



Integrated  
Environmental  
Solutions

6065 Bristol Parkway, 2nd Floor  
Culver City, CA 90230-6601  
Telephone: 310-645-6970  
Fax: 310-645-6971

December 7, 2001

# 692/446

Mr. Barney Chan  
ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY  
ENVIRONMENTAL PROTECTION  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577

RE: REQUEST FOR ADDITIONAL DATA  
CASE CLOSURE REQUEST  
ARAMARK UNIFORM SERVICES  
330 CHESTNUT STREET, OAKLAND, CALIFORNIA

Dear Mr. Chan:

Per our December 5, 2001 conversation, RMT, Inc. (RMT), on behalf of ARAMARK Uniform & Career Apparel, Inc. (ARAMARK), is providing the attached additional data supporting ARAMARK's request for case closure, pertaining to the above referenced site.

If you have any questions or comments, please feel free to contact me at (310) 645-6970 or Bob Robbins at (608) 592-3222.

Sincerely,

RMT, Inc.

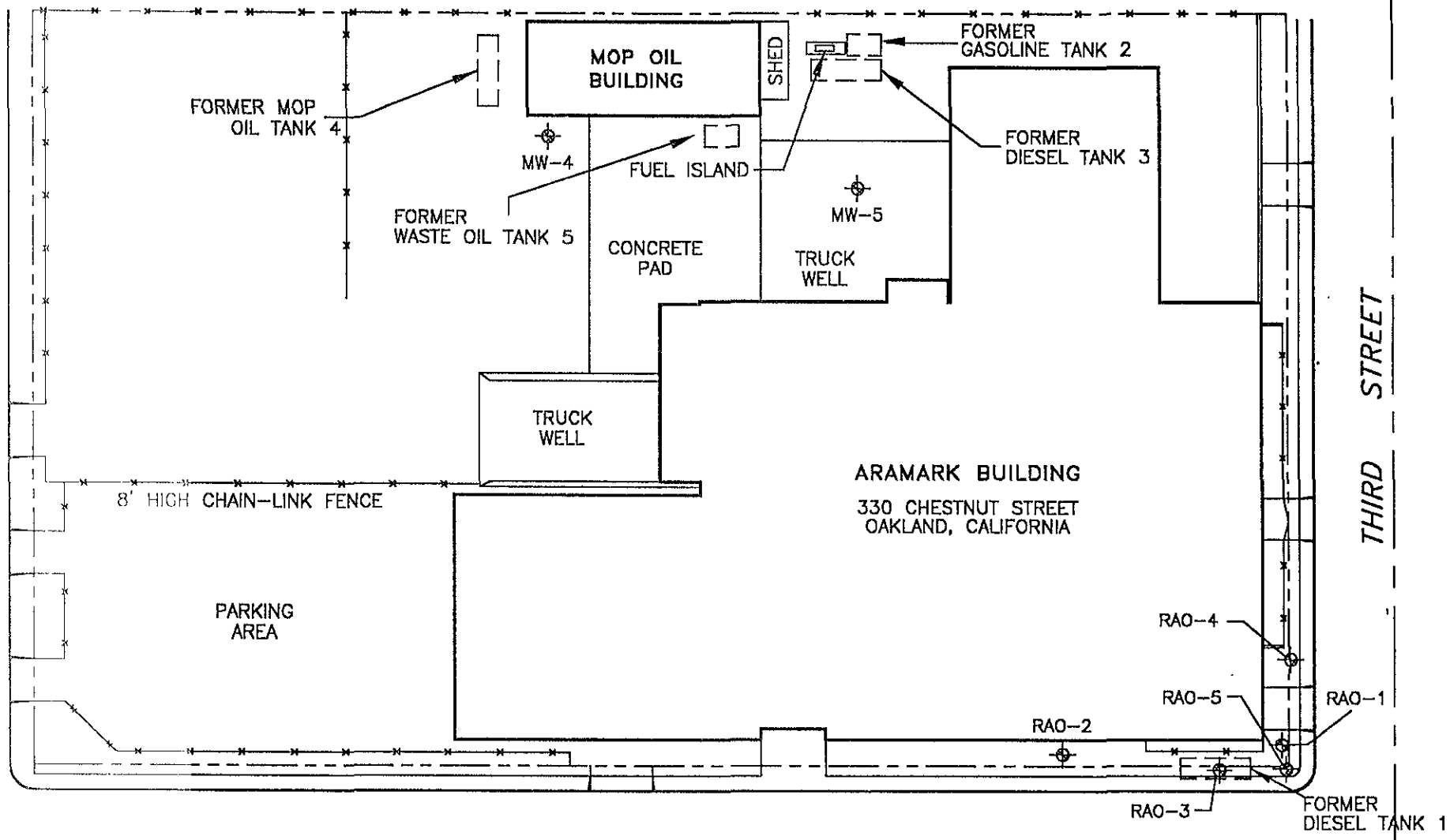
Tariq Ahmad  
Project Manager

cc: Mr. Robert J. Robbins, ARAMARK Uniform Services

**TABLE 1**  
**Chemical Analyses of Soil Samples**  
**(Corresponding to Figure 2)**

Sample Location	Sampling Date	Benzene (ug/kg)	Toluene (ug/kg)	Ethyl benzene (ug/kg)	Total Xylenes (ug/kg)	TPH-D (mg/kg)	Oil and Grease (mg/kg)	TPH-G
RAO-1-5	6/9/89	<0.3	<0.3	<0.3	<0.3	<2	<100	--
RAO-1-10	6/9/89	<0.3	<0.3	<0.3	<0.3	<2	<100	--
RAO-1-20	6/9/89	<0.3	<0.3	<0.3	<0.3	<2	<100	--
RAO-2-5	6/9/89	<0.3	<0.3	<0.3	<0.3	<2	<100	--
RAO-2-10	6/9/89	<0.3	<0.3	<0.3	<0.3	<2	<100	--
RAO-2-15	6/9/89	<0.3	<0.3	<0.3	<0.3	<2	<100	--
RAO-2-20	6/9/89	<0.3	<0.3	<0.3	<0.3	<2	<100	--
RAO-3-8	6/9/89	<0.3	75	840	2,700	22,529	8,200	--
RAO-3-15	6/9/89	<0.3	<0.3	<0.3	<0.3	<2	<100	--
RAO-3-20	6/9/89	<0.3	<0.3	<0.3	<0.3	<2	<100	--
RAO-4-5	6/9/89	<0.3	<0.3	<0.3	<0.3	<2	<100	--
RAO-4-10	6/9/89	<0.3	<0.3	<0.3	<0.3	<2	<100	--
RAO-5-3	8/27/98	<5	<5	<5	<10	<10	--	--

-- Not Analyzed



CHESTNUT STREET

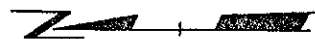
THIRD STREET

ARAMARK BUILDING  
330 CHESTNUT STREET  
OAKLAND, CALIFORNIA

LEGEND:

⊕  
RAO-3 GROUNDWATER MONITORING WELL

⊙  
SB-1 SOIL BORING LOCATION



0 60 120



APPROXIMATE SCALE IN FEET

PROJECT: ARAMARK UNIFORM SERVICES  
OAKLAND, CALIFORNIA

SHEET TITLE: SITE PLAN

DRAWN BY: GRB	SCALE:	PROJ. NO. 12013.1B
CHECKED BY: TA		FILE NO. Oakland.dwg
APPROVED BY: DBM	DATE PRINTED:	FIGURE 2
DATE: MARCH 2001		



RMT Inc. - Los Angeles  
Phone: 310/645-6970  
6065 Bristol Parkway  
2nd Floor  
Culver City, CA 90230-6601



# LOG OF TEST BORING

F-203 (R 01-87)

BORING NO. RA01  
 SHEET NO. 1 OF 1  
 PROJECT NO. 1622.01  
 INSTALLATION 6/7/89  
 SURFACE ELEV. \_\_\_\_\_  
 BOREHOLE DIA. 8 IN.

PROJECT NAME ARATEX - OAKLAND  
 LOCATION 3RD & CHESTNUT ST. OAKLAND, CA  
 CONTRACTOR ANDERSON GEOTECH.  
 DRILLING METHOD HSA

## SAMPLING NOTES

INTERVAL NO.	TYPE	RECOVERY		MOISTURE	DEPTH	VISUAL CLASSIFICATION AND GENERAL OBSERVATIONS	GENERAL WELL CONSTRUCTION
		N	IN				
						Fill material. (peat), organic, loose. dark brown.	
5	SS	49	11		5	Very fine to fine SAND, moderate brown, moist.	
10	SS	48	12		10	Medium Clayey SAND, moderate yellowish brown, trace organics, moist.	
					15	Medium SAND, dark-yellowish brown.	
					16-18	CLAY.	
20	SS	95	12		20	Medium Clayey SAND, dark-yellowish brown, trace organics, soft.	
					25	EOB at about 25.0 ft.	
					30		
					35		

## GENERAL NOTES

DATE STARTED 7 JUN 89  
 DATE COMPLETED 7 JUN 89  
 RIG MOBILE B-34  
 CREW CHIEF SWARTOUT  
 LOGGED LYVERSE CHECKED \_\_\_\_\_

## WATER LEVEL OBSERVATIONS

WHILE DRILLING  $\frac{1}{4}$  9.0 FT.  
 AT COMPLETION  $\frac{1}{4}$  8.1 FT.  
 AFTER DRILLING  
 CASE: IN: DATE/TIME \_\_\_\_\_ DEPTH \_\_\_\_\_  
 WATER: DATE/TIME 6/8/89 @ 07:45 DEPTH 7.90 FT.



# LOG OF TEST BORING

F-203 (R 31-37)

BORING NO. RA02  
 SHEET NO. 1 OF 1  
 PROJECT NO. 1622.01  
 INSTALLATION 6/8/89  
 SURFACE ELEV. \_\_\_\_\_  
 BOREHOLE DIA. 8 IN.

PROJECT NAME ARATEX - OAKLAND  
 LOCATION 3RD & CHESTNUT ST. OAKLAND, CA  
 CONTRACTOR ANDERSON GEOTECH.  
 DRILLING METHOD HSA

SAMPLING NOTES					VISUAL CLASSIFICATION AND GENERAL OBSERVATIONS	GENERAL WELL CONSTRUCT.
INTERVAL NO.	RECOVERY TYPE	MOISTURE N IN		DEPTH		
					0	
5	SS	57	12		5	
10	SS	58	12		10	
15	SS	36	12		15	
20	SS	100	10		20	
					25	
					30	
					35	

Organic (peat) FILL material, dusky brown.

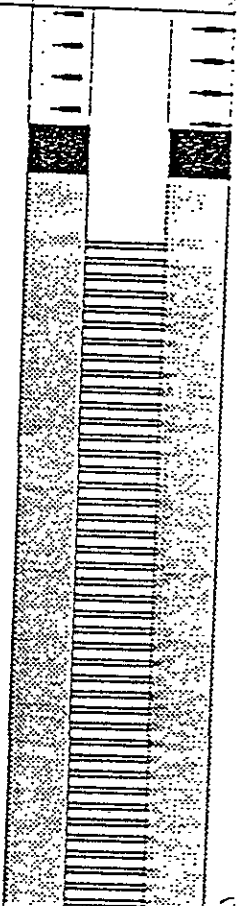
Fine to medium SAND, moderate yellowish brown, some fine gravel (5mm).

Same as above, but with some clay. Clayey SAND, moderate brown, some iron stain.

Above grades to CLAY and SAND, grayish, stiff.

Same as above.

EOB at 27 ft.



### GENERAL NOTES

### WATER LEVEL OBSERVATIONS

DATE STARTED 7 JUN 89  
 DATE COMPLETED 7 JUN 89  
 RIG MOBILE B-34  
 CREW CHIEF SWARTOUT  
 LOGGED LYVERSE CHECKED \_\_\_\_\_

WHILE DRILLING 9.0 FT  
 AT COMPLETION 8.1 FT  
 AFTER DRILLING  
 GAGE IN: DATE/TIME \_\_\_\_\_ DEPTH \_\_\_\_\_  
 WATER: DATE/TIME 6/8/89 07:45 DEPTH 8.00 FT



# LOG OF TEST BORING

F-203 (R 31-37)

BORING NO. RA03  
 SHEET NO. 1 OF 1  
 PROJECT NO. 1622.01  
 INSTALLATION 6/8/89  
 SURFACE ELEV. \_\_\_\_\_  
 BOREHOLE DIA. 8 IN.

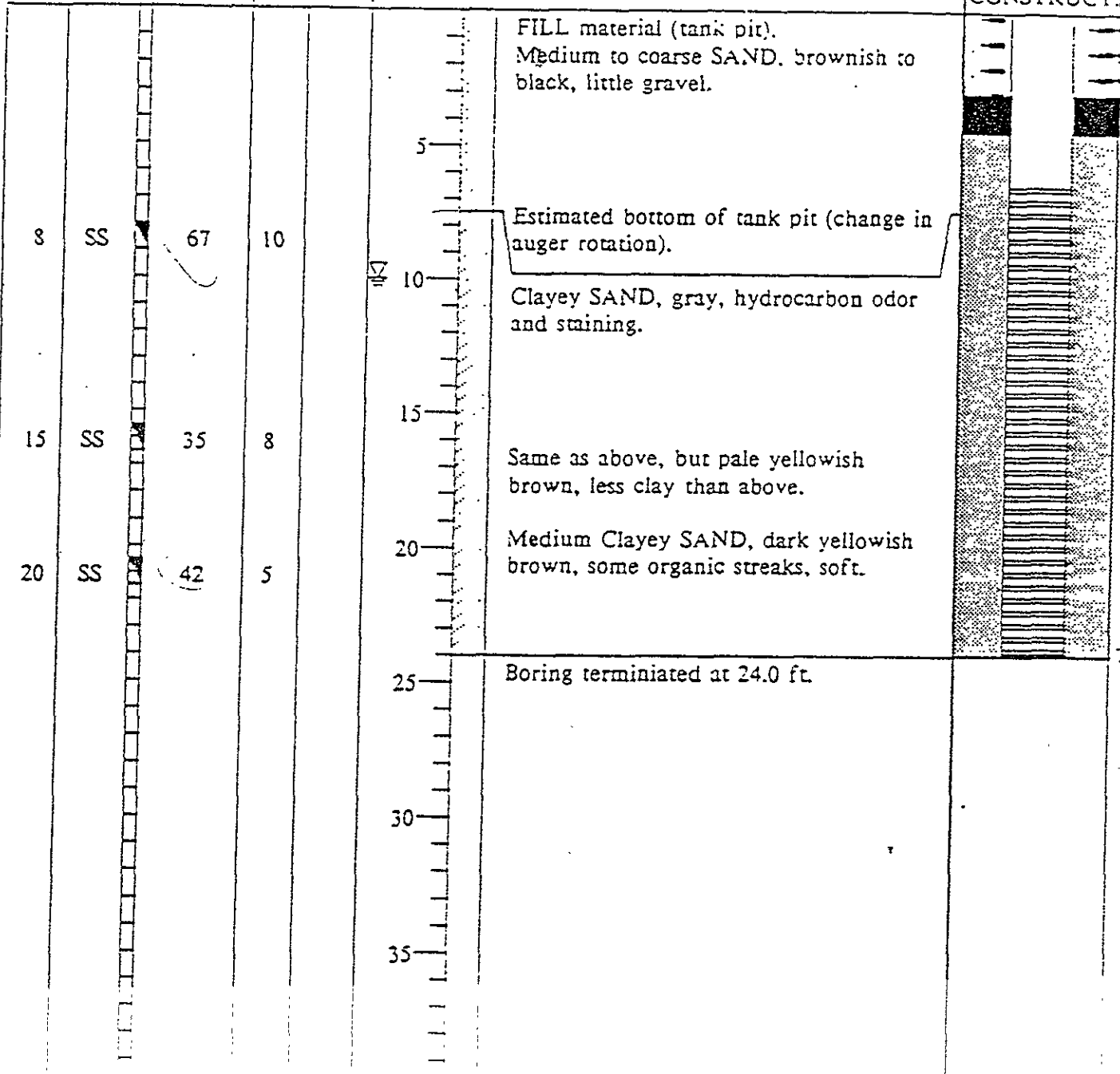
PROJECT NAME ARATEX - OAKLAND  
 LOCATION 3RD & CHESTNUT ST. OAKLAND, CA  
 CONTRACTOR ANDERSON GEOTECH.  
 DRILLING METHOD HSA

## SAMPLING NOTES

INTERVAL NO.	RECOVERY TYPE	RECOVERY		MOISTURE DEPTH
		N	IN	
8	SS	67	10	
15	SS	35	8	
20	SS	42	5	

## VISUAL CLASSIFICATION AND GENERAL OBSERVATIONS

## GENERAL WELL CONSTRUCTION



## GENERAL NOTES

## WATER LEVEL OBSERVATIONS

DATE STARTED 8 JUN 89  
 DATE COMPLETED 8 JUN 89  
 RIG MOBILE B-34  
 CREW CHIEF SWARTOUT  
 LOGGED LYVERSE CHECKED \_\_\_\_\_

WHILE DRILLING  $\equiv$  10.0 FT.  
 AT COMPLETION  $\nabla$  \_\_\_\_\_  
 AFTER DRILLING \_\_\_\_\_  
 GROUNDWATER: DATE/TIME \_\_\_\_\_ DEPTH \_\_\_\_\_  
 WATER: DATE/TIME 6/8/89 12:20 DEPTH 8.35 FT.



# LOG OF TEST BORING

F-203 (R 01-87)

BORING NO. RA04  
 SHEET NO. 1 OF 1  
 PROJECT NO. 1622.01  
 INSTALLATION 6/8/89  
 SURFACE ELEV. \_\_\_\_\_  
 BOREHOLE DIA. 8 IN.

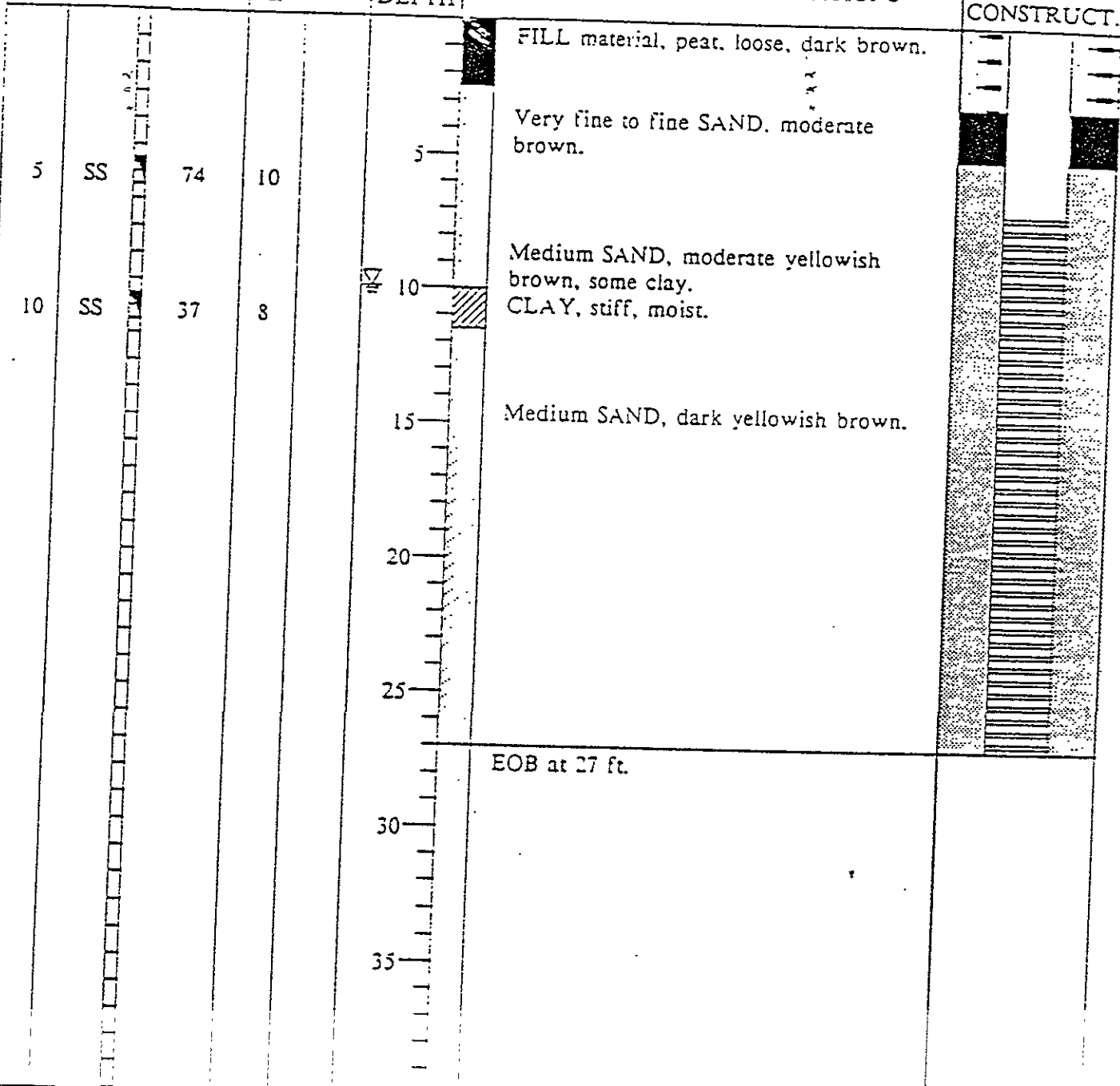
PROJECT NAME ARATEX --OAKLAND  
 LOCATION 3RD & CHESTNUT ST. OAKLAND, CA  
 CONTRACTOR ANDERSON GEOTECH.  
 DRILLING METHOD HSA

## SAMPLING NOTES

INTERVAL NO.	RECOVERY TYPE	RECOVERY		MOISTURE
		N	IN	
5	SS	74	10	
10	SS	37	8	

## VISUAL CLASSIFICATION AND GENERAL OBSERVATIONS

## GENERAL WELL CONSTRUCT.



## GENERAL NOTES

DATE STARTED 8 JUN 89  
 DATE COMPLETED 8 JUN 89  
 RIG MOBILE B-34  
 CREW CHIEF SWARTOUT  
 LOGGED LYVERSE CHECKED \_\_\_\_\_

## WATER LEVEL OBSERVATIONS

WHILE DRILLING 10.0 FT  
 AT COMPLETION \_\_\_\_\_  
 AFTER DRILLING \_\_\_\_\_  
 GROUNDWATER: DATE/TIME \_\_\_\_\_ DEPTH \_\_\_\_\_  
 WATER: DATE/TIME 6/8/89 15:20 DEPTH 8.36 FT.



**LOG OF TEST BORING**  
 FN: 12013595

BORING NO.: S8RA05  
 SHEET NO.: 1 OF 1  
 PROJECT NO.: 12013.15  
 INSTALLATION: \_\_\_\_\_  
 SURFACE ELEV.: \_\_\_\_\_  
 BOREHOLE DIA.: 8"

PROJECT NAME: ARAMARK UNIFORM SERVICES, INC.  
 LOCATION: OAKLAND, CALIFORNIA  
 CONTRACTOR: WEST HAZMAT  
 DRILLING METHOD: HOLLOW STEM AUGER

SAMPLING NOTES					DEPTH	VISUAL CLASSIFICATION AND GENERAL OBSERVATIONS
INTERVAL		RECOVERY %		PIG (ppm)		
NO.	TYPE	BLOWS				
RAO-5 @ 1'	SS	HARD AUGER	<2			SILT (SM): dark brown, slightly moist, no odor or stain.
RAO-3 @ 3'	SS	HARD AUGER	3.9			SILT (SM); with little fine sand, light brown, slightly moist, no odor or stain.
RAO-3 @ 5'	SS	50	50-8"	<2	5	SAND w/SILT (SP-SM): fine to medium sand, dark brown, moist, no odor or stain.
RAO-5 @ 10'	SS	100	11,14,14	<2	10	SILT (SM): dark brown, slight plasticity, wet, no odor or stain.
RAO-3 @ 12'	SS	100	15,19,20	<2		
RAO-5 @ 15'	SS	100	7,9,10	<2	15	SAND w/SILT (SW-SM): fine sand, slight plasticity, wet, dark brown with beige swirls and red stains, no odors.
RAO-5 @ 17'	SS	100	7,20,30-3"	<2		Same as above.
RAO-3 @ 20'	SS	80	20,30-1"	<2	20	SAND (SW): fine to medium sand, dark brown, moist, no odor or stain.
RAO-5 @ 22'	SS	80	13,30-3"	<2		
RAO-5 @ 25'	SS	80	22,30-1"	<2	25	Same as above.
RAO-3 @ 30'	SS	80	18,30-2"	<2	30	Total Depth = 30'
					35	
					40	

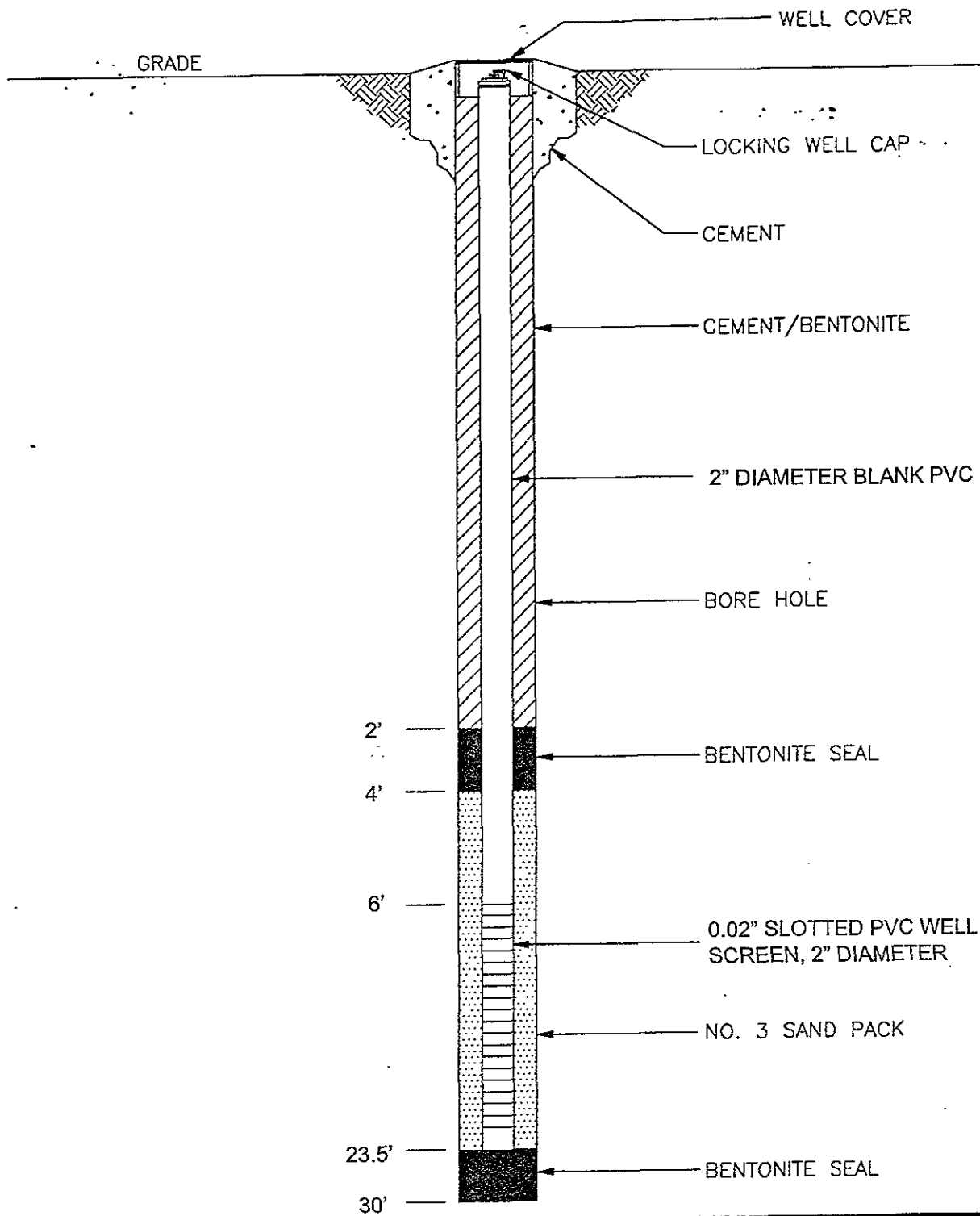
GENERAL NOTES

DATE STARTED: 2/21/98  
 DATE COMPLETED: 8/27/98  
 RIG LIMITED ACCESS \_\_\_\_\_  
 CREW CHIEF: ADAM  
 LOGGED BY: YANI CHECKED: \_\_\_\_\_

WATER LEVEL OBSERVATIONS

WHILE DRILLING: 9.0' bgs  
 AT COMPLETION: 7.0' bgs.  
 AFTER DRILLING: \_\_\_\_\_  
 GROUNDWATER DATE/TIME: \_\_\_\_\_ DEPTH: \_\_\_\_\_  
 WATER: DATE/TIME: \_\_\_\_\_ DEPTH: \_\_\_\_\_





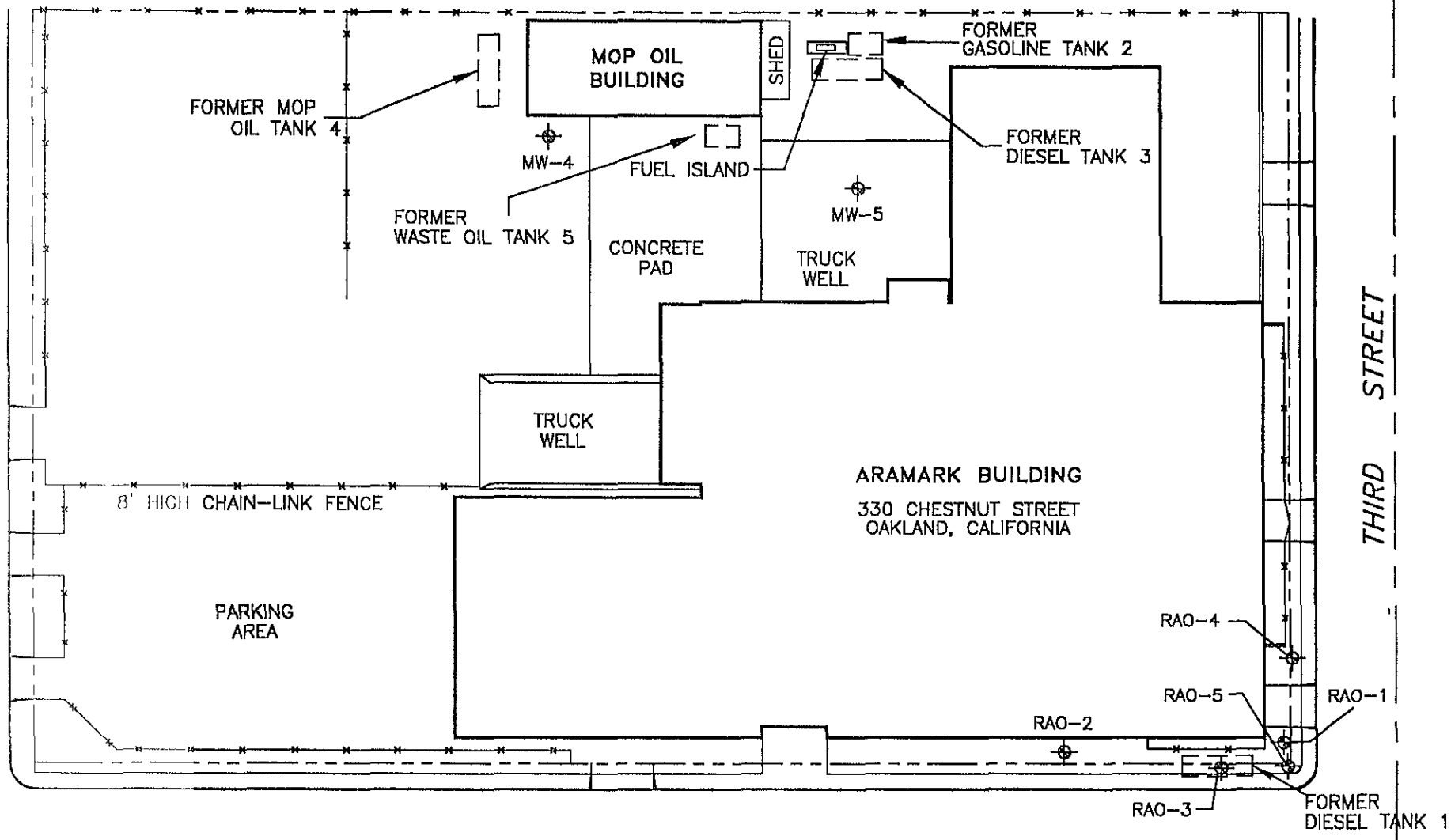
PROJECT: ARAMARK UNIFORM SERVICES, INC. OAKLAND, CALIFORNIA		
SHEET TITLE MONITORING WELL CONSTRUCTION DETAIL		
DRAWN BY: CRE	SCALE NOT TO SCALE	PROJ NO 12011
CHECKED BY		FILE NO 12011A20
APPROVED BY	DATE PRINTED	RAO-5
DATE AUGUST 1998		
PNT Inc - Los Angeles Phone 310/578-1241 4540 Admiralty Way Suite 301 Marina Del Rey, CA 90292		

NOT TO SCALE



**TABLE 2**  
**Chemical Analyses of Soil (Sampled 5/6/95)**  
**(Corresponding to Figure 2)**


Soil Boring	Depth (ft-bgs)	Parameter (mg/kg)									
		Benzene	Toluene	Ethyl-benzene	Xylenes	TRPH	TPH-G	TPH-MS	TPH-D	TPH-MO	TPH-K
MW-4	5	--	--	--	--	14	<10	<10	<40	<10	<10
	10	--	--	--	--	14	<10	<10	<40	<10	<10
MW-5	5	<5	<5	<5	<5	--	<10	<10	<40	<10	<10
	7.5	<5	<5	<5	<5	--	<10	<10	<40	<10	<10

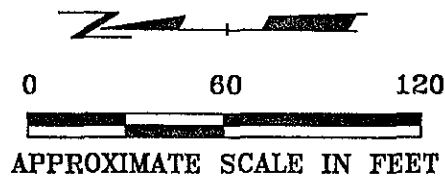


CHESTNUT STREET

LEGEND:


 RAO-3 GROUNDWATER MONITORING WELL


 SB-1 SOIL BORING LOCATION



PROJECT: ARAMARK UNIFORM SERVICES  
OAKLAND, CALIFORNIA

SHEET TITLE: SITE PLAN

DRAWN BY: CRB	SCALE:	PROJ. NO. 12013.18
CHECKED BY: TA		FILE NO. Oakland.dwg
APPROVED BY: DBM	DATE PRINTED:	FIGURE 2
DATE: MARCH 2001		



RMT, Inc. - Los Angeles  
 Phone: 310/845-6970  
 6065 Bristol Parkway  
 2nd Floor  
 Culver City, CA 90230-6601



**LOG-OF TEST BORING**  
FN: 12013MW4

BORING NO.: MW-4  
 SHEET NO.: 1 OF 1  
 PROJECT NO.: 12013.13  
 INSTALLATION: \_\_\_\_\_  
 SURFACE ELEV.: \_\_\_\_\_  
 BOREHOLE DIA.: 8 INCHES

PROJECT NAME: ARAMARK OAKLAND  
 LOCATION: OAKLAND (MOP OIL BUILDING)  
 CONTRACTOR: WEST HAZMAT DRILLING  
 DRILLING METHOD: HOLLOW STEM AUGER

SAMPLING NOTES					VISUAL CLASSIFICATION AND GENERAL OBSERVATIONS	GENERAL WELL CONSTRUCT.
INTERVAL		RECOVERY				
NO.	TYPE	BLOWS	DEPTH			
					Asphaltic concrete pavement	
					Coarse sub-angular, well graded gravel, sub grade (GW).	
MW4-5	SOIL	70	4/5/9	5	Well graded, fine grained sand (SW), dark brown, slightly moist, no staining, no odor.	
MW4-7.5	SOIL	100	12/22/27		Well graded, fine sand (SW), light brown, slightly moist, no staining, no odor	
MW4-10	SOIL	100	12/17/24	10	Same as above, wet.	
				15		
				20		
				25		
				30		
					Total depth of boring = 17 feet bgs. Groundwater encountered at 13 feet.	

**GENERAL NOTES**  
 DATE STARTED 5/6/95  
 DATE COMPLETED 5/6/95  
 RIG MOBILE B-61  
 CREW CHIEF \_\_\_\_\_  
 LOGGED KEVIN BATE CHECKED JIM VAN NORTWICK

**WATER LEVEL OBSERVATIONS**  
 WHILE DRILLING: 13 FEET  
 AT COMPLETION: \_\_\_\_\_  
 AFTER DRILLING: \_\_\_\_\_  
 CAVE-IN DATE/TIME \_\_\_\_\_ DEPTH \_\_\_\_\_  
 WATER DATE/TIME \_\_\_\_\_ DEPTH \_\_\_\_\_



# LOG OF TEST BORING

FN: 12013MW5

BORING NO.: MW-5

SHEET NO.: 1 OF 1

PROJECT NAME: ARAMARK OAKLAND

PROJECT NO.: 12013.13

LOCATION: OAKLAND (MOP OIL BUILDING)

INSTALLATION:

CONTRACTOR: WEST HAZMAT DRILLING

SURFACE ELEV.:

DRILLING METHOD: HOLLOW STEM AUGER

BOREHOLE DIA.: 8 INCHES

SAMPLING NOTES					VISUAL CLASSIFICATION AND GENERAL OBSERVATIONS	GENERAL WELL CONSTRUCT.
INTERVAL		RECOVERY		DEPTH		
NO.	TYPE	BLOWS	DEPTH			
					Concrete pavement	
					Coarse sub-angular well graded gravel, sub grade (GW).	
MW5-5	SOIL	80	4/6/6	5	Well graded, fine grained sand (SW), dark brown, no staining, no odor.	
MW5-7.5	SOIL	100	10/15/18		Same as above, moist.	
MW5-10	SOIL	100	7/17/15	10	Same as above, wet.	
				15	Total depth of boring = 15 feet bgs. Groundwater encountered at 10 feet.	
				20		
				25		
				30		

GENERAL NOTES

DATE STARTED 5/6/95  
 DATE COMPLETED 5/6/95  
 RIG MOBILE B-6  
 CREW CHIEF \_\_\_\_\_  
 LOGGED KEVIN BATE CHECKED JM VAN NORTWICK

WATER LEVEL OBSERVATIONS

WHILE DRILLING: 10 FEET  
 AT COMPLETION: \_\_\_\_\_  
 AFTER DRILLING: \_\_\_\_\_  
 GAGE-IN DATE/TIME \_\_\_\_\_ DEPTH \_\_\_\_\_  
 WATER DATE/TIME \_\_\_\_\_ DEPTH \_\_\_\_\_

**TABLE 3**  
**Chemical Analyses of Soil Samples**  
**(Corresponding to Figure 3)**

Sample Location	Sampling Date	Benzene (ug/kg)	Toluene (ug/kg)	Ethyl benzene (ug/kg)	Total Xylenes (ug/kg)	TPH-D (mg/kg)	Oil and Grease (mg/kg)	TPH-G
SB-1-7	9/25/90	<5	<5	<5	<15	89	--	--
SB-1-9	9/25/90	<5	763	2,560	4,430	41,000	--	--
SB-2-7	9/25/90	<5	292	906	1,120	9,900	--	--
SB-2-9	9/25/90	<5	300	596	1,060	2,600	--	--
SB-3-7	9/25/90	<5	388	1,110	1,600	4,400	--	--
SB-3-9	9/25/90	<5	159	<5	319	4,600	--	--
SB-4-7	9/25/90	<5	<5	<5	<15	11	--	--
SB-4-9	9/25/90	<5	<5	17	<15	1,200	--	--
SB-5-7	9/25/90	<5	<5	<5	<15	<1	--	--
SB-5-9	9/25/90	<5	<5	<5	<15	<1	--	--
SB-6-7	9/25/90	<5	<5	<5	<15	1.1	--	--
SB-6-9	9/25/90	<5	<5	<5	<15	1.3	--	--

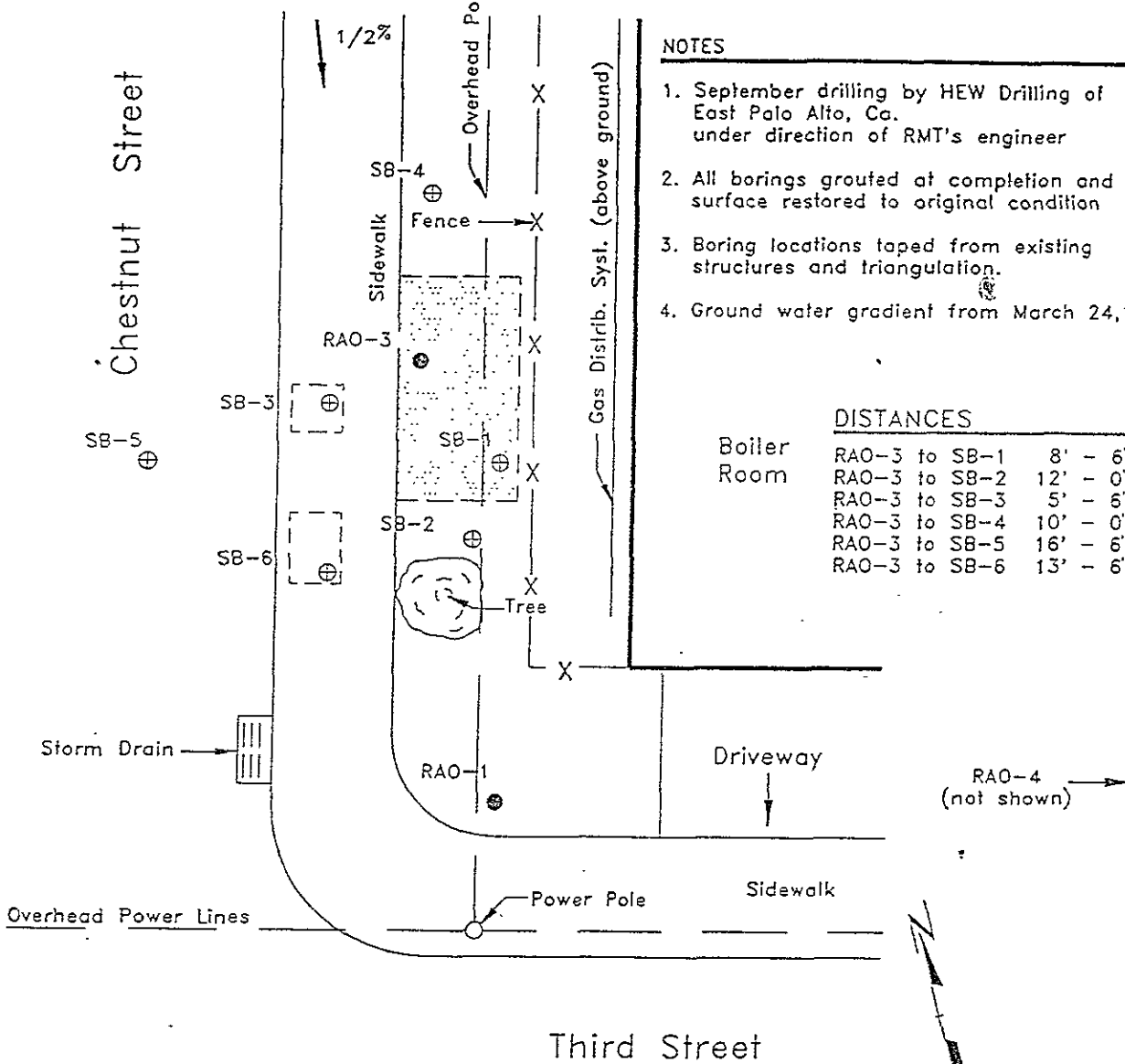
-- Not Analyzed

Legend :

- RAO-x ● Ground Water Monitoring Well ; RMT 5/89
- SB-x ⊕ Soil Boring ; RMT 9/90
- Plant
- Estimated limits of Dec.1988 Tank Removal and backfill
- x-x-x- Fence, 6-Foot high chain link
- Concrete cut out for boring and Replaced at completion.

MAIN OFFICE →

RAO-2 (not shown) ↑



NOTES

1. September drilling by HEW Drilling of East Palo Alto, Ca. under direction of RMT's engineer
2. All borings grouted at completion and surface restored to original condition
3. Boring locations taped from existing structures and triangulation.
4. Ground water gradient from March 24,1990

DISTANCES

	RAO-3 to SB-1	8' - 6"
Boiler Room	RAO-3 to SB-2	12' - 0"
	RAO-3 to SB-3	5' - 6"
	RAO-3 to SB-4	10' - 0"
	RAO-3 to SB-5	16' - 6"
	RAO-3 to SB-6	13' - 6"

SEPTEMBER 1990 INVESTIGATION / SITE PLAN

ARATEX FACILITY # 516  
 330 Chestnut Street  
 Oakland, Ca.



NO.	DAVID PASI
DATE	DEC 07, 1990
PRO. #	1800 03
FILE #	18010300

Figure 3



# LOG OF TEST BORING

F-203 (R 01-87)

BORING NO. SB-1  
 SHEET NO. 1 OF 1  
 PROJECT NO. 1622.03  
 INSTALLATION 09/25/90  
 SURFACE ELEV. \_\_\_\_\_  
 BOREHOLE DIA. 7.5 IN.

PROJECT NAME ARATEX #516 VZI-RI/FS  
 LOCATION Oakland, CA  
 CONTRACTOR HEW Drilling  
 DRILLING METHOD HSA

## SAMPLING NOTES

## VISUAL CLASSIFICATION AND GENERAL OBSERVATIONS

INTERVAL		RECOVERY		MOISTURE	
NO.	TYPE	N	IN		DEPTH

		(PPM)			
A	SS	13	12		5
B	SS	191	9		
C	SS	689	18		
D	SS	1248+	18		10

SAND, fine, brownish yellow, loose, dry, (SP), (Fill).

Silty fine SAND, dark brown, loose, damp (SP-SM).

-with occasional brownish yellow clayey SAND pockets at 5'.

-moist below 6.5' with slight olive green discoloration, faint diesel odor.

-below 7.5' wet with trace free water.  
-below 8' olive green with strong diesel like odor.

[Note: 0 recovery on initial sampling with 18" recovery on resampling]

End of Boring at 9.5 Ft.  
Sampling Completed to 11.0 Ft.

### Notes:

- No water accumulation in boring
- Boring collapsed to 7-foot depth on auger removal.

## GENERAL NOTES

## WATER LEVEL OBSERVATIONS

DATE STARTED 25 SEP 90  
 DATE COMPLETED 25 SEP 90  
 RIG CME 45B  
 CREW CHIEF B. Douglas  
 LOGGED Z. Batchko CHECKED [Signature]

WHILE DRILLING  $\nabla$  \_\_\_\_\_  
 AT COMPLETION  $\nabla$  \_\_\_\_\_  
 AFTER DRILLING  
 GAGE IN: DATE/TIME \_\_\_\_\_ DEPTH \_\_\_\_\_  
 WATER: DATE/TIME \_\_\_\_\_ DEPTH \_\_\_\_\_





# LOG OF TEST BORING

F-203 (R 01-87)

BORING NO. SB-2

SHEET NO. 1 OF 1

PROJECT NAME ARATEX #516 VZI-RI/FS

PROJECT NO. 1622.03

LOCATION Oakland, CA

INSTALLATION 09/25/90

CONTRACTOR HEW Drilling

SURFACE ELEV. \_\_\_\_\_

DRILLING METHOD HSA

BOREHOLE DIA. 7.5 IN.

## SAMPLING NOTES

## VISUAL CLASSIFICATION AND GENERAL OBSERVATIONS

INTERVAL NO.	TYPE	RECOVERY		MOISTURE	
		N	IN		DEPTH

		(PPM)			
A	SS		2		5
B	SS	36	10		
C	SS	Over	18		
D	SS	Over	18		10

SAND, fine, reddish brown, some silt, loose, dry, with occasional brick fragments, (SP), (Fill).  
-moist below 2.5'.

SAND, medium to fine, brownish yellow, loose, moist, with some silt, trace clay, (SP-SM).  
-brick obstructing sampler just above the shoe.

-with several medium gravel-sized brick fragments.

Silty fine SAND, olive green, trace clay, medium, wet, trace free water and free product, strong diesel odor, (SP-SM).  
-strong diesel odor.  
-lost bottom 6" on retrieval.

End of Boring at 9.5 Ft.  
Sampling Completed to 11.0 Ft.  
Notes:  
1. No water accumulation in boring during advancement.  
2. "Over" indicates PID Readings exceed meter's range.  
3. Boring collapsed to 6.5-foot depth on auger removal.

## GENERAL NOTES

## WATER LEVEL OBSERVATIONS

DATE STARTED 25 SEP 90  
 DATE COMPLETED 25 SEP 90  
 RIG CME 45B  
 CREW CHIEF B. Douglas  
 LOGGED Z. Batchko CHECKED ZB

WHILE DRILLING   
 AT COMPLETION   
 AFTER DRILLING \_\_\_\_\_  
 CAVE-IN: DATE/TIME \_\_\_\_\_ DEPTH \_\_\_\_\_  
 WATER: DATE/TIME \_\_\_\_\_ DEPTH \_\_\_\_\_



# LOG OF TEST BORING

F-203 (R 01-87)

BORING NO. SB-3

SHEET NO. 1 OF 1

PROJECT NAME ARATEX #516 VZI-RI/FS

PROJECT NO. 1622.03

LOCATION Oakland, CA

INSTALLATION 09/25/90

CONTRACTOR HEW Drilling

SURFACE ELEV. \_\_\_\_\_

DRILLING METHOD HSA

BOREHOLE DIA. 7.5 IN.

## SAMPLING NOTES

## VISUAL CLASSIFICATION AND GENERAL OBSERVATIONS

INTERVAL		RECOVERY		MOISTURE	
NO.	TYPE	N	IN	DEPTH	

NO.	TYPE	N (PPM)	IN	DEPTH
A	SS		0	5
B	SS	671	18	
C	SS	392	18	

4-inch thick concrete sidewalk.

SAND, fine, dark brown to dark gray, some silt, trace coarse gravel, loose, dry, (SW-SP), (Base-Fill).

Silty fine SAND, dark brown, trace clay, medium, moist, (SP-SM).

-below 5' brown, dense, with some clay.

-moist to wet below 6'.

-below 7' wet with trace free water, trace free product, olive green, and diesel-like odor.

-no free product evident below 8'.

-with small reddish-brown, medium sand pockets below 8' with slight odor.

End of Boring at 8 Ft.  
Sampling Completed to 9.5 Ft.

## GENERAL NOTES

## WATER LEVEL OBSERVATIONS

DATE STARTED 25 SEP 90

WHILE DRILLING

DATE COMPLETED 25 SEP 90

AT COMPLETION

RIG CME 45B

AFTER DRILLING

CREW CHIEF B. Douglas

CAVE-IN: DATE/TIME \_\_\_\_\_ DEPTH \_\_\_\_\_

LOGGED Z. Batchko CHECKED [Signature]

WATER: DATE/TIME \_\_\_\_\_ DEPTH \_\_\_\_\_



# LOG OF TEST BORING

F-203 (R 01-87)

BORING NO. SB-4

SHEET NO. 1 OF 1

PROJECT NAME ARATEX #516 VZI-RI/FS

PROJECT NO. 1622.03

LOCATION Oakland, CA

INSTALLATION 09/25/90

CONTRACTOR HEW Drilling

SURFACE ELEV. \_\_\_\_\_

DRILLING METHOD HSA

BOREHOLE DIA. 7.5 IN.

SAMPLING NOTES					VISUAL CLASSIFICATION AND GENERAL OBSERVATIONS
INTERVAL		RECOVERY		MOISTURE	
NO.	TYPE	N	IN	DEPTH	
		(PPM)			Topsoil.
					Silty SAND, fine, dark brown, medium, dry, (SP). -moist below 2'.
A	SS	33	15	5	
B	SS	58	18		Silty SAND, medium to fine, brownish-yellow, medium, with ferric nodules and trace green gray silty CLAY pockets, slight odor, (SP-SM).
C	SS	1248	18		Silty SAND, fine, dark brown, dense, wet, some clay, strong diesel-like odor, (SP-SM).
D	SS	Over	18	10	-with occasional medium sand pockets below 9.5', strong odor.
					End of Boring at 9.5 Ft. Sampling Completed to 11.0 Ft.

### GENERAL NOTES

DATE STARTED 25 SEP 90

DATE COMPLETED 25 SEP 90

RIG CME 45B

CREW CHIEF B. Douglas

LOGGED Z. Batchko CHECKED ZB

### WATER LEVEL OBSERVATIONS

WHILE DRILLING

AT COMPLETION

AFTER DRILLING

CAVE-IN: DATE/TIME \_\_\_\_\_ DEPTH \_\_\_\_\_

WATER: DATE/TIME \_\_\_\_\_ DEPTH \_\_\_\_\_



# LOG OF TEST BORING

F-203 (R 01-87)

BORING NO. SB-5

SHEET NO. 1 OF 1

PROJECT NAME ARATEX #516 VZI-RI/FS

PROJECT NO. 1622.03

LOCATION Oakland, CA

INSTALLATION 09/25/90

CONTRACTOR HEW Drilling

SURFACE ELEV. \_\_\_\_\_

DRILLING METHOD HSA

BOREHOLE DIA. 7.5 IN.

## SAMPLING NOTES

INTERVAL		RECOVERY		MOISTURE	
NO.	TYPE	N	IN		DEPTH

(PPM)

A	SS	1	18		
B	SS	n/d	18		
C	SS	2	18		

## VISUAL CLASSIFICATION AND GENERAL OBSERVATIONS

6-inch thick a/c pavement.

SAND, fine, dark brown to olive gray, sme silt, trace coarse gravel, medium, dry, (SW), (Base-Fill).

SAND, fine, dark brown to brownish yellow, some silt, trace clay, medium, moist. (SP-SM)

-with occasional fine roots to 5.5'.

-grading to medium and fine sand with depth.

-wet below 5.5'

-trace free water below 6'.

End of Boring at 8 Ft.  
Sampling Completed to 9.5 Ft.

## GENERAL NOTES

DATE STARTED 25 SEP 90

DATE COMPLETED 25 SEP 90

RIG CME 45B

CREW CHIEF B. Douglas

LOGGED Z. Batchko CHECKED [Signature]

## WATER LEVEL OBSERVATIONS

WHILE DRILLING  \_\_\_\_\_

AT COMPLETION  \_\_\_\_\_

AFTER DRILLING

CAVE-IN: DATE/TIME \_\_\_\_\_ DEPTH \_\_\_\_\_

WATER: DATE/TIME \_\_\_\_\_ DEPTH \_\_\_\_\_



# LOG OF TEST BORING

F-203 (R 01-87)

BORING NO. SB-6

SHEET NO. 1 OF 1

PROJECT NAME ARATEX #516 VZI-RI/FS

PROJECT NO. 1622.03

LOCATION Oakland, CA

INSTALLATION 09/25/90

CONTRACTOR HEW Drilling

SURFACE ELEV. \_\_\_\_\_

DRILLING METHOD HSA

BOREHOLE DIA. 7.5 IN.

## SAMPLING NOTES

INTERVAL		RECOVERY		MOISTURE	
NO.	TYPE	N	IN		DEPTH
		(PPM)			
A	SS	36	18		5
B	SS	12	18		
C	SS	19	18		

## VISUAL CLASSIFICATION AND GENERAL OBSERVATIONS

4-inch thick concrete sidewalk.

SAND, dark brown-olive gray, some silt, trace coarse gravel, medium, dry, (SW), (Base-Fill).

SAND, fine, brownish yellow, some silt, moist, (SP-SM).

-grading slightly coarser with depth.

-trace free water below 6.5' and medium to fine SAND.

End of Boring at 8.0 Ft.  
Sampling Completed to 9.5 Ft.

## GENERAL NOTES

DATE STARTED 25 SEP 90

DATE COMPLETED 25 SEP 90

RIG CME 45B

CREW CHIEF B. Douglas

LOGGED Z. Batchko CHECKED Jh

## WATER LEVEL OBSERVATIONS

WHILE DRILLING

AT COMPLETION

AFTER DRILLING \_\_\_\_\_

CAVE-IN: DATE/TIME \_\_\_\_\_ DEPTH \_\_\_\_\_

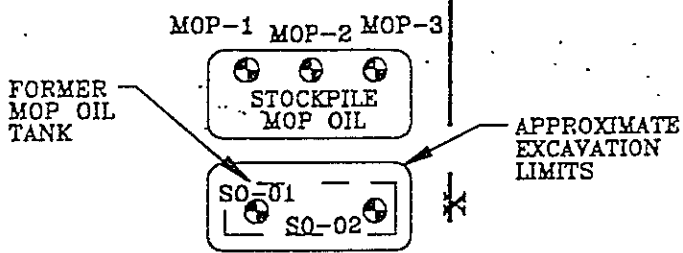
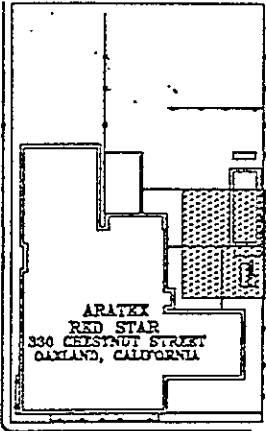
WATER: DATE/TIME \_\_\_\_\_ DEPTH \_\_\_\_\_

**TABLE 4**  
**Chemical Analyses – Tank Removal Activities (Sampled 7/30/93 and 8/2/93)**  
**(Corresponding to Figure 4)**

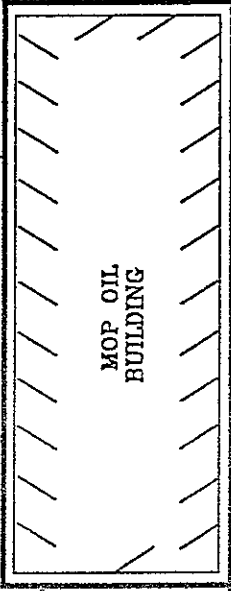
Sample Location	Sample Depth (ft-bgs)	Parameter (mg/kg)								
		TPH-G	TPH-D	TPH-MS/K/MO TRPH	TPH (418.1)	Benzene	Toluene	Ethyl-benzene	Xylene	Lead
<b>MOP OIL EXCAVATION</b>										
SO-01	14	---	---	BMDL	---	---	---	---	---	---
SO-02	13	---	---	BMDL	---	---	---	---	---	---
<b>GASOLINE/DIESEL FUEL EXCAVATION</b>										
SO-03	12	---	<1	---	---	<0.010	<0.010	<0.010	<0.15	<5
SO-04	13	---	<10	---	---	<0.010	<0.010	<0.010	<0.15	---
SO-05	11.5	<1	---	---	---	<0.010	<0.010	<0.010	<0.15	<5
SO-06	13	<1	---	---	---	<0.010	<0.010	<0.010	<0.15	<5
<b>DIESEL FUEL DISPENSER VAULTS/REGULATOR EXCAVATION</b>										
SO-07	5	---	1,300	---	---	0.014	0.021	<0.005	<0.15	---
SO-08	5	---	9,400	---	---	<0.010	<0.010	<0.010	<0.15	---
SO-09	4	---	62	---	---	<0.010	<0.010	<0.010	0.59	---
SO-10	2	---	<10	---	---	<0.010	<0.010	<0.010	<0.15	---
SO-11	1	---	4,200	---	---	0.010	0.009	<0.005	0.015	---
<b>STOCKPILED SOIL – GASOLINE/DIESEL FUEL EXCAVATION</b>										
SO-ST1	NA	<1	36	---	---	<0.010	<0.010	<0.010	<0.15	21
SO-ST2	NA	<1	23	---	---	<0.010	<0.010	<0.010	<0.15	18
SO-ST3	NA	<1	<10	---	---	<0.010	<0.010	<0.010	<0.15	9
SO-ST4	NA	<1	<10	---	---	<0.010	<0.010	<0.010	<0.15	26
SO-ST5	NA	<1	<10	---	---	<0.010	<0.010	<0.010	<0.15	44
<b>STOCKPILED SOIL – MOP OIL EXCAVATION</b>										
MOP-1	NA	---	---	---	290	---	---	---	---	---
MOP-2	NA	---	---	---	110	---	---	---	---	---
MOP-3	NA	---	---	---	140	---	---	---	---	---

BMDL - Below Method Detection Limit  
 TPH-MS = 10 mg/kg  
 TPH-K = 10 mg/kg  
 TPH-MO = 100 mg/kg  
 TRPH = 5 mg/kg

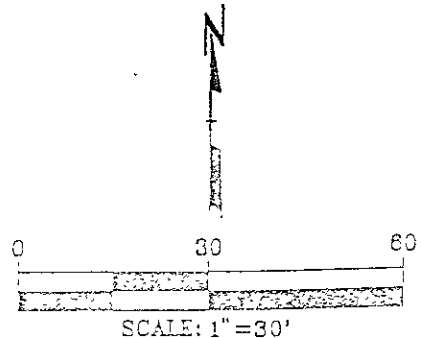
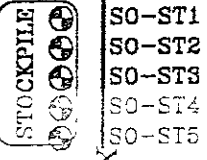
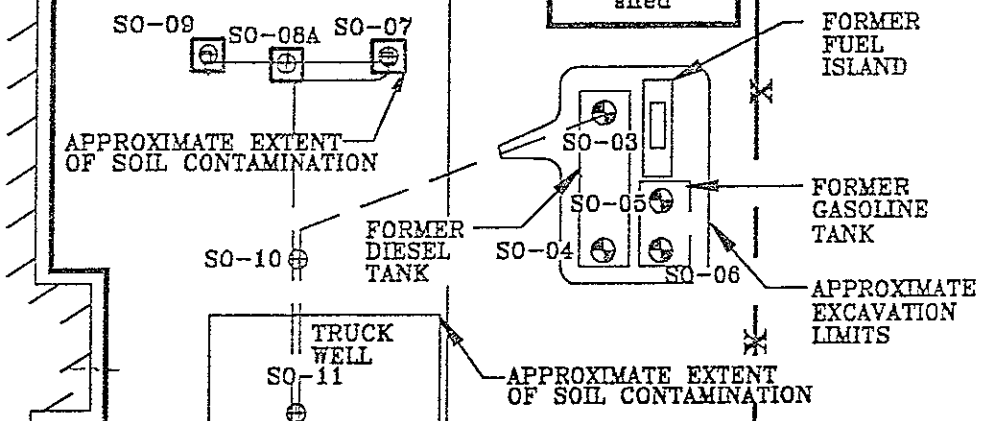
NA - Not Applicable  
 --- - Not Analyzed



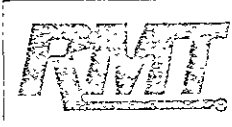
CONCRETE PAD



shed



SAMPLING LOCATIONS  
TANK REMOVAL ACTIVITIES



CON. BY:	RAS
DATE:	FEB., 1994
PROJECT:	12013.11
FILE #:	1103

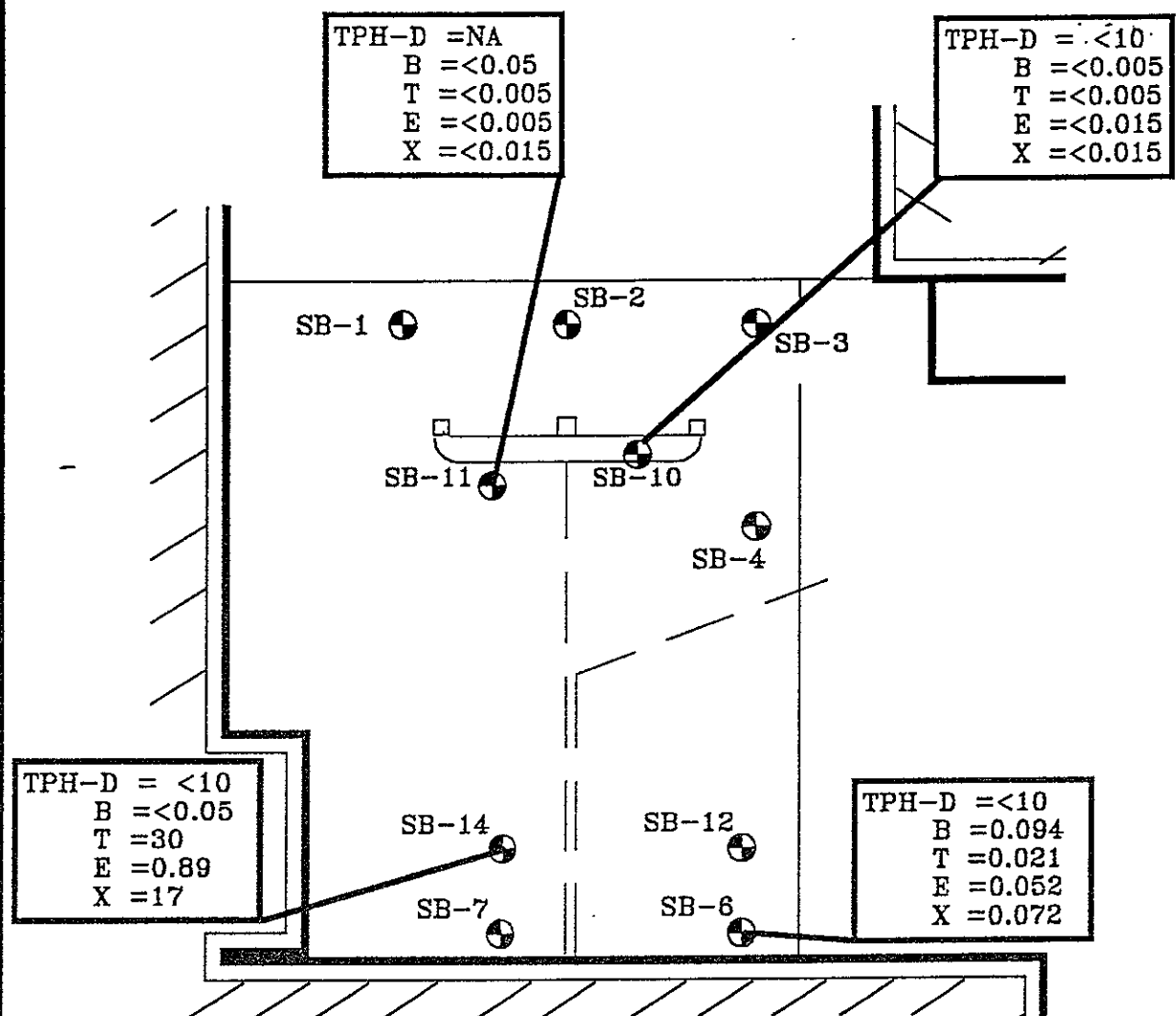
FIGURE 4

**TABLE 5**  
**Chemical Analyses – Soil Sampling Activities (Sampled 9/23/93)<sup>b</sup>**  
**(Corresponding to Figure 6)**

Sample Location	Sample Depth (ft bgs)	Parameter (mg/kg)				
		TPH-D	Benzene	Toluene	Ethylbenzene	Xylene
SB-06-5	5	<10	0.094	0.021	0.052	0.072
SB-10-5	5	<10	<0.005	<0.005	<0.005	<0.005
SB-11-5	5	---	<0.05	30	0.89	17
SB-14-5	5	<10 <sup>a</sup>	<0.005	<0.005	<0.005	<0.005

a - Hydrocarbon pattern not indicative of diesel fuel (pattern resembles motor oil)  
b - Soil samples were collected at depths of approximately 5 and 10-ft bgs. Based on PID readings and visual observations noted during sample collection, only those listed in Table 3 were submitted for chemical analysis.



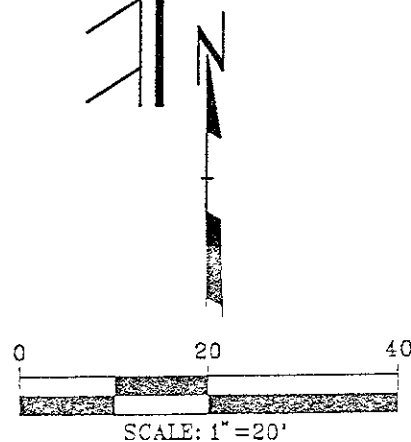


**LEGEND:**

⊙ SOIL SAMPLE LOCATIONS AND ANALYTICAL RESULTS

**NOTE:**

- 1 SAMPLE DEPTH = 5 FEET bgs.
- 2 ALL CONCENTRATIONS IN mg/Kg



CHEMICAL ANALYSES  
SOIL SAMPLING ACTIVITIES

<b>RMT</b> INC.	DWN. BY: RAS
	DATE FEB., 1994
	PROJ # 12013.11
	FILE # 1106

FIGURE 6

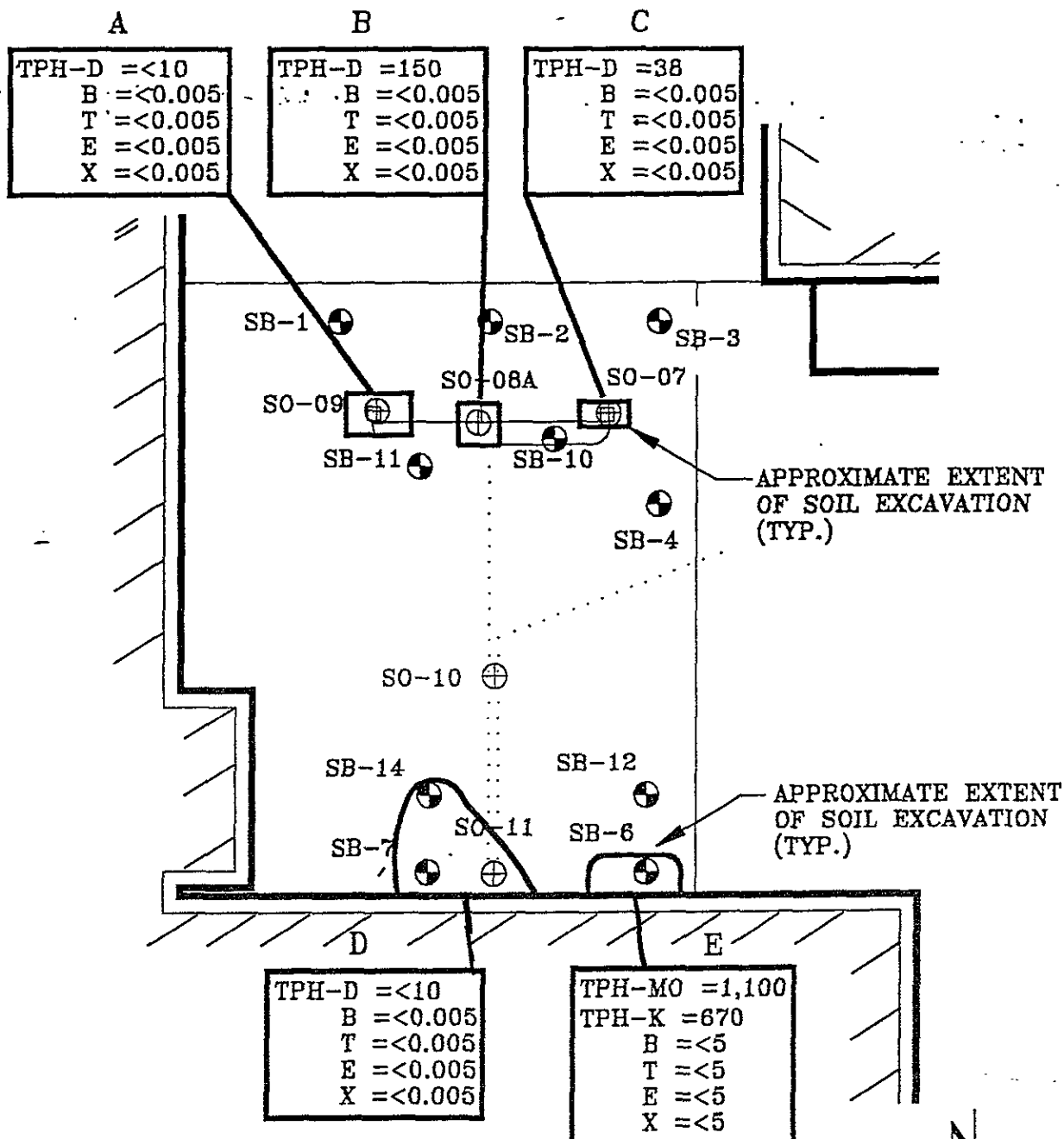
**TABLE 6**  
**Excavation Area Dimensions and Sampling Depths**  
**(Corresponding to Figure 7)**

Excavation Area (See Figure 7)	Approximate Excavation Dimensions
A - Diesel Fuel Dispenser Vault	8-ft x 5-ft x 9.5-ft deep
B - Diesel Fuel Dispenser Vault	4-ft x 5-ft x 8.0-ft deep
C - Diesel Fuel Dispenser Vault	3-ft x 6-ft x 8.0-ft deep
D - Diesel Fuel Regulator	10-ft x 12-ft x 9.0-ft deep
E - Eastern Section of Loading Dock	5-ft x 6-ft x 3.0-ft deep

**TABLE 7**  
**Chemical Analyses - Soil Excavation Activities**  
**(Corresponding to Figure 7)**

Sample Location	Sample Depth (ft bgs)	Parameter (mg/kg)				
		TPH-D	Benzene	Toluene	Ethylbenzene	Xylene
A-1	9.5	<10	<0.005	<0.005	<0.005	<0.005
B-1	8.0	150	<0.005	<0.005	<0.005	<0.005
C-1	8.0	38	<0.005	<0.005	<0.005	<0.005
D-1	9.0	<10	<0.005	<0.005	<0.005	<0.005
E-1	1.0	<10 <sup>a</sup>	<0.500 <sup>b</sup>	<0.500 <sup>b</sup>	<0.500 <sup>b</sup>	<0.500 <sup>b</sup>

- a - Hydrocarbon pattern not indicative of diesel fuel. The presence of TPH as kerosene (TPH-K) and TPH as motor oil (TPH-MO) were identified at concentrations of 670-mg/kg and 1,100-mg/kg, respectively.
- b - Raised detection limit due to high concentration of non-target hydrocarbons in sample.



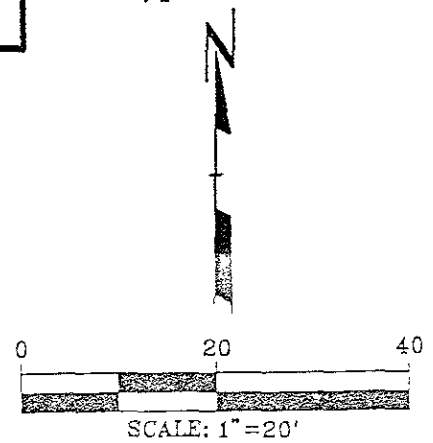
**LEGEND:**

- SOIL SAMPLE LOCATIONS OF SEPTEMBER, 1993.
- ⊕ SOIL SAMPLE LOCATIONS OF AUGUST, 1993 SAMPLING
- APPROXIMATE EXTENT OF SOIL EXCAVATION

**NOTE:**

ALL CONCENTRATIONS  
 IN mg/Kg

CHEMICAL ANALYSES  
 SOIL EXCAVATION ACTIVITIES



<b>RMT</b> INC.	DWN BY: RAS
	DATE: FEB., 1994
	PROJ # 12013.11
	FILE # 1107

FIGURE 7