HTW DRILLING LOG

HOLE NO.	PZ-4D
1. COMPANY NAME	Woodward-Clyde Consultants
2. DRILLING SUBCONTRACTOR	EAST COAST DRILLING
SHEET 1 OF 2 SHEETS	
3. PROJECT	STRATFORD ARMY ENGINE PLANT
4. LOCATION	STRATFORD, CT
5. NAME OF DRILLER	PAT SCOTT
6. MANUFACTURER'S DESIGNATION OF DRILL	CME-75
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT	2" split spoon
8. HOLE LOCATION	
9. SURFACE ELEVATION	6.01
10. DATE STARTED	6-19-92
11. DATE COMPLETED	6-19-92
12. OVERBURDEN THICKNESS	—
15. DEPTH GROUNDWATER ENCOUNTERED	See WC-4S
13. DEPTH DRILLED INTO ROCK	—
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	
14. TOTAL DEPTH OF HOLE	42 ft
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
6	SS-		

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE REC.
NAMC	—	—	—	—	—	—%

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
			Piezometer	M Dambrouski

ELEV. a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS h
		Auger to 15 ft					
	15 ↓ 17 ft	ML - Black organic silt.	0.5 ppm	SS-1		WH- 1- 1- 2	BKG = 0.5 Rec'd 14" Time 0945
		Auger to 20 ft					

PROJECT: STRATFORD ARMY ENGINE PLANT

HOLE NO.: PZ-4D

HTW DRILLING LOG

HOLE NO. PZ-4D

PROJECT STRATFORD ARMY ENGINE PLANT

INSPECTOR M. DOMBROWSKI

SHEET 2 OF 2 SHEETS

ELEV. a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS h
	20 ↓ 22 ft	S.A.A.	2.5 ppm	SS-2		WH- -1 -2 -3	Bkg 1.5 Rec'd 22" Time 1000
		Augered to 25 ft					
	25 ↓ 27 ft	S.A.A.	5.1 ppm	SS-3		WH -2 -2 -3	Bkg 2.1 Rec'd 24" Time 1010
		Augured to 30 ft					
	30 ↓ 32 ft	ML/SP/ML - Top 4" S.A.A., then SP gravelly med sand for 8" then ML - Yellow brown sandy silt.	1.5 ppm	SS-4		7 -4 -4 -6	Bkg 1.5 Rec'd 24" Time 1020
		Augured to 35 ft					
	35 ↓ 37 ft	SM/ML - Yellow brown silty fine sand or sandy silt. Hard-packed on bottom.	1.5 ppm	SS-5		7 -11 -15 -14	Bkg 1.5 Rec'd 13" Time 1040
		Augered to 40 ft.					
	40 ↓ 42 ft	SM - Yellow brown silty fine to med sand. End of boring 42 ft	0.1 ppm	SS-6		22- 26- 30- 22	Bkg 0.1 Rec'd 19" Time 1115

PROJECT STRATFORD ENGINE HOLE NO

HTW DRILLING LOG

HOLE NO. PZ-5D

1. COMPANY NAME	Woodward-Clyde Consultants
2. DRILLING SUBCONTRACTOR	EAST COAST DRILLING
SHEET 1 OF 3 SHEETS	
3. PROJECT	STRATFORD ARMY ENGINE PLANT
4. LOCATION	STRATFORD, CT
5. NAME OF DRILLER	BRETT SWIATEK
6. MANUFACTURER'S DESIGNATION OF DRILL	CME-75
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT	2" split spoon
8. HOLE LOCATION	
9. SURFACE ELEVATION	6.05
10. DATE STARTED	6-25-92
11. DATE COMPLETED	6-25-92
12. OVERBURDEN THICKNESS	—
15. DEPTH GROUNDWATER ENCOUNTERED	See WC-5S
13. DEPTH DRILLED INTO ROCK	—
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	
14. TOTAL DEPTH OF HOLE	47 ft
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
8	SS-7	—	—

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE REC.
none	—	—	—	—	—	—%

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
			Piezometer	M. Damkowski

ELEV. a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS h
		Auger to 10 ft					
	10 ↓ 12 ft	SM — Dark gray silty fine to med sand, tr gravel.	6 ppm	SS-1		4-2-3-2	Bkg 0.0 Rec'd 12" Time 0955
		Auger to 15 ft					
	15 ↓ 17 ft	OL - Black organic silt.	0.0 ppm	SS-2		WH-WH-1-1	Bkg 0.0 Rec'd 5" Time 1010

PROJECT: STRATFORD ARMY ENGINE PLANT HOLE NO.: PZ-5D

HTW DRILLING LOG

HOLE NO. PZ-5D

PROJECT: STRATFORD ARMY ENGINE PLANT

INSPECTOR: M DOMBROWSKI

SHEET 2 OF 3 SHEETS

ELEV. a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS h
		Auger to 20 ft					
	20 ↓ 22 ft	S.A.A., with a 4" layer of white bivalve shells. Roots and wood fragments.	0.0 ppm	SS-3		WH-WH-2-3	Bkg 0.0 Rec'd 24" Time 1020
		Auger to 25 ft					
	25 ↓ 27 ft	S.A.A. with shells, wood fragments.	0.0 ppm	SS-4		WH-1-1-2	Bkg 0.0 Rec'd 24" Time 1030
		Auger to 30 ft					
	30 ↓ 32 ft	S.A.A., with shells, wood fragments.	0.0 ppm	SS-5		WH-WH-2-2	Bkg 0.0 Rec'd 24" Time 1040
		Auger to 35 ft					
	35 ↓ 37 ft	S.A.A.	0.0 ppm	~~SS-6~~		WH-WH-2-2	Bkg 0.0 Rec'd 24" Time 1050
		Auger to 40 ft					

PROJECT: STRATFORD ARMY ENGINE PLANT

HOLE NO.: PZ-5D

HTW DRILLING LOG

HOLE NO. PZ-5D

PROJECT STRATFORD ARMY ENGINE PL

INSPECTOR M DOMBROWSKI

SHEET 3 OF 3 SHEETS

ELEV. a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS h
	40 ↓ 42 ft	S. A. A., wood fragments	0.0 ppm	~~SS-7~~		1- 3- 3- 4	Bkg 0.0 Rec'd 24" Time 1105
		↓ Auger to 45 ft					
	45 ↓ 47 ft	SP/GP – Dark gray gravelly coarse sand or sandy fine gravel.	0.0 ppm	SS-8		3- 13- 14- 15	Bkg 0.0 Rec'd 20" Time 1150
		End of boring 47 ft					

PROJECT: STRATFORD ARMY ENGINE PLANT

HOLE NO.: PZ-5D

HTW DRILLING LOG

HOLE NO. PZ-7D

1. COMPANY NAME: Woodward-Clyde Consultants
2. DRILLING SUBCONTRACTOR: EAST COAST DRILLING
SHEET 1 OF 2 SHEETS
3. PROJECT: STRATFORD ARMY ENGINE PLANT
4. LOCATION: STRATFORD, CT
5. NAME OF DRILLER: PAT SCOTT
6. MANUFACTURER'S DESIGNATION OF DRILL:
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: CME; 2" split spoon
8. HOLE LOCATION:
9. SURFACE ELEVATION: 7.33
10. DATE STARTED: 6-5-92
11. DATE COMPLETED: 6-5-92
12. OVERBURDEN THICKNESS: —
15. DEPTH GROUNDWATER ENCOUNTERED: 4.5 ft
13. DEPTH DRILLED INTO ROCK: —
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED:
14. TOTAL DEPTH OF HOLE: 32 ft
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY):
18. GEOTECHNICAL SAMPLES: 5 — DISTURBED: — UNDISTURBED: none
19. TOTAL NUMBER OF CORE BOXES: none
20. SAMPLES FOR CHEMICAL ANALYSIS: none — VOC: none — METALS: none — OTHER (SPECIFY): none — OTHER (SPECIFY): none — OTHER (SPECIFY): none
21. TOTAL CORE REC.: —%
22. DISPOSITION OF HOLE: BACKFILLED: — MONITORING WELL: — OTHER (SPECIFY): Piezometer
23. SIGNATURE OF INSPECTOR: M Dembowski

ELEV. a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS h
	0.5 ↓ 2.5 ft	SM- Brown to gray silty fine sand, some gravel. Asphalt fragments.	0.0 ppm			10-7-10-12	Bkg = 0.0 Rec'd 10" Time 0905
	2.5 ↓ 4.5 ft	S.A.A., bottom 2" wet.	0.0 ppm			7-5-4-2	Rec'd 12" Time 0910
	4.5 ↓ 6.5 ft	S.A.A., tr gravel.	0.0 ppm			2-2-2-2	Rec'd 9" Time 0915
		↓ Augered to 10 ft					
	10 ↓ 12 ft	OL - Black organic silt, tr sand, tr pyrite. Marsh smell.	0.0 ppm	SS-4		1-2-2-1	Rec'd 18" Time 0925

PROJECT: STRATFORD ARMY ENGINE PLANT HOLE NO.: PZ-7D

HTW DRILLING LOG

HOLE NO. PZ-7D

PROJECT: STRATFORD ARMY ENGINE PLANT

INSPECTOR: M. DAMERAWSKI

SHEET 2 OF 2 SHEETS

ELEV. a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS h
	15 ↓ 17 ft	OL/SP - Top half is S.A.A., lower half is gray med sand with some gravel.	0.0	SS-5		2-3 -3-2	Rec'd 11" Time 0935
		↓ Augered to 20					
	20 ↓ 22 ft	SP - Gray to brown med sand, trace gravel.	0.0	SS-6		5-7 -8-8	Rec'd 18" Time 0940
		↓ Augered to 25					
	25 ↓ 27 ft	SP/GP - Brown coarse sand and brown gravel, some cobbles.	0.0	SS-7		4-10- 10-17	Rec'd 24" Time 0950
		↓ Augered to 30 ft.					
	30 ↓ 32 ft	SP/GP - S.A.A., interlayered sand and gravel.	0.0	SS-8		10-12 -15- 22	Rec'd 24" Time 0955
		End of boring 32 ft					

HTW DRILLING LOG

HOLE NO.	PZ-8D
1. COMPANY NAME	Woodward-Clyde Consultants
2. DRILLING SUBCONTRACTOR	EAST COAST DRILLING
SHEET 1 OF 2 SHEETS	
3. PROJECT	STRATFORD ARMY ENGINE PLANT
4. LOCATION	STRATFORD, CT
5. NAME OF DRILLER	PAT SCOTT
6. MANUFACTURER'S DESIGNATION OF DRILL	CME-75
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT	2-inch split spoon
8. HOLE LOCATION	
9. SURFACE ELEVATION	7.43
10. DATE STARTED	6-18-92
11. DATE COMPLETED	6-18-92
12. OVERBURDEN THICKNESS	—
15. DEPTH GROUNDWATER ENCOUNTERED	See WC-8S
13. DEPTH DRILLED INTO ROCK	—
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	
14. TOTAL DEPTH OF HOLE	34 ft
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
2	SS-4	—	—

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE REC.
none	—	—	—	—	—	— %

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
			Piezometer	M Dombrowski

ELEV. a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS h
		Augered to 15 ft					
	15 ↓ 17 ft	SW/GP - Gray brown med sand underlain by sandy fine gravel.	4.2 ppm			6-9 -17 -23	Bkg = 4.4 Rec'd 18" Time 1305
		Augured to 20 ft					

PROJECT: STRATFORD ARMY ENGINE PLANT

HOLE NO.: PZ-8D

HTW DRILLING LOG

HOLE NO. PZ-8D

PROJECT STRATFORD ARMY ENGINE PLANT

INSPECTOR M DOMBROWSKI

SHEET 2 OF 2 SHEETS

ELEV. a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS h
	20 ↓ 22 ft	S.A.A.	4.2 ppm			2-4 -5 -17	Rec'd 15" Time 1320
		Augered to 25 ft					
	25 ↓ 26.5 ft	GP — Dark brown sandy gravel.	4.0 ppm	SS-3		30-30 -36	Rec'd 15" Time 1345
		Auger to 30 ft					
	30 ↓ 31 ft	SW- Dark brown med sand, tr gravel. Biotite schist cobble at bottom with yellow-brown weathering halo.	4.0 ppm	SS-4		26 -43	Rec'd 12" Time 1400
		Auger to 34 ft					
		End of boring 34 ft					

PROJECT: STRATFORD ARMY ENGINE PLANT

HOLE NO.: PZ-8D

HTW DRILLING LOG

HOLE NO. PZ-9D

SHEET 1 OF SHEETS

1. COMPANY NAME: Woodward-Clyde Consultants
2. DRILLING SUBCONTRACTOR: EAST COAST DRILLING
3. PROJECT: STRATFORD ARMY ENGINE PLANT
4. LOCATION: STRATFORD, CT
5. NAME OF DRILLER: PAT SCOTT
6. MANUFACTURER'S DESIGNATION OF DRILL:
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: CME-75; stainless steel 2" split spoon
8. HOLE LOCATION:
9. SURFACE ELEVATION: 8.66
10. DATE STARTED: 6-15-92
11. DATE COMPLETED: 6-15-92
12. OVERBURDEN THICKNESS: ——
13. DEPTH DRILLED INTO ROCK: ——
14. TOTAL DEPTH OF HOLE:
15. DEPTH GROUNDWATER ENCOUNTERED:
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED:
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY):
18. GEOTECHNICAL SAMPLES: 5 — DISTURBED: ; UNDISTURBED:
19. TOTAL NUMBER OF CORE BOXES:
20. SAMPLES FOR CHEMICAL ANALYSIS: none — VOC: ; METALS: ; OTHER (SPECIFY): ; OTHER (SPECIFY): ; OTHER (SPECIFY):
21. TOTAL CORE REC. %
22. DISPOSITION OF HOLE: BACKFILLED: ; MONITORING WELL: ; OTHER (SPECIFY): Piezometer
23. SIGNATURE OF INSPECTOR: M Donnarumi

ELEV. a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS h
		Augered to 15 ft.					
	15 ↓ 17 ft	SP - Brown gray med to Coarse sand, tr gravel.	0.0 ppm	SS-1		5-5-4-4	Bkg=0.0 Rec'd 14" Time 1340
		Augered to 20 ft					

PROJECT: STRATFORD ARMY ENGINE PLANT HOLE NO.: PZ-9D

HTW DRILLING LOG

HOLE NO. PZ-9D

PROJECT STRATFORD ARMY ENGINE PLANT

INSPECTOR M. DOMBROWSKI

SHEET 2 OF 2 SHEETS

ELEV. a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS h
	20 ↓ 22 ft	SW - Gray brown med sand.	0.0 ppm	SS-2		3-5 -8- 12	Rec'd 15" Time 1350
		Augered to 25 ft					
	25 ↓ 27 ft	SM/ML - Brown silty fine sand or sandy silt. Mica flakes.	0.0 ppm	SS-3		10-16 -22 -25	Rec'd 18" Time 1400
		Augured to 30 ft					
	30 ↓ 32 ft	S.A.A., harder.	0.0 ppm	SS-4		16- 25- 40- 46	Rec'd 15" Time 1415
		Augered to 35 ft					
	35 ↓ 37 ft	S.A.A, except not hard-packed.	0.0 ppm	SS-5		4-6 -10 -15	Rec'd 16" Time 1440
		End of borehole 37 ft.					

PROJECT: STRATFORD ARMY ENGINE PLANT

HOLE NO.: PZ-9D

HTW DRILLING LOG

HOLE NO. PZ-11D

SHEET 1 OF 2 SHEETS

1. COMPANY NAME: Woodward-Clyde Consultants
2. DRILLING SUBCONTRACTOR: EAST COAST DRILLING
3. PROJECT: STRATFORD ARMY ENGINE PLANT
4. LOCATION: STRATFORD, CT
5. NAME OF DRILLER: PAT SCOTT
6. MANUFACTURER'S DESIGNATION OF DRILL:
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: CME 75; Stainless Steel 2" split spoon
8. HOLE LOCATION:
9. SURFACE ELEVATION: 7.73
10. DATE STARTED: 6-16-92
11. DATE COMPLETED: 6-16-92
12. OVERBURDEN THICKNESS: —
13. DEPTH DRILLED INTO ROCK: —
14. TOTAL DEPTH OF HOLE: 37 ft
15. DEPTH GROUNDWATER ENCOUNTERED:
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: —
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): —
18. GEOTECHNICAL SAMPLES: 2 — DISTURBED: SS-4 — UNDISTURBED:
19. TOTAL NUMBER OF CORE BOXES:
20. SAMPLES FOR CHEMICAL ANALYSIS: none — VOC: — METALS: — OTHER (SPECIFY): — OTHER (SPECIFY): — OTHER (SPECIFY): —
21. TOTAL CORE REC.: — %
22. DISPOSITION OF HOLE: BACKFILLED: — MONITORING WELL: — OTHER (SPECIFY): Piezometer
23. SIGNATURE OF INSPECTOR: M Dombrowski

ELEV. a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS h
		Auger to 15 ft					
	15 ↓ 17 ft	GP/SP - Sandy gravel and med to coarse sand.	0.0 ppm			10-13 -32 -35	Rec'd 15" Time 1330
		Auger to 20 ft					

PROJECT: STRATFORD ARMY ENGINE PLANT

HOLE NO.: PZ-11D

HTW DRILLING LOG

HOLE NO. PZ-11D

PROJECT STRATFORD ARMY ENGINE PLANT

INSPECTOR M. DOMBROWSKI

SHEET 2 OF 2 SHEETS

ELEV. a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS h
	20 ↓ 22 ft	SP/SM – Brown fine and coarse sand, bottom 12" are brown silty fine sand.	0.0 ppm			10-13 -19 -18	Rec'd 19" Time 1340
		Driller says some silt layers ↓ Auger to 25 ft					
	25 ↓ 27 ft	ML - Brown silt with tr sand, hard.	0.0 ppm	SS-3		8-15 -26 -28	Rec'd 12" Time 1350
		↓ Augered to 30 ft					
	30 ↓ 32 ft	SM/ML - Brown silty fine sand or sandy silt.	0.0 ppm	SS-4		10-12 -21 -21	Rec'd 15" Time 1405
		↓ Augered to 35 ft					
	35 ↓ 37 ft	SM - Brown silty fine to med sand	0.0 ppm			4-8 -12 -13	Rec'd 20" Time 1430
		End of boring 37 ft					

PROJECT: STRATFORD ARMY ENGINE PLANT

HOLE NO.: PZ-11D