SB-03

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Jackson Court, Suite 204
Naperville, Illinois 60563
630/355-7868

SOIL BORING LOG

PAGE 1 of 3
DATE 3/4/52009
LOGGED BY DR
GSI JOB No. 08201

ROUTE I-70
DESCRIPTION I-70 Tri-Level Connection IDOT Job No. D-98-059-08
SECTION 82-2-1HVB
LOCATION I-70 Curved Approach Structures
COUNTY St. Clair
DRILLING METHOD 3.25" Hollow Stem Auger
HAMMER TYPE CME Automatic

STRUCT. NO. S.N. 082-0318
Station: 127+00 to 140+74
BORING NO. SB-03
Station: 132+64
Offset: 43.0' Left
Ground Surface Elev. 404.4

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	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
6.0" TOPSOIL-black	403.9		AS	-	45
SILTY CLAY-dark brown & gray-medium stiff to stiff (A-7) Wet			2		
			3		
			4	0.5P	37
			2		79
			3		
		-5	4	1.3B	38
SANDY LOAM-brown-medium dense (A-2)	398.9		ST	NP	11
			4		
			5		
		-10	5	NP	35
SAND-brown & gray-medium dense (A-3)	393.9		5		
			7		
			9	NP	25
			6		
			6		
		-15	4	NP	24
CLAY-dark gray-very soft (A-7) Wet	388.9		2		60
			1		
			1	0.2B	61
SAND-brown & gray-medium dense to dense (A-3)	386.4				
		-20	ST	NP	27
SAND-brown & gray-medium dense to dense (A-3)			1		
			2		
			4	NP	37
			10		
			15		
		-25	14	NP	23
			16		
			13		
			13	NP	25
			4		
			4		
		-30	7	NP	18
			4		
			6		
			9	NP	17
			7		
			5		
		-35	9	NP	17
			6		
			8		
			11	NP	17
			9		
			15		
		-40	18	NP	22

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

Description	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SAND-brown & gray-medium dense to dense (A-3)		13		
		13		
		14	NP	23
		9		
		11		
	-45	17	NP	27
		4		
		9		
		12	NP	15
		6		
		9		
	-50	12	NP	16
		13		
		15		
		19	NP	17
		16		
		25		
	-55	28	NP	16
		12		
		12		
		11	NP	16
		7		
		10		
	-60	12	NP	13
SAND-brown & gray-medium dense to dense (A-3)		9		
		7		
		11	NP	13
		14		
		11		
	-65	12	NP	13
		11		
		13		
		16	NP	13
		14		
		16		
	-70	14	NP	14
SAND with Gravel-brown & gray-medium dense to very dense (A-1-b)	333.9	8		
		30		
		50/1"	NP	9
		50/6"		
	-75		NP	3
		19		
		26		
		24	NP	9
		9		
		12		
	-80	13	NP	14

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After 24 Hrs. n/a

Description	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SAND with Gravel-brown & gray-medium dense to very dense (A-1-b)		9		
		11		
		12	NP	10
		12		
		26		
	-85	34	NP	10
SAND-brown & gray-dense (A-3)	318.9	19		
		22		
		30	NP	15
SAND & GRAVEL-brown & gray-very dense (A-1)	316.4	34		
		34		
	-90	39	NP	8
SAND-brown & gray-very dense (A-3)	313.9	22		
		50/6"		
			NP	17
		42		
		37		
	-95	42	NP	13
		24		
		32		
		37	NP	11
		26		
		50/6"		
	-100		NP	10
SAND-very dense (A-3)	303.9			
GRAVEL-brown & gray-very dense (A-1)		50/3"		
			NP	6
	300.9			
Drillers Observation: Apparent Bedrock	299.9			
Mississippian System, Valmeyeran Series Limestone RUN 1 (-104.5' to -114.5')	-105			
Light gray with horizontal bedding. Fine grained with numerous horizontal fractures throughout. Some chert replacement. Recovery = 100.0% R.Q.D. = 33.5%	-110			RUN 1
RUN 2 (-114.5' to -119.5') Light gray to gray with horizontal bedding. Fine grained with some chert replacement. Horizontal fractures @ -114.6', -115.0', -115.5', -116.9', -117.4' & -119.2'. Recovery = 100.0% R.Q.D. = 100.0%	-115			RUN 2
End Of Boring @ -119.5' Hollow Stem Augers To -10.0' Rotary Drilling To Completion	284.9			
CME Automatic Hammer	-120			

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