

PROJECT NUMBER 177556.SA.FE BORING NUMBER

MW-178

SHEET 1 of 3

SOIL BORING LOG

PROJECT: Memphis Depot Remedial Investigation Plan LOCATION: Memphis, TN

DRILLING CONTRACTOR: Prosonic Corporation

DRILLING METHOD/EQUIPMENT: Rotosonic Drilling

OVERBURDEN THICKNESS: DEPTH DRILLED INTO ROCK: N/A

WATER LEVELS: START: 10/13/2005 END: 10/13/2005 LOGGER: Mike Karafa/ATI

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WATER LEVELS : DEPTH BELOW SURFACE (FT)				STANDARD	SOIL DESCRIPTION	COMMENTS
	SAMPLE INTI		Τ\		SOIL DESCRIPTION	CONNICIONA
		RECOVE		PENETRATION TEST RESULTS 6"-6"-6"	SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY, OR CONSISTENCY, SOIL STRUCTURE,	DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, AND INSTRUMENTATION.
				(N)	MINERALOGY.	FID (ppm)
5	0-6	100%	N/A	N/A	0-6: SILTY SAND, grass roots 3-25: SILT to SILTY CLAY (Loess), brown stiff, damp	0.0
10	6-16	100%	N/A	N/A		21.8
- - - -						23.7
20	16-26	100%	N/A	N/A		3.2
25 					25-35: SILTY SAND, reddish brown to grey, fine grained, stiff, damp	4.1
- - - - 30	26-36	100%	N/A	N/A		0.0
- - - -						0.0



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SHEET 2 of 3

SOIL BORING LOG

PROJECT: Memphis Depot Remedial Investigation Plan LOCATION: Memphis, TN **ELEVATION:** DRILLING CONTRACTOR: Prosonic Corporation NAME OF DRILLER: Adam Marshall Rotosonic Drilling DRILLING METHOD/EQUIPMENT: 4 X 6" SIZE/TYPE OF BIT: DEPTH DRILLED INTO ROCK : OVERBURDEN THICKNESS: N/A TOTAL DEPTH OF BORING: 96 ft-bgs END: 10/13/2005 WATER LEVELS: START: 10/13/2005 LOGGER: Mike Karafa/ATL

DEPTH BELOW SURFACE (FT)				STANDARD	SOIL DESCRIPTION	COMMENTS	
	SAMPLE INT	ERVAL (F1	T)	PENETRATION			
		RECOVE		TEST	SOIL NAME, USCS GROUP SYMBOL, COLOR,	DEPTH OF CASING, DRILLING RATE,	
			#/TYPE	RESULTS	MOISTURE CONTENT, RELATIVE DENSITY,	DRILLING FLUID LOSS,	
				6"-6"-6"	OR CONSISTENCY, SOIL STRUCTURE,	TESTS, AND INSTRUMENTATION.	
				(N)	MINERALOGY.	FID (ppm)	
						W.I. /	
_							_
35 _	26-36	100%	N/A	N/A	25 27: Sand grange loose fine to madium grained		_
55 —					35-37: Sand, orange, loose, fine to medium grained damp	0.0	_
							_
_							_
_					37-45: Gravelly sand, fine to coarse grain, reddish orange, loose, damp, gravel and chert, subangular, up to 1.5" in		_
					diameter		
_							
_							_
40 _							_
						0.0	_
_	00.40	4000/	N1/A	N 1/A			_
_	36-46	100%	N/A	N/A			_
_						0.0	_
						3.3	
_							_
_							-
45					45-55: SAND: orangish tan, fine grain, dry loose.		
					g , g , j		
_							-
_							-
_							_
_							_
							_
50						<u>-</u>	_
_							-
_	46-56	100%	N/A	N/A			-
_							_
_							-
_							-
I							
55					55-65: GRAVELLY SAND, tan, loose, fine to coarse grained,	-	_
1 -					damp to wet, gravel and cobbles up to 3" diam, subrounded to rounded. Chert and quartz. Gravel sze only below 62'.		-
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1 -							
60 _							_
· · · · ·						-	-
I -							Ξ
I -	56-66	100%	N/A	N/A			
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-							-
I -							Ξ
1 -							_
65 _							-
J 03 —						-	-
					66-74: SAND, orange, fine grained, loose damp		



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SHEET 3 of 3

TD @ 96' BGS

SOIL BORING LOG

PROJECT: Memphis Depot Remedial Investigation Plan LOCATION: Memphis, TN **ELEVATION:** NAME OF DRILLER: DRILLING CONTRACTOR: Prosonic Corporation Adam Marshall DRILLING METHOD/EQUIPMENT: Rotosonic Drilling SIZE/TYPE OF BIT: 4 X 6" DEPTH DRILLED INTO ROCK: OVERBURDEN THICKNESS: N/A TOTAL DEPTH OF BORING: 96 ft-bgs WATER LEVELS: START: 10/13/2005 END: 10/13/2005 LOGGER: Mike Karafa/ATL DEPTH BELOW SURFACE (FT) STANDARD SOIL DESCRIPTION COMMENTS SAMPLE INTERVAL (FT) PENETRATION RECOVERY (FT) DEPTH OF CASING, DRILLING RATE, **TEST** SOIL NAME, USCS GROUP SYMBOL, COLOR, #/TYPE RESULTS MOISTURE CONTENT, RELATIVE DENSITY, DRILLING FLUID LOSS, TESTS, AND INSTRUMENTATION. 6"-6"-6" OR CONSISTENCY, SOIL STRUCTURE, (N) MINERALOGY. FID (ppm) 70 66-76 100% N/A N/A 74-77: SAND, fine to coarse grained, orange, loose, wet 75 77-82: Same as above. Gravel up to 1.5" 80 76-86 100% N/A N/A 82.5-83: SILTY CLAY lense, orange stiff, damp 83-85: SAND, orange, coarse grained, loose, saturated, gravel at 85 ft bgs 85 85-92: SILTY CLAY, orange, very stiff, damp, with grey 90 86-96 100% N/A N/A 92-96: SILTY CLAY, dark grey, very stiff, damp 95

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