



*Sustaining
Environments
Worldwide*

RECEIVED

By loprojectop at 3:20 pm, May 17, 2006

424 First Street, Benicia, CA 94510
(707) 748-3170 / fax (707) 748-3171

May 15, 2006
Project: CA124-3

RO#:4848

Ted Dang
Tomorrow Development
1305 Franklin, #500
Oakland, California

Well Survey
Former Gasoline Station
2547 East 27th Street
Oakland, California (Property)

Dear Mr. Dang:

Ceres Associates is pleased to present this Well Survey report for the above referenced Property. Ceres Associates has conducted this report at the request of the Alameda County Environmental Health Department in connection with the ongoing assessment and remediation of the Property.

Scope of Survey

Ceres Associates collected well information data for sites within a 2,000-foot radius of the Property from the State of California Department of Water Resources, the Alameda County Public Works Agency, and the City of Oakland Public Works Department.

Results

Results of the survey have been compiled on the attached map and reference those wells which were identified within the search radius of the Property.

Groundwater flow direction has been reported to be predominantly to the southeast. Wells identified within 2,000-feet of the Property were limited to monitoring wells and include:

Location	Wells	Distance	Direction
Chevron Station, 2681 Fruitvale Avenue	14	1,000 feet	Southeast
Quick Stop, 2400 Fruitvale Avenue	1	2,000 feet	South
Peralta Hacienda, Fruitvale Avenue and Davis Street	1	1,200 feet	Southeast
Mrs. Frances Beddig, 2964 Fruitvale Avenue	3	2,000 feet	Northeast

The Property is located to the west of Sausal Creek, however all of the wells identified within the search radius are located east of Sausal Creek.

Supporting documentation related to these sites can be found in the Appendix of this report. The attached map and key reference these sites relative to the Property location.

If you have any questions regarding this project, please don't hesitate to contact me at (707) 748-3170 or via email at ryanmeyer@ceresassociates.com.

Sincerely,
Ceres Associates

Ryan Meyer
Project Manager

Appendix

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

25/3W-5C10

LOG OF EXPLORATORY BORING 340327

PROJECT NUMBER 1207

BORING NO. MW-9

PROJECT NAME Former Chevron Service Station No. 9-4340

PAGE 1 OF 2

BY K. Flory DATE 7/26/90

SURFACE ELEV. ~100 ft.

PID (ppm)	RECOVERY (in/in)	BLOW CNT. (blws/ft)	GROUND WATER LEVELS	DEPTH IN FT.	LITHO-GRAPHIC COLUMN	DESCRIPTION	WELL DETAIL
0	18/18	13 17 20		5		<p>FILL, very dark grayish brown (10YR,3/2); 60-70% low plasticity fines; 30-40% fine to medium gravel; very dry; no product odor.</p> <p>@5': dark brown (7.5YR,3/2); 40-50% low plasticity fines; 20% fine to coarse sand; 30-40% fine to coarse gravel; hard; very dry; no product odor.</p>	
0	18/18	6 11 5		10		<p>CLAY (CH), dark brown (7.5YR,3/2); 85-90% high plasticity fines; 5-10% fine sand; trace fine gravel; firm; damp; slight product odor.</p>	
1453	18/18	5 3 2	<p>7/26/90</p> <p>▽ ▽ 15</p> <p>7/26/90</p>	15		<p>SANDY GRAVEL (GW), dark gray (7.5YR,4/2); trace high plasticity fines; 30-40% fine to coarse sand; 55-65% fine to coarse gravel; loose; wet; strong product odor.</p> <p>CLAYEY SILT (ML), dark brown (7.5YR,3/2); 80-90% low plasticity fines; 10-20% fine to coarse sand; stiff, moist; no product odor.</p>	

REMARKS

Boring was drilled using 8-inch outside-diameter hollow-stem augers. Soil samples were collected using a 2-inch diameter modified-California split-spoon sampler. A monitor well was installed using 2-inch diameter PVC casing.

25/30-05C10

LOG OF EXPLORATORY BORING 340827

PROJECT NUMBER 1207	BORING NO. MW-9
PROJECT NAME Former Chevron Service Station No. 9-4340	PAGE 2 OF 2
BY K. Flory	DATE 7/26/90
	SURFACE ELEV. ~100 ft.

PID (ppm)	RECOVERY (in/in)	BLOW CNT. (blws/ft)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO-GRAPHIC COLUMN	DESCRIPTION	WELL DETAIL
0	18/18	2 3 4					<p>CLAYEY SILT (ML), continued. SANDY SILT (SM), very dark gray (7.5YR,2/0); 90-95% low plasticity fines; 5-10% fine sand; firm; very moist; no product odor.</p> <p>GRAVEL (GW).</p>	
0	12/18	5 8 10		25			<p>SILTY SAND (SM), dark gray (7.5YR,4/0); 5-15% low plasticity fines; 85-95% fine sand; medium dense; wet; no product odor. SILT (ML), gray (7.5YR,5/0); 95-100% low plasticity fines; trace fine sand; soft; dry; no product odor. @26.2': olive brown (2.5YR,4/4). BORING TERMINATED AT 26.5 FEET.</p>	
				30				
				35				
				40				

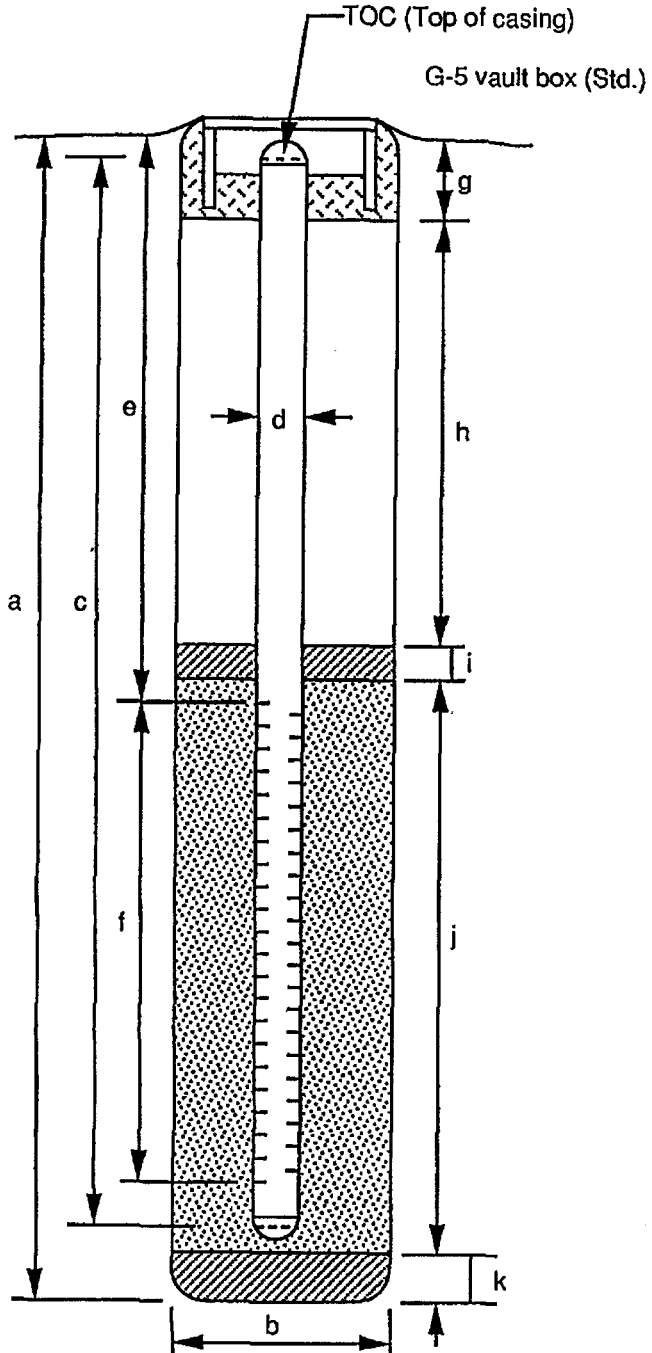
REMARKS
 Boring was drilled using 8-inch outside-diameter hollow-stem augers. Soil samples were collected using a 2-inch diameter modified-California split-spoon sampler. A monitor well was installed using 2-inch diameter PVC casing.

25/30-5010

WELL DETAILS

340327

PROJECT NUMBER 1207 BORING / WELL NO. MW-9
 PROJECT NAME Former Chevron SS No. 9-4340 TOP OF CASING ELEV. _____
 LOCATION 2681 Fruitvale Ave., Oakland, CA GROUND SURFACE ELEV. ~100'
 WELL PERMIT NO. 90406 DATUM MSL
 INSTALLATION DATE 7/26/90



EXPLORATORY BORING

a. Total depth 26.5 ft.
 b. Diameter 8 in.
 Drilling method Hollow-Stem Auger

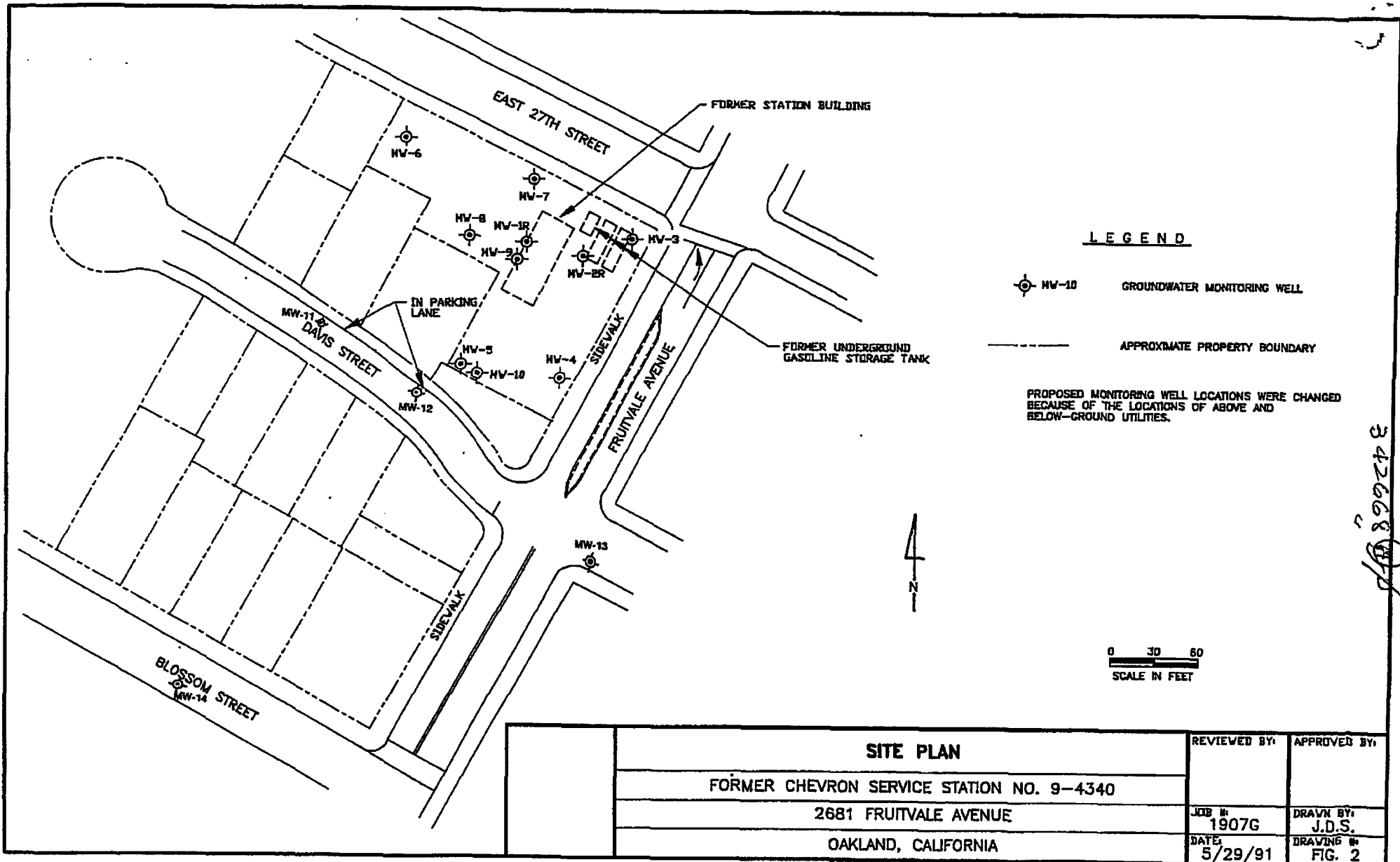
WELL CONSTRUCTION

c. Total casing length 24.5 ft.
 Material Schedule 40 PVC
 d. Diameter 2 in.
 e. Depth to top perforations 10 ft.
 f. Perforated length 15 ft.
 Perforated interval from 10 to 25 ft.
 Perforation type Machine Slotted
 Perforation size 0.020 inch
 g. Surface seal 1 ft.
 Material Concrete
 h. Backfill 5 ft.
 Material Bentonite-Cement Grout
 i. Seal 2 ft.
 Material Bentonite
 j. Gravel pack 17 ft.
 Gravel pack interval from 7.5 to 24.5 ft.
 Material # 3 Sand
 k. Bottom seal/fill 1.5 ft.
 Material slough

CONFIDENTIAL

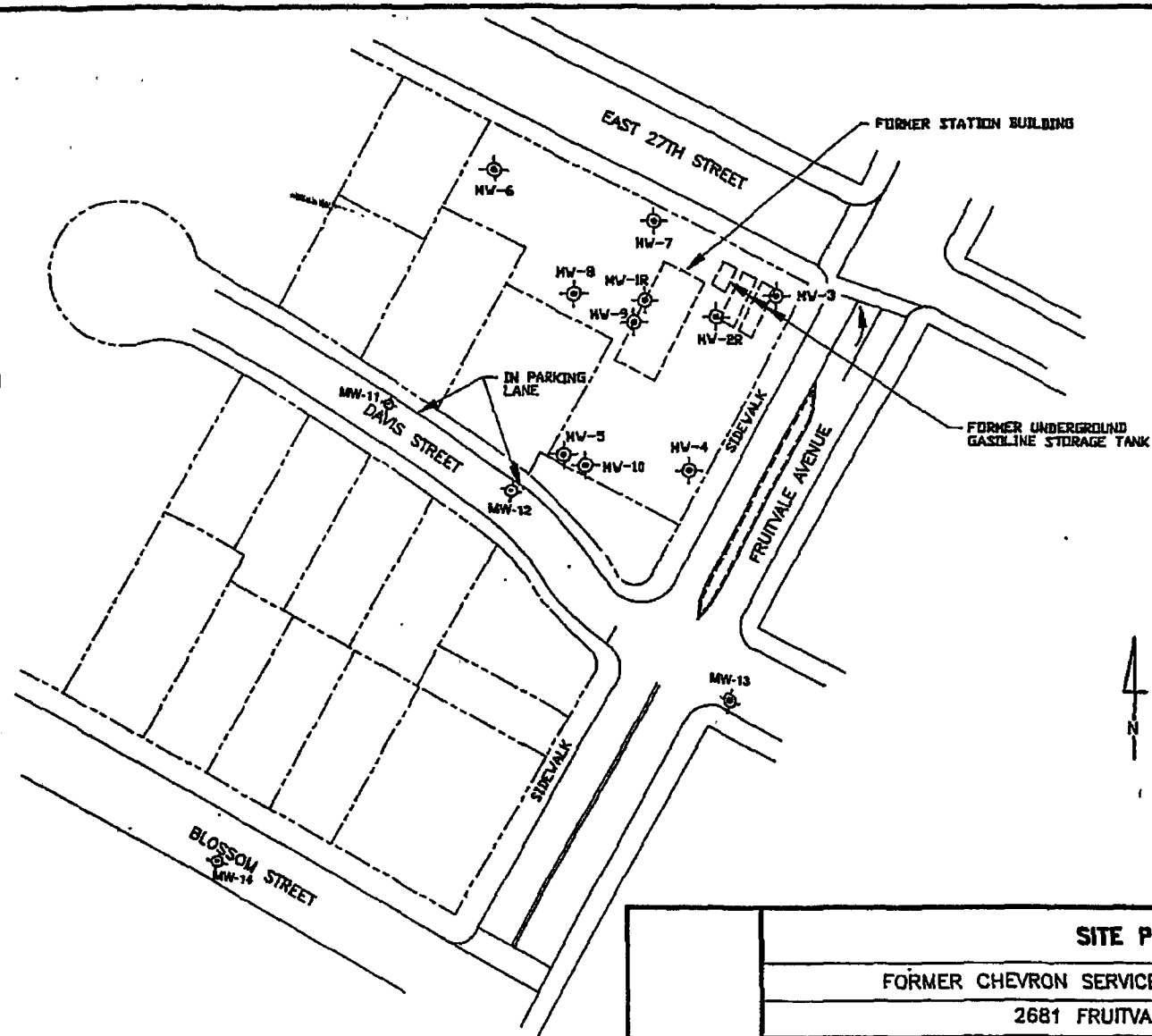
STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED



342688

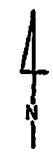
SITE PLAN		REVIEWED BY:	APPROVED BY:
FORMER CHEVRON SERVICE STATION NO. 9-4340			
2681 FRUITVALE AVENUE		JOB # 1907G	DRAWN BY: J.D.S.
OAKLAND, CALIFORNIA		DATE: 5/29/91	DRAWING #: FIG. 2



LEGEND

- HV-12 GROUNDWATER MONITORING WELL
- APPROXIMATE PROPERTY BOUNDARY

PROPOSED MONITORING WELL LOCATIONS WERE CHANGED BECAUSE OF THE LOCATIONS OF ABOVE AND BELOW-GROUND UTILITIES.



0 30 60
SCALE IN FEET

342668 MB

SITE PLAN		REVIEWED BY:	APPROVED BY:
FORMER CHEVRON SERVICE STATION NO. 9-4340			
2681 FRUITVALE AVENUE		JOB #: 1907G	DRAWN BY: J.D.S.
OAKLAND, CALIFORNIA		DATE: 5/29/91	DRAWING #: FIG. 2

342668A

02503W 05012

RESNA EXPLORATORY BORING LOG

Project Name: Former Chevron Station 9-4340
Oakland, California

Boring No. MW-11

Date Drilled: 10/8/91

Project Number: 1907-3G

Logged By: BVT

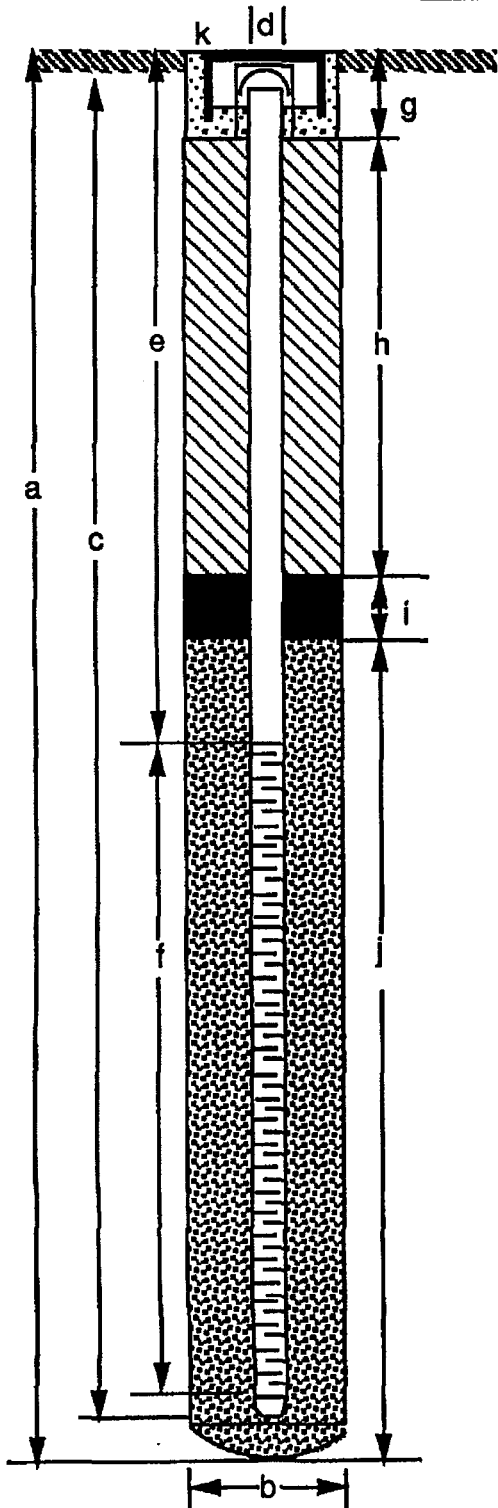
Depth (ft.)	Sample No.	Blows/Foot	Unified Soil Classification	SOIL DESCRIPTION	Water Level	PID Reading (ppm)	Well Construction
1				Asphalt: 3" Baserock: 2"			
2			ML	SILT, dark reddish brown (5YR 2.5/2), 80-90% silt, 5-15% clay, 5-10% very fine- to fine-grained sand, <5% medium- to coarse-grained sand, low plasticity, stiff, moist			
3							
4				At approximately 4 feet, color change to dark brown (7.5YR 3/4), increase in coarse-grained sand to fine gravel content (5-10%)			
5							
6		23				0	
7				At approximately 7 feet, driller indicated presence of gravels. Thickness apparently <1 foot			
8							
9							
10							
11		10	SM	SILTY SAND, brown to dark brown (7.5YR 4/4) 60-70% fine- to medium-grained sand, 20-30% silt, 5-15% coarse-grained sand to fine gravel, minor clay binder, poorly sorted, loose to medium dense, very moist to wet		0	
12							
13							
14					11/7/91 08:45		
15							
16		12			10/8/91 09:47	0	
17			SW-SM	GRAVELLY SAND, dark grayish brown (10YR 4/2), 70-80% fine- to coarse-grained sand, 10-20% fine-medium gravel, 10-20% silt, poorly sorted, medium dense, saturated			
18							
19							
20			ML	SILT, brown (10YR 5/3), low plasticity, very stiff, damp			
21		38					

Bottom of boring = 21.5 feet

REVIEWED BY R.G./C.E.G.

MONITORING WELL DETAIL

Project Number	1907-3G	Boring/Well No.	MW-11
Project Name	Former Chevron Station 9-4340	Top of Casing Elev.	101.98
County	Alameda	Ground Surface Elev.	102.62
Well Permit No.	91545	Datum	Mean Sea Level



EXPLORATORY BORING

a.	Total depth	21.5	ft.
b.	Diameter	8	in.
	Drilling method	Hollow Stem Auger	

WELL CONSTRUCTION

c.	Casing length	21	ft.
	Material	Schedule 40 PVC	
d.	Diameter	2	in.
e.	Depth to top perforations	11	ft.
f.	Perforated length	10	ft.
	Perforated interval from	11 to 21	ft.
	Perforation type	Machine Slot	
	Perforation size	0.020	in.
g.	Surface seal	1	ft.
	Seal material	Concrete (10"), Asphalt (2")	
h.	Backfill	8.5	ft.
	Backfill material	Cement Grout	
i.	Seal	1	ft.
	Seal material	Bentonite	
j.	Gravel pack	11.5	ft.
	Pack material	2/12 Monterey Type Sand	
k.	Traffic-rated watertight vault box with locking PVC expansion cap		

342668D

025 03205C15

RESNA EXPLORATORY BORING LOG

Project Name: Former Chevron Station 9-4340
Oakland, California

Boring No. MW-14

Date Drilled: 10/9/91

Project Number: 1907-3G

Logged By: BVT

Depth (ft.)	Sample No.	Blows/Foot	Unified Soil Classification	SOIL DESCRIPTION	Water Level	PID Reading (ppm)	Well Construction
1				Asphalt: 3" Baseroack: 6"			
2							
3							
4							
5		25	ML	GRAVELLY SILT, very dark grayish brown (10YR 3/2), 60-70% silt, 20-30% fine to medium gravel, 10-20% fine- to coarse-grained sand, clay binder, low plasticity, very stiff, moist		0	
6							
7							
8							
9			ML	SANDY SILT, dark yellowish brown (10YR 4/4), 70-80% silt, 20-30% fine-grained sand, clay binder, low to medium plasticity, moist to very moist			
10							
11		13	SM	SILTY SAND, yellowish brown (10YR 4/4), 60-70% fine- to coarse-grained sand, 25-35% silt, 15-25% fine to coarse gravel, poorly sorted, medium dense, very moist to wet		0	
12							
13				11/7/91 08:25	▼		
14							
15		9	ML	SANDY SILT, mottled yellowish brown (10YR 5/4) with strong brown (7.5YR 5/6), 55-65% silt, 40-50% fine- to medium-grained sand, 3-5% coarse-grained sand to fine gravel, 3-5% rootholes, low plasticity, very moist to saturated (wet in rootholes)		0	
16							
17							
18							
19				At approximately 19.5 to 20.5 feet, gradational color change to dark greenish gray (5GY 4/1)			
20				10/9/91 15:40	▼		
21		8	SM	SILTY SAND			

REVIEWED BY R.G./C.E.G.

342668D

RESNA EXPLORATORY BORING LOG


Project Name: Former Chevron Station 9-4340
Oakland, California

Boring No. MW-14

Date Drilled: 10/9/91

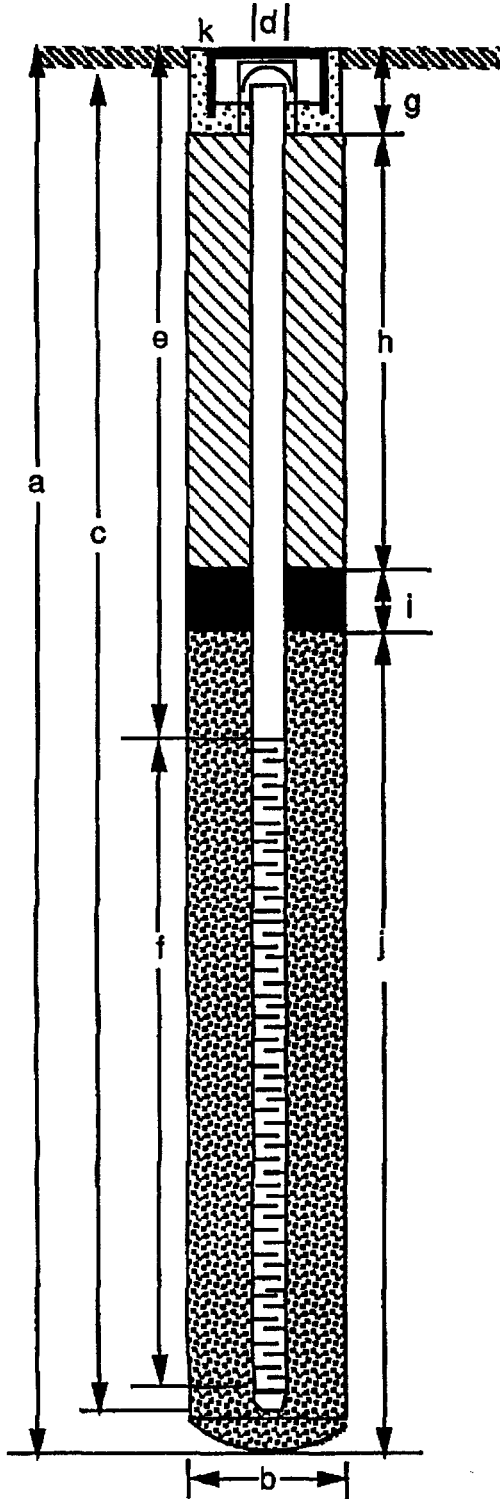
Project Number: 1907-3G

Logged By: BVT

Depth (ft.)	Sample No.	Blows/Foot	Unified Soil Classification	SOIL DESCRIPTION	Water Level	PID Reading (ppm)	Well Construction
22			SM	SILTY SAND, mottled dark bluish gray (5B 4/1) with olive brown (2.5Y 4/3), 75-85% fine- to medium-grained sand, 25-35% silt, well sorted, loose, saturated			
23			SW-SM		GRAVELLY SAND, dark greenish gray (5GY 4/1), 70-80% fine- to coarse-grained sand, 20-30% fine-coarse gravel, 5-15% fines, poorly sorted, medium dense, saturated		
24							
25							
26		27	ML	SILT, light yellowish brown (2.5Y 5/3), low plasticity, very stiff, moist			
27				Bottom of boring = 26.5 feet			
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							

MONITORING WELL DETAIL

Project Number	<u>1907-3G</u>	Boring/Well No.	<u>MW-14</u>
Project Name	<u>Former Chevron Station 9-4340</u>	Top of Casing Elev.	<u>98.26</u>
County	<u>Alameda</u>	Ground Surface Elev.	<u>98.56</u>
Well Permit No.	<u>91545</u>	Datum	<u>Mean Sea Level</u>



EXPLORATORY BORING

a.	Total depth	<u>26.5</u>	ft.
b.	Diameter	<u>8</u>	in.
	Drilling method	<u>Hollow Stem Auger</u>	

WELL CONSTRUCTION

c.	Casing length	<u>26</u>	ft.
	Material	<u>Schedule 40 PVC</u>	
d.	Diameter	<u>2</u>	in.
e.	Depth to top perforations	<u>16</u>	ft.
f.	Perforated length	<u>10</u>	ft.
	Perforated interval from	<u>16</u> to <u>26</u>	ft.
	Perforation type	<u>Machine Slot</u>	
	Perforation size	<u>0.020</u>	in.
g.	Surface seal	<u>1</u>	ft.
	Seal material	<u>Concrete (10"), Asphalt (2")</u>	
h.	Backfill	<u>13</u>	ft.
	Backfill material	<u>Sand/Cement Slurry</u>	
i.	Seal	<u>1</u>	ft.
	Seal material	<u>Bentonite</u>	
j.	Gravel pack	<u>11.5</u>	ft.
	Pack material	<u>2/12 Monterey Type Sand</u>	
k.	<u>Traffic-rated watertight vault box with locking PVC expansion cap</u>		

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

FLEMING CORPORATION 2000 RAYBURN DRIVE OAKLAND, CA 94612	Peralta Hacienda Owner Name		AT-2

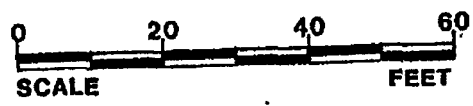
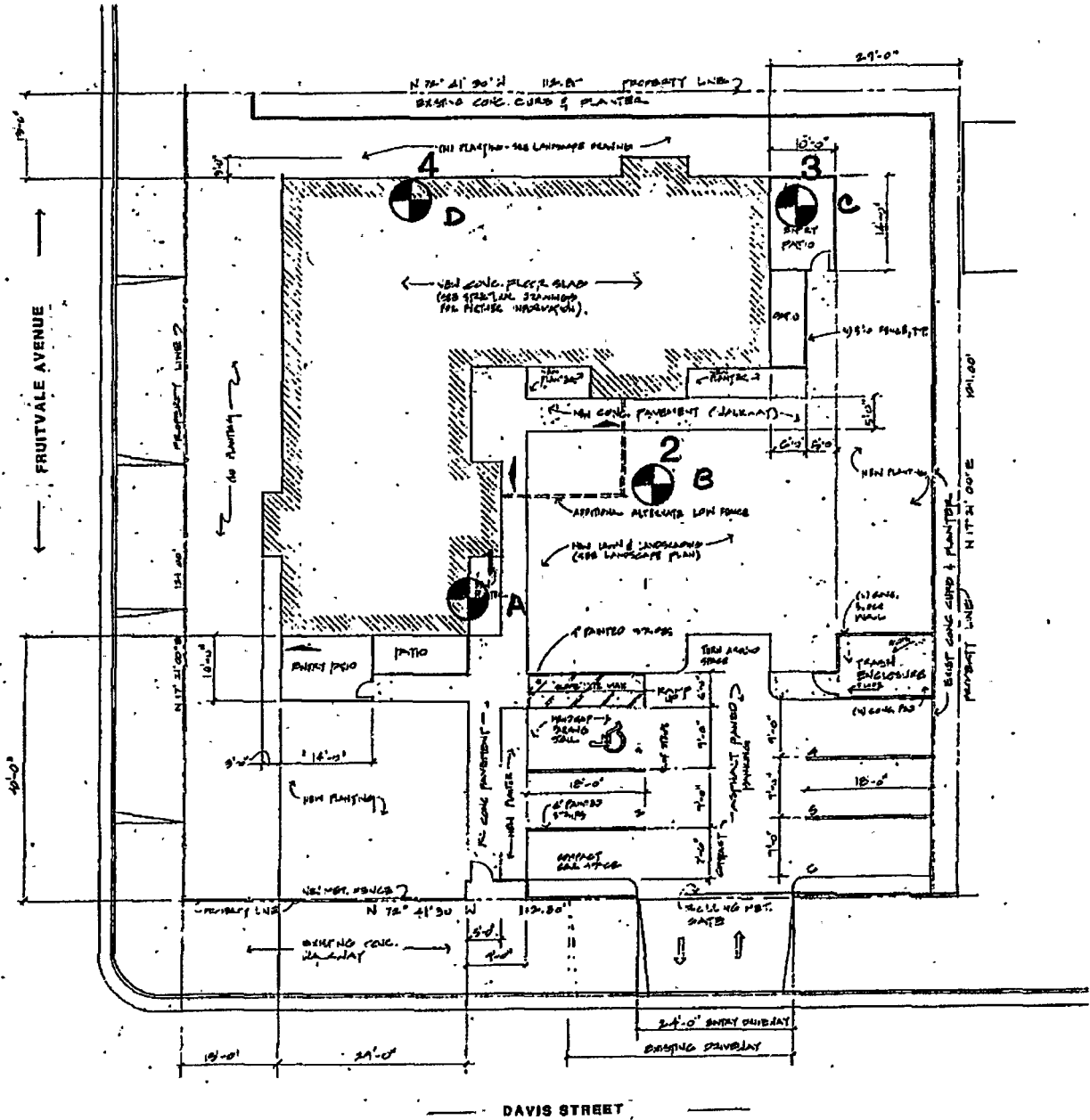
OWNER = PERALTA HACIENDA
 FRUITVALE AVE / DAVIS ST. 25/30, 5C 401A-2
 OAKLAND, CA. (4 BORINGS)

5/3/97

REVISIONS BY DATE

FILE 1881-2-01 City of Oakland

BY CHECKED BY DATE



Boring Location

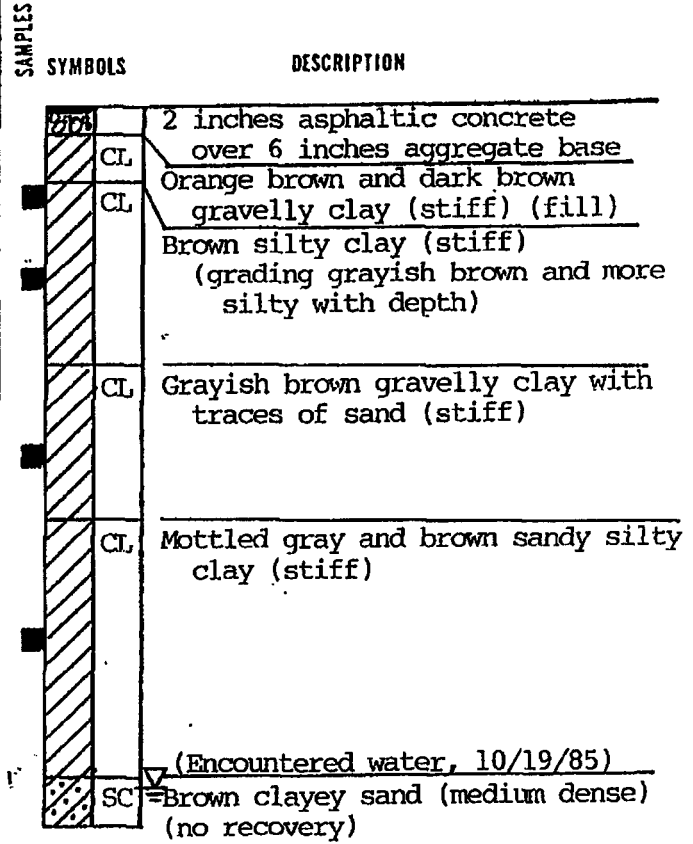
SITE PLAN

TransPacific Geotechnical Engineers, Inc.

DRILLER: JOHN CARVER

BORING 2
 DATE DRILLED 10/19/85
 SURFACE ELEVATION 104[±]

DEPTH IN FEET	LABORATORY TEST DATA					SAMPLING	
	STRENGTH TEST DATA			MOISTURE CONTENT, %	DRY DENSITY, PCF	TYPE OF SAMPLER	SAMPLING RESISTANCE
	TYPE OF STRENGTH TEST	NORMAL OR CONFINING PRESSURE, PSF	SHEAR STRENGTH, PSF				
0							
	P	-	4500	19	105	U	18
5	P	-	3700	19	105	U	16
10				18	111	U	23
15	P	-	2550	23	106	U	29
20						U	29



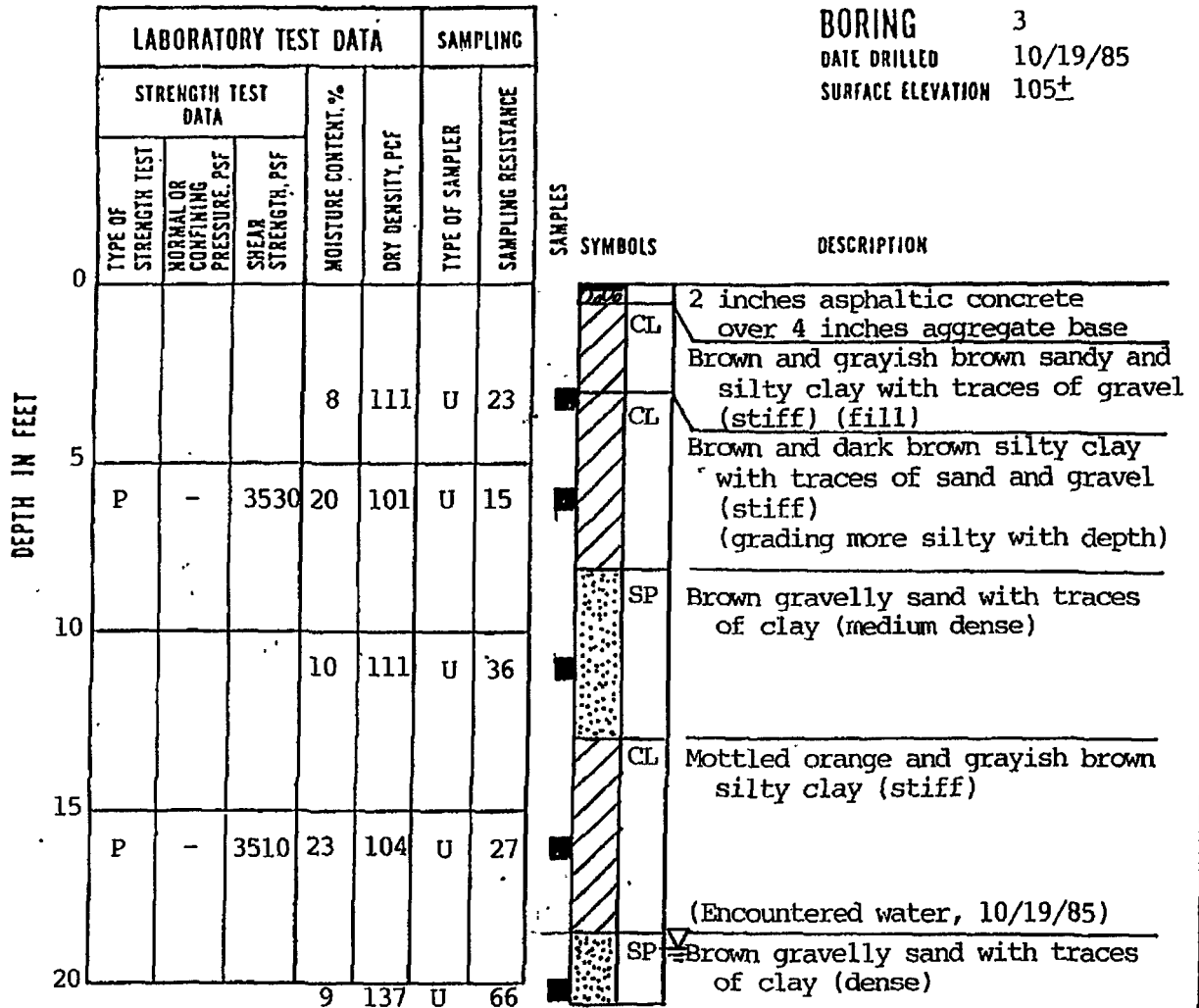
NOTE: See Plate 2-A

1081-01-01 City of Oakland

LOG OF BORING

TransPacific Geotechnical Engineers, Inc.

BORING 3
 DATE DRILLED 10/19/85
 SURFACE ELEVATION 105±



NOTE: See Plate 2-A

1081-01-01 City of Oakland

LOG OF BORING

TransPacific Geotechnical Engineers, Inc.

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

15/3W 32P2

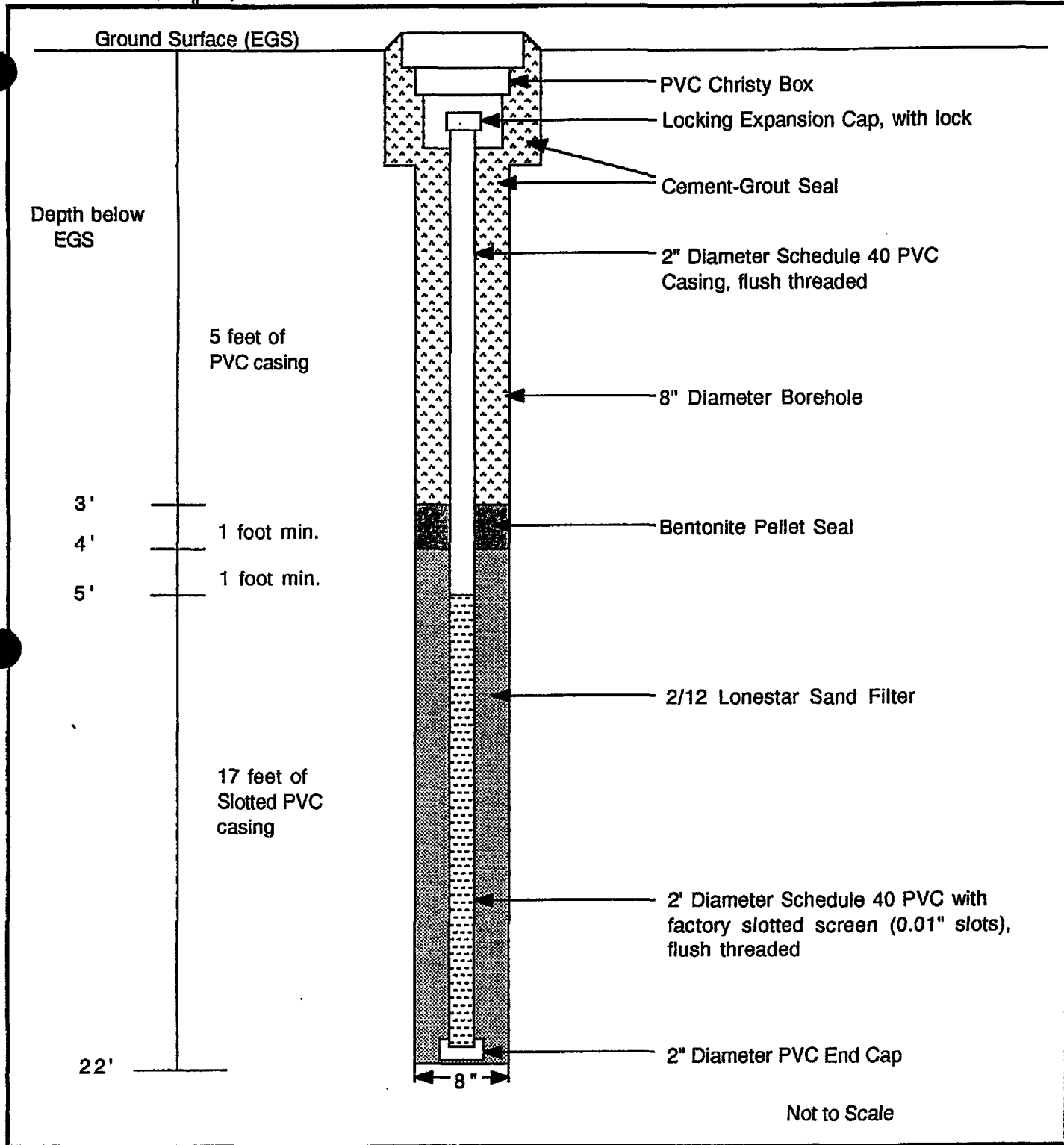
327

407400

Bayland Drilling B-53 Drill Rig.		Microtip (ppm)	Blows/6 in.	SAMPLE #	Sample Int.	Depth (feet)	Equipment: Hollow Stem Auger Logged By: M. Kaltreider PROJECT: 2964 Fruitvale Avenue Start Date: 01/15/93
Soil color described using Munsell soil color charts <u>Color code</u>						0	Asphalt: 4" lift. Lt. brown gravelly silt (GM) & gravelly clay (GC), med grained, dense (baserock)
(10YR-3/2)	0	3	MW2-5			2	Very dark greyish brown/red mottled silty clay (CL), plastic, medium stiff, moist.
(10YR-3/2) (Gley - 4)	50	4	MW2-10			8	Hydrocarbon odor in cuttings. ▼ (groundwater 01/15/93)
(5Y-3/2)	10	7	MW2-15			10	Very dark greyish brown to dark grey mottled clay (CH), plastic, saturated, medium stiff, strong hydrocarbon odor
(10YR-4/3)	0	10	MW2-20			14	Dark olive gray sandy clay (CL), plastic, medium stiff, saturated.
(10YR-4/3)	0	30				16	Brown clayey gravel (GC) with sand, medium dense, saturated.
						20	Brown gravelly sand (SW), medium dense, saturated.
						22	BOTTOM OF BORING @ 22 FEET
						24	
						26	
						28	
ACC ENVIRONMENTAL CONSULTANTS 1000 ATLANTIC AVEUNUE, SUITE 110 ALAMEDA, CA 94501						JOB NO: 6068-2	BORING MW-2
						DATE: 02/13/93	2964 Fruitvale Avenue

4 of 7

407400



ACC Environmental Consultants 1000 Atlantic Avenue, Suite 110 Alameda, CA 94501	Job No.: 6068-2	Schematic of Monitoring Well No.: MW-2
	Date: 02/13/93	2964 Fruitvale Avenue



5077

407400

1513W 32P2

Geochem ENVIRONMENTAL LABORATORIES

Mobile & In-House Laboratories Certified by State of California

Phone: (408) 955-9988 / FAX: (408) 955-9538

ANALYTICAL REPORT

Page: 1 of 1

Client: ACC Environmental
1000 Atlantic Ave.
Alameda, CA 94501

Date Sampled: 01/15/93
Date Received: 01/18/93
Date Analyzed: 01/19/93

Attn: Misty Kaltreider

Batch:SD-071 Matrix: Soil
Conc. Unit mg/kg(ppm)

Project: Fruitvale (Proj.#6068-2)

"ND" means "not detected" at indicated detection limit.
B:benzene, T:toluene, E:ethylbenzene & X:total xylenes.
Samples received chilled with a chain of custody record.

SAMPLE I.D.	Total Lead

DETECTION LIMIT	1 ppm

→ MW-2-10'	ND
MW-3-10'	ND

Reviewed and approved by

George Tsai, Laboratory Director, Jan. 20, 1992



647

407400

1513W 32 P2

Geochem ENVIRONMENTAL LABORATORIES

Mobile & In-House Laboratories Certified by State of California

Phone: (408) 955-9988 / FAX: (408) 955-9538

ANALYTICAL REPORT

Page: 1 of 1

Client: ACC Environmental
1000 Atlantic Ave.
Alameda, CA 94501
Attn: Misty Kaltreider

Date Sampled: 01/15/93
Date Received: 01/18/93
Date Analyzed: 01/19/93
Batch: SD-071 Matrix: Soil
Conc. Unit ug/kg(ppb)

Project: Fruitvale (Proj.#6068-2)

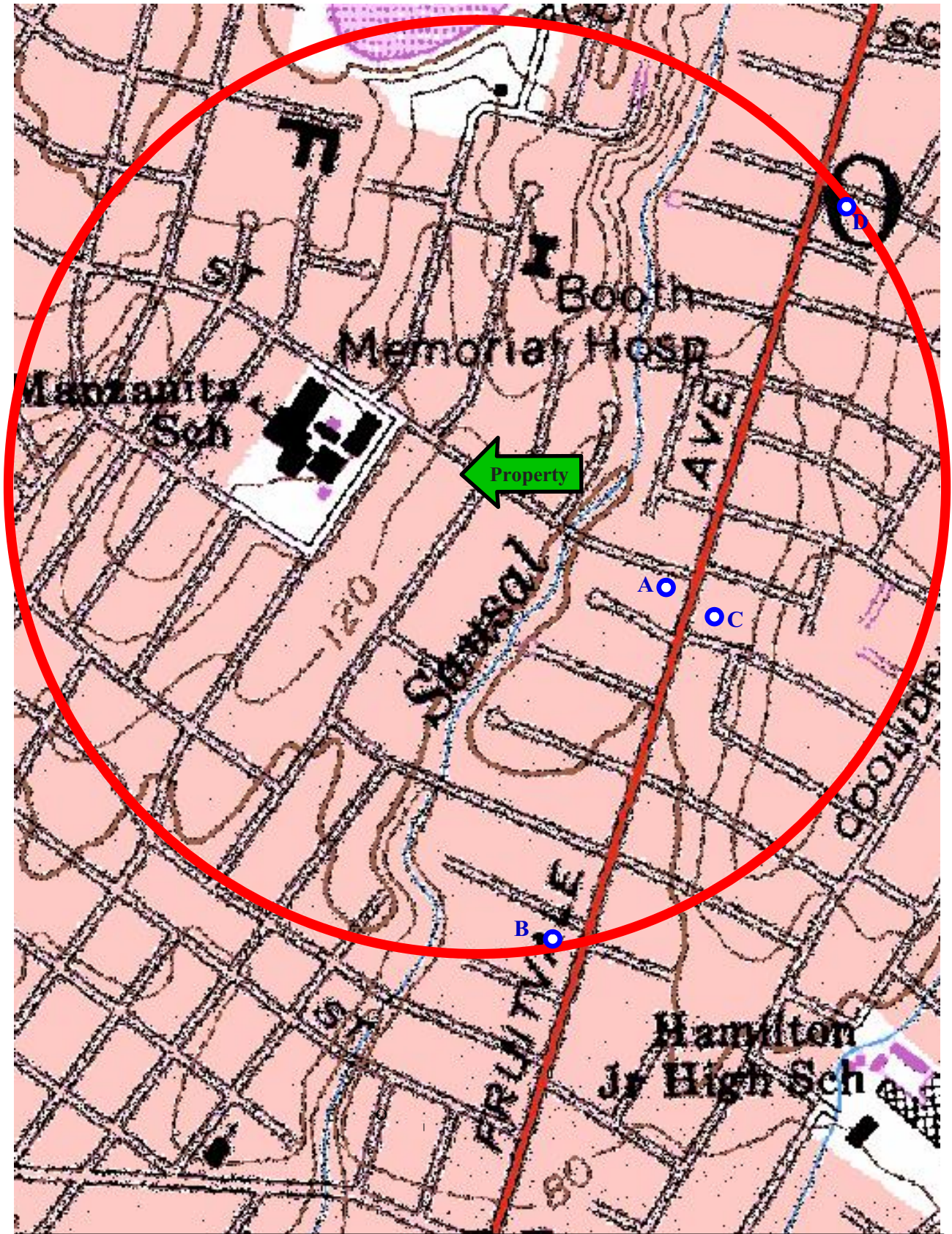
"ND" means "not detected" at indicated detection limit.
B:benzene, T:toluene, E:ethylbenzene & X:total xylenes.
Samples received chilled with a chain of custody record.

SAMPLE I.D.	8015M/TPH	8020			
	Gasoline	B	T	E	X
		/	/	/	/
DETECTION LIMIT	50ppb	0.5 ppb			
MW-2-5'	ND	ND	ND	ND	ND
MW-2-10'	11350	1254.6	1112.1	1267.5	1679.8
MW-3-5'	ND	ND	ND	ND	ND
MW-3-10'	7610	1540.0	1774.7	1249.0	1613.5

Reviewed and approved by

George Tsai, JAN. 20, 1993
George Tsai, Laboratory Director

Well Survey Map



Project CA1264-3

Former Gasoline Station
2547 East 27th Street
Oakland, California

Scale
1:615

Estimated
Groundwater
Flow Direction



WELL SURVEY MAP

○ 2,000 foot radius



Well Map Key



- Property location



- Boundary of 2,000 foot radius around the Property



- Monitoring wells location

A - Chevron station monitoring well location. There are 14 monitoring wells at this location.

B - Quik-Stop Market monitoring well location. There is one well at this location.

C - Peralta Hacienda monitoring well location. There are four wells at this location.

D - Mrs. Frances Beddig monitoring well location. There are three wells at this location.