

APPENDIX A
TRENCH LOGS

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TRENCH LOGS

This appendix contains the trench logs. These trenches were logged by HLA geologists or engineers using ASTM D 2488-90, which is based on the Unified Soil Classification System; the HLA Sampling and Analysis Plan; and standard

geologic techniques. Samples were logged from outside the test pits. Soil cuttings removed from the test pit by the backhoe during excavation were also evaluated.

MAJOR DIVISIONS			SYMBOLS	TYPICAL NAMES
COARSE-GRAINED SOILS OVER 50% > No. 200 SIEVE SIZE	GRAVELS MORE THAN 1/2 OF COARSE FRACTION > No. 4 SIEVE SIZE	CLEAN GRAVELS WITH LESS THAN 5% FINES	GW	Well-graded gravels or gravel-sand mixtures, little or no fines
			GP	Poorly graded gravels or gravel-sand mixtures, little or no fines
		GRAVELS WITH OVER 15% FINES	GM	Silty gravels, gravel-sand mixtures
			GC	Clayey gravels, gravel-sand-clay mixtures
	SANDS MORE THAN 1/2 OF COARSE FRACTION < No. 4 SIEVE SIZE	CLEAN SANDS WITH LESS THAN 5% FINES	SW	Well-graded sands or gravelly sands, little or no fines
			SP	Poorly graded sands or gravelly sands, little or no fines
		SANDS WITH OVER 15% FINES	SM	Silty sands, sand-silt mixtures
			SC	Clayey sands, sand-clay mixtures
FINE-GRAINED SOILS OVER 50% < No. 200 SIEVE SIZE	SILTS & CLAYS LIQUID LIMIT 50% OR LESS	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity	
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays	
		OL	Organic silts and organic silty clays of low plasticity	
	SILTS & CLAYS LIQUID LIMIT GREATER THAN 50%	MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts	
		CH	Inorganic clays of high plasticity, fat clays	
		OH	Organic clays of medium to high plasticity, organic silty clays, organic silts	
		PT	Peat and other highly organic soils	
HIGHLY ORGANIC SOILS				
DEBRIS ZONE ¹			Metal, concrete, plastic, brick, wood, etc.	
CONSTRUCTION DEBRIS ¹			Concrete, wood, rebar, asphalt	

SYMBOLS KEY

	Bulk or classification sample
	Sample preserved for possible laboratory analysis
	Hydropunch sample
	First-encountered groundwater level
	Static groundwater level
(10YR 4/4)	Munsell soil color 1990 edition
NA	Not available
ND	Not detected

GRAIN SIZE CHART

CLASSIFICATION	RANGE OF GRAIN SIZES	
	U.S. Standard Sieve Size	Grain Size in Millimeters
BOULDERS	Above 12'	Above 305
COBBLES	12' to 3'	305 to 76.2
GRAVEL	coarse	76.2 to 4.75
	fine	4.75 to 0.075
SAND	No. 4 to No. 200	4.75 to 0.075
	coarse	4.75 to 2.00
	medium	2.00 to 0.425
fine	0.425 to 0.075	
SILT & CLAY	Below No. 200	Below 0.075

Source: ASTM D 2488-90, based on Unified Soil Classification System
 1. Not part of ASTM Classification System



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Soil Classification Chart
 Volume II-RI, Basewide RI/FS
 Fort Ord, California

PLATE

A1

DRAWN CEG JOB NUMBER 23366 041711

APPROVED *BPF*

DATE 07/94

REVISED DATE

F10-LEG

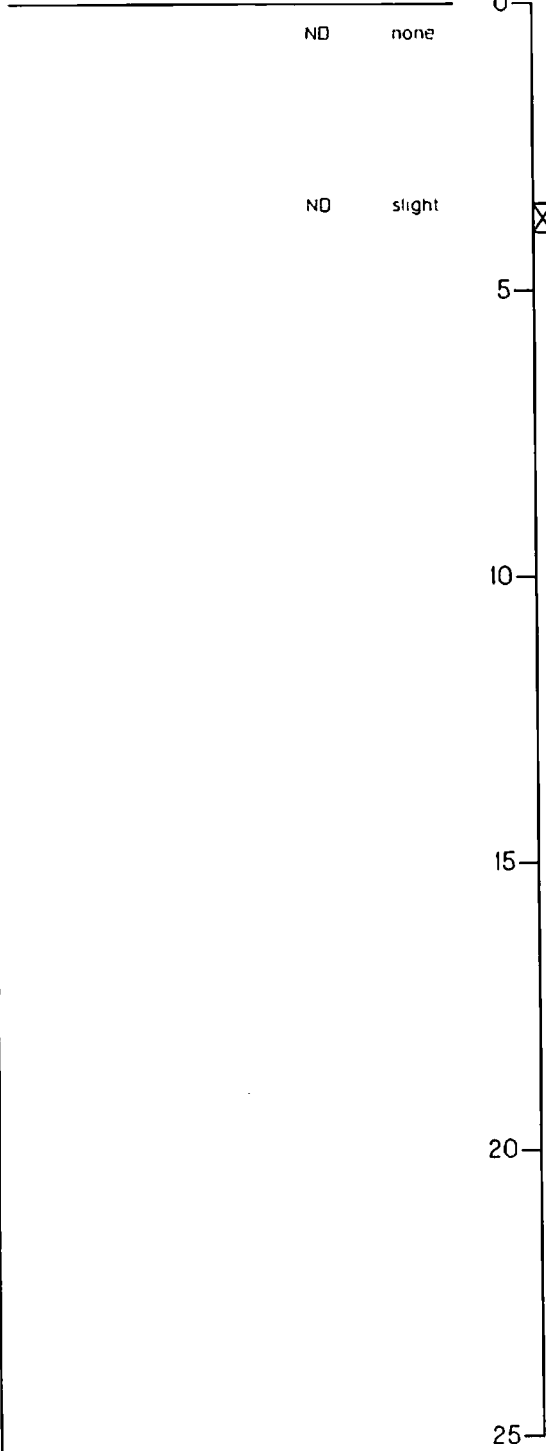
Equipment Case 580 D Backhoe
30" Bucket
 Elevation 64.3 (grnd) Date 1-27-92

OVA Reading
(ppm)

Odor

Depth (ft.)

Sample



VEGETATION COVER (GRASS SOD)

VERY DARK BROWN SILTY CLAYEY SAND (SM-SC) (FILL)
 (10YR 2/2); becomes dark brown (10YR 3/3) below 1.5' to 2.5'

YELLOWISH BROWN SAND (SP) (FILL) (10YR 5/4)

@ 3.5': concrete chunk and steel object

@ 4': metal pipe and wooden pieces, asphalt and concrete pieces, steel bar

Trench dimensions = 12' long, 4' deep, 30" wide

FTORD-TR

PLATE



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Log of Trench TR-12-1A
 Data Evaluation and Recommendation Report
 Sites 2 and 12
 Fort Ord, California

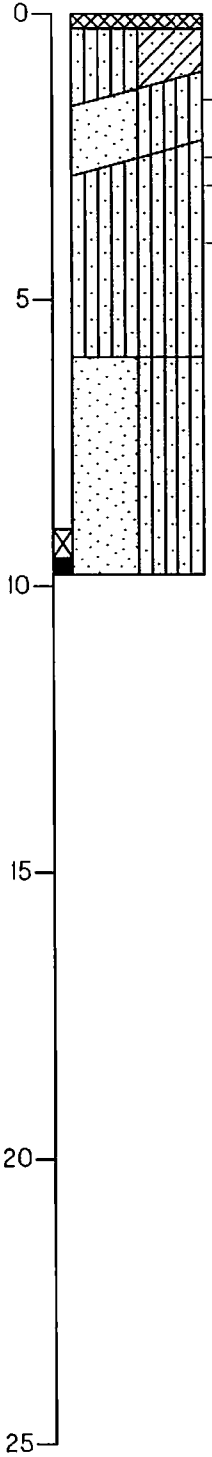
A2

DRAWN GTG	JOB NUMBER 23366 041711	APPROVED <i>8PF</i>	DATE 07/94	REVISED DATE
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Equipment Case 580 D Backhoe
30" Bucket
 Elevation 64.3 (grnd) Date 1-27-92

OVA Reading (ppm)
 Odor

Depth (ft.)
 Sample



VEGETATION COVER
 DARK BROWN SILTY CLAYEY SAND (SM-SC) (Fill) (10YR 3/3)
 YELLOWISH-BROWN SAND TO SILTY SAND (SP-SM) (Fill) (10YR 5/4)
 DARK BROWN SILTY SAND (SM) (Fill) (10YR 3/3)
 @ 3' to 3.5': steel rails
 @ 4': concrete slab, intermittent concrete chunks
 DARK YELLOWISH-BROWN SAND TO SILTY SAND (SP-SM) (10YR 3/4)
 @ 9': fine- to medium-grained, 10-15% silt, trace rootlets
 Trench dimensions = 18' long, 9.8' deep, 30" wide.

ND none
 ND none
 0.4 none
 0.6

F.TORD-TR



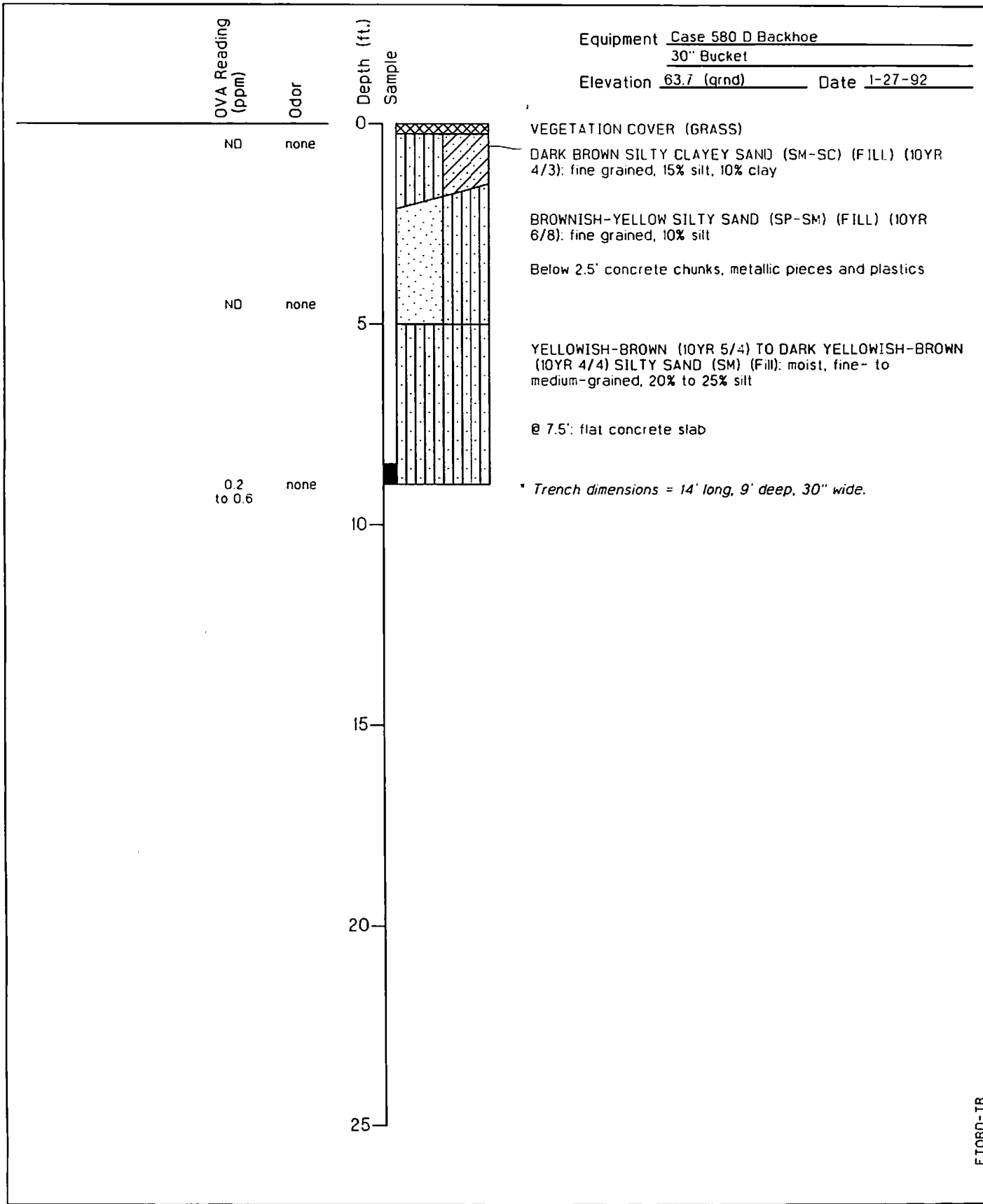
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Log of Trench TR-12-1B
 Data Evaluation and Recommendation Report
 Sites 2 and 12
 Fort Ord, California

PLATE

A3

DRAWN GTG	JOB NUMBER 23366 041711	APPROVED BPF	DATE 07/94	REVISED DATE
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FTORD-TR



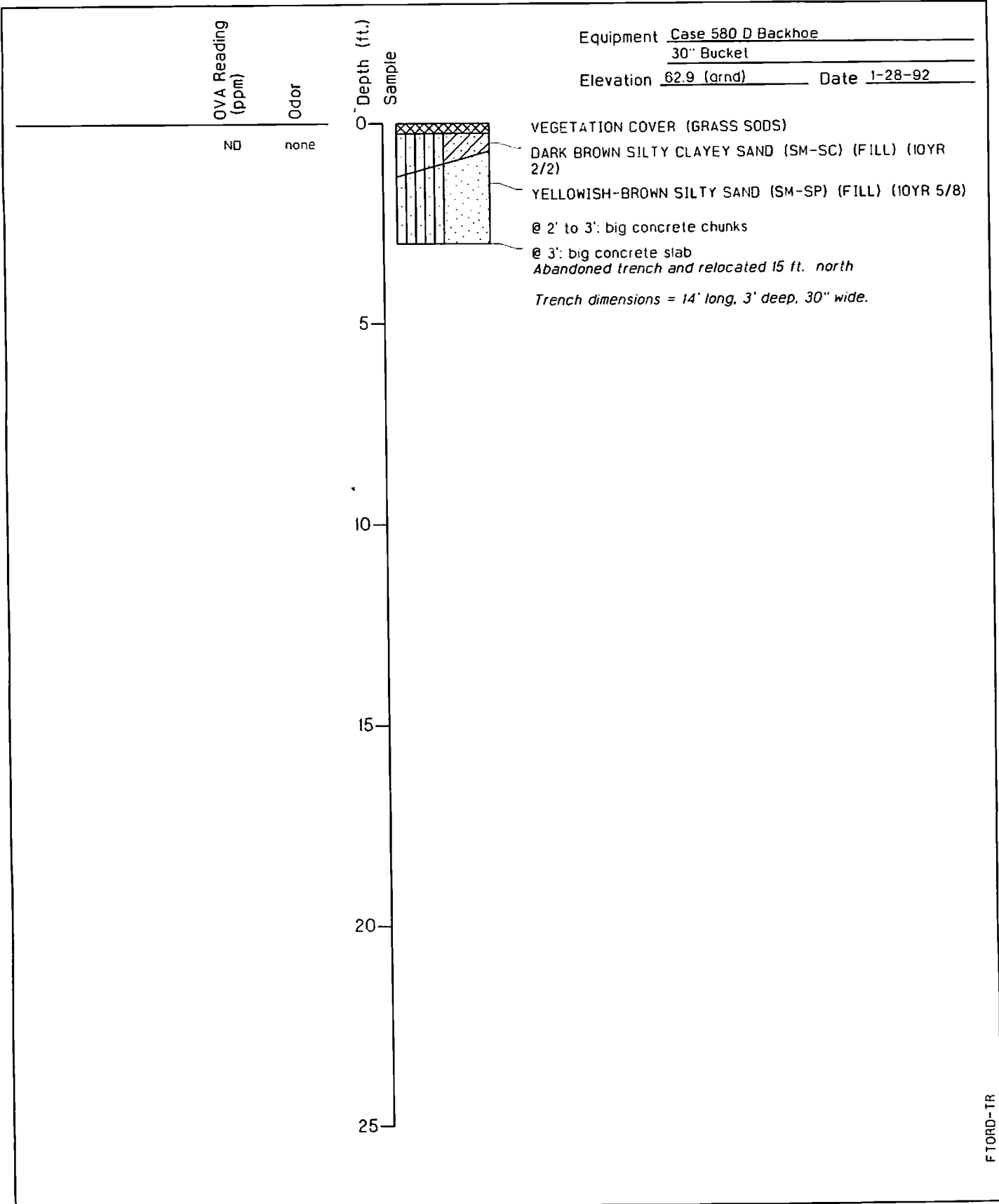
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Environmental Services

Log of Trench TR-12-2
Data Evaluation and Recommendation Report
Sites 2 and 12
Fort Ord, California

PLATE

A4

DRAWN GTG	JOB NUMBER 23366 041711	APPROVED <i>BPF</i>	DATE 07/94	REVISED DATE
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FTORD-TR

PLATE



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Log of Trench TR-12-3A
 Data Evaluation and Recommendation Report
 Sites 2 and 12
 Fort Ord, California

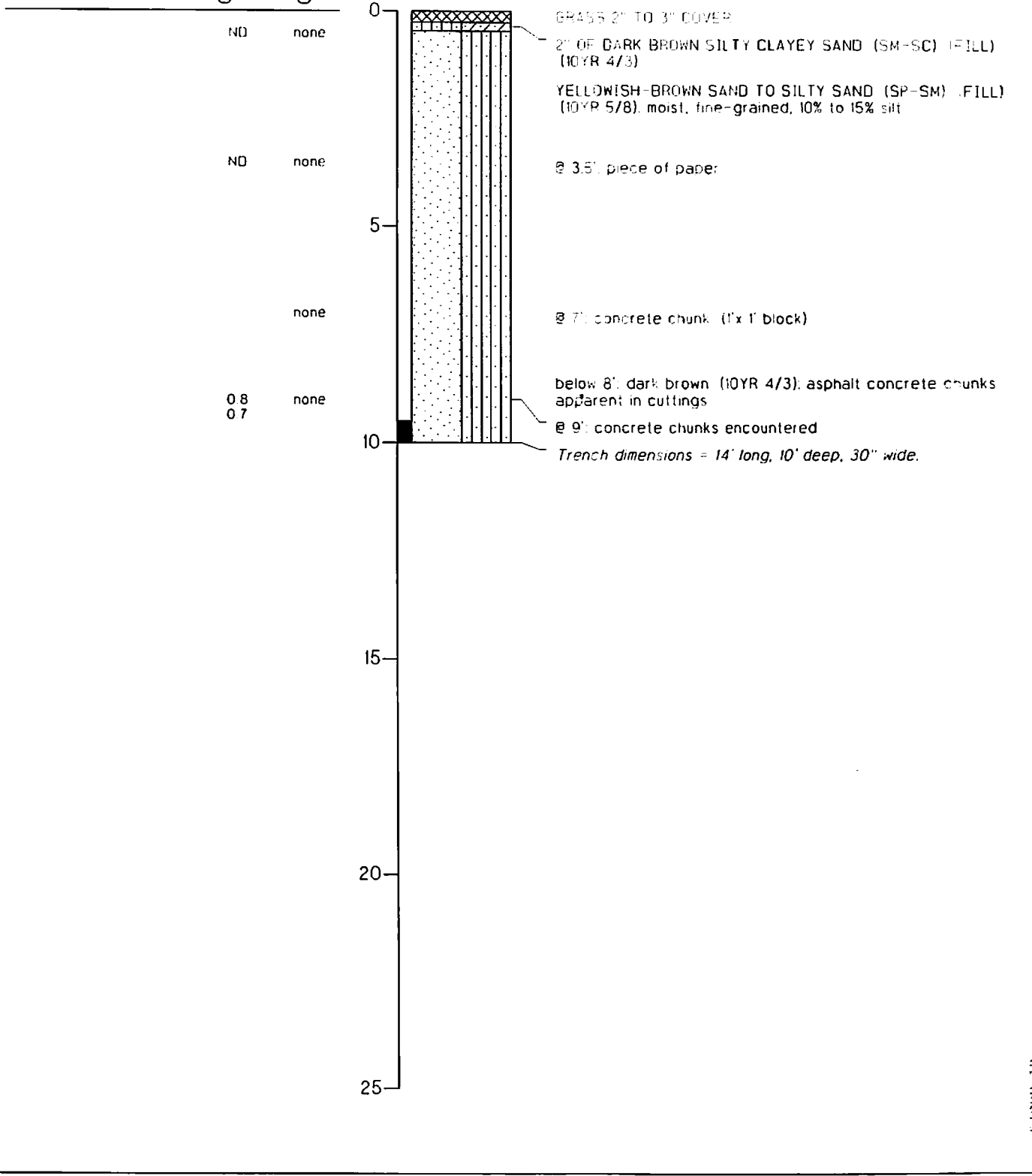
A5

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED DATE
GTG	23366 041711	<i>BPF</i>	07/94	

Equipment Case 580 D Backhoe
30" Bucket
 Elevation 62.9 (grnd) Date 1-28-92

OVA Reading (ppm)
 Odor

Depth (ft.)
 Sample



F L O R D T R

PLATE



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 Environmental Services

Log of Trench TR-12-3B
 Data Evaluation and Recommendation Report
 Sites 2 and 12
 Fort Ord, California

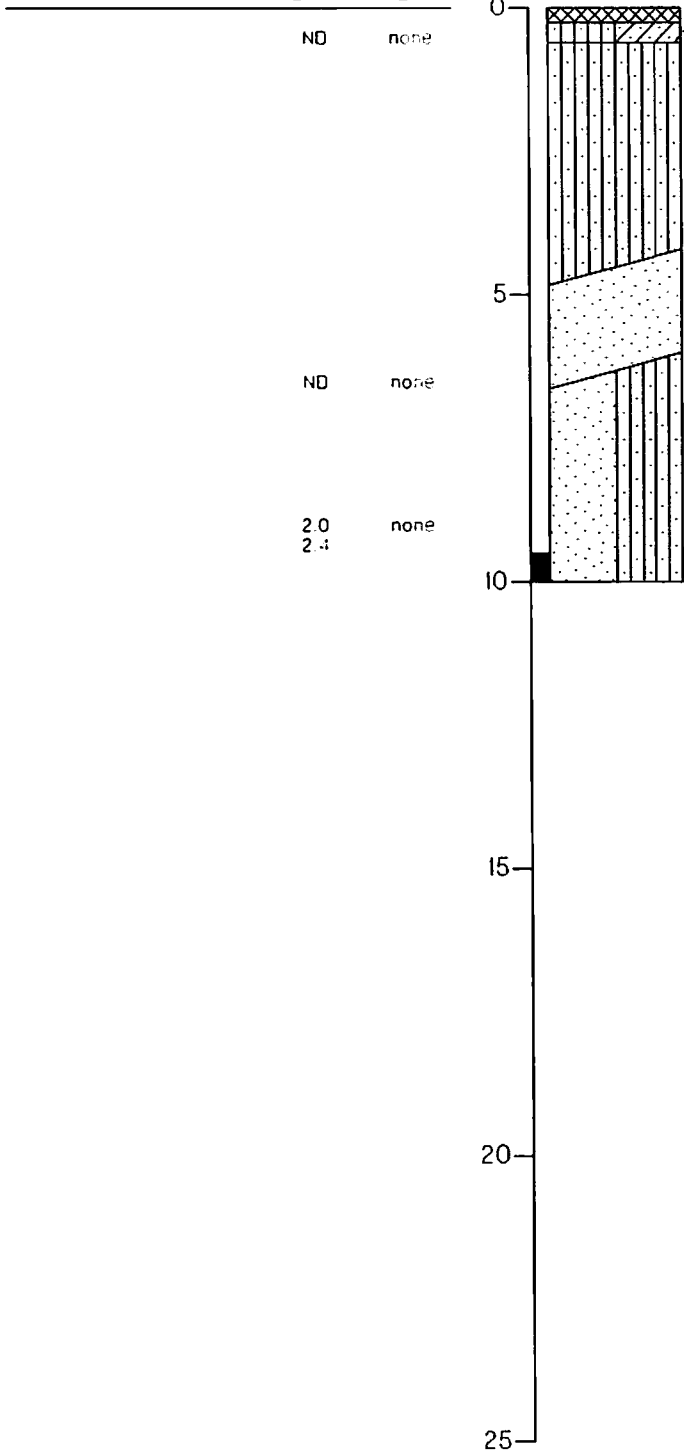
A6

DRAWN GTG	JOB NUMBER 23366 041711	APPROVED BPF	DATE 07/94	REVISED DATE
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Equipment Case 580 D Backhoe
30" Bucket
 Elevation 64.3 (grnd) Date 1-26-92

OVA Reading (ppm)
 Odor

Depth (ft.)
 Sample



VEGETATION COVER
 VERY DARK BROWN SILTY CLAYEY SAND (SM-SC) (FILL) (10YR 2/2)
 DARK YELLOWISH-BROWN SILTY SAND (SM) (FILL) (10YR 4/6); moist, fine- to medium-grained, 15% to 20% silt, rootlets apparent at 1 ft.
 YELLOWISH-BROWN SAND (SP) (FILL) (10YR 5/8); moist, 3-5% silt
 @ 7" sewer pipe
 VERY DARK YELLOWISH-BROWN SILTY SAND (SM-SP) (10YR 3/4) AND YELLOWISH-BROWN SAND (SP); fine- to medium-grained, some soil lumps, looks stained (shiny)
 Trench dimensions = 12' long, 10' deep, 30" wide.

NO none
 ND none
 2.0 none
 2.4



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Log of Trench TR-12-4
 Data Evaluation and Recommendation Report
 Sites 2 and 12
 Fort Ord, California

PLATE

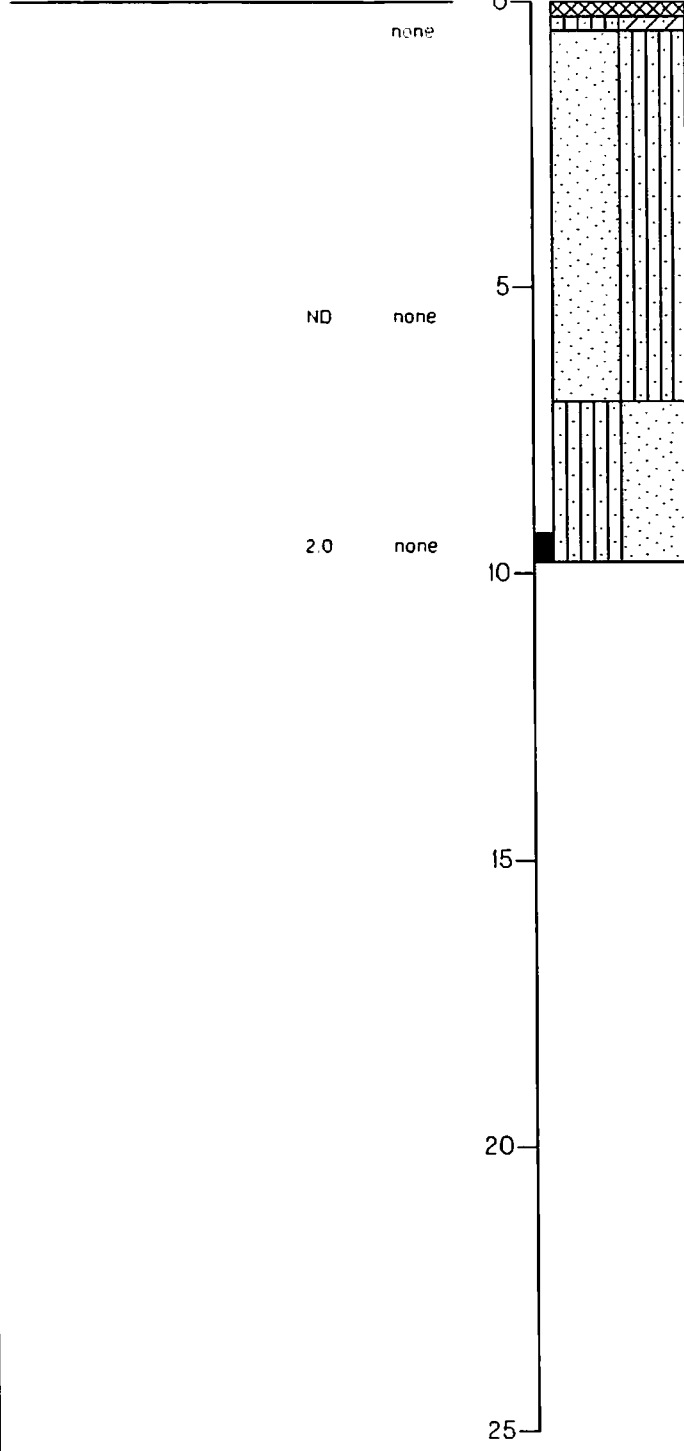
A7

DRAWN GTG	JOB NUMBER 23366 041711	APPROVED BPF	DATE 07/94	REVISED DATE
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Equipment Case 580 D Backhoe
30" Bucket
 Elevation 65.9 (grnd) Date 1-28-92

OVA Reading (ppm)
 Odor

Depth (ft.)
 Sample



VEGETATION COVER
 VERY DARK BROWN SILTY CLAYEY SAND (SM-SC) (FILL) (10YR 2/2)
 YELLOWISH-BROWN SILTY SAND (SP-SM) (10YR 5/8): moist, fine-grained, 5-10% silt
 @ 3': dark yellowish-brown (10YR 4/6)

BLACK SILTY SAND (SM) (10YR 2/1) AND DARK YELLOWISH-BROWN SILTY SAND (SM-SP): moist, fine- to medium-grained, 15-20% silt and clay
 @ 9': rock fragments

Trench dimensions = 13' long, 9'8" deep, 30" wide.

F10RD-TR

Equipment Case 580 D Backhoe
30" Bucket
 Elevation 64.2 (grnd) Date 1-29-92

OVA Reading
(ppm)

Odor

Depth (ft.)

Sample



VEGETATION COVER (GRASS)

VERY DARK BROWN SILTY CLAYEY SAND (SM-SC) (FILL) (10YR 2/2): moist, fine-grained, 15-20% fines

DARK YELLOWISH-BROWN SILTY SAND (SP-SM) (FILL) (10YR 4/6): moist, fine-grained, 10-15% silt

VERY DARK GRAY SILTY SAND (SM-SC) (FILL) (10YR 3/1): moist, fine- to medium-grained, 15-20% fines (silt and clay), small metallic pieces apparent in cuttings

below 5.5': concrete chunks

@ 6' abalone shell

steel rods 4' long, reinforced concrete slab

Trench dimensions = 14' long, 7' deep, 30" wide.

ND

none

ND

none

FIELD TR

PLATE



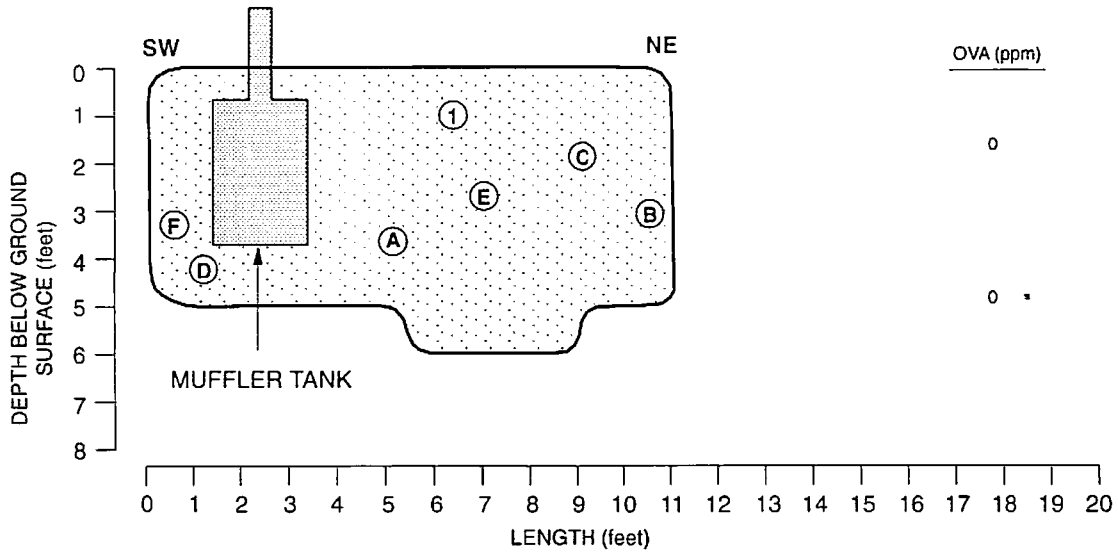
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Log of Trench TR-12-8A
 Data Evaluation and Recommendation Report
 Sites 2 and 12
 Fort Ord, California

A9

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED DATE
GTG	23366 041711	BPE	07/94	

Excavation: TR-12-07
 Date Started: 11-3-93
 Date Completed: 11-3-93
 Orientation: S81W
 Elevation: ~81 ft.



EXPLANATION:



LIGHT BROWN SAND (SP)
 dense, dry, predominantly fine to medium,
 no odor

@ 2 feet: yellowish brown, medium sand

@ 3 feet: dark brown, no odor

- (A) Sample: 9344Z001201F
- (B) Sample: 9344Z001202F
- (C) Sample: 9344Z001203F
- (D) Sample: 9344Z001204F
- (E) Sample: 9344Z001205F
- (F) Sample: 9344Z001206F

070794LFD

PLATE



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Log of Excavation TR-12-07
 Site 12, DOL Automotive Yard
 Volume II - RI, Basewide RI/FS
 Fort Ord, California

A11

DRAWN
 SEc

JOB NUMBER
 23366 041711

APPROVED
BPF

DATE
 5/94

REVISED DATE