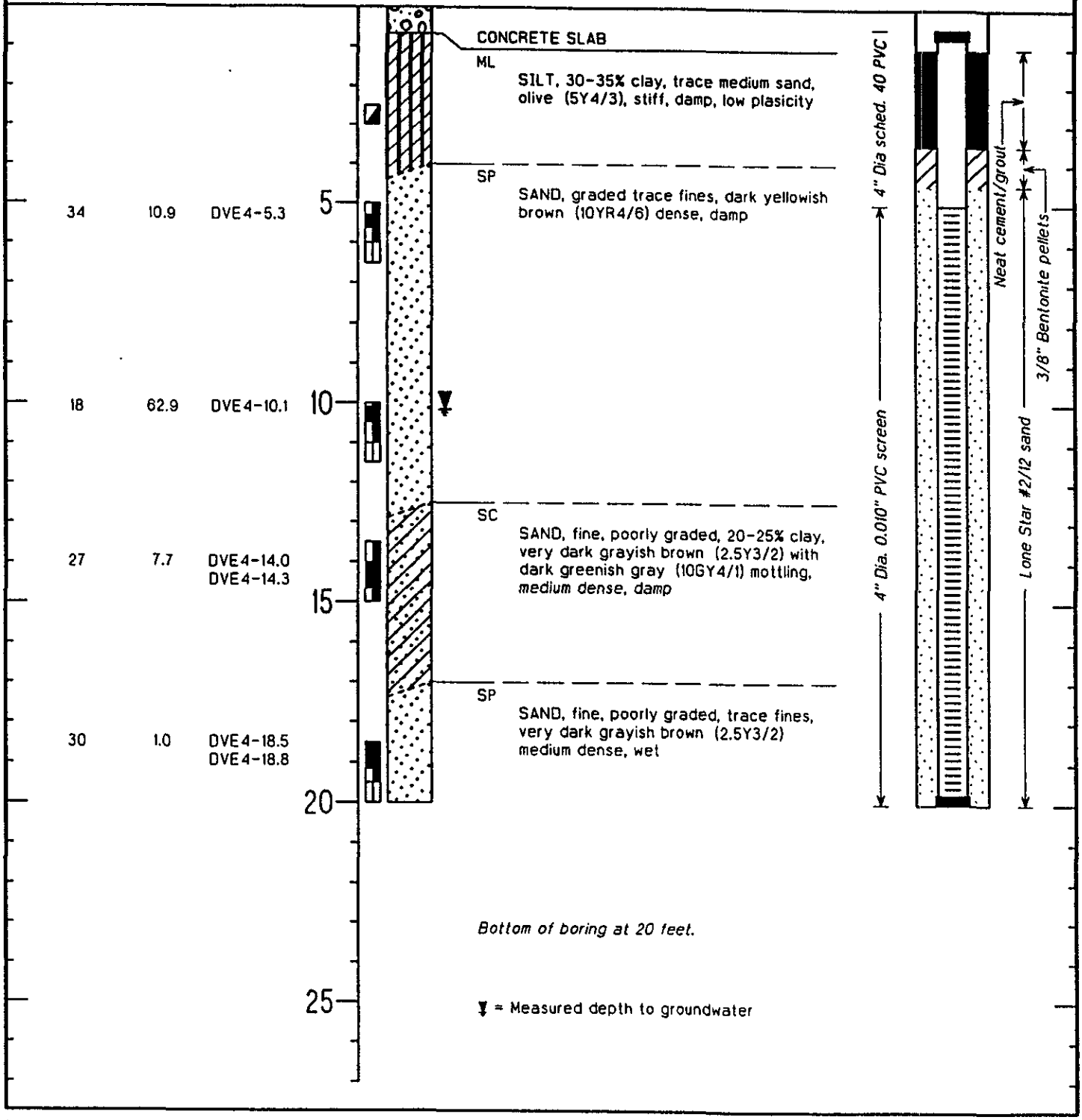
WELL DIAGRAM



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	

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

LOG OF DVE-4



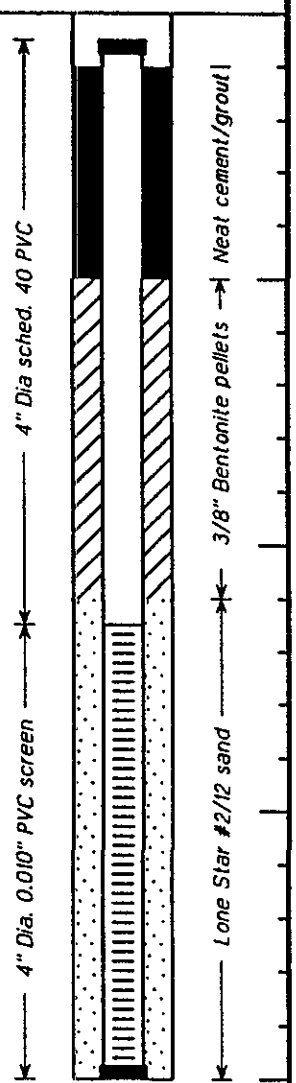
PROJECT Chevron SS #9-4587	DRILLING COMPANY Spectrum Exploration
LOCATION 609 Oak Street, Oakland	DATE DRILLED 7/11/95
JOB NUMBER 30-0219	SURFACE ELEVATION Not surveyed
GEOLOGIST Cliff M. Garratt	TOTAL DEPTH OF HOLE 20 Feet
BORING DIAMETER 10 in. dia Hollow Stem Auger	FIRST OBSERVED GW

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

LOG OF DVE-5

BLOWS/FT	PID (ppm)	SAMP.NO.	DEPTH (ft)	SAMPLES	SYMBOLS	MATERIALS DESCRIPTION
						PEA GRAVEL fill
			5			
						DRAIN rock balast
			10			CL CLAY, 25-30% coarse, poorly graded sand, olive gray (5Y5/2), medium stiff, wet, medium plasticity
8	20	DVE5-11.2				PEA GRAVEL fill
7	53.8	No Sample Retained	15			
						BRICK fragment jammed into bottom liner, trace pea gravel above obstruction
						SP
34	39.9	DVE5-18.8				SAND, fine, poorly graded, dark greenish gray (5GY3/1), dense, wet
			20			
						Bottom of boring at 20 feet.
			25			▼ = Measured depth to groundwater

WELL DIAGRAM



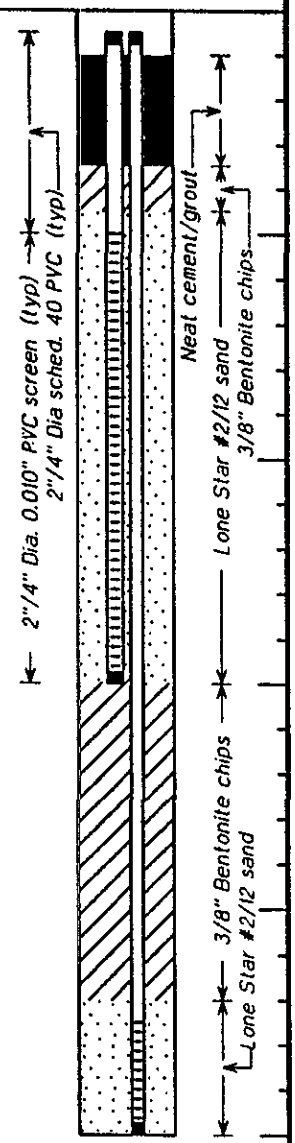
PROJECT Chevron SS #9-4587	DRILLING COMPANY Spectrum Exploration
LOCATION 609 Oak Street, Oakland	DATE DRILLED 7/11/95
JOB NUMBER 30-0219	SURFACE ELEVATION Not surveyed
GEOLOGIST Cliff M. Garratt	TOTAL DEPTH OF HOLE 20 Feet
BORING DIAMETER 10 in. dia Hollow Stem Auger	FIRST OBSERVED GW

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

LOG OF DVSP-1

BLOWS/FT	PID (ppm)	SAMP.NO.	DEPTH (ft)	SAMPLES	SYMBOLS	MATERIALS DESCRIPTION
						CONCRETE SLAB
					ML	SILT, 30-35% clay, trace fine sand, olive (5Y4/3),soft, damp, low to medium plasicity
18	6.6	DVSP1-5.3 DVSP1-5.8	5			AS above, 20-25% clay, trace coarse gravel, olive gray (5Y5/2), very stiff, damp, low plasticity, mottling
					SP	SAND, fine, poorly graded, trace fines, dark olive gray (5Y3/2), very dense, damp, trace concrete rubble, glass fragments and woody debris
50/5.5"	5.6	DVSP1-10.2	10			
					SC	SAND, fine, poorly graded, 15-20% clay, olive (5Y4/3) medium dense, wet, trace interbedded fine sand, greenish gray (5GY5/1), iron staining
13	142	DVSP1-15.5 DVSP1-15.8	15			
					CL	CLAY, 5-10% coarse sand, trace silt, olive (5Y5/3), medium stiff, wet, high plsticity
			20		SP	SAND, fine, poorly graded, very dark greenish gray (5GY3/1), medium dense, wet
24	12.6	DVSP1-20.5 DVSP1-20.8				
23	12.7	DVSP1-24.0 DVSP1-24.3	25			
						Bottom of boring at 25 feet.
			30			▼ = Measured depth to groundwater

WELL DIAGRAM



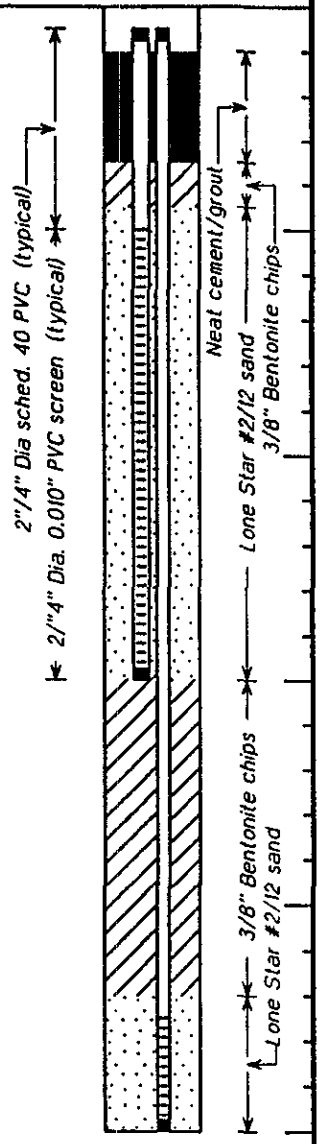
PROJECT Chevron SS #9-4587	DRILLING COMPANY Spectrum Exploration
LOCATION 609 Oak Street, Oakland	DATE DRILLED 7/11/95
JOB NUMBER 30-0219	SURFACE ELEVATION Not surveyed
GEOLOGIST Cliff M. Garratt	TOTAL DEPTH OF HOLE 25 Feet
BORING DIAMETER 12 in. dia Hollow Stem Auger	FIRST OBSERVED GW

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

LOG OF DVSP-2

BLOWS/FT	PID (ppm)	SAMP.NO.	DEPTH (ft)	SAMPLES	SYMBOLS	MATERIALS DESCRIPTION
						PEA gravel fill
8	8.7	DVSP2-5.2	5			ML SILT, 35-40% medium to coarse rounded gravel, 15-20% clay, trace fine sand, olive gray (5Y4/2), medium stiff, damp, low plasicity, iron staining, mottling
14	60.2	DVSP2-10.5 DVSP2-10.8	10			AS above, woody debris, organic staining at contact SP-SC SAND, fine, poorly graded, 10% clay, dark olive gray (5Y3/2) to dark yellowish brown (10YR4/6), medium dense, damp
24	15.8	DVSP2-15.5 DVSP2-15.8	15			CL CLAY, 35-40% medium sand, olive brown (2.5Y4/3), stiff, wet, medium plasticity, trace woody dedris SP SAND, fine, poorly graded, trace fines, dark olive gray (5Y3/2), medium dense, wet
27	1.1	DVSP2-20.2	20			AS above, dark grayish brown (10YR4/2)
22	8.0	DVSP2-23.8	25			SC SAND, fine to medium, 15-20% clay, olive brown (2.5Y4/3), medium dense, wet, low plasicity, trace woody debris SP SAND, fine, poorly graded, trace fines, olive brown (2.5Y4/4), medium dense, wet *Bottom of boring at 25 feet.*
			30			▼ = Measured depth to groundwater

WELL DIAGRAM



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

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

LOG OF DVSP-3

BLOWS/FT	PID (ppm)	SAMP.NO.	DEPTH (ft)	SAMPLES	SYMBOLS	MATERIALS DESCRIPTION
						CONCRETE SLAB
					ML	SILT, 35-40% clay, trace medium sand, olive (5Y4/3), medium stiff, damp, low plasicity,
12	99	DVSP3-5.5 DVSP3-5.2	5			AS above, 20-25% clay, low pasticity, stiff damp, dark grayish brown, (2.5Y4/2), trace interbedded medium to coarse sand, mottling
10	395	No Sample Retained	10		SP	SAND, fine, poorly graded, trace fines, very dark olive gray (5Y3/1) medium dense, wet
22	20	DVSP3-15.5 DVSP3-15.8	15			AS above, trace clay, olive brown (2.5Y4/3)
					CL	CLAY, 15-20% silt, trace coarse gravel, olive (5Y4/2) stiff, wet, medium plasticity, organic material at top of sample
47	115	DVSP3-20.5 DVSP3-20.8	20		SP	SAND, fine, poorly graded, trace fines, olive gray (5Y4/2) to olive (5Y4/3), medium dense, wet,
42	30	DVSP3-23.8 DVSP3-24.2	25			AS above, trace clay
		No Sample Collected	30			
			35			

Bottom of boring at 30 feet.

▼ = Measured depth to groundwater

WELL DIAGRAM

2"/4" Dia sched. 40 PVC (typical)
2"/4" Dia. 0.010" PVC screen (typical)
Neat cement/grout
3/8" Bentonite chips
Lone Star #2/12 sand
3/8" Bentonite chips
Lone Star #2/12 sand

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

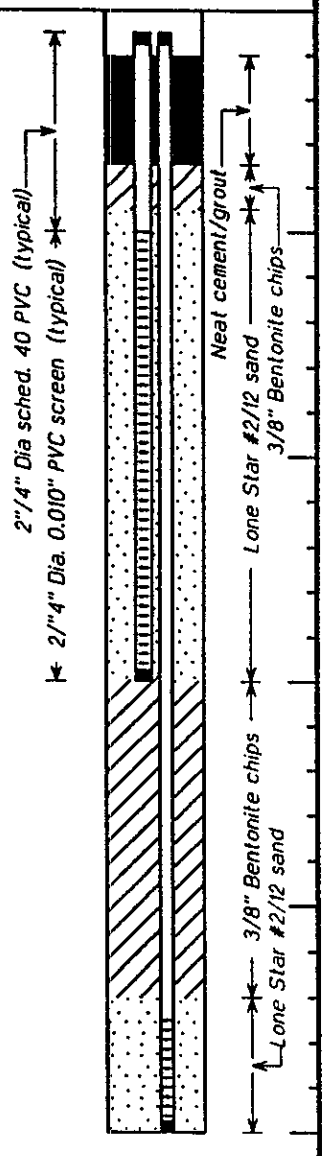
DRILLING COMPANY Spectrum Exploration
DATE DRILLED 7/10/95
SURFACE ELEVATION Not surveyed
TOTAL DEPTH OF HOLE 30 Feet
FIRST OBSERVED GW

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

LOG OF DVSP-4

BLOWS/FT	PID (ppm)	SAMP.NO.	DEPTH (ft)	SAMPLES	SYMBOLS	MATERIALS DESCRIPTION
						CONCRETE SLAB
					ML	SILT, 25-35% clay, trace medium sand, olive (5Y4/3), medium stiff, damp, low to medium plasicity
16	12	DVSP4-5.5 DVSP4-5.8	5			AS above, 15-20% clay, low plasticity, olive gray (5Y5/2), trace medium sand, mottling
					SP	SAND, fine, poorly graded, trace fines, dark olive gray (5Y3/2), medium dense, damp
13	660	No Sample Retained	10		SC	SAND, fine,poorly graded, 20-25% clay, dark olive gray (5Y3/2), medium dense, wet, trace interbedded fine sand, greenish gray (5GY5/1)
					SP	SAND, fine, poorly graded, olive brown (2.5Y4/3), medium dense, wet,
28	86.9	No Sample Retained	15			
58	24.8	DVSP4-20.5 DVSP4-20.8	20			AS above, dark yellowish brown (10YR4/4), very dense, wet
27	4.5	No Sample Retained	25			AS above, very dark grayish brown (2.5Y3/2), medium dense, wet, trace well rounded medium gravel, trace interbedded clayey sand (35-40% clay)
			30			*Bottom of boring at 25 feet.*

WELL DIAGRAM



▼ = Measured depth to groundwater

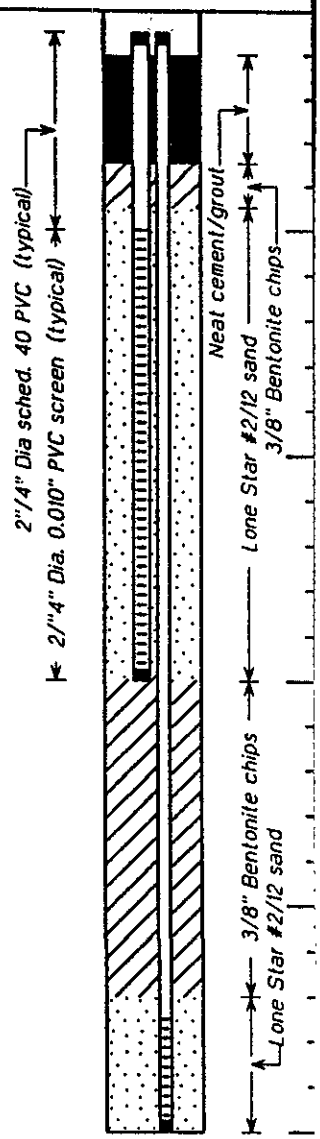
PROJECT Chevron SS #9-4587	DRILLING COMPANY Spectrum Exploration
LOCATION 609 Oak Street, Oakland	DATE DRILLED 7/10/95
JOB NUMBER 30-0219	SURFACE ELEVATION Not surveyed
GEOLOGIST Cliff M. Garratt	TOTAL DEPTH OF HOLE 25 Feet
BORING DIAMETER 12 in. dia Hollow Stem Auger	FIRST OBSERVED GW

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

LOG OF DVSP-5

BLOWS/FT	PID (ppm)	SAMP.NO.	DEPTH (ft)	SAMPLES	SYMBOLS	MATERIALS DESCRIPTION
						CONCRETE SLAB
						ML in=4 SILT, 15-20% clay, olive (5Y4/3), stiff, damp, low plasicity
26	22	DVSP5-5.5 DVSP5-5.8	5			SP SAND, fine, poorly graded, trace fines, dark yellowish brown (10YR4/6), medium dense, damp,
11	422	DVSP5-10.5	10			SC SAND, fine, poorly graded, 15-20% clay, dark yellowish brown (10YR4/6), medium dense, moist, trace fine sand stringers, greenish gray (10G5/1), iron staining
28	8.5	DVSP5-15.5 DVSP5-15.8	15			SP SAND, fine, poorly graded, dark yellowish brown (10YR4/6), medium dense, wet, trace fine sand stringers, greenish gray (10G5/1)
35	3.2	DVSP5-20.2 DVSP5-20.5	20			CL CLAY, 15-20% coarse sand, olive (5Y4/3), soft, wet, SP SAND, fine, poorly graded, olive brown (2.5Y4/3), dense, wet
27	4.0	DVSP5-23.7 DVSP5-24.0	25			AS above
			30			*Bottom of boring at 25 feet.*

WELL DIAGRAM



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

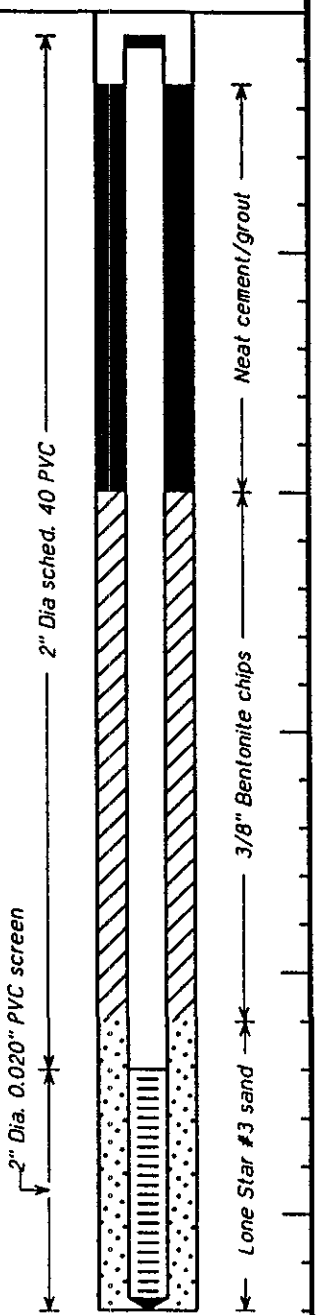
DRILLING COMPANY Spectrum Exploration
DATE DRILLED 7/12/95
SURFACE ELEVATION Not surveyed
TOTAL DEPTH OF HOLE 25 Feet
FIRST OBSERVED GW

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

LOG OF AIR SPARGE WELL SP-6

BLOWS/FT	PID (ppm)	SAMP.NO.	DEPTH (ft)	SAMPLES	SYMBOLS	MATERIALS DESCRIPTION
			0			PAVEMENT SECTION
28	3	SP6-4.3 SP6-4.7	5		ML	SILT, clay (5-10%), sand (5%), coarse, brown (10YR4/3), very stiff, moist, (fill)
						As above, brick fragments in drill cuttings
51	525	SP6-9.7 SP6-10.3	10		SP	SAND, fine, silt (5-10%), clay (<5%), yellow brown (10YR5/4), very dense, wet
14	58	SP6-14.3 SP6-14.7	15			As above, increase in clay (10-15%) and silt (20-25%), very dark brown (2.5Y3/2), medium dense
66	5	SP6-19.0 SP6-19.3	20			As above, decrease in clay (<5%), olive brown (2.5Y4/4), very dense
77/9"	0	SP6-24.0 SP6-24.3	25			As above, silt (10-15%), dark brown (2.5Y4/4)
			30			*Bottom of boring at 27.0 feet.*

WELL DIAGRAM



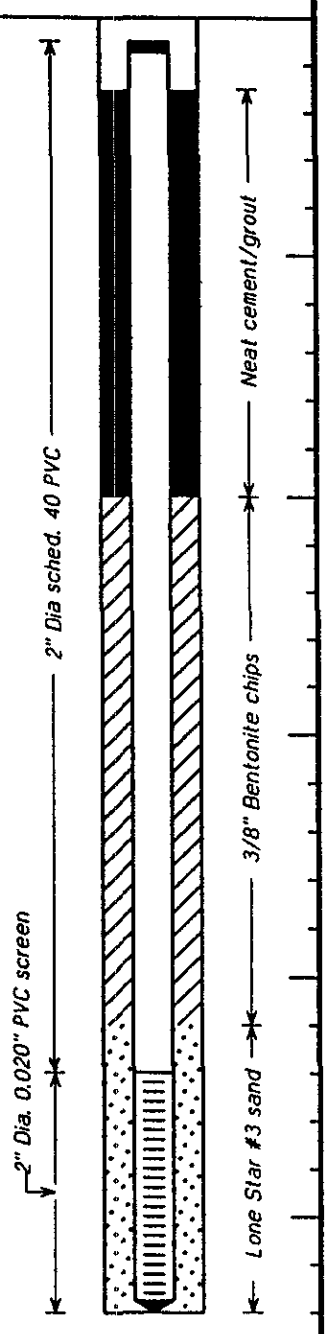
PROJECT	Chevron	DRILLING COMPANY	West Hazmat Drilling Co.
LOCATION	609 Oak Street, Oakland	DATE DRILLED	12/20/95
JOB NUMBER	30-0219	SURFACE ELEVATION	Not surveyed
GEOLOGIST	Karel L. Detterman, R.G.	TOTAL DEPTH OF HOLE	27.0 Feet
BORING DIAMETER	8 in. dia	FIRST OBSERVED GW	10.0 Feet

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

LOG OF AIR SPARGE WELL SP-7

BLOWS/FT	PID (ppm)	SAMP.NO.	DEPTH (ft)	SAMPLES	SYMBOLS	MATERIALS DESCRIPTION
						PAVEMENT SECTION
27	0	SP7-4.3 SP7-4.7	5			ML SILT, clay (5-10%), sand (5-10%), olive (5Y4/4), very stiff, moist, (fill)
						Stiff drilling 7.5 to 8.0 feet
59	3	SP7-9.0 SP7-9.3	10			SP SAND, fine, silt (5-10%), black (10YR5/4), very dense, wet, brick fragments & concrete rubble in drill cuttings (fill)
39	37	SP7-14.0 SP7-14.3	15			SM SAND, silt (20-25%), olive brown (2.5Y4/4), dense, wet
74/11"	1	SP7-19.0 SP7-19.3	20			SP SAND, silt (5-10%), very dark brown (2.5Y3/2), medium dense, wet,
77/9"	0	SP7-24.0 SP7-24.3	25			As above
			30			*Bottom of boring at 27.0 feet.*

WELL DIAGRAM



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

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Terra Vac	Client Proj. ID: Chevron 9-4587, 30-0219	Sampled: 02/16/98
1651 Alvarado St.	Sample Descript: SP (1-3) Comp	Received: 02/18/98
San Leandro, CA 94577	Matrix: LIQUID	Extracted: 02/19/98
	Analysis Method: 8015Mod/8020	Analyzed: 02/19/98
Attention: Tony Dahl	Lab Number: 9802B26-01	Reported: 02/20/98

QC Batch Number: GC021998BTEXEXA
Instrument ID: GCHP22

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Methyl t-Butyl Ether	0.025	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	101
4-Bromofluorobenzene	60	140	97

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Tod Granicher
Project Manager

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Terra Vac
1651 Alvarado St.
San Leandro, CA 94577
Attention: Tony Dahl

Client Project ID: Chevron 9-4587, 30-0219
Matrix: Solid
Work Order #: 9802B26 01
Reported: Mar 3, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC021998BTEXEXA	GC021998BTEXEXA	GC021998BTEXEXA	GC021998BTEXEXA	GC021998BTEXEXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	980292501	980292501	980292501	980292501	980292501
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	2/19/98	2/19/98	2/19/98	2/19/98	2/19/98
Analyzed Date:	2/19/98	2/19/98	2/19/98	2/19/98	2/19/98
Instrument I.D.#:	GCHP22	GCHP22	GCHP22	GCHP22	GCHP22
Conc. Spiked:	0.20 mg/Kg	0.20 mg/Kg	0.20 mg/Kg	0.60 mg/Kg	1.2 mg/Kg
Result:	0.21	0.21	0.21	0.64	1.3
MS % Recovery:	105	105	105	107	108
Dup. Result:	0.21	0.21	0.21	0.64	1.3
MSD % Recov.:	105	105	105	107	108
RPD:	0.0	0.0	0.0	0.0	0.0
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK021998	BLK021998	BLK021998	BLK021998	BLK021998
Prepared Date:	2/19/98	2/19/98	2/19/98	2/19/98	2/19/98
Analyzed Date:	2/19/98	2/19/98	2/19/98	2/19/98	2/19/98
Instrument I.D.#:	GCHP22	GCHP22	GCHP22	GCHP22	GCHP22
Conc. Spiked:	0.20 mg/Kg	0.20 mg/Kg	0.20 mg/Kg	0.60 mg/Kg	1.2 mg/Kg
LCS Result:	0.17	0.17	0.18	0.53	1.1
LCS % Recov.:	85	85	90	88	92
MS/MSD LCS Control Limits	60-140 70-130	60-140 70-130	60-140 70-130	60-140 70-130	60-140 70-130

SEQUOIA ANALYTICAL

Tod Granicher
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

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Terra Vac
1651 Alvarado St.
San Leandro, CA 94577
Attention: Tony Dahl

Client Proj. ID: Chevron 9-4587, 30-0219
Lab Proj. ID: 9802B26

Received: 02/18/98
Reported: 02/20/98

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 4 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL

Tod Granicher
Project Manager

Fax copy of Lab Report and COC to Chevron Contact: ☐ Yes ☐ No

Chain-of-Custody-Record

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

Chevron Facility Number: 9-4587
Facility Address: 609 Oak St, Oakland
Consultant Project Number: 30-0219
Consultant Name: Terra Vac
Address: 1651 Alvarado St.
Project Contact (Name): Tony Dahl
(Phone) (510) 351-8900 (Fax Number) 351-0221

Chevron Contact (Name): Phil Briggs
(Phone) (510) 842-9136
Laboratory Name: Sequoia
Laboratory Release Number: 9034807
Samples Collected by (Name): R.A. Dahl
Collection Date: 2/16/98
Signature: RADahl

Analyses To Be Performed: 9802B26

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)					Remarks
SP-1		1	S		1603		Y	X												Composite
SP-2		1	S		1604		Y	X												Composite
SP-3		1	S		1605		Y	X												Composite

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
RADahl	Terra Vac	2/18 1635	Stac Tan	SEQ.	2/18 1635
Stac Tan	SEQ	2/18/98			
			Received For Laboratory By (Signature): M. S.		2-18-98 1949

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

WF 18 7 4

COC-3.DWG/33 91/MCH