SB-09 Run-1

Geo Services, Inc.
Geotechnical, Environmental, Civil Engineering
805 Dunham Court, Suite 204
Naperville, Illinois 60565
630-961-7900

ROCK CORE LOG

PAGE 1 of 2
DATE 3/16-17/2009
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
CORING BARREL TYPE & SIZE NX Double Swivel-10 ft
Station: 127+00 to 140+74
Core Diameter 2.0 in
BORING NO. SB-09
Top of Rock Elev. 299.1
Station: 140+74
Begin Core Elev. 298.1
Offset: 43.0' Left
Ground Surface Elev. 406.1

	DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
RUN 1 (-108.0' to -118.0') Mississippian System, Valmeyeran Series Limestone Light gray & fine grained with horizontal bedding becoming darker gray @ -115.6. Some chert replacement & numerous horizontal fractures throughout.	298.1	1	100.0	58.0	n/a	883@ -109.4'
	-113.0					
	-118.0					

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)

SB-09 Run-2

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ROCK CORE LOG

PAGE 2 of 2
DATE 3/16-17/2009
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
CORING BARREL TYPE & SIZE NX Double Swivel-5 ft
Station: 127+00 to 140+74
Core Diameter 2.0 in
BORING NO. SB-09
Top of Rock Elev. 299.1
Station: 140+74
Begin Core Elev. 298.1
Offset: 43.0' Left
Ground Surface Elev. 406.1

	DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
RUN 2 (-118.0' to -123.0') Mississippian System, Valmeyeran Series Limestone Gray & fine grained with horizontal bedding. No chert replacement encountered. Horizontal fractures @ -118.6', -121.0', -121.6', -122.2', -122.3' & -122.5'.	288.1	2	100.0	93.0	n/a	1738@ -118.3'
	-123.0					
	-128.0					

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)

SB-10

Geo Services, Inc.
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SOIL BORING LOG

PAGE 1 of 4
DATE 3/18-20/2009
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-10
Station: 140+74
Offset: 43.0' Right
Ground Surface Elev. 406.7

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 ▽

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
TOPSOIL-black	405.7	AS	-	34
SILTY CLAY-dark brown-stiff (A-6/A-7) Wet		2		*94*
		2		9
		3	1.9B	28
		2		*87*
		1		11
	-5	2	1.3B	35
	401.2			
SILTY CLAY LOAM-brown & gray-medium stiff (A-4/A-6) Wet		2		11
		2		13
		3	0.5P	28
	398.7			
SILTY LOAM to LOAM-brown & gray-loose (A-4)		3		10
		3		8
	-10	3	NP	26
	396.2			
SAND-brown-loose to medium dense (A-3)		2		7
		3		7
		2	NP	24
		4		6
		3		7
	-15	4	NP	22
		5		9
		6		9
		7	NP	23
		3		10
		3		12
	-20	5	NP	25

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SAND-brown-loose to medium dense (A-3)	-25	11	NP	22
Trace organics from -31.0' to -32.5'.	-30	9	NP	21
	-35	11	NP	21
	-40	14	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

..\082203B-CONN-05-01B-MS.DGN, ..\082203B-CONN-05-01B-MS.DGN, ..\082203B-CONN-05-01B-MS.DGN, ..\082203B-CONN-99-001-SG.DGN
6/02/2010, 1:59:41 PM CDOT\MJD \\VS 00141-MN\VAL_CD-TRANS_87\2202\20869-001\STRUCT\CAD\01 DESIGN\082203B\SHEET\082203B-CONN-05-01B-SHT-MS.DGN