SB-110

SOIL BORING LOG

PAGE 1 of 4
DATE 5/1-4/2009
LOGGED BY DR
GSI JOB No. 08201

ROUTE 170/IL3 DESCRIPTION I-70/Relocated IL 3 Interchange IDOT Job No. D-98-059-08
SECTION 82-2-1HVB-1 LOCATION I-70 & Illinois Route 3
COUNTY St. Clair DRILLING METHOD 3.25" Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 082-W309
Station: --
BORING NO. SB-110
Station: 50+82
Offset: 56.5' Right
Ground Surface Elev. 417.4

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After 24 Hrs. 399.4

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
7.0" ASPHALT	416.7				
SANDY LOAM with Cinders-black-loose (Fill)	414.4		10 4 3	NP	23
SAND-brown-loose (A-3)	409.4	-5	6 3 3	NP	15
SILTY CLAY-brown-medium stiff to stiff (A-7) Wet	405.4	-10	2 2 2 1 0 2	1.28	73 48
SANDY LOAM-brown-loose (A-2)		-15	ST ST 2 2 2	NP	26 33
		-20	3 3 3 3	NP	29 31
SANDY LOAM-brown-loose (A-2)	396.9				
SILTY CLAY-dark gray-very soft (A-7) Wet	393.9		0 1 1	0.2B	81 37
Trace organics from -26.0' to -27.5'.		-25	1 3 4 2 1 2	NP	22 37
SANDY LOAM-gray-very loose to loose (A-2)		-30	2 2 4 1 1 2	NP	32 30
		-35	1 2 4 2 3 3	NP	30 30
		-40	3 3 3 2	NP	30

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	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SANDY LOAM-grey-very loose to loose (A-2)		-45	1 2 3 1 2 4	NP	33 29
		-50	1 2 1 0 1	NP	30 30
		-55	1 2 2 1 2	NP	29 27
		-60	2 3 5 18 28 30	NP	29 21
SAND-brown & gray-loose to dense (A-3)		-65	5 6 13 21 19 13	NP	16 20
		-70	11 11 9 3 2 4	NP	25 17
		-75	10 12 12 10 15 19	NP	17 16
		-80	11 11 13 9 10 12	NP	18 17

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Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SAND-brown & gray-loose to dense (A-3)	331.9	-85	11 12 14 10 10 11	NP	18 15
SAND with Gravel-brown & gray-medium dense to dense (A-1-b)	321.9	-90	10 13 17 10 10 8	NP	15 20
		-95	8 7 9 11 10 10	NP	17 16
SAND-gray-medium dense (A-3)	319.4		9 11 11	NP	19
SAND with Gravel-brown & gray-medium dense (A-1-b)		-100	14 11 13	NP	13
SAND with Gravel (A-1-b)	316.9				
SAND-gray-dense (A-3)	314.4		20 20 22	NP	18
SAND with Gravel-brown & gray-very dense (A-1-b)	306.9	-105 -110	50/6" 27 50/6" 50/5"	NP NP	20 14 20
SAND & Gravel-brown & gray-very dense (A-1)	302.4	-115	50/5" 50/3"	NP NP	15 19
Drillers Observation: Apparent Bedrock.	301.9				
RUN 1 (-115.5' to -125.5') Mississippian System, Valmeyeran Series Limestone Light gray to gray with horizontal bedding. Fine grained with some chert replacement. Tight vertical fracture from -115.5' to -118.0'. Horizontal fractures @ -116.2', -116.4', -117.2', -118.0', -118.1', -119.0', -119.3', -119.5'.		-120			RUN 1

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