WB-08

Geo Services Inc.
Geotechnical, Environmental & Civil Engineering
805 Aurelius Court, Suite 204
Naperville, Illinois 60565
630-355-8300

SOIL BORING LOG

PAGE 2 of 2
DATE 7/27-28/2009
LOGGED BY MR
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 Diedrich Automatic

STRUCT. NO. XX
Station: 140+70 to 147+35
BORING NO. WB-08
Station: 144+75
Offset: 54.5' Left
Ground Surface Elev. 405.3

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 (%)
SAND-brown-loose to dense (A-3)		10		
		14		
		14	NP	20
		7		
		10		
	-45	12	NP	23
		10		
		14		
		15	NP	21
		11		
		16		
	-60	18	NP	22
		11		
		15		
		17	NP	24
XX				
SAND-gray-medium dense to dense (A-3)		12		
		14		
	-55	18	NP	23
		13		
		13		
		17	NP	21
		11		
		14		
	-60	16	NP	25

Description	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SAND-gray-medium dense to dense (A-3)		9		
		13		
		14	NP	24
		10		
		20		
	-65	29	NP	22
		16		
		28		
		30	NP	16
		15		
		25		
	-70	29	NP	20
		14		
		18		
		28	NP	22
		14		
		13		
	-75	16	NP	22
XX				
SAND with Gravel-brown & gray-medium dense (A-1-b)		24		
		12		
		12	NP	9
End Of Boring @ -80.0'				
Straight Flight Augers To -10.0'				
Rotary Drilling To Completion				
10.0' of 4.0"* Casing Used	XX -80	8	NP	14

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

WB-09

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COUNTY St. Clair
DRILLING METHOD Straight Flight Auger/Rotary
HAMMER TYPE Diedrich Automatic

STRUCT. NO. XX
Station: 140+70 to 147+35
BORING NO. WB-09
Station: 145+25
Offset: 44.5' Left
Ground Surface Elev. 404.8

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		AS	-	27
XX				
SILTY CLAY-brown-medium stiff to stiff (A-6/A-7) Wet		2		78
		2		
		3	1.1B	37
		2		80
	-5	3	1.5B	36
		2		75
		2	1.4S@	
		3	9.9%	44
		3		83
		3		
	-10	3	0.9B	36
XX				
SILTY CLAY-gray-very soft (A-7) Wet		0		56
		0		
		0	0.2B	71
XX				
SAND-brown-loose (A-3)		5		
		1		
	-15	3	NP	21
		2		
		2		
		3	NP	26
		1		
XX				
SILTY CLAY-gray-very soft (A-7) Wet	-20	3		
		5	NP	26

Description	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SILTY CLAY-gray-very soft (A-7) Wet		4		66
		2		
		2	0.2B	51
XX				
		10		
		12		
	-25	13	NP	16
		5		
		9		
		11	NP	25
SAND-brown & gray-medium dense to dense (A-3)		5		
		11		
	-30	16	NP	22
		9		
		15		
		23	NP	30
		10		
		17		
	-35	18	NP	19
		8		
		11		
		16	NP	18
		7		
		14		
	-40	12	NP	18

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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 (%)
		10		
		13		
		12	NP	19
Trace organics from -43.5' to -45.0'.		4		
		8		
	-45	13	NP	30
SAND-brown & gray-medium dense to dense (A-3)		9		
		8		
		10	NP	25
		6		
		12		
	-50	17	NP	27
		9		
		10		
		14	NP	26
		6		
		9		
	-55	12	NP	23
		2		
		4		
Trace organics from -56.0' to -57.5'.		7	NP	42
		5		
		8		
	-60	10	NP	25

Description	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SAND-brown & gray-medium dense to dense (A-3)		11		
		10		
		13	NP	23
		8		
		10		
	-65	12	NP	22
XX				
SAND with Gravel-gray-medium dense (A-1-b)		4		
		9		
		8	NP	15
XX				
SAND-gray-dense (A-3)		10		
		20		
	-70	25	NP	22
XX				
SAND with Gravel-gray-medium dense to very dense (A-1-b)		10		
		13		
		14	NP	11
		10		
		31		
	-75	33	NP	8
XX				
SAND-gray-dense (A-3)		18		
		33		
		19	NP	22
XX				
SAND with Gravel-medium dense (A-1-b)				
End Of Boring @ -80.0'		10		
Straight Flight Augers To -10.0'				
Rotary Drilling To Completion	XX -80	8	NP	17

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NR-No Recovery