SB-07 Run-2

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

ROCK CORE LOG

PAGE 2 of 2
DATE 3/24-25/2009
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
Station: 127+00 to 140+74
CORING BARREL TYPE & SIZE NX Double Swivel-5 ft
Core Diameter 2.0 in
Top of Rock Elev. 299.5
Begin Core Elev. 299.5
BORING NO. SB-07
Station: 138+44
Offset: 43.0' Left
Ground Surface Elev. 412.0

	DEPTH (ft)	CORE RUN	RECOVERY (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min /ft)	STRENGTH (tsf)
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.	289.5	2	100.0	41.5	n/a		797 @ -122.8'
	-127.5						
	-132.5						

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)

SB-08

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

SOIL BORING LOG

PAGE 1 of 4
DATE 3/26-27/2009
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-08
Station: 138+34
Offset: 43.0' Right
Ground Surface Elev. 404.3

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

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Silty SAND & STONE with Wood Chips-medium dense (Fill)		AS 1	NP	33
		2 2	NP	55
	401.3			
SILTY CLAY LOAM-dark brown-very loose (A-4)		2 1		
	-5	2	0.5P	34
	398.8			
SILTY CLAY-brown & gray-stiff (A-6/A-7) Wet				
	396.3	ST	1.7B	37
SAND-brown-loose to medium dense (A-3)		3 6		
	-10	6	NP	15
		3 4		
		2	NP	17
		3 5		
	-15	7	NP	23
		4 3		
		3	NP	31
	386.3			
SILTY CLAY to SILTY CLAY LOAM-gray-very soft to soft (A-4/A-6) Wet		1 0		*71*
	-20	1	0.1B	46

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SILTY CLAY to SILTY CLAY LOAM-gray-very soft to soft (A-4/A-6) Wet		ST	0.4B	46
	380.3			
SANDY LOAM to LOAM-gray-very loose (A-4)		1 0		
	-25	1	NP	33
		1 1		
		1	NP	32
		1 0		
	-30	2	<0.25P	39
	373.8			
SAND-gray-loose to dense (A-3)		2 2		
		4	NP	26
		1 2		
	-35	4	NP	26
		5 6		
		5	NP	26
		5 5		
	-40	6	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

SB-08

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

SOIL BORING LOG

PAGE 2 of 4
DATE 3/26-27/2009
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-08
Station: 138+34
Offset: 43.0' Right
Ground Surface Elev. 404.3

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

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
		9		
Coal chips from -41.0' to -42.5'.		11 10	NP	22
		10		
SAND-gray-loose to dense (A-3)		12 13	NP	23
		10		
		12 14	NP	23
		11		
		11 12	NP	15
		13		
		14 15	NP	17
		10		
		14 21	NP	17
		9		
		11 16	NP	23
		9		
		29	NP	21

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
		12		
		16 24	NP	24
		14		
SAND-gray-loose to dense (A-3)		18 28	NP	21
		15		
		20 24	NP	18
		8		
		8 11	NP	17
	333.8			
		6		
		6 9	NP	13
SAND & GRAVEL-brown & gray-medium dense to dense (A-1)		28		
		10 9	NP	10
		14		
		30 18	NP	8
	326.3			
SAND with Gravel-brown & gray-medium dense to dense (A-1-b)		16		
		20 19	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