

BORING NUMBER

MW-231 (IW-3)

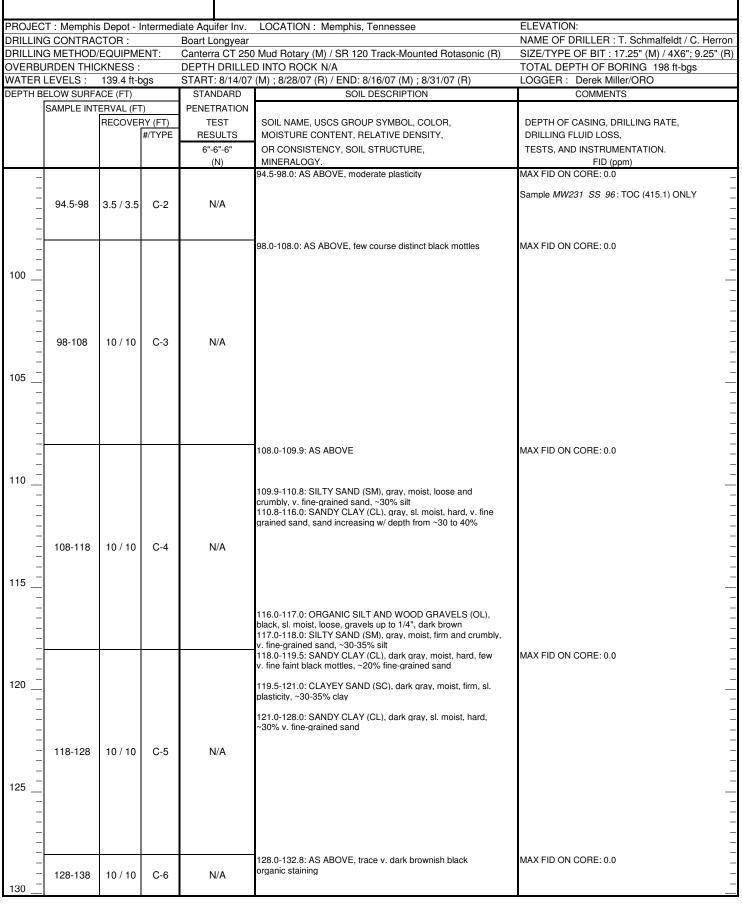
SHEET 1 of 4

### DRILLING CONTRACTOR: ### OVERBURDEN THICKNESS: Canterior CT 250 Mod Retary (M) / SR 120 Track-Mounted Retaignent (R) ### OVERBURDEN THICKNESS: 130 4 h bys ### DEPTH RETURN ETT: ### OVERBURDEN THICKNESS: 130 4 h bys ### DEPTH RETURN ETT: ### OVERBURDEN THICKNESS: 130 4 h bys ### OVERBURDEN THICKNESS: 130 5 h bys ### OVERBURDEN THIC	PROJECT : Memphis Depot - Intermediate Aquifer Inv. LOCATION : Memphis, Tennessee ELEVATION:							
### SPECIFIC PROPERTY CONTRIBUTION CONTRIBUT				ntermeu		LOOATION . Memphis, remessee		on
OVERBURDEN THICKNESS DEPTH OF BRILLED INTO ROCK NA				-NIT·		Mud Rotary (M) / SR 120 Track-Mounted Rotasonic (R)		
### WATER LEVELS: 1934 14 bays START-81407 (M); 8/2807 (R); 18/10; 8/1007 (M); 8/2107 (M);						• • • • • • • • • • • • • • • • • • • •		(11)
SAMPLE NITERON SUPPLY STANDARD POINTERTATION POINTERTA								
SAMPLE INTERVALED PRECOVERY TO PRESENTATION TESTS SOIL NAME USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY, DELIGIBLES, SOIL NAME USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY, DELIGIBLES, TESTS, AND INSTRUMENTATION. FID (ignor) Color Consistency Soil STRUCTURE, MINERALOGY TESTS, AND INSTRUMENTATION. FID (ignor) Color Not Standard Color N				ys				
Second Part	· '			-		SOIL DESCRIPTION	COMMENTS	
### ### ##############################		SAMPLE IN I	<u>`</u>					
On CONSISTENCY, SOIL STRUCTURE, TESTS, AND INSTRUMENTALT, 70 or TEST (pgm)								
No.				#/TYPE		•	'	
35								
SAMPLING UNTIL 70.0 FT BGS					(N)			
To -	_					0.0-70.0: NOT SAMPLED		_
70	_						SAMPLING ONTIL 70.0 FT BGS	_
70 - 70 N/A							*REFERENCE MW-37 BORING LOG	_
70 - 70 N/A	_							_
70 - 70 N/A	_							-
70 - 70 N/A								_
70 - 70 N/A								_
70.72 2 / 2 SS-1 N/A common medium prominent black mottles throughout maximum models. Firm common medium prominent black mottles throughout maximum models. MAX FID ON CORE: 0.9 MAX FID ON CORE: 0.0 MAX FID ON TUBE: 0.0	35	0-70	N/A	N/A	N/A			—
70.72 2 / 2 SS-1 N/A common medium prominent black mottles throughout maximum models. Firm common medium prominent black mottles throughout maximum models. MAX FID ON CORE: 0.9 MAX FID ON CORE: 0.0 MAX FID ON TUBE: 0.0	-							-[
70.72 2 / 2 SS-1 N/A common medium prominent black mottles throughout maximum models. Firm common medium prominent black mottles throughout maximum models. MAX FID ON CORE: 0.9 MAX FID ON CORE: 0.0 MAX FID ON TUBE: 0.0	_							
70.72 2 / 2 SS-1 N/A common medium prominent black mottles throughout maximum models. Firm common medium prominent black mottles throughout maximum models. MAX FID ON CORE: 0.9 MAX FID ON CORE: 0.0 MAX FID ON TUBE: 0.0	_							_
70.72 2 / 2 SS-1 N/A common medium prominent black mottles throughout maximum models. Firm common medium prominent black mottles throughout maximum models. MAX FID ON CORE: 0.9 MAX FID ON CORE: 0.0 MAX FID ON TUBE: 0.0	_							-
70.72 2 / 2 SS-1 N/A common medium prominent black mottles throughout maximum models. Firm common medium prominent black mottles throughout maximum models. MAX FID ON CORE: 0.9 MAX FID ON CORE: 0.0 MAX FID ON TUBE: 0.0	_							-
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70.72 2 / 2 SS-1 N/A common medium prominent black mottles throughout maximum models. Firm common medium prominent black mottles throughout maximum models. MAX FID ON CORE: 0.9 MAX FID ON CORE: 0.0 MAX FID ON TUBE: 0.0								_
To To To To To To To To	⁷⁰ —					70.0.70.0.CLAV/CL\ limbt muses to undefine bussing maniet firms	MAY FID ON CORE, a a	_
72-74 2 / 2 SS-1 N/A 72-74 2 / 2 SS-2 N/A 72-74-0: AS ABOVE 74-0: AS ABOVE 75-0: AS ABOVE 76-0: AS ABOVE 76-0: AS ABOVE 78-0: ABOVE 78-	_						MAX FID ON CORE: 0.9	-
72-74 2/2 SS-2	_	70-72	2/2	SS-1	N/A	oommon modalin prominent black metaled throughout		
72-74 2/2 SS-2	_							_
74.76 2 / 2 SS-3 N/A 74.77.5.3 SANDY CLAY (CL), gray to reddish brown, moist, firm, v. fine-grained sand, -35-40% sand 76.78.0 SS-40 N/A 78.78.0 SANDY CLAY (CL), dark gray, moist, firm v. fine grained sand, -35-40% sand 78.88.0 SS-5 N/A 78.89.0	_					72.0-74.0: AS ABOVE	MAX FID ON CORE: 0.0	-
74-76	_	72-74	2/2	SS-2	N/A			_
74-76	_							
1.8 2 2 2 2 2 2 3 5 3 3 4 3 4 4 5 5 4 5 5 4 5 5							MAX FID ON CORE: 0.0	_
T5.0.76.0: CLAY (CL), reddish brown to light gray, moist, firm T6.0.76.2: AS ABOVE	^{/5} —	74-76	2/2	SS-3	N/A			_
T6-78	_							_
1.8 / 2 SS-5	_						MAX FID ON CORE: 0.0	_
N/A	_	76-78	1.8 / 2	SS-4	N/A			_
1.8 2 SS-5 N/A	_					distinct black mottles throughout, distinct contact		_
80 - 81.5: CLAYEY SAND (SC), dark gray, moist, firm, v. fine grained sand, -35-40% clay 81.5-82.0: SILTY CLAY (CL), dark gray, moist, stiff, few fine distinct black mottles throughout 82.0-83.7: CLAYEY SAND (SC), dark gray, moist, firm, v. fine grained sand, -35-40% clay 81.7-84.0: SILTY CLAY (CL), dark gray, moist, firm, v. fine grained sand, -35-40% clay 81.7-84.0: SILTY CLAY (CL), dark gray, moist, stiff, few fine distinct black mottles throughout 84.0-85.0: CLAY (CL), dark gray, moist, stiff, few fine distinct black mottles throughout 84.0-85.0: CLAY (CL), dark gray, moist, firm, v. fine grained sand, -35-40% clay 85.4-86.0: CLAY (CL), dark gray, sl. moist, hard 86.0-88.0: AS ABOVE 88-98 2/2 SS-9 N/A 88.0-89.0: CLAY (CL), dark gray, sl. moist, hard 89.0-90.0: CLAYEY SAND (SC), dark gray, moist, firm, v. fine grained sand, -35-40% clay 0.0-90.0: 12" CARBON STEEL PERMANENT CASING 90.0-91.7: Sl. SANDY CLAY (CL), dark gray, moist, firm, v. fine frained sand, -35-40% clay 0.1-90.0: 12" CARBON STEEL PERMANENT CASING 91.7-93.0: CLAYEY SAND (SC), dark gray, moist, firm, v. fine frained sand, -30-50% sand, sl. plasticity MAX FID ON CORE: 0.0	_					78.0-80.0: AS ABOVE	MAX FID ON CORE: 0.0	_
80 - 81.5: CLAYEY SAND (SC), dark gray, moist, firm, v. fine grained sand, -35-40% clay 81.5-82.0: SILTY CLAY (CL), dark gray, moist, stiff, few fine distinct black mottles throughout 82.0-83.7: CLAYEY SAND (SC), dark gray, moist, firm, v. fine grained sand, -35-40% clay 81.7-84.0: SILTY CLAY (CL), dark gray, moist, firm, v. fine grained sand, -35-40% clay 81.7-84.0: SILTY CLAY (CL), dark gray, moist, stiff, few fine distinct black mottles throughout 84.0-85.0: CLAY (CL), dark gray, moist, stiff, few fine distinct black mottles throughout 84.0-85.0: CLAY (CL), dark gray, moist, firm, v. fine grained sand, -35-40% clay 85.4-86.0: CLAY (CL), dark gray, sl. moist, hard 86.0-88.0: AS ABOVE 88-98 2/2 SS-9 N/A 88.0-89.0: CLAY (CL), dark gray, sl. moist, hard 89.0-90.0: CLAYEY SAND (SC), dark gray, moist, firm, v. fine grained sand, -35-40% clay 0.0-90.0: 12" CARBON STEEL PERMANENT CASING 90.0-91.7: Sl. SANDY CLAY (CL), dark gray, moist, firm, v. fine frained sand, -35-40% clay 0.1-90.0: 12" CARBON STEEL PERMANENT CASING 91.7-93.0: CLAYEY SAND (SC), dark gray, moist, firm, v. fine frained sand, -30-50% sand, sl. plasticity MAX FID ON CORE: 0.0	_	78-80	18/2	SS-5	N/A			_
80-82	90 -	70 00	1.07 =	000	14// (_
80-82	⁶⁰ —					80 0-81 5: CLAVEV SAND (SC), dark gray moist firm y fine	MAX FID ON CORE: 0.0	_
81.5.82.0: SILTY CLAY (CL), dark gray, moist, stiff, few fine distinct black mottles throughout 82.0-83.7: CLAYEY SAND (SC), dark gray, moist, firm, v. fine grained sand, ~35-40% clay 83.7-84.0: SILTY CLAY (CL), dark gray, moist, stiff, few fine distinct black mottles throughout 84.0-85.0: CLAY (CL), dark gray, sl. moist, hard 85.0-85.4: CLAYEY SAND (SC), dark gray, moist, firm, v. fine grained sand, ~35-40% clay 85.0-85.4: CLAYEY SAND (SC), dark gray, moist, firm, v. fine grained sand, ~35-40% clay 85.4-86.0: CLAY (CL), dark gray, sl. moist 86.0-88.0: AS ABOVE 88.0-88.0: AS ABOVE 88.0-88.0: AS ABOVE MAX FID ON CORE: 0.0 S9.0-90.0: 12" CARBON STEEL PERMANENT CASING 90.0-91.7: Sl. SANDY CLAY (CL), dark gray, moist, firm, v. fine to fine-grained sand, ~50% sand, sl. plasticity MAX FID ON TUBE: 0.0		80-85	13/2	99.6	NI/A	grained sand, ~35-40% clay		
82-84	_	00-02	1.0/2	03-6	IN/A	81.5-82.0: SILTY CLAY (CL), dark gray, moist, stiff, few fine		_]
82-84	_						MAY FID ON CORE: 0.0	-[
85 — 84-86 2 / 2 SS-8 N/A 83.7-84.0: SILTY CLAY (CL), dark gray, moist, stiff, few fine distinct black mottles throughout 84.0-85.0: CLAY (CL), dark gray, sl. moist, hard 85.0-85.4: CLAYEY SAND (SC), dark gray, moist, firm, v. fine grained sand, ~35-40% clay 85.4-86.0: CLAY (CL), dark gray, sl. moist 86.0-88.0: AS ABOVE 88-90 2 / 2 SS-9 N/A 88-90 2 / 2 SS-10 N/A 88.0-89.0: CLAY (CL), dark gray, sl. moist, hard 89.0-90.0: CLAYEY SAND (SC), dark gray, moist, firm, v. fine grained sand, ~35-40% clay 90.0-91.7: Sl. SANDY CLAY (CL), dark gray, moist, firm, v. fine grained sand, ~10% sand 91.7-93.0: CLAYEY SAND (SC), dark gray, moist, firm, v. fine to fine-grained sand, ~50% sand, sl. plasticity 93.0-94.5: SANDY CLAY (CL), dark gray, moist, firm, v. fine MAX FID ON TUBE: 0.0	_	00.04	15/0	CC 7	N1/A		IVIAA FID ON OOME. U.U	-
85.— 84-86 2 / 2 SS-8 N/A		82-84	1.5/2	55-/	N/A			
85 — 84-86 2 / 2 SS-8 N/A	_						MAY FIR ON OORF A A	_
## Second Process of Second Pr	85 -						MAX FID ON CORE: 0.0	-
85.4-86.0: CLAY (CL), dark gray, sl. moist 86.0-88.0: AS ABOVE MAX FID ON CORE: 0.0 88-90 2 / 2 SS-10 N/A 88.0-89.0: CLAY (CL), dark gray, sl. moist, hard 89.0-90.0: CLAYEY SAND (SC), dark gray, moist, firm, v. fine grained sand, ~35-40% clay 0.0-90.0: 12" CARBON STEEL PERMANENT CASING 90-91 3 / 3 C-1 N/A 90-93 3 / 3 C-1 N/A 90-93 3 / 3 C-1 N/A 90-94.5: SANDY CLAY (CL), dark gray, moist, firm, v. fine to fine-grained sand, ~50% sand, sl. plasticity MAX FID ON CORE: 0.0 MAX FID ON CORE: 0.0 MAX FID ON CORE: 0.0 MAX FID ON TUBE: 0.0		84-86	2/2	SS-8	N/A			
86-88 2 / 2 SS-9 N/A 88.0-89.0: CLAY (CL), dark gray, sl. moist, hard 89.0-90.0: CLAYEY SAND (SC), dark gray, moist, firm, v. fine grained sand, ~35-40% clay 0.0-90.0: 12" CARBON STEEL PERMANENT CASING 90.0-91.7: SL. SANDY CLAY (CL), dark gray, moist, hard, v. fine-grained sand, ~10% sand 91.7-93.0: CLAYEY SAND (SC), dark gray, moist, firm, v. fine to fine-grained sand, ~50% sand, sl. plasticity 93.0-94.5: SANDY CLAY (CL), dark gray, moist, firm, v. fine MAX FID ON TUBE: 0.0	_					85.4-86.0: CLAY (CL), dark gray, sl. moist		
88.0-89.0: CLAY (CL), dark gray, sl. moist, hard 89.0-90.0: CLAYEY SAND (SC), dark gray, moist, firm, v. fine grained sand, ~35-40% clay 0.0-90.0: 12" CARBON STEEL PERMANENT CASING 90.0-91.7: SL. SANDY CLAY (CL), dark gray, moist, hard, v. fine-grained sand, ~10% sand 91.7-93.0: CLAYEY SAND (SC), dark gray, moist, firm, v. fine to fine-grained sand, ~50% sand, sl. plasticity 93.0-94.5: SANDY CLAY (CL), dark gray, moist, firm, v. fine MAX FID ON CORE: 0.0 MAX FID ON TUBE: 0.0	_[86.0-88.0: AS ABOVE	MAX FID ON CORE: 0.0	-[
88-90 2 / 2 SS-10 N/A 89.0-90.0: CLAYEY SAND (SC), dark gray, moist, firm, v. fine grained sand, ~35-40% clay 0.0-90.0: 12" CARBON STEEL PERMANENT CASING 90-93 3 / 3 C-1 N/A 91.7-93.0: CLAYEY SAND (SC), dark gray, moist, hard, v. fine to fine-grained sand, ~10% sand 91.7-93.0: CLAYEY SAND (SC), dark gray, moist, firm, v. fine to fine-grained sand, ~50% sand, sl. plasticity 93.0-94.5: SANDY CLAY (CL), dark gray, moist, firm, v. fine MAX FID ON TUBE: 0.0	_	86-88	2/2	SS-9	N/A			-[
88-90 2 / 2 SS-10 N/A 89.0-90.0: CLAYEY SAND (SC), dark gray, moist, firm, v. fine grained sand, ~35-40% clay 0.0-90.0: 12" CARBON STEEL PERMANENT CASING 90-93 3 / 3 C-1 N/A 91.7-93.0: CLAYEY SAND (SC), dark gray, moist, hard, v. fine to fine-grained sand, ~10% sand 91.7-93.0: CLAYEY SAND (SC), dark gray, moist, firm, v. fine to fine-grained sand, ~50% sand, sl. plasticity 93.0-94.5: SANDY CLAY (CL), dark gray, moist, firm, v. fine MAX FID ON TUBE: 0.0	_							_
90							MAX FID ON CORE: 0.0	_
grained sand, ~35-40% clay 0.0-90.0: 12" CARBON STEEL PERMANENT CASING 0.0-90.0: 12" CARBON STEEL PERMANENT CASING 90-93 3/3 C-1 N/A 91.7-93.0: CLAYEY SAND (SC), dark gray, moist, firm, v. fine to fine-grained sand, ~50% sand, sl. plasticity 93.0-94.5: SANDY CLAY (CL), dark gray, moist, firm, v. fine MAX FID ON TUBE: 0.0	_	88-90	2/2	SS-10	N/A			_
90.0-91.7: SL. SANDY CLAY (CL), dark gray, moist, hard, v. fine-grained sand, ~10% sand 91.7-93.0: CLAYEY SAND (SC), dark gray, moist, firm, v. fine to fine-grained sand, ~50% sand, sl. plasticity 93.0-94.5: SANDY CLAY (CL), dark gray, moist, firm, v. fine MAX FID ON TUBE: 0.0	90 -]		,			-
90-93 3 / 3 C-1 N/A fine-grained sand, ~10% sand 91.7-93.0: CLAYEY SAND (SC), dark gray, moist, firm, v. fine to fine-grained sand, ~50% sand, sl. plasticity 93.0-94.5: SANDY CLAY (CL), dark gray, moist, firm, v. fine MAX FID ON TUBE: 0.0							MAX FID ON CORE: 0.0	
to fine-grained sand, ~50% sand, sl. plasticity 93.0-94.5: SANDY CLAY (CL), dark gray, moist, firm, v. fine MAX FID ON TUBE: 0.0						fine-grained sand, ~10% sand		
to fine-grained sand, ~50% sand, sl. plasticity 93.0-94.5: SANDY CLAY (CL), dark gray, moist, firm, v. fine MAX FID ON TUBE: 0.0	_	90-93	3/3	C-1	N/A			_
	_		-, -			to tine-grained sand, ~50% sand, sl. plasticity		-
	_]					-
						93.0-94.5: SANDY CLAY (CL), dark gray, moist, firm, v. fine	MAX FID ON TUBE: 0.0	
composition of the control of the co	04 5 -	93-94.5	1.5 / 1.5	ST-1	N/A	to fine-grained sand, ~30-35% sand	Sample MW231 ST 93-94.5: (Shelby tube)	-[
94.5 _ *LOGGED SHAVINGS FROM TUBE* Vertical permeability and grain size analysis	94.5		l .			*LOGGED SHAVINGS FROM TUBE*	Vertical permeability and grain size anaylsis	

CH2MHILL

SHEET 2 of

4





PROJECT NUMBER 334469.SA.HS

BORING NUMBER MW-231 (IW-3)

SHEET 3 of

4

	PROJECT : Memphis Depot - Intermediate Aquifer Inv. LOCATION : Memphis, Tennessee						
DRILLING CONTRACTOR: Boart Longyear State Contractor Content of Co							
				DEPTH DRILLED INTO ROCK N/A		TOTAL DEPTH OF BORING 198 ft-bgs	
WATER LEVELS: 139.4 ft-bgs			ogs	START: 8/14/07	(M); 8/28/07 (R) / END: 8/16/07 (M); 8/31/07 (R)	LOGGER: Derek Miller/ORO	
DEPTH BELOW SURFACE (FT)				STANDARD	SOIL DESCRIPTION	COMMENTS	
	SAMPLE INT	RECOVER	RY (FT)	PENETRATION TEST	SOIL NAME, USCS GROUP SYMBOL, COLOR,	DEPTH OF CASING, DRILLING RATE,	
			#/TYPE	RESULTS	MOISTURE CONTENT, RELATIVE DENSITY,	DRILLING FLUID LOSS,	
				6"-6"-6" (N)	OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY.	TESTS, AND INSTRUMENTATION. FID (ppm)	
				(14)	MINERALOGT.	MAX FID ON CORE: 0.0	
_						_	
_							
_					132.8-138.0: SILTY CLAY (CL), dark gray, sl. moist, hard,	-	
_					common medium distinct light gray mottling		
_	128-138	10 / 10	C-6	N/A		-	
135							
_						-	
_						_	
_							
_					138.0-141.4: SANDY CLAY (CL), dark gray, moist, firm to	MAX FID ON CORE: 12.0	
_					~30% v. fine-grained sand	MAX FID ON CORE. 12.0	
140 -						-	
_							
_						-	
_					141.4-148.0: SILTY CLAY (CL), dark gray, sl. moist, hard, ~]	
_	138-148	10 / 10	C-7	N/A	20% silt, few course distinct black mottles, trace wood gravel up to 1/4", dark brownish black	_	
_	130-140	10 / 10	U-7	IN/A		_	
145						_	
_							
_						-	
_							
_					148.0-150.1: SL. SANDY CLAY (CL), dark gray, moist, firm,	MAX FID ON CORE: 6.3	
_					~20% v. fine-grained sand	_	
150							
_					150.1-156.0: CLAYEY SAND (SC), dark gray, sl. moist, hard and crumbly, sl. platicity, ~50-60% v. fine-grained sand	-	
_					and crambly, st. platicity, 50 00 /6 v. fine grained said		
_						-	
_	148-158	10 / 10	C-8	N/A			
_							
155 -						-	
-							
_					156.0-158.0: SANDY CLAY (CL), dark gray, moist to sl. moist	-	
_					w/ depth, hard, ~35-40% v. fine-grained sand]	
_						-	
_					158.0-160.3: AS ABOVE	MAX FID ON CORE: 15.0	
_						-	
160					160 2 169 0: CL CH TV CAND (CM) avoy		
_					160.3-168.0: SL. SILTY SAND (SM), gray, wet, loose to firm and crumbly, well sorted, ~80-85% v. fine to fine-grained]	
_	158-168	10 / 10	C-8	N/A	sand	-	
_							
_						-	
_							
165						-	



PROJECT NUMBER
334469.SA.HS

BORING NUMBER

MW-231 (IW-3)

SHEET 4 of 4

DRILLING CONTRACTOR: DRILLING METHOD/EQUIPMENT: Canterra CT 250 Mud Rotary (M) / SR 120 Track-Mounted Rotasonic (R) OVERBURDEN THICKNESS: DEPTH DRILLED INTO ROCK N/A NAME OF DRILLER: T. Schmalfeldt / C. Herron SIZE/TYPE OF BIT: 17.25" (M) / 4X6"; 9.25" (R) TOTAL DEPTH OF BORING 198 ft-bgs	PROJEC	T : Memphis	Depot - I	ntermed	iate Aquifer Inv.	LOCATION : Memphis, Tennessee	ELEVATION:
DRILLING METHODE CURRENTS: Canteriar of 269 Mod Retary (M.) 58 120 Track-Mounted Retarsonic (S) SIZETYPE OF BIT: 17.25 (M) 479.25 (P) (N) 200 (PM) Mod Retary (M.) 58 120 Track-Mounted Retarsonic (S) SIZETYPE OF BIT: 17.25 (M) 479.25 (P) (N) 200 (PM) Mod Retary (M.) 58 120 Track-Mounted Retarsonic (S) SIZETYPE OF BIT: 17.25 (M) 479.25 (P) (N) SIZETYPE OF MOUNTED RECOVERY (FIT)					·		
MATER LEVELS 138.4 hbgs START: 91407 Mr.); 92807 (R) / END. 91607 (M); 93107 (R) LOGGER: 1006 MileroPOO						Mud Rotary (M) / SR 120 Track-Mounted Rotasonic (R)	SIZE/TYPE OF BIT: 17.25" (M) / 4X6"; 9.25" (R)
SAMPLE INTERVAL (FT) STANDARD PENTITIATION							
SAMPLE INTERVAL_ PRECOVERY TEST SOLIL MAME. USCS GROUP SYMBOL, COLOR, MOST PRECOVERY PR					START: 8/14/07	(M); 8/28/07 (R) / END: 8/16/07 (M); 8/31/07 (R)	LOGGER: Derek Miller/ORO
RECOVERY IFT RESULTS SOIL NAME, USCS, GROUP SYMBOL, COLOR, DEPTH OR CASHIG, DRILLING RATE, DRILLING RATE, DRILLING RATE, OF 6° 6° 7° 6° 7° 6° 7° 6° 7° 6° 7° 6° 7° 6° 7° 6° 7° 6° 7° 6° 7° 7° 6° 7° 7° 7° 7° 7° 7° 7° 7° 7° 7° 7° 7° 7°	DEPTH B	ELOW SURFA	ACE (FT)		STANDARD	SOIL DESCRIPTION	COMMENTS
Note		SAMPLE INT	ERVAL (FT	Γ)	PENETRATION		
158-168 10 / 10 C-8 N/A 188 0-178 0-180 0-198 0-			RECOVER	RY (FT)	TEST	SOIL NAME, USCS GROUP SYMBOL, COLOR,	DEPTH OF CASING, DRILLING RATE,
158-168				#/TYPE	RESULTS	MOISTURE CONTENT, RELATIVE DENSITY,	DRILLING FLUID LOSS,
178 - 188 10 / 10 C-9 N/A 198.0-178.0- AS ABOVE many prominent coarse dark brownish black laminated organisationing, nearly horizontal 198.0-188.0-188.0-188.0-188.0- AS ABOVE MAX FID ON CORE: 10.8 188.0-1					6"-6"-6"		TESTS, AND INSTRUMENTATION.
178 - 188 10 / 10					(N)	MINERALOGY.	
170 168-178 10 / 10 C-9 N/A 178.0-179.5- AS ABOVE, coarsening down w' depth from v. fine to fine-grained 178.0-179.5- AS ABOVE MAX FID ON CORE: 12.0 MAX FID ON CORE: 10.8 178.0-179.5- AS ABOVE MAX FID ON CORE: 20.0 188.0-198.0- AS ABOVE 188.0-198	_						MAX FID ON CORE: 15.0
170 168-178 10 / 10 C-9 N/A 178.0-179.5- AS ABOVE, coarsening down w' depth from v. fine to fine-grained 178.0-179.5- AS ABOVE MAX FID ON CORE: 12.0 MAX FID ON CORE: 10.8 178.0-179.5- AS ABOVE MAX FID ON CORE: 20.0 188.0-198.0- AS ABOVE 188.0-198	_	150-160	10 / 10	C-8	NI/A		
1770	_	130-100	10 / 10	0-0	IN/A		_
1770	_						-
170	_						MAX FID ON CORE: 12.0
175	_					fine to fine-grained	_
175	170 -						_
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178.0-179.5: AS ABOVE 179.5-180.3: AS ABOVE, many prominent coarse dark promises black luminated organic staining, nearly horizontal 180.3-188.0: SL. SILTY SAND (SM), gray, wet, loose, -90% fine-grained sand, well sorted 178-188 10 / 10	_						-
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178-188	_					brownish black laminated organic staining, nearly horizontal	_
185 _	_					180.3-188.0: SL. SILTY SAND (SM), gray, wet, loose, ~90%	-
185	_					into grained sand, well sorted	_
185	_						_
190	_	178-188	10 / 10	C-10	N/A		-
190	_						
190	105 -						_
190 _	185						_
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190 _	-						_
190 _	-						_
190 _]
- 188-198 10 / 10 C-11 N/A	_					188.0-198.0: AS ABOVE	MAX FID ON CORE: 20.0 _
- 188-198 10 / 10 C-11 N/A	_						_
195	190						
195	-						-
195							
195	_]
195	-						-
		188-198	10 / 10	C-11	N/A		
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TD @ 198.0 FT-BGS							
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TD @ 198.0 FT-BGS							_
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