

SB-05

Geo Services Inc. SOIL BORING LOG PAGE 3 of 4 DATE 3/30/2009 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-IHVB 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-05  
Station: 135+64  
Offset: 43.0' Left  
Ground Surface Elev. 403.8

Surface Water Elev. n/a		D	B	U	M	D	B	U	M
Stream Bed Elev. n/a		E	L	C	O	E	L	C	O
Groundwater Elevation:		P	O	S	I	P	O	S	I
First Encounter 395.3	▼	T	W	Q	T	T	W	Q	T
Upon Completion n/a	▼	H	S			H	S		
Dry Cave In 395.3	▼	(ft)	(6")	(tsf)	(%)	(ft)	(6")	(tsf)	(%)
<b>SAND with Gravel (A-1-b) 323.3</b>									
GRAVEL-very dense (A-1-a) 303.3									
SAND & GRAVEL-brown & gray-very dense (A-1) 300.8									
SAND with Gravel-brown & gray-very dense (A-1-b) 297.8									
Drillers Observation: Boulder or Bedrock. 297.3									
RUN 1 (-106.5' to -116.5') Mississippian System, Valmeyeran Series Limestone									
Light gray with horizontal bedding. Fine grained with numerous horizontal fractures throughout & some thin clay partings. Recovery = 100.0% R.Q.D. = 19.8%									
<b>315.3</b>									
<b>310.8</b>									
GRAVEL-brown & gray-very dense (A-1-a) 287.3									
RUN 2 (-116.5' to -121.5') Mississippian System, Valmeyeran Series Limestone Light gray with horizontal bedding. Fine grained with numerous horizontal fractures throughout & some thin clay partings becoming darker gray & weathered with some chert replacement.									
<b>282.3</b>									
RUN 2									

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shaly 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-05

Geo Services Inc. SOIL BORING LOG PAGE 4 of 4 DATE 3/30/2009 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-IHVB 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-05  
Station: 135+64  
Offset: 43.0' Left  
Ground Surface Elev. 403.8

Surface Water Elev. n/a		D	B	U	M	D	B	U	M
Stream Bed Elev. n/a		E	L	C	O	E	L	C	O
Groundwater Elevation:		P	O	S	I	P	O	S	I
First Encounter 395.3	▼	T	W	Q	T	T	W	Q	T
Upon Completion n/a	▼	H	S			H	S		
Dry Cave In 395.3	▼	(ft)	(6")	(tsf)	(%)	(ft)	(6")	(tsf)	(%)
<b>323.3</b>									
<b>303.3</b>									
<b>300.8</b>									
<b>297.8</b>									
<b>297.3</b>									
<b>315.3</b>									
<b>310.8</b>									
<b>287.3</b>									
<b>282.3</b>									
RUN 2									

Numerous horizontal fractures throughout.  
Recovery = 100.0% R.Q.D. = 8.0%  
End Of Boring @ -121.5'  
Hollow Stem Augers To -10.0'  
Rotary Drilling To Completion  
CME Automatic Hammer  
10' Of 4" Casing Used  
108' Of 3" Casing Used

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shaly 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-05 Run-1

Geo Services Inc. ROCK CORE LOG PAGE 1 of 2 DATE 3/30/2009 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-IHVB 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-05  
Station: 135+64  
Offset: 43.0' Left  
Ground Surface Elev. 403.8

CORING BARREL TYPE & SIZE NX Double Swivel-5 ft  
Core Diameter 2.0 in  
Top of Rock Elev. 297.3  
Begin Core Elev. 297.3

DEPTH	CORING	RECOVERY	REMARKS	CORING	REMARKS
(ft)	(#)	(%)	(%)	(ft)	(tsf)
297.3	1	100.0	19.8	ns	97.8 @ -131.7
RUN 1 (-106.5' to -116.5') Mississippian System, Valmeyeran Series Limestone Light gray with horizontal bedding. Fine grained with numerous horizontal fractures throughout & some thin clay partings.					

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

0820318-CONN-05-010-MS.DGN, 0820318-CONN-05-010-MS.DGN, 0820318-CONN-05-001-BOLDEN, 0820318-CONN-05-002-BOLODEN, 0820318-CONN-05-003-BOLODEN, 0820318-CONN-05-004-BOLODEN, 0820318-CONN-05-005-BOLODEN, 0820318-CONN-05-006-BOLODEN, 0820318-CONN-05-007-BOLODEN, 0820318-CONN-05-008-BOLODEN, 0820318-CONN-05-009-BOLODEN, 0820318-CONN-05-010-BOLODEN, 0820318-CONN-05-011-BOLODEN, 0820318-CONN-05-012-BOLODEN, 0820318-CONN-05-013-BOLODEN, 0820318-CONN-05-014-BOLODEN, 0820318-CONN-05-015-BOLODEN, 0820318-CONN-05-016-BOLODEN, 0820318-CONN-05-017-BOLODEN, 0820318-CONN-05-018-BOLODEN, 0820318-CONN-05-019-BOLODEN, 0820318-CONN-05-020-BOLODEN, 0820318-CONN-05-021-BOLODEN, 0820318-CONN-05-022-BOLODEN, 0820318-CONN-05-023-BOLODEN, 0820318-CONN-05-024-BOLODEN, 0820318-CONN-05-025-BOLODEN, 0820318-CONN-05-026-BOLODEN, 0820318-CONN-05-027-BOLODEN, 0820318-CONN-05-028-BOLODEN, 0820318-CONN-05-029-BOLODEN, 0820318-CONN-05-030-BOLODEN, 0820318-CONN-05-031-BOLODEN, 0820318-CONN-05-032-BOLODEN, 0820318-CONN-05-033-BOLODEN, 0820318-CONN-05-034-BOLODEN, 0820318-CONN-05-035-BOLODEN, 0820318-CONN-05-036-BOLODEN, 0820318-CONN-05-037-BOLODEN, 0820318-CONN-05-038-BOLODEN, 0820318-CONN-05-039-BOLODEN, 0820318-CONN-05-040-BOLODEN, 0820318-CONN-05-041-BOLODEN, 0820318-CONN-05-042-BOLODEN, 0820318-CONN-05-043-BOLODEN, 0820318-CONN-05-044-BOLODEN, 0820318-CONN-05-045-BOLODEN, 0820318-CONN-05-046-BOLODEN, 0820318-CONN-05-047-BOLODEN, 0820318-CONN-05-048-BOLODEN, 0820318-CONN-05-049-BOLODEN, 0820318-CONN-05-050-BOLODEN, 0820318-CONN-05-051-BOLODEN, 0820318-CONN-05-052-BOLODEN, 0820318-CONN-05-053-BOLODEN, 0820318-CONN-05-054-BOLODEN, 0820318-CONN-05-055-BOLODEN, 0820318-CONN-05-056-BOLODEN, 0820318-CONN-05-057-BOLODEN, 0820318-CONN-05-058-BOLODEN, 0820318-CONN-05-059-BOLODEN, 0820318-CONN-05-060-BOLODEN, 0820318-CONN-05-061-BOLODEN, 0820318-CONN-05-062-BOLODEN, 0820318-CONN-05-063-BOLODEN, 0820318-CONN-05-064-BOLODEN, 0820318-CONN-05-065-BOLODEN, 0820318-CONN-05-066-BOLODEN, 0820318-CONN-05-067-BOLODEN, 0820318-CONN-05-068-BOLODEN, 0820318-CONN-05-069-BOLODEN, 0820318-CONN-05-070-BOLODEN, 0820318-CONN-05-071-BOLODEN, 0820318-CONN-05-072-BOLODEN, 0820318-CONN-05-073-BOLODEN, 0820318-CONN-05-074-BOLODEN, 0820318-CONN-05-075-BOLODEN, 0820318-CONN-05-076-BOLODEN, 0820318-CONN-05-077-BOLODEN, 0820318-CONN-05-078-BOLODEN, 0820318-CONN-05-079-BOLODEN, 0820318-CONN-05-080-BOLODEN, 0820318-CONN-05-081-BOLODEN, 0820318-CONN-05-082-BOLODEN, 0820318-CONN-05-083-BOLODEN, 0820318-CONN-05-084-BOLODEN, 0820318-CONN-05-085-BOLODEN, 0820318-CONN-05-086-BOLODEN, 0820318-CONN-05-087-BOLODEN, 0820318-CONN-05-088-BOLODEN, 0820318-CONN-05-089-BOLODEN, 0820318-CONN-05-090-BOLODEN, 0820318-CONN-05-091-BOLODEN, 0820318-CONN-05-092-BOLODEN, 0820318-CONN-05-093-BOLODEN, 0820318-CONN-05-094-BOLODEN, 0820318-CONN-05-095-BOLODEN, 0820318-CONN-05-096-SHT-MS.DGN, 0820318-CONN-05-097-SHT-MS.DGN, 0820318-CONN-05-098-SHT-MS.DGN, 0820318-CONN-05-099-SHT-MS.DGN, 0820318-CONN-05-100-SHT-MS.DGN