

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



RAFAT A. SHAHID, Assistant Agency Director

Alameda County
Environmental Protection Division
1131 Harbor Bay Parkway, Room 250
Alameda CA 94502-6577
(510) 567-6700

REMEDIAL ACTION COMPLETION CERTIFICATION

January 8, 1996

Marla Guensler
Exxon Company, U.S.A.
P.O. Box 4032
Concord, CA 94524-2032

UNDERGROUND STORAGE TANK (UST) CASE
Re: Exxon Station #7-8907, 8008 Mountain Blvd., Oakland, CA 94605
Site No. 1127

Dear Ms. Guensler,

This letter confirms the completion of site investigation and remedial action for the underground storage tanks located at the above described location (two 8,000-gallon gas tanks, one 5,000-gallon gas tank, and one 1,000-gallon waste oil tank). Enclosed is the Case Closure Summary for the referenced site for your records.

Based upon the available information, including the current land use, and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground storage tank release is required.

This notice is issued pursuant to a regulation contained in Title 23, California Code of Regulations, Division 3, Chapter 16, Section 2721(e). If a change in land use is proposed, the owner must promptly notify this agency.

Please telephone Juliet Shin at (510) 567-6700 if you have any questions regarding this matter.

Sincerely,

A handwritten signature in cursive script that reads "Jun Makishima".

Jun Makishima, Interim Director

c: Acting Chief, Hazardous Materials Division - files
~~Juliet Shin~~, ACDEH
Kevin Graves, RWQCB
Mike Harper, SWRCB

CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION Date: 6/15/95

Agency name: Alameda County-HazMat Address: 1131 Harbor Bay Pkwy.
City/State/Zip: Alameda, CA 94502 Phone: (510) 567-6700
Responsible staff person: Juliet Shin Title: Senior HMS

II. CASE INFORMATION

Site facility name: Exxon Station #7-8907
Site facility address: 8008 Mountain Blvd., Oakland, CA 94605
RB LUSTIS Case No: N/A Local Case No./LOP Case No.: 1127
URF filing date: 5/02/90 SWEEPS No: N/A

05 OCT 29 1995
EMERGENCY
113010101
113010101

<u>Responsible Parties:</u>	<u>Addresses:</u>	<u>Phone Numbers:</u>
Exxon Company, U.S.A. Attn: Marla Guensler	P.O. Box 4032 Concord, CA 94524-2032	(510) 246-8776

<u>Tank No:</u>	<u>Size in gal.:</u>	<u>Contents:</u>	<u>Closed in-place or removed?:</u>	<u>Date:</u>
1	8,000	unleaded gas	removed	2/22/90
2	8,000	leaded gas	removed	2/22/90
3	5,000	unleaded gas	removed	2/22/90
4	1,000	waste oil	removed	2/22/90

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: Holes were observed in the waste oil tank pit ranging from 1/4" to 2" in diameter, near the tank bottom.

Site characterization complete? YES

Date approved by oversight agency: 6/20/95

Monitoring Wells installed? Yes Number: Three

Proper screened interval? OW-3 is screened from 3 to 12'bgs, OW-4 is screened from 5 to 25'bgs, and OW-6 is screened from 5 to 25'bgs.

Highest GW depth below ground surface: 16.02' (OW-6) Lowest depth: 1.16' (OW-4)

Flow direction: Predominantly southeast, with a couple of quarters of southwest and one quarter of northeast.

Leaking Underground Fuel Storage Tank Program

Most sensitive current use: Unknown. There are three private water wells located within 1,000 feet of the site: 210'NW, 400'SW, and 800'W.

Are drinking water wells affected? NO Aquifer name: The contaminated water-bearing zone lies above 14-feet below ground surface, in what is thought to be fill material. IT consultants have labeled it a perched aquifer.

Is surface water affected? NO Nearest affected SW name: None

Off-site beneficial use impacts (addresses/locations): None

Report(s) on file? YES Where is report(s) filed? Alameda County
1131 Harbor Bay Pkwy.
Alameda, CA 94502

Treatment and Disposal of Affected Material:

<u>Material</u>	<u>Amount</u> (include units)	<u>Action (Treatment</u> <u>of Disposal w/destination)</u>	<u>Date</u>
Tanks	4 tanks	Erickson, Inc. 255 Parr Blvd. Richmond, CA	2/22/90
Soil	650 cubic yards	BFI Vasco Road Livermore	4/13/90 to 6/8/90
Product	1,600 gallons	Refineries Services 13331 North Hwy. 33 Patterson, CA 95363	2/21/90
Groundwater	9,700 gallons	Evergreen Environmental Newark, California	2/26/91

III. RELEASE AND SITE CHARACTERIZATION INFORMATION (Continued)
Maximum Documented Contaminant Concentrations - - Before and After Cleanup
(Not including stockpiled soil)

Contaminant	Soil (ppm)		Water (ppm)	
	Before	After	Before	After
TPH (Gas)	ND ^s	5,100**	28*	ND
TPH (Diesel)	ND ^s			
Benzene	ND ^s	19**	0.8	ND
Toluene	ND ^s	9#	0.4	ND
Xylene	ND ^s	340**	3.8	ND
Ethylbenzene	ND ^s	170**	8.1	ND
Oil & Grease	ND ^s		NA	

Leaking Underground Fuel Storage Tank Program

	Soil (ppm)		Water (ppm)	
	<u>Before</u>	<u>After</u>	<u>Before</u>	<u>After</u>
lead	22	.	0.026	
chromium	39			
zinc	120			

§ Soil samples initially collected from the gas tank and/or waste oil tank pit

* Free product initially observed in well

** From sample ES-7 in fill area around sewer line at 10 feet or below

Observed in soil sample from OW-3

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Undetermined

Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Undetermined

Does corrective action protect public health for current land use? YES

Site management requirements: NA

Should corrective action be reviewed if land use changes? NO

Monitoring wells Decommissioned: NO Will be decommissioned upon receipt of case closure.

Number Decommissioned: NA

Number Retained:

List enforcement actions taken: None

List enforcement actions rescinded:

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: Juliet Shin

Title: Senior HMS

Signature: *Juliet Shin*

Date: 12/13/95

Reviewed by

Name: Eva Chu

Title: Hazardous Materials Specialist

Signature: *Eva Chu*

Date: 12/13/95

Name: Madhulla Logan

Title: Hazardous Materials Specialist

Signature: *Madhulla Logan*

Date: 12/12/95

Leaking Underground Fuel Storage Tank Program

VI. RWQCB NOTIFICATION

Date Submitted to RB:

RWQCB Staff Name: Kevin Graves

RB Response: *Approval*

Title: San. Engineering Asso. Date: *12/27/95*

VII. ADDITIONAL COMMENTS, DATA, ETC.

The site is bounded by Interstate 580 and mainly residential areas. In July 1989, two borings, SB-1 and OW-3, were drilled at the site to initiate investigations for divestment of the site. OW-3 was converted into a monitoring well. No water samples were collected from OW-3 due to observed floating product. Soil samples collected from SB-1 at 5-feet and 35-feet below ground surface (bgs), and soil samples collected from OW-3 at 5' and 10' bgs, were analyzed for TPHg and BTEX. Analysis of soil samples from SB-1 did not identify any contaminants. However, the soil sample collected from OW-3 at 5' bgs identified 1,600 ppm TPHg and BTEX (9ppm, 9ppm, 44 ppm, and 160 ppm).

On December 13, 1989, six soil borings, SB-2 through SB-7, were drilled to try and delineate the contamination observed in Well OW-3. Drilling of all six borings was terminated at 6.5-feet bgs due to the presence of greater than five feet of clay below the shallow gravel fill. No ground water was encountered in any of the six borings. One soil sample was collected from each of the borings at 5.5-feet bgs. Up to 180 ppm TPHg, 0.36ppm benzene, 0.053ppm toluene, 1ppm ethylbenzene, and 4.2ppm total xylenes were identified in these samples (refer to attached table).

The site is underlain by two distinct soil types: the upper unit consists of a laterally discontinuous medium grained sand fill, containing gravels and silt. The lower unit consists of an organic silty clay. Ground water appears to be restricted to the fill zone. According to IT Consultants, the observed ground water is a potential perched water source associated with utility fill beneath the sidewalk on Mountain Boulevard.

On February 22, 1990, four underground storage tanks, two 8,000-gallon gasoline tanks, one 5,000-gallon gas tank, and one 1,000-gallon waste oil tank, were removed from the site. Holes ranging from 1/4-inch to 2-inch diameter were observed near the waste oil tank bottom. Two soil samples were collected from beneath either end of the waste oil tank at about 6-feet bgs. These soil samples were analyzed for TPHg, TPHd, BTEX, Oil & Grease, heavy metals, and Method 8010 and 8270 constituents. Only trace levels of metals were identified. No ground water was encountered in this excavation. Seven soil samples were collected from the tank pit where all three of the former gas tanks were located. Sample depths ranged from 7.5 to 12.5 feet bgs. Soil samples were analyzed for TPHg and BTEX. No contaminants were identified. No ground water was encountered in this gas tank pit.

Leaking Underground Fuel Storage Tank Program

On March 7, 1990, further investigations were conducted to determine the extent of soil contamination immediately north of OW-3. A pit was dug using a hydraulic excavator to a depth of 14-feet bgs. Two soil samples, SS-1A and SS-2A, were collected at 6-feet and 12.5-feet bgs. Sample results for these samples could not be located.

On June 6, 1990, five soil samples were collected from beneath the piping trenches, SS-1 through SS-5, from 2-feet bgs, and identified up to 3,400 ppm TPHg, 5ppm benzene, 38ppm toluene, 76ppm ethylbenzene, and 380ppm total xylenes (refer to attached figure and table). On August 17, 1990, additional excavation was conducted in this area. Confirmatory samples, SS-6 through SS-8, collected from 8-feet bgs did not identify any TPHg and only trace levels of BTEX (0.02ppm, 0.05ppm, 0.1ppm, and 0.03ppm).

On August 17, 1990, two monitoring wells, OW-4 and OW-6, were installed at the site (refer to attached figure). Both borings were drilled to 50 feet bgs without encountering groundwater. The wells were then backfilled with neat cement for 24.5 feet with the cement top at 25.5 feet bgs. Soil samples were collected from OW-4 at 10-, 30-, and 50-feet bgs, and from OW-6 at 11-, 20-, and 50-feet bgs. Soil samples were analyzed for TPHg and BTEX. No contaminants were identified.

Approximately 650 cubic yards of soil was removed from the excavation of the tank area and piping trenches. Between April 13 and June 8, 1990, approximately 650 cubic yards of soil was aerated on site and removed to BFI Vasco Road landfill.

On October 15-16, 1990, additional excavation and sampling was performed after removal of the fuel island canopy at the site. Excavation was completed in the vicinity of the eastern fuel island when no apparent petroleum hydrocarbons were encountered in the pit bottom and sides. Four soil samples (ES-1 through ES-4) were collected from the pit walls. (Refer to attached figure). Excavation on the western fuel island continued into October 16, 1990. Soil excavation was halted by sand fill adjacent to a sewer line located on the property and fill adjacent to major utility lines located under the sidewalk near Mountain Blvd. Samples (ES-5 through ES-10) were collected from native soil on the pit sides and bottom. Two samples were collected from apparent fill materials, ES-7 and ES-8, on the side of the pit. It appears that all soil samples were collected above 10-feet bgs. Up to 5,100 ppm TPHg was identified in sample ES-7. Further excavation was not conducted in this area, apparently due to utility line obstructions beneath the sidewalk.

Approximately 9,700 gallons of water was pumped out of the pit. According to IT consultants, this water was not groundwater and resulted from Spring

Leaking Underground Storage Tank Program

rain. It appears that the excavated soil was combined with formerly excavated soil and hauled to Browning-Ferris Industries (BFI) sanitary landfill in Livermore.

An additional well, OW-5, was installed within the pit. This well is a six-inch diameter well and was intended for use as an extraction well. No soil samples were collected during the installation of this well.

A two-week soil vapor extraction test was conducted from OW-5. Continuous visual readings were taken during system startup on February 28, March 1, and March 6, 1991. After system startup, input and exhaust gases were monitored at least twice a day. In order to better facilitate the soil venting operations, it was decided to pump water that had collected in the excavation pit prior to and during the SVE test. Each pumping of the extraction well, OW-5, and excavation pit yielded approximately 4,700 gallons of water over a two hour period. During the testing period, upto 40 ppmv was identified in the extracted vapors. This was roughly commensurate with the OVM readings of the vapor. An estimated 4.2 lbs of BTEX and 39 lbs of non-methane alkanes were removed during the two week test. Subsequently, soil venting was discontinued at the site based on the argument that only low levels of contaminants were identified in the air samples.

It appears that groundwater has not been significantly impacted by the former USTs at the site. (Contrary to IT's statements, ground water does not appear to be limited to the fill zone, since most of the soil strata in Wells OW-4 and OW-6 are clay and water is still recharging in these wells). Groundwater sample results from the last three quarters of monitoring have not identified any TPHg or BTEX concentrations exceeding detection limits. Although elevated levels of soil contamination identified in former sample ES-7 at 5,100 ppm TPHg and 19ppm benzene, was left in place, this contamination appears to be very limited, based on the ND soil sample results from former borings SB-7 and SB-3, which were located immediately downgradient of sample ES-7. Additionally, contamination appears to have been located in piping trench fill material and the two-week vapor extraction pilot test may have remediated some of this contamination. Nonetheless, it appears that this remaining soil contamination has not significantly impacted groundwater, based on the groundwater sampling results of the downgradient well, OW-6, and does not appear to be a threat to human health due to the depth of the observed contamination in ES-7.

148002-A1

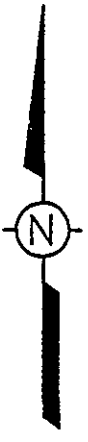
DRAWING NUMBER

CHECKED BY

R.D.B. 8-14-89

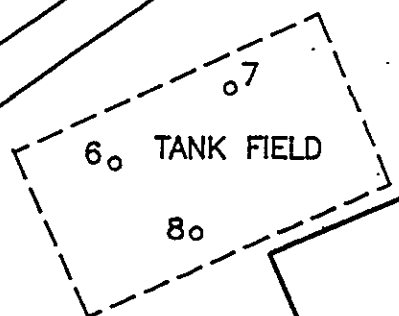
APPROVED BY

DRAWN BY

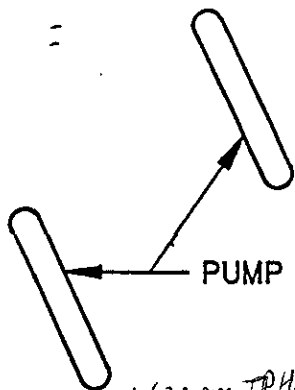


SHONE AVENUE

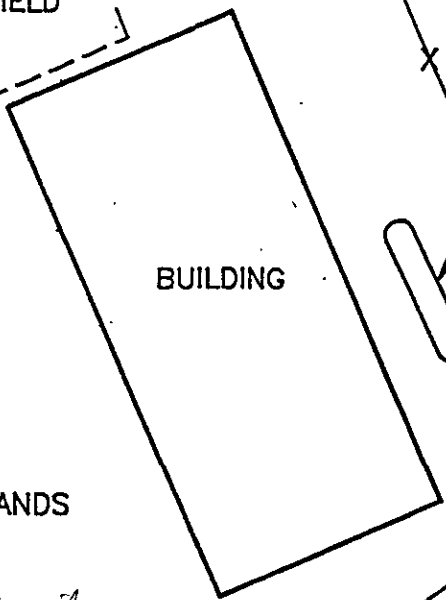
MOUNTAIN BOULEVARD
SIDEWALK



SB-1



PUMP ISLANDS



BUILDING

WASTE OIL STORAGE TANK (500 GAL.)



*6600ppm TPHg } in soil
9ppm Benzene } at 5' bgs.*

OW-3

SURFACE DRAIN



FENCE

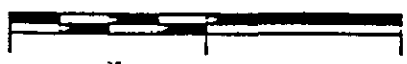
FIGURE 3

SITE MAP

PREPARED FOR

EXXON STATION
8008 MOUNTAIN BLVD.
OAKLAND, CALIFORNIA

SCALE



0 20 40 FEET



INTERNATIONAL
TECHNOLOGY
CORPORATION

148002-A2

DRAWING NUMBER

S.I.M. 9.13.89
9m. 9.13.89

CHECKED BY
APPROVED BY

R.D.B.
8-14-89

DRAWN BY

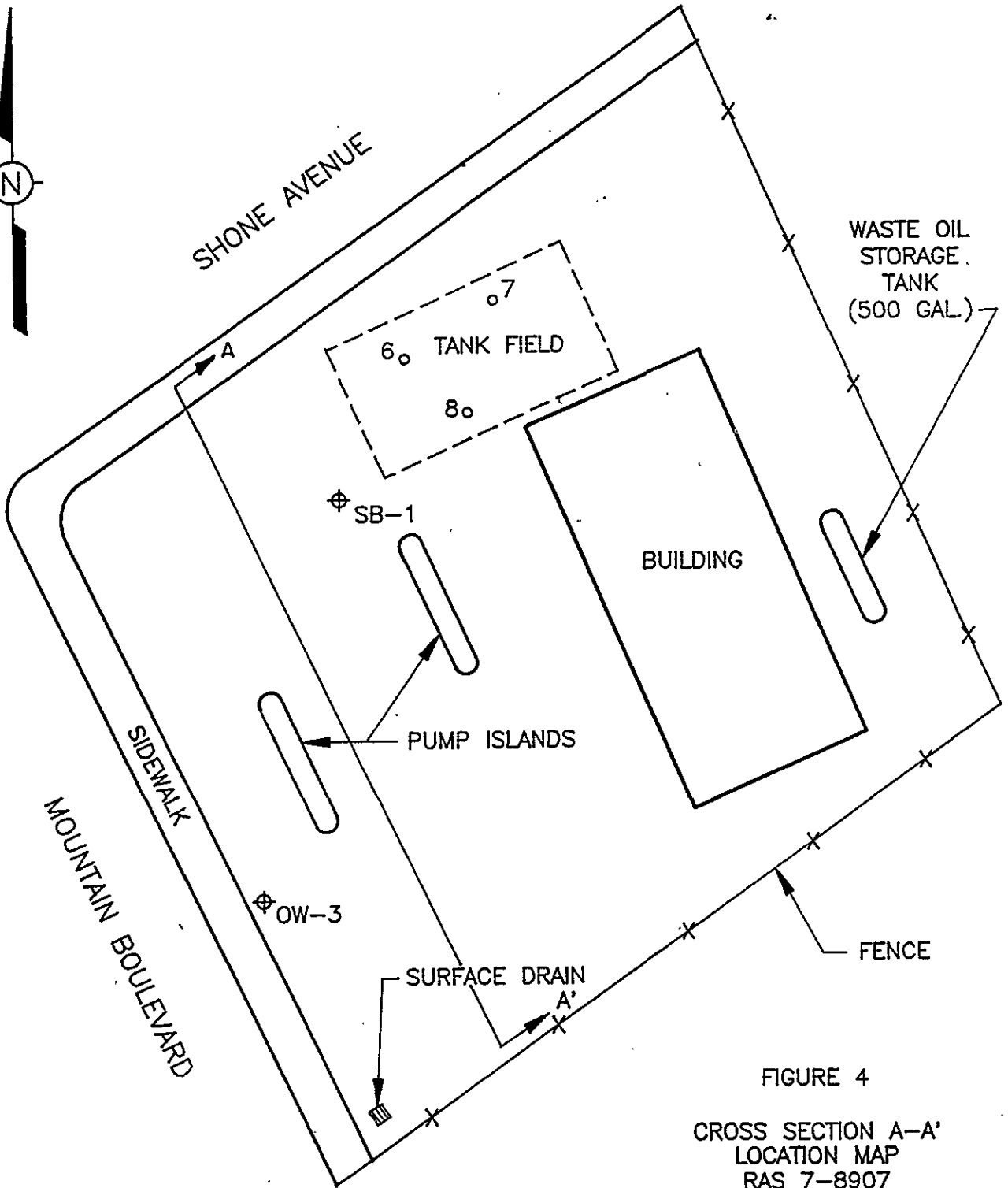
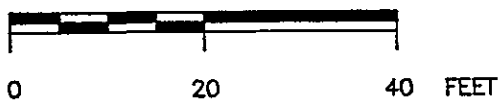


FIGURE 4

CROSS SECTION A-A'
LOCATION MAP
RAS 7-8907
8008 MOUNTAIN BLVD.
OAKLAND, CALIFORNIA

PREPARED FOR
EXXON COMPANY, U.S.A.

SCALE



INTERNATIONAL
TECHNOLOGY
CORPORATION

DRAWN BY T.R.S. CHECKED BY S.J.H. 9-13-89 DRAWING NUMBER 148002-B1
 9-11-89 APPROVED BY G.A. 9-13-89

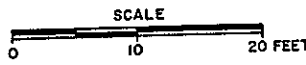
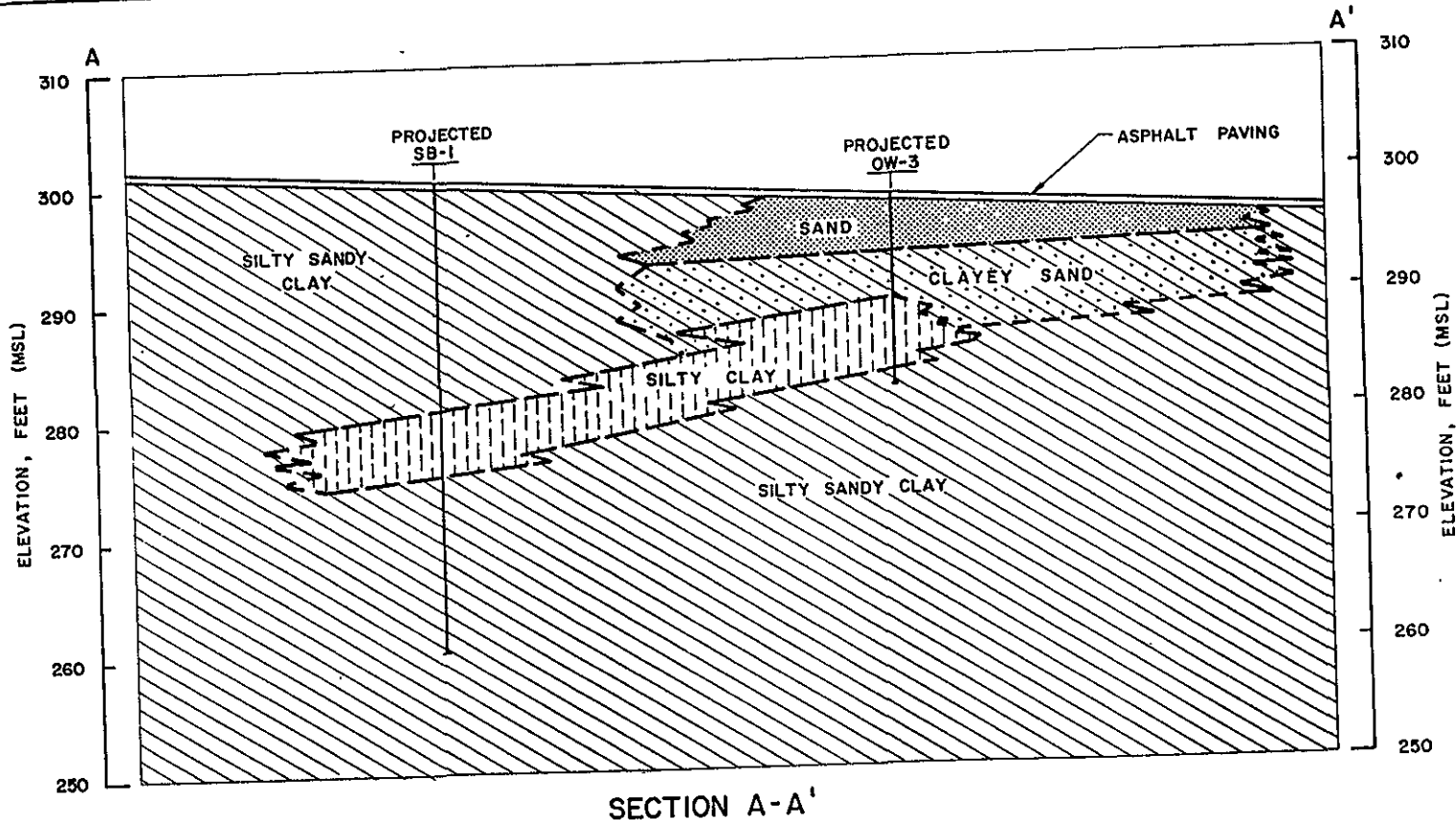
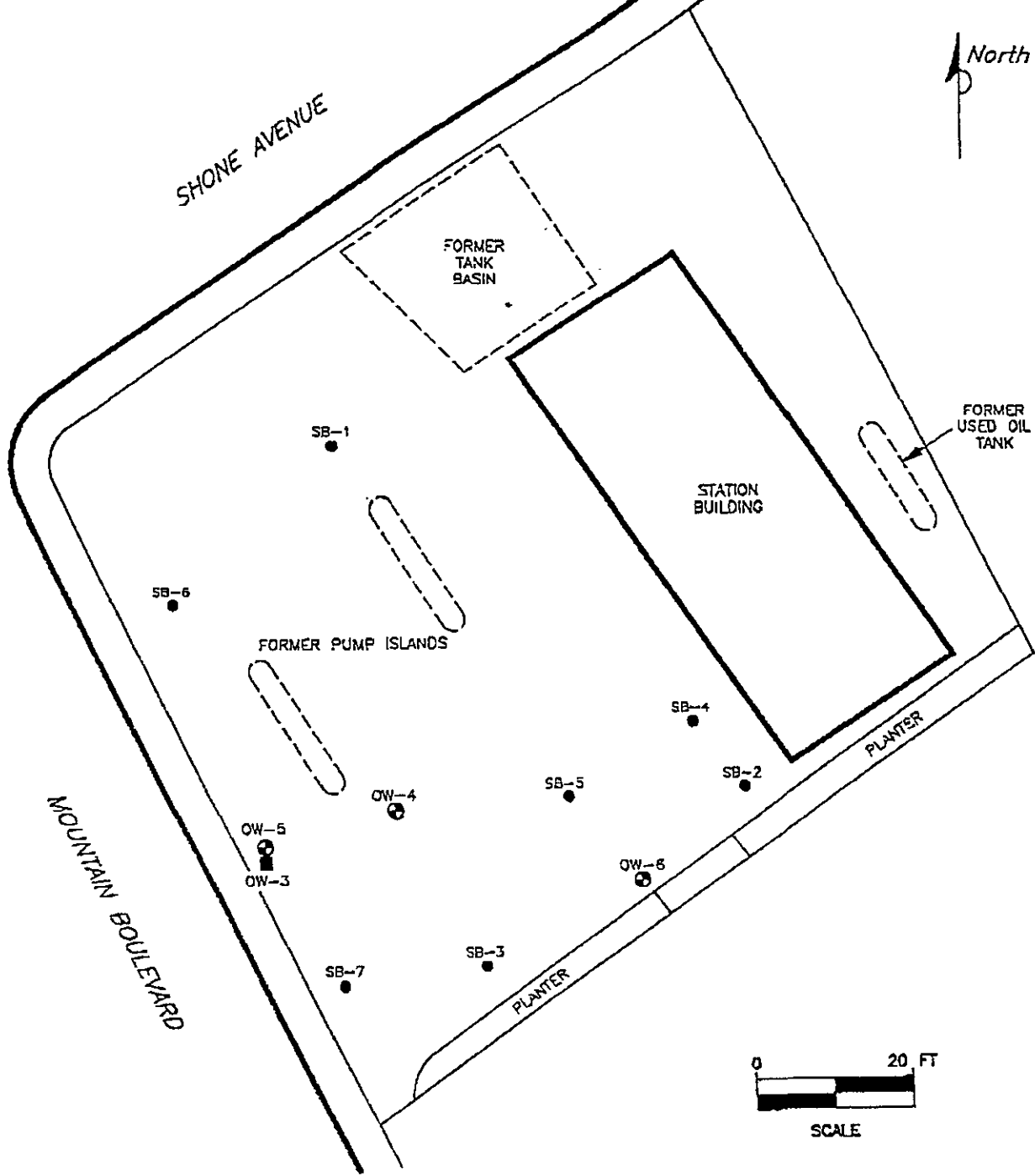


FIGURE 5
 CROSS SECTION A-A'
 RAS 7-8907
 8008 MOUNTAIN BLVD.
 OAKLAND, CALIFORNIA
 PREPARED FOR
 EXXON COMPANY U.S.A.

NOTE:
 FOR PLAN LOCATION OF SECTION A-A'
 SEE DRAWING 148002-A2, FIG. 4





LEGEND:


- ⊙ OW-4 MONITORING WELL LOCATION
- OW-3 FORMER MONITORING WELL LOCATION
- SB-1 SOIL BORING LOCATION

NOTE:
 BASE MAP ADAPTED FROM RESNA FIGURE. SITE DIMENSIONS
 AND FACILITY LOCATIONS NOT VERIFIED.

**FIGURE 2
 SITE MAP**

**EXXON STATION NO. 7-8907
 8008 MOUNTAIN BOULEVARD
 OAKLAND, CA.**

PROJECT NO. D084-841	DRAWN BY L.H. 6/13/85
FILE NO. 94-841-1	PREPARED BY CKA
REVISION NO. 2	REVIEWED BY C.K. S.P.



Delta
 Environmental
 Consultants, Inc.

148041-A1

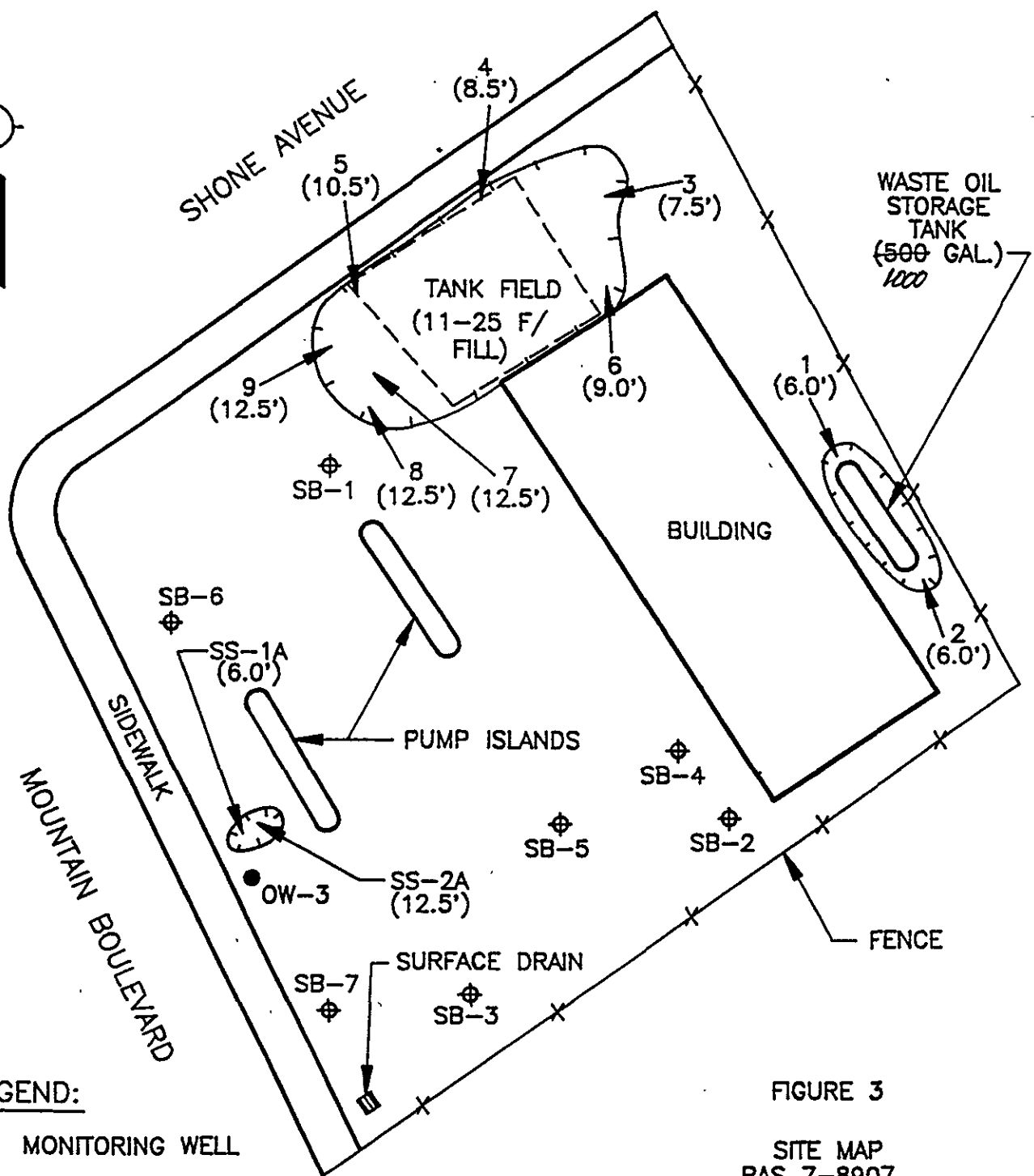
DRAWING NUMBER

C. B. B. / C. B. B.

CHECKED BY / APPROVED BY

J.R.B. / -18-90

DRAWN BY



LEGEND:

- MONITORING WELL
- ⊕ SOIL BORING
- EXCAVATION PITS WITH SOIL SAMPLES (1-9)
COMPOSITE SAMPLES (11-25)
SAMPLE DEPTHS IN PARENTHESIS

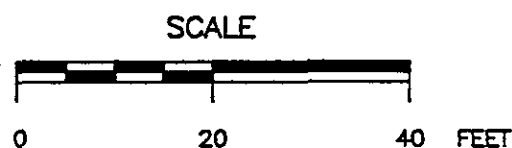


FIGURE 3

SITE MAP
 RAS 7-8907
 8008 MOUNTAIN BLVD.
 OAKLAND, CALIFORNIA

PREPARED FOR
 EXXON COMPANY, U.S.A.
 HOUSTON, TEXAS

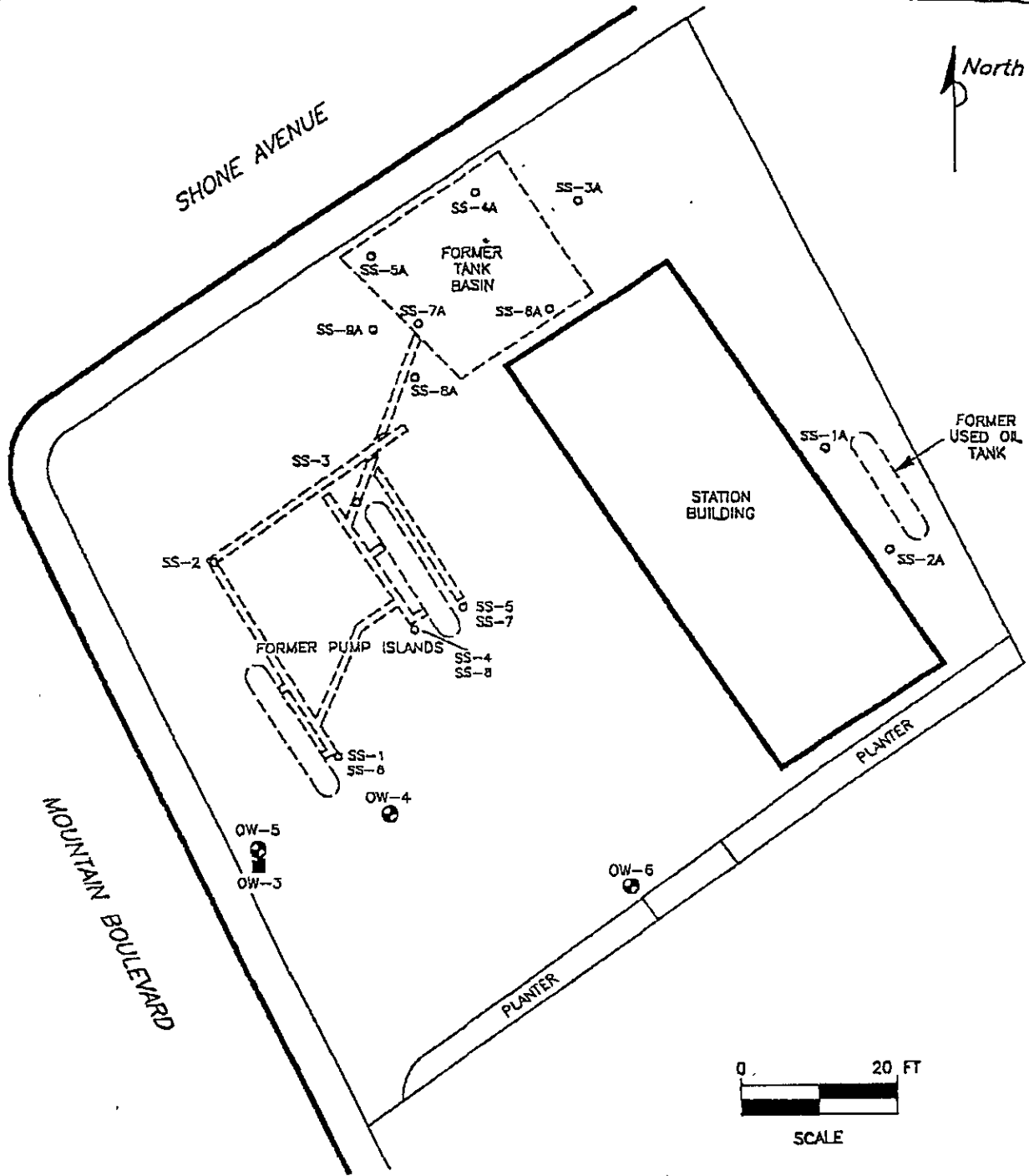


TABLE 1. SOIL ANALYSIS
(Milligrams per Kilogram)

SAMPLE LOCATION	SB-#2	SB-#3	SB-#4	SB-#5	SB-#6	SB-#7
SAMPLE NUMBER	S9-12-178-02	S9-12-178-03	S9-12-178-04	S9-12-178-05	S9-12-178-06	S9-12-178-07
SAMPLE DATE	12/13/89	12/13/89	12/13/89	12/13/89	12/13/89	12/13/89
SAMPLE DEPTH	5.5 ft.	5.5 ft.	5.5 ft.	5.5 ft.	5.5 ft.	5.5 ft.
TPH (Gas)	10.0	23.0	180.0	ND	18.0	18.0
Benzene	ND	0.06	ND	ND	0.24	0.36
Toluene	ND	0.04	ND	ND	0.053	ND
Ethyl Benzene	ND	0.06	ND	ND	0.30	1.0
Total Xylenes	0.16	0.11	4.2	ND	0.16	0.83

NOTES:

ND - None Detected



LEGEND:

- OW-4 MONITORING WELL LOCATION
- OW-3 FORMER MONITORING WELL LOCATION
- SS-1 SOIL SAMPLE LOCATION
- PRODUCT LINE PIPING

NOTE:

BASE MAP ADAPTED FROM RESNA FIGURE. SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED.

FIGURE 4
TANK BASIN & PRODUCT LINE TRENCH
SOIL SAMPLE LOCATIONS
EXXON STATION NO. 7-8907
8008 MOUNTAIN BOULEVARD
OAKLAND, CA.

PROJECT NO. 0094-841	DRAWN BY LH. 8/13/95
FILE NO. 94-841-1	PREPARED BY CKA
REVISION NO. 1	REVIEWED BY CEX



190645-A5

DRAWING NUMBER

9/11/90

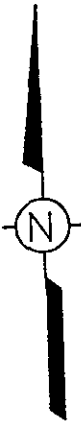
OPD

CHECKED BY

J. BERA

5-13-90

DRAWN BY



SHONE AVENUE

- (1) 8,000 GALLON UNLEADED REGULAR
- (1) 8,000 GALLON LEADED REGULAR
- (1) 5,000 GALLON SUPER UNLEADED

WASTE OIL STORAGE TANK (500 GAL.)

TANK FIELD

BUILDING

PRODUCT LINE

SS-3

SS-2

PRODUCT LINES

SS-5

SS-4

SS-7

SS-8

SS-1

SS-6

PUMP ISLANDS

OW-3

SURFACE DRAIN

FENCE

MOUNTAIN BOULEVARD

LEGEND:

● MONITORING WELL

==== PRODUCT PIPING LINES

X SAMPLE LOCATIONS

SCALE

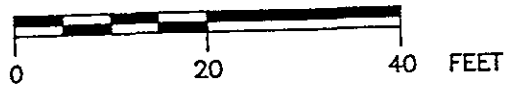


FIGURE 2

SAMPLE MAP
RAS 7-8907
8008 MOUNTAIN BLVD.
OAKLAND, CALIFORNIA

PREPARED FOR

EXXON COMPANY, U.S.A.
HOUSTON, TEXAS



INTERNATIONAL
TECHNOLOGY
CORPORATION

TABLE 7
SOIL CHEMICAL ANALYSIS (PIPING TRENCHES)
(TPH as Gasoline, BTEX)

SAMPLE LOCATION	SAMPLE DATE	SAMPLING DEPTH (feet)	TPH as GASOLINE mg/kg	BENZENE mg/kg	TOLUENE mg/kg	ETHYL-BENZENE mg/kg	XYLENE mg/kg
SS1	6/6/90	2.0	350	0.85	8.3	11	51
SS2	6/6/90	2.0	6.6	ND _{0.025}	ND _{0.025}	ND _{0.025}	0.06
SS3	6/6/90	2.0	4.2	0.27	ND _{0.025}	0.19	0.18
SS4	6/6/90	2.0	330	1.6	2.7	7.1	35
SS5	6/6/90	2.0	3400	5.0	38	76	380
SS6	8/17/90	8.0	ND _{1.0}	0.02	0.05	0.1	0.03
SS7	8/17/90	8.0	ND _{1.0}	ND _{0.005}	ND _{0.005}	ND _{0.005}	ND _{0.005}
SS8	8/17/90	8.0	ND _{1.0}	0.006	ND _{0.005}	0.04	0.02

NOTES:

ND_x - None Detected at x Limit of Detection.
mg/kg - Milligrams per Kilogram
Depths in feet below grade

190645-A13

DRAWING NUMBER

Checked by: S. Dean
Approved by: O.P. Burns / 11/97

Checked by: W.J.
Approved by: 11-20-90

Drawn by: 11-20-90

Drawn by:



SHONE AVENUE

FORMER TANK FIELD

BUILDING

FORMER PUMP ISLANDS

OW-4

OW-5

OW-6

WALL

CONCRETE PAD

MOUNTAIN BOULEVARD

SIDEWALK

PLANTER

PIPING TRENCH

LEGEND :

● MONITORING WELL

APPROXIMATE SCALE

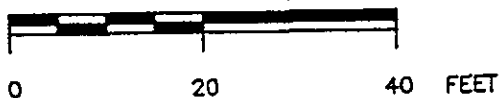


FIGURE 2

SITE MAP
RAS 7-8907
8008 MOUNTAIN BLVD.
OAKLAND, CALIFORNIA

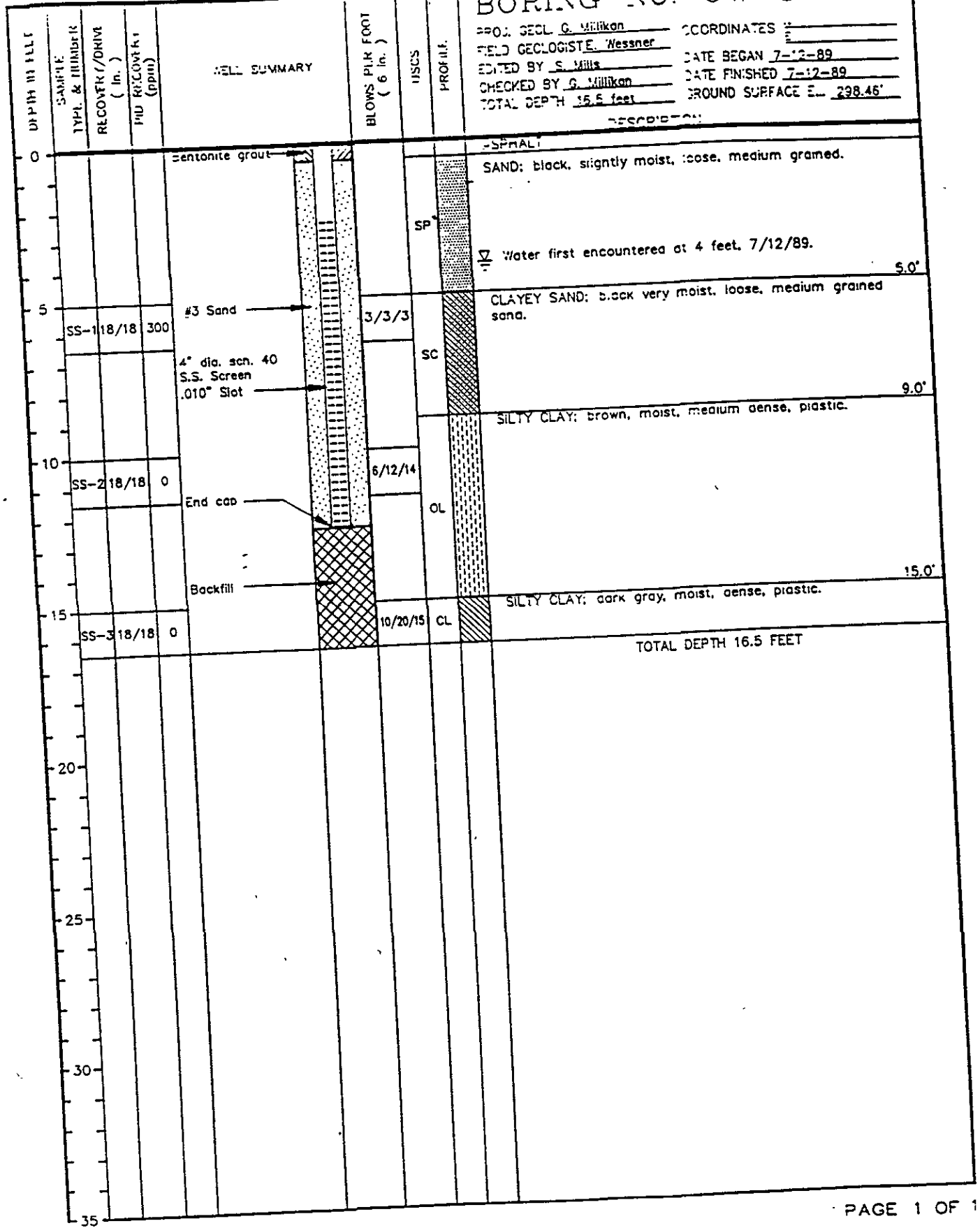
PREPARED FOR
EXXON COMPANY, U.S.A.



INTERNATIONAL
TECHNOLOGY
CORPORATION

BORING NO. OW-3

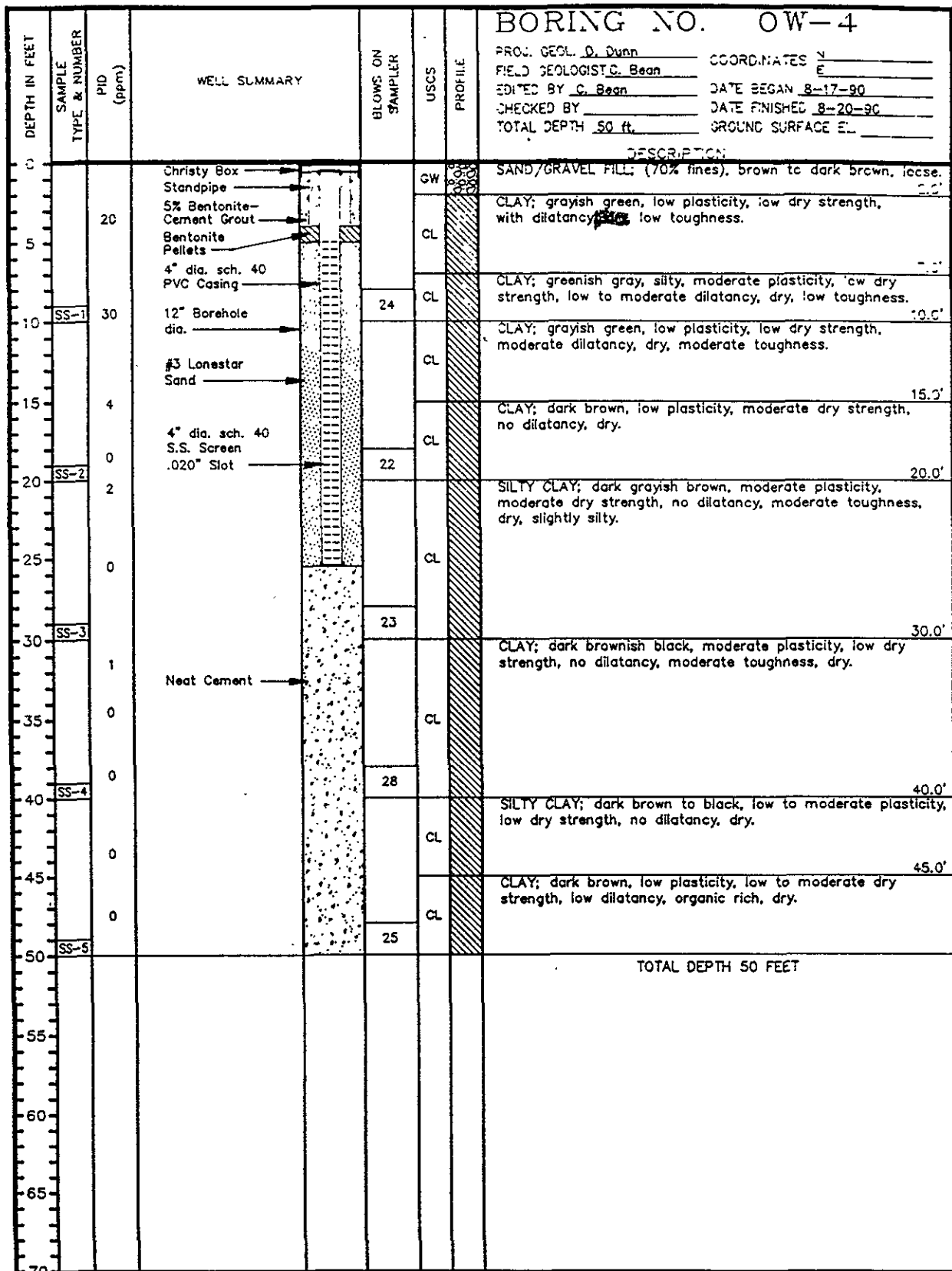
PROJ. GEOL. G. Millikan COORDINATES _____
 FIELD GEOLOGIST E. Wessner DATE BEGAN 7-12-89
 EDITED BY S. Mills DATE FINISHED 7-12-89
 CHECKED BY G. Millikan GROUND SURFACE E. 298.46'
 TOTAL DEPTH 16.5 feet



DRILLING CO.:
 DRILL METHOD: Hollow Stem Auger
 PROJECT NO.: 148002
 CLIENT: EXXON
 LOCATION: Oak Knoll, Store # 7-8907

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS



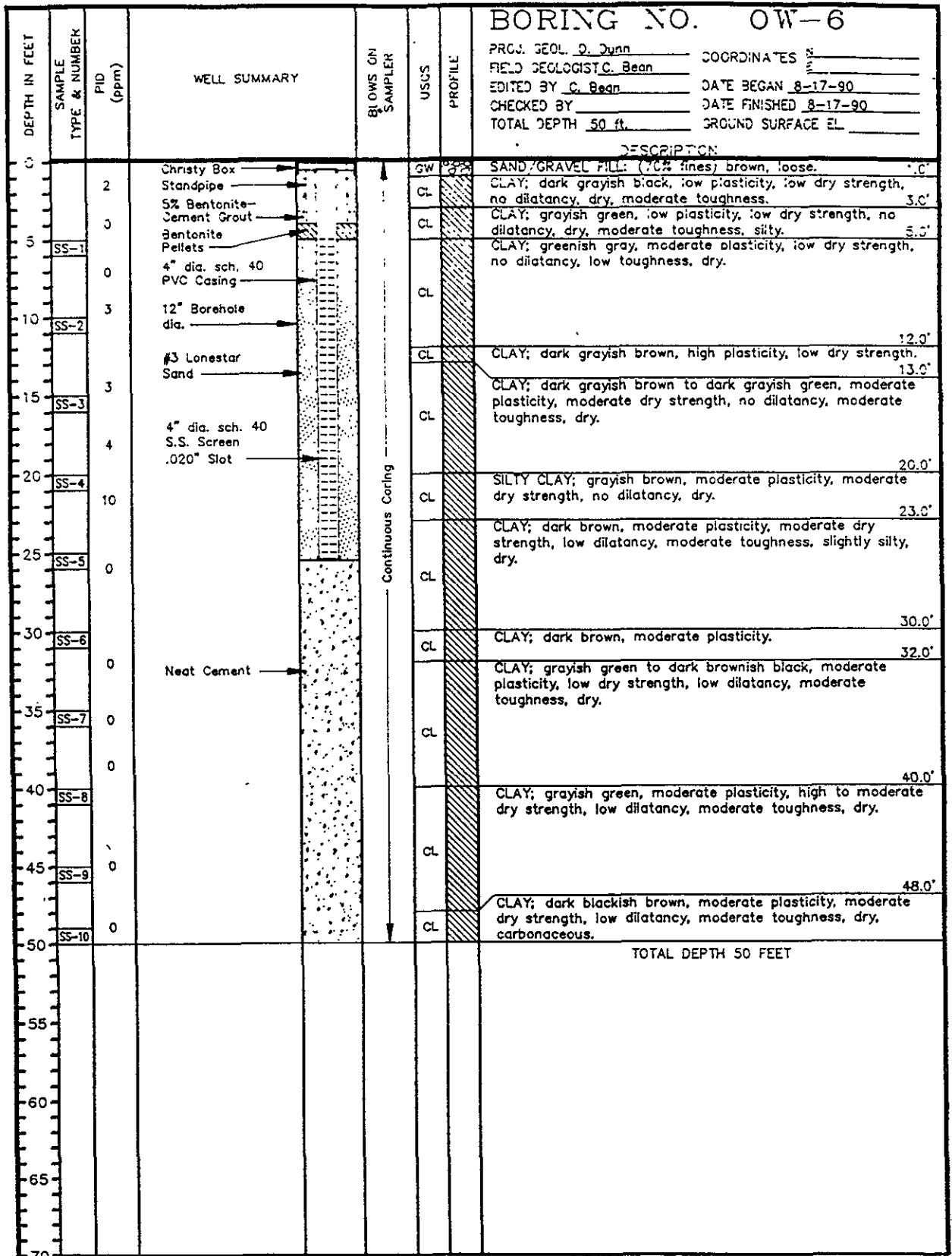


DRILLING CO.: Sierra Pacific Exploration
 DRILL METHOD: Hollow Stem Auger (Rig F-10)

PROJECT NO.: 190645.5
 CLIENT: Exxon U.S.A.
 LOCATION: 8008 Mountain Boulevard

SEE LEGEND FOR LOGS AND TEST PITS
 FOR EXPLANATION OF SYMBOLS AND TERMS



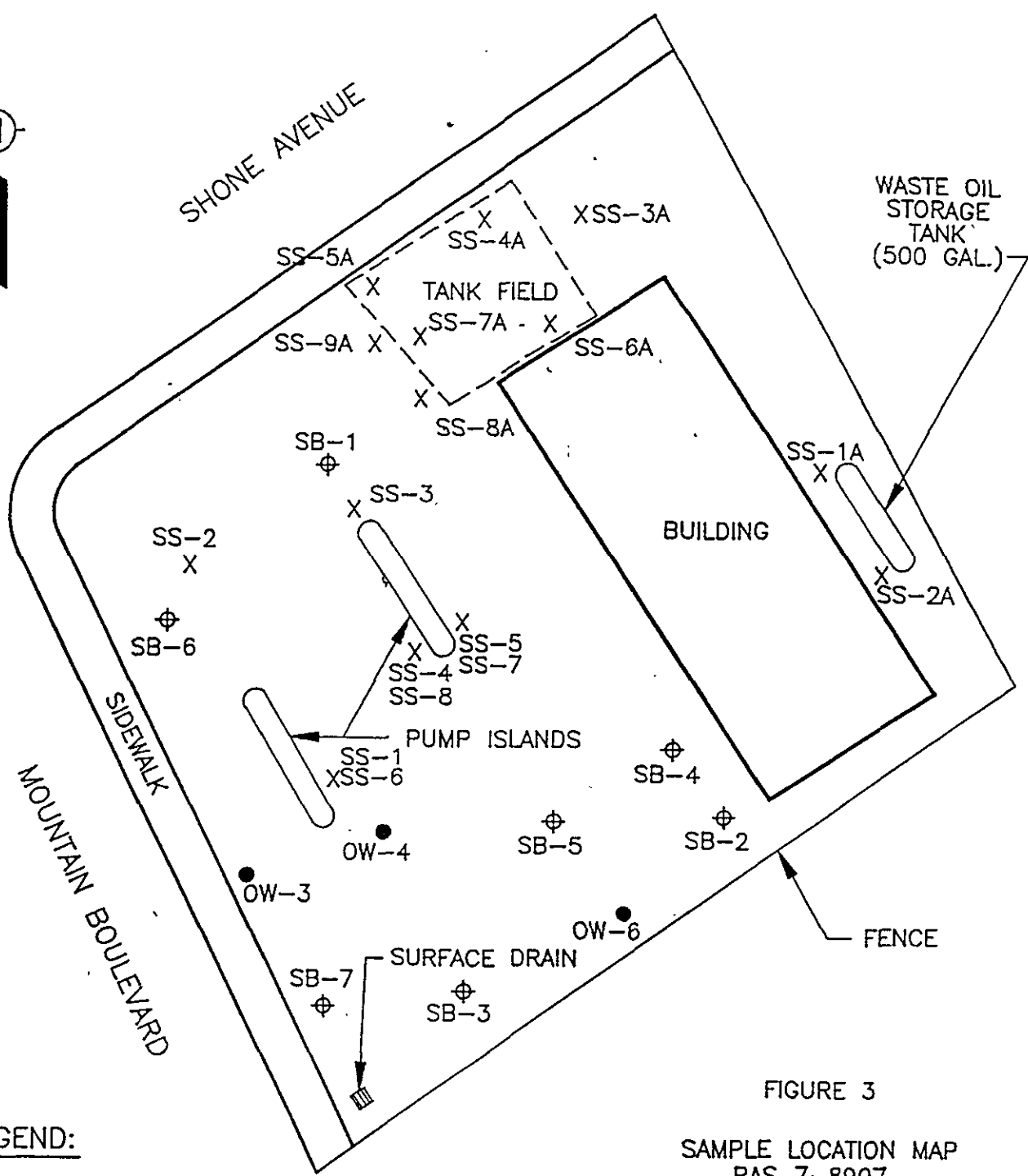


DRILLING CO.: Sierra Pacific Exploration
 DRILL METHOD: Hollow Stem Auger (Rig F-10)

PROJECT NO.: 190645.5
 CLIENT: Exxon U.S.A.
 LOCATION: 8008 Mountain Boulevard

SEE LEGEND FOR LOGS AND TEST PITS
 FOR EXPLANATION OF SYMBOLS AND TERMS

DRAWING NUMBER 190645-A11
 DRAWN BY J. BERA 3-22-90
 CHECKED BY D.D. 7/1/90
 APPROVED BY P.P. 9/11/90



LEGEND:

- MONITORING WELL
(OW-3, GROUNDWATER
OW-4 AND OW-6 VADOSE)
- ⊕ SOIL BORING
- X SOIL SAMPLE

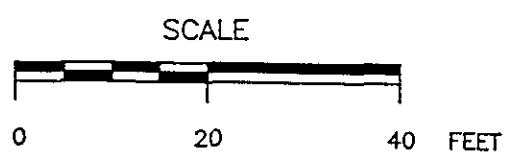


FIGURE 3

SAMPLE LOCATION MAP
 RAS 7-8907
 8008 MOUNTAIN BLVD.
 OAKLAND, CALIFORNIA

PREPARED FOR
 EXXON COMPANY, U.S.A.
 HOUSTON, TEXAS

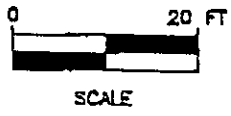
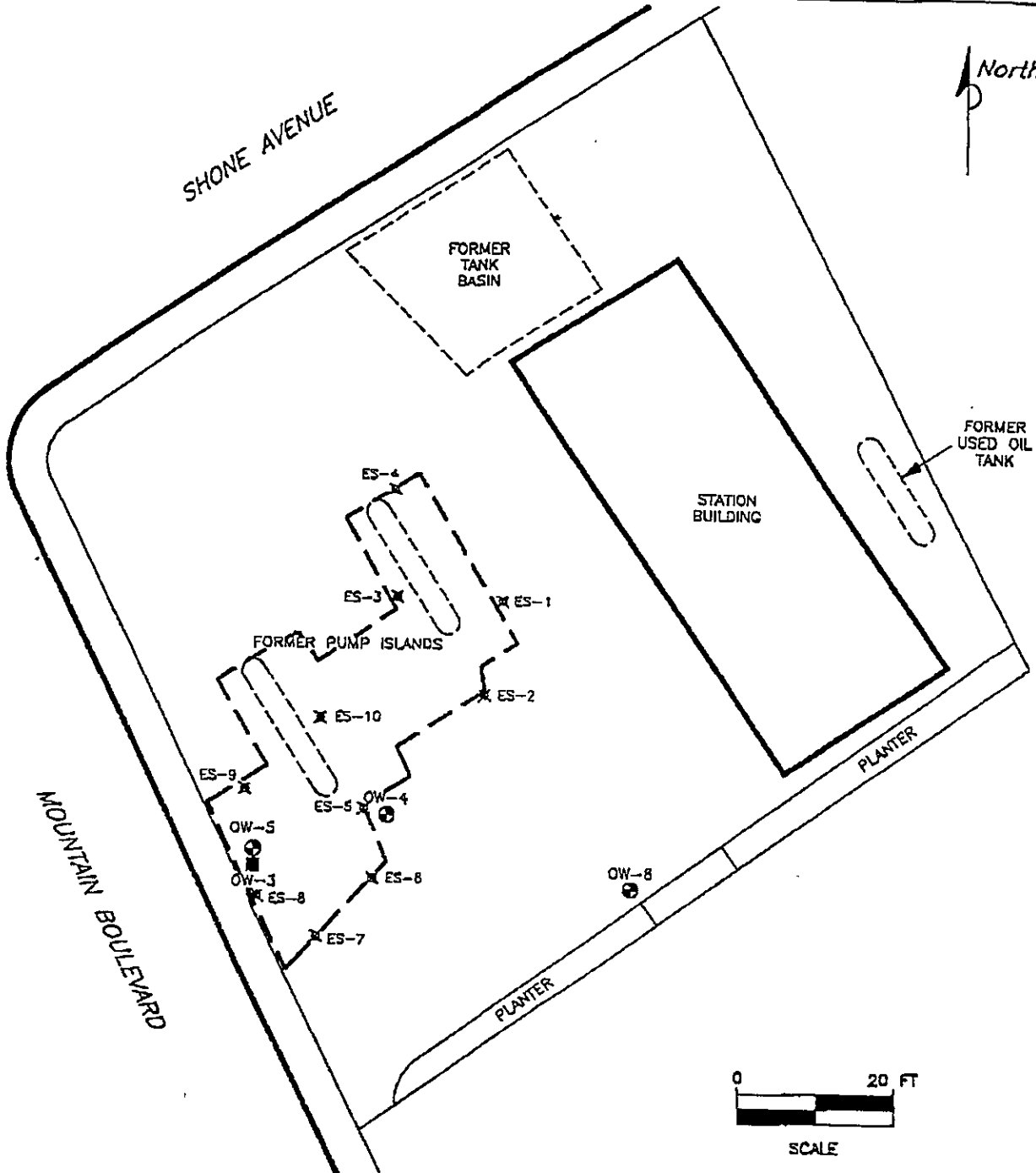


TABLE 4
SOIL CHEMICAL ANALYSIS (UNDISTURBED SOIL)
(TPH as Gasoline, BTEX)
From beneath tanks

SAMPLE LOCATION	SAMPLE DATE	SAMPLING DEPTH (feet)	TPH as GASOLINE mg/kg	BENZENE mg/kg	TOLUENE mg/kg	ETHYL-BENZENE mg/kg	XYLENE mg/kg
SS-1A	2/22/90	6.0	ND _{2.5}	ND _{0.025}	ND _{0.025}	ND _{0.025}	ND _{0.05}
SS-2A	2/22/90	6.0	ND _{2.5}	ND _{0.025}	ND _{0.025}	ND _{0.025}	ND _{0.05}
SS-3A	2/22/90	7.5	ND _{2.5}	ND _{0.025}	ND _{0.025}	ND _{0.025}	ND _{0.05}
SS-4A	2/22/90	8.5	ND _{2.5}	ND _{0.025}	ND _{0.025}	ND _{0.025}	ND _{0.05}
SS-5A	2/22/90	10.5	ND _{2.5}	ND _{0.025}	ND _{0.025}	ND _{0.025}	ND _{0.05}
SS-6A	2/22/90	9.0	ND _{2.5}	ND _{0.025}	ND _{0.025}	ND _{0.025}	ND _{0.05}
SS-7A	2/22/90	12.5	ND _{2.5}	ND _{0.025}	ND _{0.025}	ND _{0.025}	ND _{0.05}
SS-8A	2/22/90	12.5	ND _{2.5}	ND _{0.025}	ND _{0.025}	ND _{0.025}	ND _{0.05}
SS-9A	2/22/90	12.5	ND _{2.5}	ND _{0.025}	ND _{0.025}	ND _{0.025}	ND _{0.05}
(SS-7 retest)	2/22/90	12.5	ND _{2.5}	ND _{0.025}	ND _{0.025}	ND _{0.025}	ND _{0.05}

NOTES:

ND_x - None Detected at x Limit of Detection.
mg/kg - Milligrams per Kilogram
Depths in feet below grade



LEGEND:

- ⊙ OW-4 MONITORING WELL LOCATION
- OW-3 FORMER MONITORING WELL LOCATION
- ✕ ES-1 SOIL SAMPLE LOCATION
- - - LIMITS OF EXCAVATION

NOTE:

BASE MAP ADAPTED FROM RESNA FIGURE. SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED.

FIGURE 3
OVEREXCAVATION SOIL SAMPLE LOCATION MAP
EXXON STATION NO. 7-8907
8008 MOUNTAIN BOULEVARD
OAKLAND, CA.

PROJECT NO. D084-841	DRAWN BY I.H. 8/13/95
FILE NO. 84-841-1	PREPARED BY CKA
REVISION NO. 1	REVIEWED BY CKA

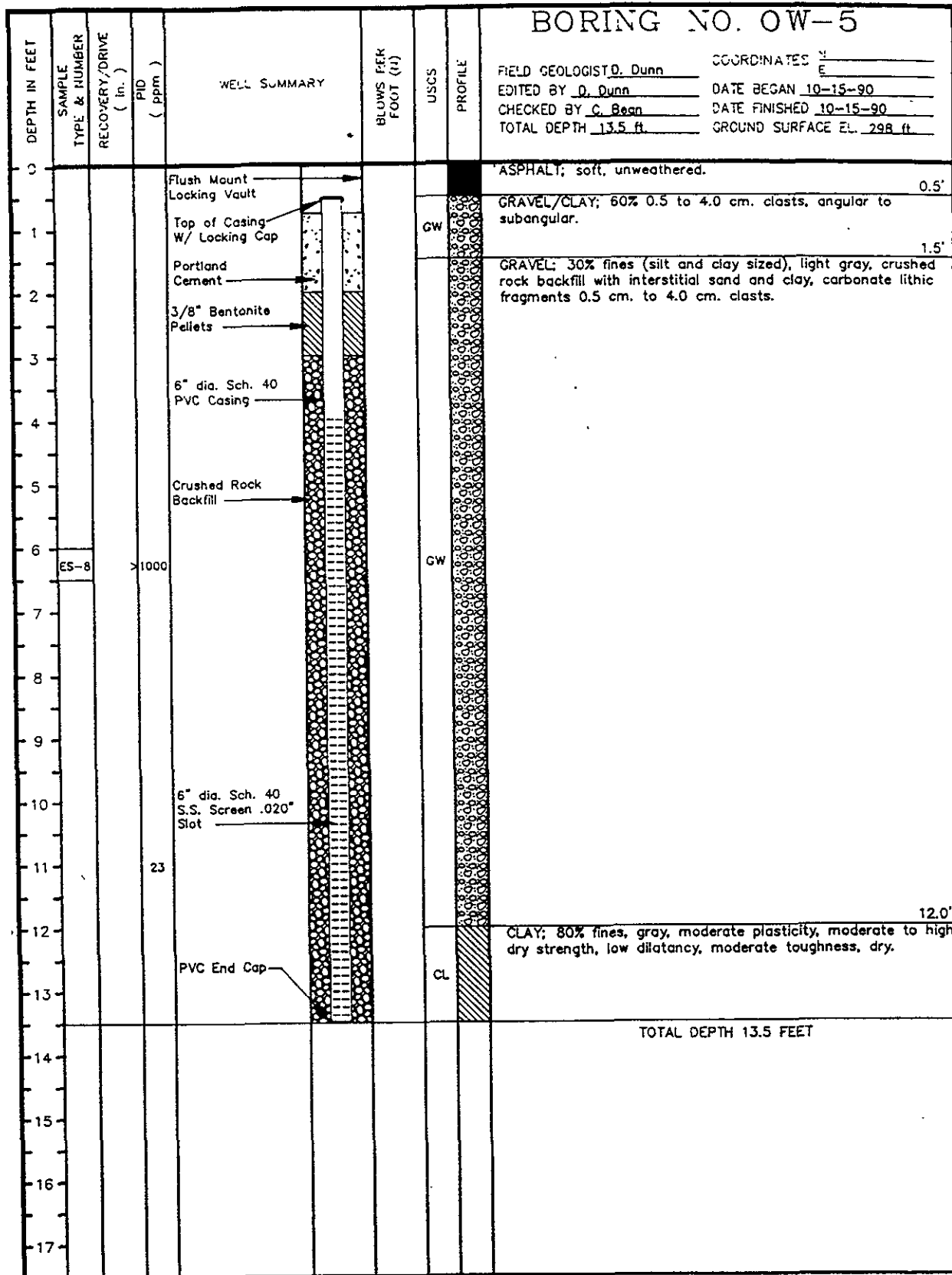
Delta
Environmental
Consultants, Inc.

TABLE 1
SUMMARY OF SOIL ANALYSIS DATA

WELL NAME	DESCRIPTION	TPH (AS GASOLINE) mg/L	BENZENE mg/L	TOLUENE mg/L	ETHYL- BENZENE mg/L	XYLENE mg/L
ES-1	EAST ISLAND	ND _{1.0}	ND _{.005}	ND _{.005}	ND _{.005}	ND _{.005}
ES-2	EAST ISLAND	ND _{1.0}	ND _{.005}	ND _{.005}	ND _{.005}	ND _{.005}
ES-3	EAST ISLAND	ND _{1.0}	ND _{.005}	ND _{.005}	ND _{.005}	ND _{.005}
ES-4	EAST ISLAND	ND _{1.0}	ND _{.005}	ND _{.005}	ND _{.005}	ND _{.005}
ES-5	WEST ISLAND	24	0.39	0.55	0.96	0.34
ES-6	WEST ISLAND	86	2.2	0.17	3.3	5.2
ES-7	WEST ISLAND (FILL)	5,100	19	2.0	170	340
ES-8	WEST ISLAND (FILL)	2,500	6.4	3.1	60	240
ES-9	WEST ISLAND	80	4.4	1.0	2.6	4.0
ES-10	WEST ISLAND	ND _{1.0}	ND _{.005}	ND _{.005}	ND _{.005}	ND _{.005}
ES-11	SPOILS COMPOSITE	5.7	0.089	0.012	0.12	0.20
ES-12	SPOILS COMPOSITE	112	0.26	0.10	0.63	2.1
ES-13	SPOILS COMPOSITE	64	0.26	0.17	1.3	1.9
ES-14	SPOILS COMPOSITE	58	1.9	0.15	1.3	1.8
ES-15	SPOILS COMPOSITE	21	0.57	0.53	0.86	1.2
ES-16	SPOILS COMPOSITE	86	0.16	0.24	2.5	6.0

ND_x - None detected at x limit of detection.

mg/l - Micrograms per liter.



PROJECT NO.: 190645.5
 CLIENT: EXXON COMPANY, U.S.A.
 LOCATION: 8008 MOUNTAIN BLVD.
 OAKLAND, CALIFORNIA

PAGE 1 OF

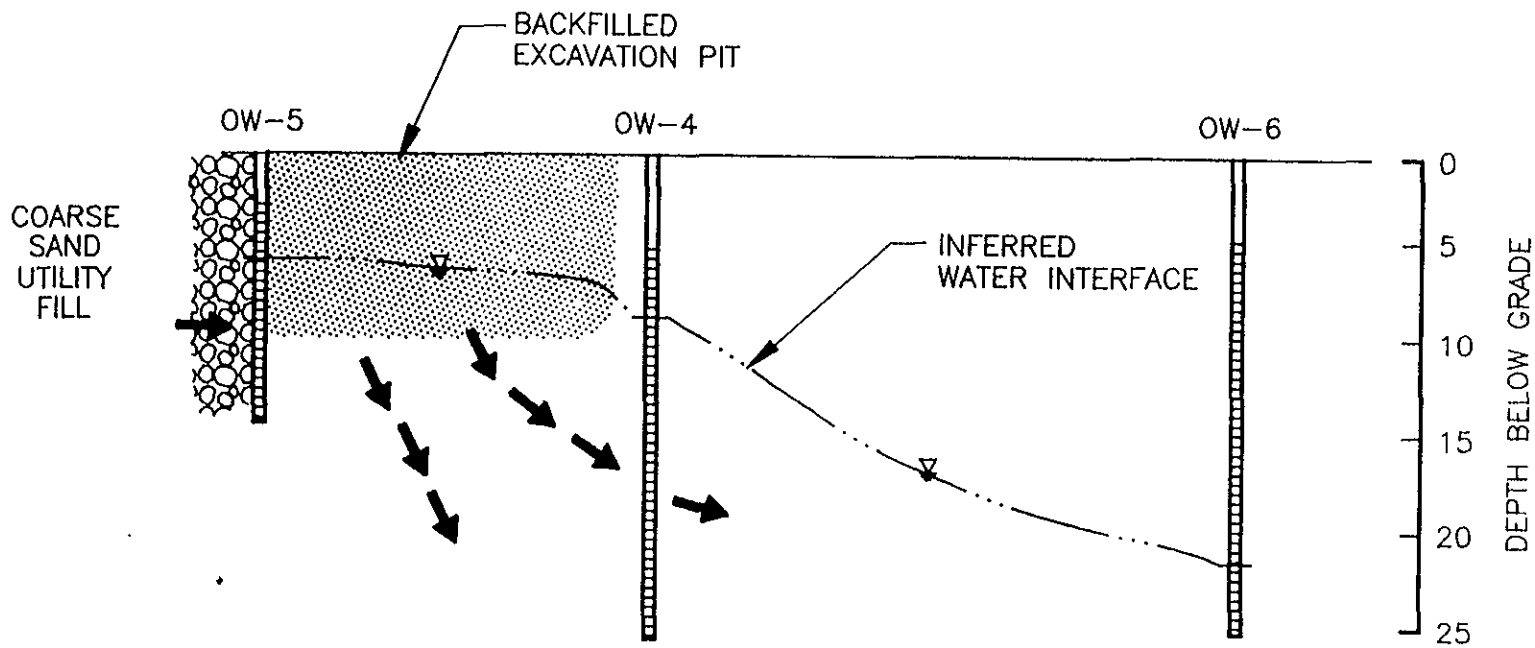
FIGURE 4
 WELL CONSTRUCTION DIAGRAM

TABLE 2
SVE GAS MONITORING

DATE	TIME (HR:MIN)	ELAPSED TIME (HR:MIN)	OVM (ppm)	LAB RESULTS (ppmw)	O ₂ (%)	LEL (%)
2/28	14:16	0:00	15.0	-	20.9	01
2/28	14:25	0:09	45.1	-	21.0	01
3/1	13:20	0:10	-*	-	18.4	01
3/1	13:35	0:25	-*	2.9	19.0	00
3/1	14:35	1:25	-*	1.9	20.4	01
3/1	18:45	5:35	13.1	-	20.7	01
3/2	9:15	20:05	6.9	-	20.8	00
3/2	16:00	26:50	11.6	-	20.9	00
3/3	9:00	43:50	25.0	-	20.9	00
3/3	15:40	50:30	15.0	-	20.9	00
3/4	7:40	66:30	16.9	-	20.8	00
3/4	17:40	76:30	52.0	-	20.9	00
3/5	7:40	90:30	14.6	-	20.4	00
3/5	18:15	101:05	18.8	-	20.9	00
3/6	7:20	114:10	18.8	40	20.8	00
3/6	11:15	114:10	0.0*		20.4	00
3/6	12:30	115:25	4.2*	33	20.3	00
3/6	18:30	121:25	4.2*		20.8	00
3/7	7:10	134:05	0.0*	-	20.9	00
3/7	19:40	146:35	30.4	-	20.9	00
3/8	6:45	157:40	26.7	-	20.9	00
3/8	19:30	170:25	26.7	-	20.9	00
3/9	9:40	184:35	19.3	-	20.9	00
3/9	16:40	191:35	21.3	-	20.8	00
3/10	10:30	209:25	26.6	-	20.9	00
3/10	17:40	216:35	50.0	-	20.9	00
3/11	7:00	229:55	27.4	-	20.9	00
3/11	18:30	241:25	28.9	-	20.9	00
3/12	7:00	253:55	23.7	-	20.8	00
3/12	23:00	269:55	44.0	-	20.8	00
3/13	7:00	277:22	-	-	20.9	00
3/13	15:00	285:55	25.4	31	20.9	00

Notes: * Heavy precipitation interfered with OVM meter (readings are suspect)

DRAWN BY	T.R.S.	CHECKED BY	OPD ST/11	DRAWING NUMBER	190645-A16
	5-3-91	APPROVED BY			



LEGEND



-  HYPOTHESIZED WATER FLOW
-  PERCHED WATER ZONE

FIGURE 4

PERCHED WATER LEVELS
FEBRUARY 1, 1991

RAS 7-8907
8008 MOUNTAIN BLVD
OAKLAND, CALIFORNIA

PREPARED FOR
EXXON COMPANY U.S.A.



INTERNATIONAL
TECHNOLOGY
CORPORATION

TABLE 1
CUMULATIVE GROUNDWATER MONITORING DATA
Exxon Station 7-8907
8008 Mountain Boulevard
Oakland, California
(Page 1 of 2)

Well ID # (TOC)	Sampling Date	SUBJ	DTW feet	Elev.-W	TPHg	B T E X parts per billion			
						<-----	----->	<-----	----->
OW-4 (297.23)	08/15/91	NP	5.20	292.03	240	160	<0.5	<0.5	0.6
	12/19/91	NP	6.29	290.94	<50	3.0	<0.5	<0.5	<0.5
	03/24/92	NP	2.80	294.43	<50	4.4	<0.5	1.3	2.0
	06/24/92	NP	5.51	291.72	<50	1.9	<0.5	<0.5	<0.5
	09/23/92	NP	6.26	290.97	<50	<0.5	<0.5	<0.5	<0.5
	12/17/92	NP	4.52	292.71	<50	2.9	<0.5	1.1	1.3
	03/16/93	NP	4.90	292.33	<50	0.8	<0.5	<0.5	1.0
	06/30/93	NP	4.77	292.46	<50	<0.5	0.5	<0.5	<0.5
	08/17/93	NP	5.08	292.15	<50	<0.5	<0.5	<0.5	<0.5
	11/17/93	NP	6.29	290.94	<50	<0.5	<0.5	<0.5	<0.5
	03/11/94	NP	4.96	292.27	<50	<0.5	<0.5	<0.5	<0.5
	06/06/94	NP	4.73	292.50	67	<0.5	<0.5	<0.5	<0.5
	OW-5 (296.67)	02/01/91	—	—	—	670	12	<0.5	11
03/06/91		—	—	—	830	33	<0.8	21	88
08/20/91		NP	4.10	292.57	500	21	1.0	9.1	22
12/19/91		NP	4.70	291.97	73	11	<0.5	<0.5	2.7
03/24/92		NP	1.16	295.51	120	32	<0.5	<0.5	<0.5
06/24/92		NP	5.25	291.42	<50	2.3	<0.5	<0.5	<0.5
09/23/92		NP	5.73	290.94	<50	<0.5	<0.5	<0.5	<0.5
12/17/92		NP	1.17	295.50	<50	<0.5	<0.5	<0.5	<0.5
03/16/93		NP	3.60	293.07	<50	0.8	<0.5	<0.5	<0.5
06/30/93		NP	3.53	293.14	550	<0.5	1.1	<0.5	0.9
08/17/93		NP	4.16	292.51	<50	0.8	<0.5	<0.5	0.7
11/17/93		NP	5.20	291.47	<50	0.6	<0.5	0.9	<0.5
03/11/94		NP	3.67	293.00	<50	<0.5	<0.5	<0.5	<0.5
06/06/94	NP	3.83	292.84	<50	<0.5	<0.5	<0.5	<0.5	
OW-6 (297.78)	08/15/91	NP	14.88	282.90	<50	<0.5	<0.5	<0.5	<0.5
	12/19/91	NP	13.67	284.11	<50	<0.5	<0.5	<0.5	<0.5
	03/24/92	NP	5.38	292.40	<50	<0.5	<0.5	0.5	0.7
	06/24/92	NP	6.45	291.33	<50	<0.5	<0.5	<0.5	<0.5
	09/23/92	NP	7.45	290.33	<50	<0.5	<0.5	<0.5	<0.5
	12/17/92	NP	13.02	284.76	<50	<0.5	<0.5	<0.5	<0.5
	03/16/93	NP	10.20	287.58	<50	<0.5	<0.5	<0.5	<0.5
	06/30/93	NP	5.42	292.36	<50	<0.5	<0.5	<0.5	<0.5
	08/17/93	NP	14.95	282.83	<50	<0.5	<0.5	<0.5	<0.5
	11/17/93	NP	16.02	281.76	<50	<0.5	<0.5	<0.5	<0.5
	03/11/94	NP	11.47	286.31	<50	<0.5	<0.5	<0.5	<0.5
	06/06/94	NP	5.70	292.08	<50	<0.5	<0.5	<0.5	<0.5

See notes on page 2 of 2

TABLE 2

GROUND WATER ANALYTICAL RESULTS
 Concentrations in micrograms per liter ($\mu\text{g/L}$)

Exxon Retail Station No. 7-8907
 8008 Mountain Boulevard
 Oakland, California

<u>Monitoring Well</u>	<u>Sample Date</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-benzene</u>	<u>Xylenes</u>	<u>TPH* as gasoline</u>
OW-4	08/25/94	<0.5	<0.5	<0.5	5.0	<50
	11/08/94	<0.5	<0.5	<0.5	<0.5	<50
	02/21/95	<0.5	<0.5	<0.5	<0.5	<50
	05/05/95	<0.5	<0.5	<0.5	<0.5	<50
OW-5	08/25/94	<0.5	<0.5	<0.5	<0.5	<50
	11/08/94	0.9	<0.5	<0.5	<0.5	57
	02/21/95	<0.5	<0.5	<0.5	<0.5	<50
	05/05/95	<0.5	<0.5	<0.5	<0.5	<50
OW-6	08/25/94	3.5	2.1	2.6	11	<50
	11/08/94	<0.5	<0.5	<0.5	<0.5	<50
	02/21/95	<0.5	<0.5	<0.5	<0.5	<50
	05/05/95	<0.5	<0.5	<0.5	<0.5	<50

* Total petroleum hydrocarbons.