

JUL-15-03 08:56 From-SVERDRUP TECHNOLOGY

+8313836571

T-022 P.05/16 F-613

HTRW DRILLING LOG

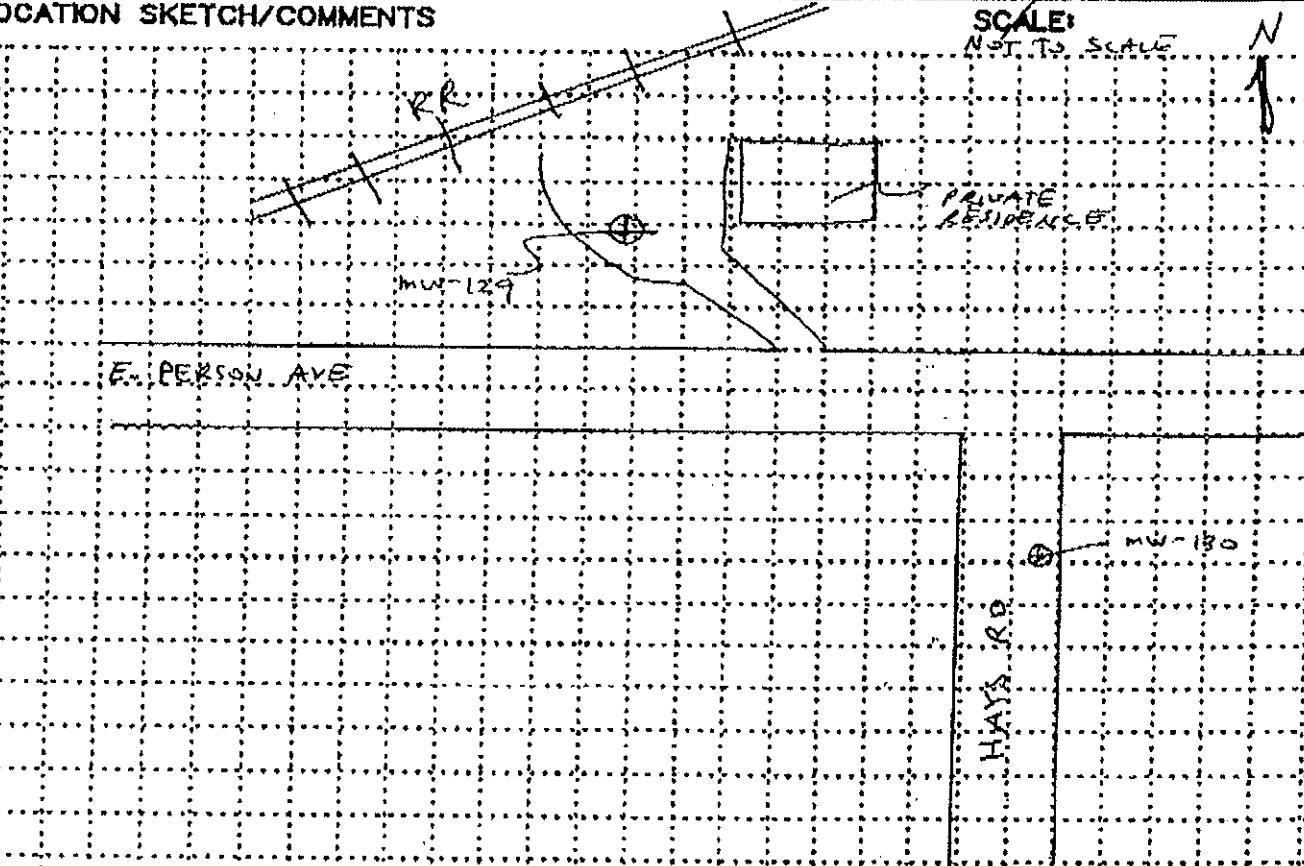
		DISTRICT	MOBILE	HOLE NUMBER
1. COMPANY NAME JYC-85 ENGINEERING		2. DRILLING SUBCONTRACTOR B-DART/LONGYEAR		MW-129
3. PROJECT DUMT-MEMPHIS		4. LOCATION SEE SKETCH - MEMPHIS, TN		SHEET 1 OF 3
5. NAME OF DRILLER TON WEEKS		6. MANUFACTURER'S DESIGNATION OF DRILL GW PESCHE RD300 SONIC DRILL		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 6" (CONTINUOUS) SAMPLE CATAPULSED INTO PLASTIC CINCHAS		8. HOLE LOCATION SEE SKETCH		
		9. SURFACE ELEVATION		
		10. DATE STARTED 6/24/03		11. DATE COMPLETED 6/24/03
12. OVERBURDEN THICKNESS NA		13. DEPTH DRILLED INTO ROCK 0		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED
15. TOTAL DEPTH OF HOLE 85 FT		16. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)		
17. GEOTECHNICAL SAMPLES X		DISTURBED	UNDISTURBED	18. TOTAL NUMBER OF CORE BOXES
19. SAMPLES FOR CHEMICAL ANALYSIS X		VOC	METALS	OTHER (SPECIFY)
20. DISPOSITION OF HOLE BACKFILLED		MONITORING WELL	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY % 100
		22. SIGNATURES OF INSPECTOR <i>Bruce Smith</i>		
LOCATION SKETCH/COMMENTS  <p>SCALE: NOT TO SCALE</p> <p>N</p> <p>PRIVATE PROPERTY</p> <p>E. PEKSON AVE.</p> <p>MW-129</p> <p>HAYES RD</p>				
PROJECT DUMT-MEMPHIS			HOLE NO. MW-129	

Figure 4-2. HTRW Drilling Log

Jul-15-03 08:56

From-SVERDRUP TECHNOLOGY

+9313936571

T-822 P.06/16 F-613

HTRW DRILLING LOG (CONTINUATION SHEET)

MW - 129

PROJECT	DOMT-MEMPHIS	INSPECTOR	K. SMITH	SHEET	2 OF 3 SHEETS	
DEPTH (ft)	DESCRIPTION OF MATERIALS (ft)	PROBABLE TYPE IN	TESTED LENGTH IN FEET IN	SWAB TEST IN	SWAB COUNT IN	REMAINS IN
AS PDUCT						BEGAN @ 2805
5'	MIXED GRAVEL & CLAY	9999 ppm	5'/5'			NO ODOR
5'	CLAY, SILTY, YELLOW-BROWN, MOIST, MED-PLASTICITY					
5'	SILT, CLAY, DRY, LOW PLASTICITY	184 ppm	5'/5'			NO ODOR
10'	"	999 ppm	5'/5'			NO ODOR
15'	CLAY, SILTY, MOIST, LT. BROWN, MED. PLASTICITY	32 ppm	5'/5'			NO ODOR
20'	SILT, CLAYEY, MOIST, LT. BROWN, LOW PLASTICITY	12.5 ppm	5'/5'			NO ODOR
25'	"	5 ppm	5'/5'			NO ODOR
30'	AS ABOVE w/SAME FINE SAND	5 ppm	5'/10'			NO ODOR
35'	"	5 ppm	5'/5'			NO ODOR
40'	CLAY, VEY SANDY, REDDISH BROWN, MOIST, MED. PLASTICITY	3.3 ppm	5'/5'			NO ODOR
45'	SAND, MED. GRAINED, SAME GRAVEL, REDDISH BROWN, MOIST, SOME LT. BROWN BANDING	2.7 ppm	5'/5'			NO ODOR
50'	SAND, FINE, REDDISH-BROWN, MOIST, SOME DARK STAINING	2.7 ppm	10'/10'	↓		NO ODOR

PROJECT

DOMT-MEMPHIS

HOLE NO.

MW - 129

ENG FORM 5056A-R, AUG 94

(Proprietary CECW-EG)

Figure 4-2 (Concluded)

Jul-15-03 08:57

From-SVERDRUP TECHNOLOGY

+8313836571

T-922 P.07/16 F-613

MW - 129

SHEET 3 OF 3 SHEETS

HTRW DRILLING LOG (CONTINUATION SHEET)

PROJECT	DDMT - MEMPHIS	INSPECTOR	K. SMITH				
STATION (ft)	DEPTH (ft)	DESCRIPTION OF MATERIALS (ft)	PERMEABILITY GROUTED (ft)	DOVER SAND & CLAY (ft)	DISPLACEMENT (ft)	SLUDGE COMPT (ft)	REMARKS (ft)
		AS ABOVE					
		SAND, MOIST TO WET, REDISH BROWN, MED. TO FINE GRAINED		10' / 10'			
55							NO DOOR
60		SAND, MED. GRAINED, WET, LT. BROWN	0.5 ppm	10' / 10'			NO DOOR
65		AS ABOVE BUT BECOMING FINER					
		SAND, COARSE, MOIST, LT. BROWN					
70				10' / 10'			
75		AS ABOVE w/ SOME LAYERING OF FINE SAND	0.6 ppm				NO DOOR
80							
		CLAY, YELLOW-BROWN MOTTLED GRAY, STIFF	0.5 ppm	10' / 10'			NO DOOR
85		T.D. = 85'					COMPLETE @ 1600 MAS
90							
95							
100							

PROJECT

DDMT - MEMPHIS

ROLL NO.

MW - 129

(Proposed: CEW-EG)

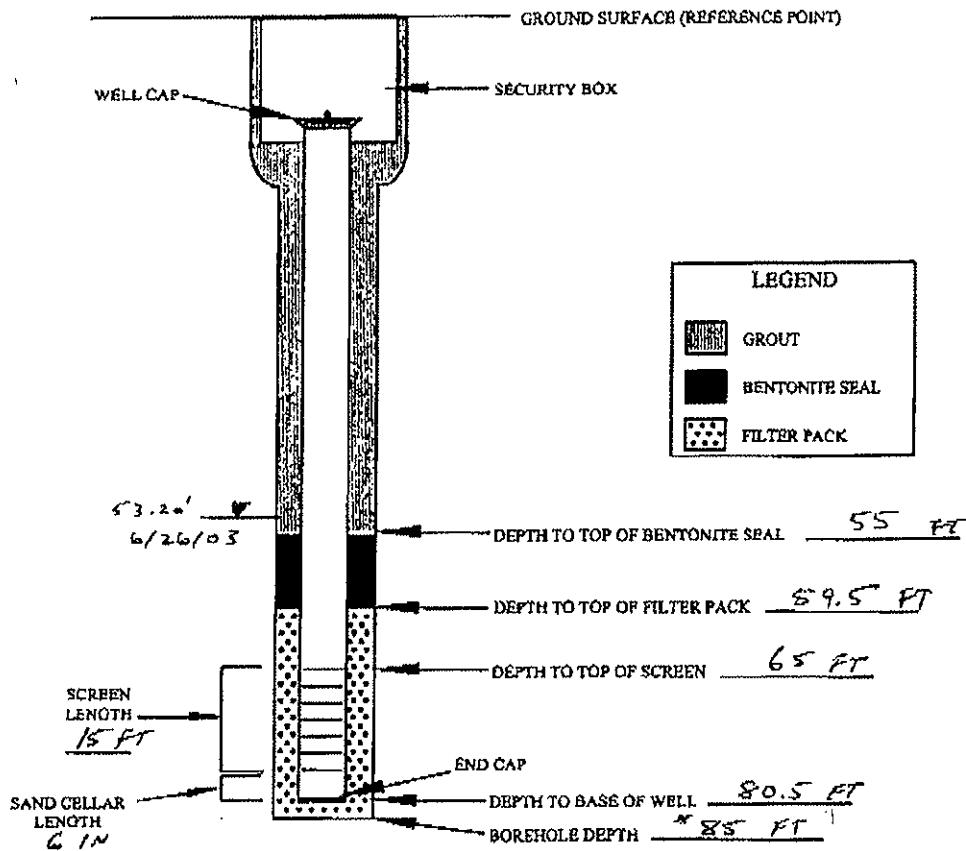
ENG FORM 5056A-R, AUG 94

Figure 4-2 (Concluded)

WELL CONSTRUCTION DETAILS AND ABANDONMENT FORM

FIELD REPRESENTATIVE: K. SMITH TYPE OF FILTER PACK: #2 SAND
 DRILLING CONTRACTOR: B3 ARTISAN GRADIASION:
 AMOUNT OF FILTER PACK USED: SEE DIAGRAM
 DRILLING TECHNIQUE: SONIC TYPE OF BENTONITE: FLAKE
 AUGER SIZE AND TYPE: 6 IN CONTINUOUS AMOUNT BENTONITE USED: SEE DIAGRAM
 BOREHOLE IDENTIFICATION: MW - 129 TYPE OF CEMENT: BENTONITE/cement
 BOREHOLE DIAMETER: 6 IN AMOUNT CEMENT USED: SEE DIAGRAM
 WELL IDENTIFICATION: MW - 129 GROUT MATERIALS USED:
 WELL CONSTRUCTION START DATE: 6/24/03 DIMENSIONS OF SECURITY BOX: 8 IN
 WELL CONSTRUCTION COMPLETE DATE: 6/24/03
 SCREEN MATERIAL: PVC TYPE OF WELL CAP: LOCKING
 SCREEN DIAMETER: 2 IN TYPE OF END CAP: 6 IN FLAT
 STRATUM-SCREENED INTERVAL (FT): 15
 COMMENTS:
 CASING MATERIAL: PVC
 CASING DIAMETER: 2 IN

SPECIAL CONDITIONS
(describe and draw)



* HOLE COLLARED TO 80.5 FT AS CASING
WAS ADVANCED

NOT TO SCALE

INSTALLED BY: JON WEEKS INSTALLATION OBSERVED BY: K. SMITH

DISCREPANCIES: _____