WB-10

Geo Services Inc.
Geotechnical, Environmental & Civil Engineering
805 American Court, Suite 204
Naperville, Illinois 60563
630-355-1670

SOIL BORING LOG

PAGE 1 of 4
DATE 48-102009
LOGGED BY DR
GSI JOB No. 08201

ROUTE I-70
DESCRIPTION I-70 Tri-Level Connection IDOT Job No. D-98-059-08
SECTION XX
LOCATION I-70 Curved Approach Structure-Retaining Wall
COUNTY St. Clair
DRILLING METHOD Straight Flight Auger/Rotary
HAMMER TYPE CME Automatic

STRUCT. NO. XX
Station: 140+70 to 147+35
BORING NO. WB-10
Station: 145+75
Offset: 56.5' Left
Ground Surface Elev. 404.7

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After 24 Hrs. n/a

Description	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
TOPSOIL-black (A-7) 403.7		AS	-	33
SILTY CLAY-brown & gray-medium stiff to very stiff (A-6/A-7) Wet		2 3 3	2.0B	33
	-5	ST	1.0P	45
		1 2 2	0.75P	34
395.7		2 2		
SAND-brown-loose to medium dense (A-3)	-10	3	0.5P	33
		3 3 4	NP	21
Clay seams from -13.5' to -15.0'.	-15	2 4 5	NP	22
386.7		3 6 7	NP	23
SILTY CLAY-dark gray-very soft (A-7) Wet	-20	3 3	<0.25P	58
SILTY CLAY-dark gray-very soft (A-7) 384.2				
SAND-brown & gray-medium dense to dense (A-3)	-25	3 5 6	NP	18
		8 12 13	NP	18
		7 13 14	NP	21
	-30	6 7 6	NP	24
		6 11 12	NP	24
	-35	7 10 13	NP	20
		9 8 9	NP	23
	-40	8 9 10	NP	21

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelby Tube Sample VS=Vane Shear Test
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%)
NR-No Recovery

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Description	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SAND-brown & gray-medium dense to dense (A-3)		7 8 9	NP	21
	-45	6 8 8	NP	16
		7 7 11	NP	18
	-50	11 16	NP	21
		10 17 24	NP	21
	-55	13 18 21	NP	19
		11 12 24	NP	21
	-60	11 14 23	NP	20
SAND-brown & gray-medium dense to dense (A-3)		10 12 19	NP	23
	-65	12 14 28	NP	19
339.2				
SAND & GRAVEL-brown & gray-loose (A-1-b)		17 5 4	NP	17
336.7				
SAND-brown & gray-medium dense to dense (A-3)	-70	12 19 28	NP	22
		11 9 8	NP	16
331.7				
SAND & GRAVEL-brown & gray-very dense (A-1)	-75	28 505"	NP	8
329.2				
SAND-brown & gray-dense (A-3)		14 17 30	NP	22
326.7				
SAND & GRAVEL-brown & gray-loose to dense (A-1-b)	-80	11 9 8	NP	16

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Upon Completion n/a
After 24 Hrs. n/a

Description	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SAND & GRAVEL-brown & gray-loose to dense (A-1-b)		5		
		3 4	NP	12
	-85	11 11 26	NP	17
		13 10 12	NP	14
	-90	7 11 14	NP	12
		18 16 20	NP	12
310.7		31		
SAND-brown & gray-very dense (A-3)	-95	503"	NP	9
		19 35 50	NP	13
	-100	27 31 48	NP	14
SAND-brown & gray-very dense (A-3) 304.2				
SAND & GRAVEL-brown & gray-very dense (A-1)		504"	NP	15
	-105	501"		NR
298.7				
RUN 1 (-106.0' to -116.0') Mississippian System, Valmeyeran Series Limestone Light gray & fine grained with horizontal bedding becoming. Some chert replacement throughout. Numerous horizontal fractures with some thin clay partings. RECOVERY=100.0% R.Q.D.=41.8%	-110			RUN 1
288.7				
RUN 2 (-116.0' to -121.0') Mississippian System, Valmeyeran Series Limestone Light gray & fine grained with horizontal bedding becoming. Numerous horizontal fractures throughout. ½" clay partings @ -117.4', -117.6' & -118.2'.	-120			RUN 2

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