SB-07

Geo Services Inc.
Geotechnical, Environmental & Civil Engineering
805 Jefferson Court, Suite 204
Naperville, Illinois 60565
(630) 355-8585

SOIL BORING LOG

PAGE 3 of 4
DATE 324-252009
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-07
Station: 138+44
Offset: 43.0' Left
Ground Surface Elev. 412.0

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 (%)
SAND & GRAVEL-brown & gray-medium dense to dense (A-1)	329.0		32 / 17 / 14	NP	13
SAND-brown & gray-medium dense to dense (A-3)	321.5	-85	13 / 12 / 15	NP	11
		-90	8 / 8 / 9	NP	16
		-95	13 / 18 / 14	NP	19
SAND with Gravel-brown & gray-medium dense to dense (A-1-b)	316.5		12 / 15 / 18	NP	10
SAND-brown & gray-dense to very dense (A-3)		-100	19 / 25 / 29	NP	9
			33 / 41 / 17	NP	14
		-105	19 / 19 / 50/5"	NP	12
SAND & GRAVEL-brown & gray-dense to very dense (A-1)		-110	50/5" / 50/4"	NP	13
	300.0			NP	11
Drillers Observation: Bedrock or Boulder.	299.5			NP	9
RUN 1 (-112.5' to -122.5') Mississippian System, Valmeyeran Series Limestone. Light gray with horizontal bedding. Fine grained with numerous horizontal fractures throughout. Some thin clay partings & chert replacement. Recovery = 100.0% R.Q.D. = 30.0%		-115			15
		-120			14

SAND-dense to very dense (A-3) 311.5

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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SOIL BORING LOG

PAGE 4 of 4
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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-07
Station: 138+44
Offset: 43.0' Left
Ground Surface Elev. 412.0

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 (%)
RUN 1 (-112.5' to -122.5')	289.5		RUN 1		
RUN 2 (-122.5' to -127.5') Mississippian System, Valmeyeran Series Limestone. Light gray with horizontal bedding. Fine grained with numerous horizontal fractures throughout. Some chert replacement. Recovery = 100.0% R.Q.D. = 41.5%	284.5	-125	RUN 2		
End Of Boring @ -127.5' Hollow Stem Augers To -15.0' Rotary Drilling To Completion CME Automatic Hammer 15' Of 4"* Casing Used 114' Of 3"* Casing Used		-130			
		-135			
		-140			
		-145			
		-150			
		-155			
		-160			

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

SB-07 Run-1

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ROCK CORE LOG

PAGE 1 of 2
DATE 324-252009
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
CORING METHOD Rotary Wash

STRUCT. NO. S.N. 082-0318
Station: 127+00 to 140+74
BORING NO. SB-07
Station: 138+44
Offset: 43.0' Left
Ground Surface Elev. 412.0

CORING BARREL TYPE & SIZE NX Double Swivel-10 ft
Core Diameter 2.0 in
Top of Rock Elev. 299.5
Begin Core Elev. 299.5

Description	Elev.	DEPTH (ft)	CORE RUN (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
RUN 1 (-112.5' to -122.5') Mississippian System, Valmeyeran Series Limestone. Light gray with horizontal bedding. Fine grained with numerous horizontal fractures throughout. Some thin clay partings & chert replacement.	299.5		1	100.0	30.0	n/a	1965@ -130.5'
		-117.5					
		-122.5					

Color pictures of the cores Yes Cores will be stored for examination for XX
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

\\82\2318-CONN-05-018-HS.DGN, \\82\2318-CONN-05-018-HS.DGN, \\82\2318-CONN-05-018-HS.DGN, \\82\2318-CONN-02-081-EO.DGN
5/22/2010 8:09:23 BONDNJ0 \\FS-SB14-VAN\VOL1\D-TRACS_07\C202\29869-081\STRUCTURAL\DESIGN\82\2318\SHEET\82\2318-CONN-05-013-SHT-HS.DGN

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION I-70 CONNECTION OVER NS, TRRA, MCT AND INDUSTRIAL DR.	SOIL BORING LOGS 13 OF 20	F.A.P. RTE. 998	SECTION 82-2-1HVB	COUNTY ST. CLAIR	TOTAL SHEETS 285	SHEET NO. 214
		DRAWN - SNB	REVISED -			SN 082-0318 (EB) & 0319 (WB)			CONTRACT NO. 76C44	
TENG TENG & ASSOCIATES, INC. ENGINEERS/ARCHITECTS/PLANNERS CHICAGO, ILLINOIS	PLOT SCALE = $SCALE$	CHECKED -	REVISED -		SCALE:	SHEET NO. S-104 OF S-111	STA. 134+22.00 TO STA.	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT
	PLOT DATE = $DATE$	DATE - 06/04/10	REVISED -							