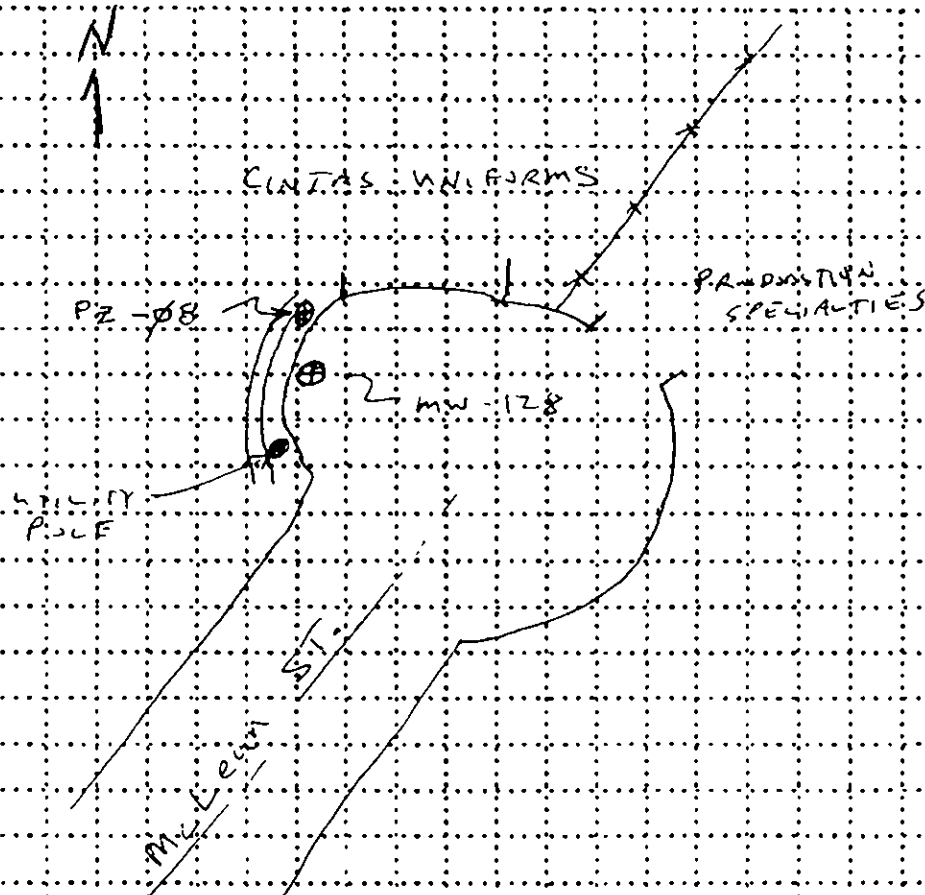


HTRW DRILLING LOG		DISTRICT		MOBILE		HOLE NUMBER		MW-128	
1. COMPANY NAME		JACOBS ENG		2. DRILLING SUBCONTRACTOR		BOACT/LONGYEAR		3. SHEET / OF	
3. PROJECT		DDMT - MEMPHIS		4. LOCATION		MEMPHIS, TN		5. SHEETS	
5. NAME OF DRILLER		JON WEEKS		6. MANUFACTURER'S DESIGNATION OF DRILL		GUS RESCHE RD300 SONIC DRILL		6. SHEETS	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		6" OD CONTINUOUS SAMPLE ENTERED INTO PLASTIC LINERS		8. HOLE LOCATION		SEE SKETCH		7. SHEETS	
12. OVERBURDEN THICKNESS		NA		10. DATE STARTED		6/27/03		11. DATE COMPLETED	
13. DEPTH DRILLED INTO ROCK		0		15. DEPTH GROUNDWATER ENCOUNTERED		APP 35'		12. SHEETS	
14. TOTAL DEPTH OF HOLE		85 FT		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED		36 S FT / E.T. = 2 HRS		13. SHEETS	
18. GEOTECHNICAL SAMPLES		DISTURBED		19. TOTAL NUMBER OF CORE BOXES		20. TOTAL CORE RECOVERY %		14. SHEETS	
20. SAMPLES FOR CHEMICAL ANALYSIS		NONE		21. SIGNATURE OF INSPECTOR		22. SIGNATURE OF INSPECTOR		15. SHEETS	
22. DISPOSITION OF HOLE		BACKFILLED		23. SIGNATURE OF INSPECTOR		24. SIGNATURE OF INSPECTOR		16. SHEETS	
24. DISPOSITION OF HOLE		MONITORING WELL		25. SIGNATURE OF INSPECTOR		26. SIGNATURE OF INSPECTOR		17. SHEETS	
26. DISPOSITION OF HOLE		X		27. SIGNATURE OF INSPECTOR		28. SIGNATURE OF INSPECTOR		18. SHEETS	
28. DISPOSITION OF HOLE		X		29. SIGNATURE OF INSPECTOR		30. SIGNATURE OF INSPECTOR		19. SHEETS	
30. DISPOSITION OF HOLE		X		31. SIGNATURE OF INSPECTOR		32. SIGNATURE OF INSPECTOR		20. SHEETS	
32. DISPOSITION OF HOLE		X		33. SIGNATURE OF INSPECTOR		34. SIGNATURE OF INSPECTOR		21. SHEETS	
34. DISPOSITION OF HOLE		X		35. SIGNATURE OF INSPECTOR		36. SIGNATURE OF INSPECTOR		22. SHEETS	
36. DISPOSITION OF HOLE		X		37. SIGNATURE OF INSPECTOR		38. SIGNATURE OF INSPECTOR		23. SHEETS	
38. DISPOSITION OF HOLE		X		39. SIGNATURE OF INSPECTOR		40. SIGNATURE OF INSPECTOR		24. SHEETS	
40. DISPOSITION OF HOLE		X		41. SIGNATURE OF INSPECTOR		42. SIGNATURE OF INSPECTOR		25. SHEETS	
42. DISPOSITION OF HOLE		X		43. SIGNATURE OF INSPECTOR		44. SIGNATURE OF INSPECTOR		26. SHEETS	
44. DISPOSITION OF HOLE		X		45. SIGNATURE OF INSPECTOR		46. SIGNATURE OF INSPECTOR		27. SHEETS	
46. DISPOSITION OF HOLE		X		47. SIGNATURE OF INSPECTOR		48. SIGNATURE OF INSPECTOR		28. SHEETS	
48. DISPOSITION OF HOLE		X		49. SIGNATURE OF INSPECTOR		50. SIGNATURE OF INSPECTOR		29. SHEETS	
50. DISPOSITION OF HOLE		X		51. SIGNATURE OF INSPECTOR		52. SIGNATURE OF INSPECTOR		30. SHEETS	
52. DISPOSITION OF HOLE		X		53. SIGNATURE OF INSPECTOR		54. SIGNATURE OF INSPECTOR		31. SHEETS	
54. DISPOSITION OF HOLE		X		55. SIGNATURE OF INSPECTOR		56. SIGNATURE OF INSPECTOR		32. SHEETS	
56. DISPOSITION OF HOLE		X		57. SIGNATURE OF INSPECTOR		58. SIGNATURE OF INSPECTOR		33. SHEETS	
58. DISPOSITION OF HOLE		X		59. SIGNATURE OF INSPECTOR		60. SIGNATURE OF INSPECTOR		34. SHEETS	
60. DISPOSITION OF HOLE		X		61. SIGNATURE OF INSPECTOR		62. SIGNATURE OF INSPECTOR		35. SHEETS	
62. DISPOSITION OF HOLE		X		63. SIGNATURE OF INSPECTOR		64. SIGNATURE OF INSPECTOR		36. SHEETS	
64. DISPOSITION OF HOLE		X		65. SIGNATURE OF INSPECTOR		66. SIGNATURE OF INSPECTOR		37. SHEETS	
66. DISPOSITION OF HOLE		X		67. SIGNATURE OF INSPECTOR		68. SIGNATURE OF INSPECTOR		38. SHEETS	
68. DISPOSITION OF HOLE		X		69. SIGNATURE OF INSPECTOR		70. SIGNATURE OF INSPECTOR		39. SHEETS	
70. DISPOSITION OF HOLE		X		71. SIGNATURE OF INSPECTOR		72. SIGNATURE OF INSPECTOR		40. SHEETS	
72. DISPOSITION OF HOLE		X		73. SIGNATURE OF INSPECTOR		74. SIGNATURE OF INSPECTOR		41. SHEETS	
74. DISPOSITION OF HOLE		X		75. SIGNATURE OF INSPECTOR		76. SIGNATURE OF INSPECTOR		42. SHEETS	
76. DISPOSITION OF HOLE		X		77. SIGNATURE OF INSPECTOR		78. SIGNATURE OF INSPECTOR		43. SHEETS	
78. DISPOSITION OF HOLE		X		79. SIGNATURE OF INSPECTOR		80. SIGNATURE OF INSPECTOR		44. SHEETS	
80. DISPOSITION OF HOLE		X		81. SIGNATURE OF INSPECTOR		82. SIGNATURE OF INSPECTOR		45. SHEETS	
82. DISPOSITION OF HOLE		X		83. SIGNATURE OF INSPECTOR		84. SIGNATURE OF INSPECTOR		46. SHEETS	
84. DISPOSITION OF HOLE		X		85. SIGNATURE OF INSPECTOR		86. SIGNATURE OF INSPECTOR		47. SHEETS	
86. DISPOSITION OF HOLE		X		87. SIGNATURE OF INSPECTOR		88. SIGNATURE OF INSPECTOR		48. SHEETS	
88. DISPOSITION OF HOLE		X		89. SIGNATURE OF INSPECTOR		90. SIGNATURE OF INSPECTOR		49. SHEETS	
90. DISPOSITION OF HOLE		X		91. SIGNATURE OF INSPECTOR		92. SIGNATURE OF INSPECTOR		50. SHEETS	
92. DISPOSITION OF HOLE		X		93. SIGNATURE OF INSPECTOR		94. SIGNATURE OF INSPECTOR		51. SHEETS	
94. DISPOSITION OF HOLE		X		95. SIGNATURE OF INSPECTOR		96. SIGNATURE OF INSPECTOR		52. SHEETS	
96. DISPOSITION OF HOLE		X		97. SIGNATURE OF INSPECTOR		98. SIGNATURE OF INSPECTOR		53. SHEETS	
98. DISPOSITION OF HOLE		X		99. SIGNATURE OF INSPECTOR		100. SIGNATURE OF INSPECTOR		54. SHEETS	
100. DISPOSITION OF HOLE		X		101. SIGNATURE OF INSPECTOR		102. SIGNATURE OF INSPECTOR		55. SHEETS	
102. DISPOSITION OF HOLE		X		103. SIGNATURE OF INSPECTOR		104. SIGNATURE OF INSPECTOR		56. SHEETS	
104. DISPOSITION OF HOLE		X		105. SIGNATURE OF INSPECTOR		106. SIGNATURE OF INSPECTOR		57. SHEETS	
106. DISPOSITION OF HOLE		X		107. SIGNATURE OF INSPECTOR		108. SIGNATURE OF INSPECTOR		58. SHEETS	
108. DISPOSITION OF HOLE		X		109. SIGNATURE OF INSPECTOR		110. SIGNATURE OF INSPECTOR		59. SHEETS	
110. DISPOSITION OF HOLE		X		111. SIGNATURE OF INSPECTOR		112. SIGNATURE OF INSPECTOR		60. SHEETS	
112. DISPOSITION OF HOLE		X		113. SIGNATURE OF INSPECTOR		114. SIGNATURE OF INSPECTOR		61. SHEETS	
114. DISPOSITION OF HOLE		X		115. SIGNATURE OF INSPECTOR		116. SIGNATURE OF INSPECTOR		62. SHEETS	
116. DISPOSITION OF HOLE		X		117. SIGNATURE OF INSPECTOR		118. SIGNATURE OF INSPECTOR		63. SHEETS	
118. DISPOSITION OF HOLE		X		119. SIGNATURE OF INSPECTOR		120. SIGNATURE OF INSPECTOR		64. SHEETS	
120. DISPOSITION OF HOLE		X		121. SIGNATURE OF INSPECTOR		122. SIGNATURE OF INSPECTOR		65. SHEETS	
122. DISPOSITION OF HOLE		X		123. SIGNATURE OF INSPECTOR		124. SIGNATURE OF INSPECTOR		66. SHEETS	
124. DISPOSITION OF HOLE		X		125. SIGNATURE OF INSPECTOR		126. SIGNATURE OF INSPECTOR		67. SHEETS	
126. DISPOSITION OF HOLE		X		127. SIGNATURE OF INSPECTOR		128. SIGNATURE OF INSPECTOR		68. SHEETS	
128. DISPOSITION OF HOLE		X		129. SIGNATURE OF INSPECTOR		130. SIGNATURE OF INSPECTOR		69. SHEETS	
130. DISPOSITION OF HOLE		X		131. SIGNATURE OF INSPECTOR		132. SIGNATURE OF INSPECTOR		70. SHEETS	
132. DISPOSITION OF HOLE		X		133. SIGNATURE OF INSPECTOR		134. SIGNATURE OF INSPECTOR		71. SHEETS	
134. DISPOSITION OF HOLE		X		135. SIGNATURE OF INSPECTOR		136. SIGNATURE OF INSPECTOR		72. SHEETS	
136. DISPOSITION OF HOLE		X		137. SIGNATURE OF INSPECTOR		138. SIGNATURE OF INSPECTOR		73. SHEETS	
138. DISPOSITION OF HOLE		X		139. SIGNATURE OF INSPECTOR		140. SIGNATURE OF INSPECTOR		74. SHEETS	
140. DISPOSITION OF HOLE		X		141. SIGNATURE OF INSPECTOR		142. SIGNATURE OF INSPECTOR		75. SHEETS	
142. DISPOSITION OF HOLE		X		143. SIGNATURE OF INSPECTOR		144. SIGNATURE OF INSPECTOR		76. SHEETS	
144. DISPOSITION OF HOLE		X		145. SIGNATURE OF INSPECTOR		146. SIGNATURE OF INSPECTOR		77. SHEETS	
146. DISPOSITION OF HOLE		X		147. SIGNATURE OF INSPECTOR		148. SIGNATURE OF INSPECTOR		78. SHEETS	
148. DISPOSITION OF HOLE		X		149. SIGNATURE OF INSPECTOR		150. SIGNATURE OF INSPECTOR		79. SHEETS	
150. DISPOSITION OF HOLE		X		151. SIGNATURE OF INSPECTOR		152. SIGNATURE OF INSPECTOR		80. SHEETS	
152. DISPOSITION OF HOLE		X		153. SIGNATURE OF INSPECTOR		154. SIGNATURE OF INSPECTOR		81. SHEETS	
154. DISPOSITION OF HOLE		X		155. SIGNATURE OF INSPECTOR		156. SIGNATURE OF INSPECTOR		82. SHEETS	
156. DISPOSITION OF HOLE		X		157. SIGNATURE OF INSPECTOR		158. SIGNATURE OF INSPECTOR		83. SHEETS	
158. DISPOSITION OF HOLE		X		159. SIGNATURE OF INSPECTOR		160. SIGNATURE OF INSPECTOR		84. SHEETS	
160. DISPOSITION OF HOLE		X		161. SIGNATURE OF INSPECTOR		162. SIGNATURE OF INSPECTOR		85. SHEETS	
162. DISPOSITION OF HOLE		X		163. SIGNATURE OF INSPECTOR		164. SIGNATURE OF INSPECTOR		86. SHEETS	
164. DISPOSITION OF HOLE		X		165. SIGNATURE OF INSPECTOR		166. SIGNATURE OF INSPECTOR		87. SHEETS	
166. DISPOSITION OF HOLE		X		167. SIGNATURE OF INSPECTOR		168. SIGNATURE OF INSPECTOR		88. SHEETS	
168. DISPOSITION OF HOLE		X		169. SIGNATURE OF INSPECTOR		170. SIGNATURE OF INSPECTOR		89. SHEETS	
170. DISPOSITION OF HOLE		X		171. SIGNATURE OF INSPECTOR		172. SIGNATURE OF INSPECTOR		90. SHEETS	
172. DISPOSITION OF HOLE		X		173. SIGNATURE OF INSPECTOR		174. SIGNATURE OF INSPECTOR		91. SHEETS	
174. DISPOSITION OF HOLE		X		175. SIGNATURE OF INSPECTOR		176. SIGNATURE OF INSPECTOR		92. SHEETS	
176. DISPOSITION OF HOLE		X		177. SIGNATURE OF INSPECTOR		178. SIGNATURE OF INSPECTOR		93. SHEETS	
178. DISPOSITION OF HOLE		X		179. SIGNATURE OF INSPECTOR		180. SIGNATURE OF INSPECTOR		94. SHEETS	
180. DISPOSITION OF HOLE		X		181. SIGNATURE OF INSPECTOR		182. SIGNATURE OF INSPECTOR		95. SHEETS	
182. DISPOSITION OF HOLE		X		183. SIGNATURE OF INSPECTOR		184. SIGNATURE OF INSPECTOR		96. SHEETS	
184. DISPOSITION OF HOLE		X		185. SIGNATURE OF INSPECTOR		186. SIGNATURE OF INSPECTOR		97. SHEETS	
186. DISPOSITION OF HOLE		X		187. SIGNATURE OF INSPECTOR		188. SIGNATURE OF INSPECTOR		98. SHEETS	
188. DISPOSITION OF HOLE		X		189. SIGNATURE OF INSPECTOR		190. SIGNATURE OF INSPECTOR		99. SHEETS	
190. DISPOSITION OF HOLE		X		191. SIGNATURE OF INSPECTOR		192. SIGNATURE OF INSPECTOR		100. SHEETS	

LOCATION SKETCH/COMMENTS

SCALE: NOT TO SCALE



PROJECT

DDMT - MEMPHIS

HOLE NO.

MW-128

Figure 4-2. HTRW Drilling Log

HTRW DRILLING LOG (CONTINUATION SHEET)						HOLE NUMBER	
PROJECT		INSPECTION		SHEET			
DDMT- MEMPHIS		K. SMITH		MW 128			
PROJECT		INSPECTION		SHEET 2 of 3 SHEETS			
ELEV. (3)	DEPTH (2)	DESCRIPTION OF MATERIALS (4)	FIELD SOILS ANALYSIS (5)	GRAVITY SAMPLE OR COR. FOR NO. (6)	ANALYTICAL SAMPLE NO. (7)	BLOW COUNT (8)	REMARKS (9)
		ASPHALT					BEGAN @ 0830
		GRAVEL		5' / 5'			NO ODR
	5	CLAY, SILTY, DARK BROWN, MOIST, MED PLASTICITY	Ø ppm				
		CLAY, VERY SILTY, BROWN, MOIST, MED PLASTICITY	Ø ppm	5' / 5'			NO ODR
	10	CLAY, SILTY, BROWN, MOIST, MED PLASTICITY	Ø ppm	5' / 5'			NO ODR
	15	As Above, becoming dark brown	Ø ppm	5' / 5'			NO ODR
		CLAY, SILTY, LIGHT BR, MOIST, MED PLASTICITY, BECOMING STIFFER	Ø ppm	5' / 5'			NO ODR
	20		Ø ppm	5' / 5'			NO ODR
	25		Ø ppm	5' / 5'			NO ODR
	30	CLAY, SILTY, REDDISH BR, MOIST, MED PLASTICITY	Ø ppm	5' / 5'			NO ODR
		As Above, becoming sandy & fine sand	Ø ppm	5' / 5'			NO ODR
	35	SAND, CLAYEY & SILTY, REDDISH BR., VERY FINE, MOIST					
	40	SAND, SILTY, VERY FINE MOIST					
		SAND, VERY FINE, WET, YELLOW BROWN	Ø ppm	10' / 10'			NO ODR
	45	SAND, MED GRAINED, YELLOW - BROWN, WET					
	50			15' / 20'			
PROJECT DDMT- MEMPHIS						HOLE NO. MW-128	

Figure 4-2 (Concluded)

743 8

HTRW DRILLING LOG (CONTINUATION SHEET)						HOLE NUMBER MW-128	
PROJECT DDMT- MEMPHIS			INSPECTOR K SMITH			SHEET 3 OF 3 SHEETS	
ELEV. (1)	DEPTH (2)	DESCRIPTION OF MATERIALS (3)	FIELD SOLENOID RESULTS (4)	TESTED SAMPLE OR DATA FOR SO (5)	ANALYTICAL LABORATORY (6)	BLOW COUNT (7)	REMARKS (8)
	55	AS ABOVE		15' / 25'			N = 200R
	60	SAND, MED GRAINED W/ SOME GRAVEL, WET, YELLOW BROWN	Ø ppm				
	65						
	70		Ø ppm	10' / 15'			N = 200R
	75	SAND, FINE, WET, YELLOW- BROWN					
	80	CLAY, SANDY, YELLOW BROWN, WET, STIFF					
	85	CLAY, YELLOW-BR, MOIST, MED PLAST, STIFF	Ø ppm	10' / 15'			N = 200R
	90	CLAY, MOIST, DARK GRAY, VERY STIFF					COMPLETE AT 1000 HRS
	95	TD = 85'					
	100						

PROJECT DDMT- MEMPHIS	HOLE NO. MW-128
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Figure 4-2 (Concluded)