

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAGE 1 of 1

ROCK CORE LOG

DATE 9/18/2008
LOGGED BY MD
JOB NUMBER P-91-186-08
GSI JOB No. 08015

ROUTE I-294 & I-57 DESCRIPTION I-57 & I-294 Interchange Improvements (PTB 146, Item 1)

SECTION - LOCATION I-57 Over I-294

COUNTY Cook CORING METHOD Rotary Wash

STRUCT. NO. 016-1096 & 016-1097 CORING BARREL TYPE & SIZE NX Double Swivel-10 ft

Station - Core Diameter 2.0 in

BORING NO. I57-I294 B-9 Top of Rock Elev. 578.0

Station: 260+15 Begin Core Elev. 576.0

Offset: 6.0' Right

Ground Surface Elev. 636.0

DEPTH (ft)	DIAMETER (in)	UNIT WEIGHT (pcf)	WATER CONTENT (%)	SHRINKAGE (%)	MOISTURE RATIO	FLUIDITY	UNCONSOLIDATED COMPRESSIVE STRENGTH (tsf)
576.0	1	98.0	47.0	na	859@	-61.2'	
Run 1 (-60.0' to -70.0') Silurian System Niagaran Series Dolomite							
Light gray to gray with horizontal bedding. Fine grained with some varving Horizontal fractures @ -60.3', -60.8', -60.9', -61.1', -62.0' & -62.3'. Vertical fracture from -62.3' to -62.8'. Horizontal fractures @ -62.9', -63.3', -63.4', -63.9', -64.2', -65.9', -66.1', -66.2', -67.2', -67.6' & -67.9'. 1.5' clay parting @ -68.4'. Horizontal fracture @ -68.9'.							
-60							
-70							

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)

PAGE 1 of 2

SOIL BORING LOG

DATE 10/1/08
LOGGED BY DR
JOB NUMBER P-91-186-08
GSI JOB No. 08015

ROUTE I-294 & I-57 DESCRIPTION I-57 & I-294 Interchange Improvements (PTB 146, Item 1)

SECTION - LOCATION I-57 Over I-294

COUNTY Cook DRILLING METHOD 3.25" Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 016-1096 & 016-1097

Station -

BORING NO. I57-I294 B-10

Station: 259+88

Offset: 71.0' Right

Ground Surface Elev. 635.4

DEPTH (ft)	DIAMETER (in)	UNIT WEIGHT (pcf)	WATER CONTENT (%)	SHRINKAGE (%)	MOISTURE RATIO	FLUIDITY	UNCONSOLIDATED COMPRESSIVE STRENGTH (tsf)
633.9	13						
17.0" ASPHALT, 2.0" CRUSHED STONE							
3							111
6	3.5P	14					17
CLAY to CLAY LOAM- dark brown & gray- very stiff to hard (A-6) Fill							
3							113
3							6
-5	5	4.3B	16				17
CLAY to CLAY LOAM- dark brown & gray- very stiff to hard (A-6) Fill							
6							108
6	4.5+P	14					18
607.4							
3							7
4							11
-10	5	4.5+P	15				13
SILTY LOAM to LOAM-gray- medium dense to dense (A-4)							
4							3
5							4
5	2.25P	15					25
45							3
9							4
-15	6	2.0P	21				25
3							110
5							7
7	2.2B	18					18
3							114
5							11
5							20
-20	6	5.0B	14				12
595.4							

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelly Tube Sample VS-Vane Shear Test
The SPT (N value) is the sum of the last two blow values in each sampling zone (ASTM T206) The Unit Dry Weight (pcf) is noted in italics above moist (%)
NR-No Recovery

PAGE 2 of 2

SOIL BORING LOG

DATE 10/1/08
LOGGED BY DR
JOB NUMBER P-91-186-08
GSI JOB No. 08015

ROUTE I-294 & I-57 DESCRIPTION I-57 & I-294 Interchange Improvements (PTB 146, Item 1)

SECTION - LOCATION I-57 Over I-294

COUNTY Cook DRILLING METHOD 3.25" Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 016-1096 & 016-1097

Station -

BORING NO. I57-I294 B-10

Station: 259+88

Offset: 71.0' Right

Ground Surface Elev. 635.4

DEPTH (ft)	DIAMETER (in)	UNIT WEIGHT (pcf)	WATER CONTENT (%)	SHRINKAGE (%)	MOISTURE RATIO	FLUIDITY	UNCONSOLIDATED COMPRESSIVE STRENGTH (tsf)
574.9							
...continued							
Run 1 (-60.5' to -70.0') Silurian System Niagaran Series Dolomite							
Light gray to gray with horizontal bedding. Fine grained with some varving Horizontal fractures -61.3', -61.5', -61.9', -62.4', -62.5', -63.2', -63.3', -64.1', -64.4', -65.1', -65.6' & -69.5'.							
30							3
30							6
-45	NP	9					17
SILTY LOAM with Fractured Rock- gray-very dense (A-4)							
306"							3
6							6
-25	7	2.0P	17				17
Recovery = 98.9% R.Q.D. = 88.4%							
100.0% Water Loss							
574.9							
30							7
11							11
11	2.1B	18					18
607.4							
7							7
11							11
-30	13	NP	13				13
SANDY LOAM with Fractured Rock- gray-dense to very dense (A-2)							
30							3
4							4
-35	6	NP	25				25
583.4							
24							24
27							27
-55	24	NP	10				10
End Of Boring @ -70.0' Straight Flight Augers To -10.0' Rotary Drilling To Completion CME Automatic Hammer 10.0' 4.0" Casing Used 60.0' 3.0" Casing Used							
565.4							
24							24
27							27
-55	24	NP	10				10
-75							
42							42
20							20
504"							9
-60	NP	9					9
-80							

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelly Tube Sample VS-Vane Shear Test
The SPT (N value) is the sum of the last two blow values in each sampling zone (ASTM T206) The Unit Dry Weight (pcf) is noted in italics above moist (%)
NR-No Recovery

BORING LOGS 10
STRUCTURE NO. 016-1251

TYLIN INTERNATIONAL	DESIGNED - JMA	REVISIONS		SHEET NO. 66	F.A.I RTE. 57	SECTION 1414.2B	COUNTY COOK	TOTAL SHEETS 516	SHEET NO. 311
	CHECKED - SP,	NAME	DATE						
	DRAWN - JMA								
	CHECKED - SP,PDF								
DATE - 03/18/10				68 SHEETS	CONTRACT NO. 60J27				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT									

P:\60254\016-1251\STRUCTURE\I-57 OVER I-294\0161251-60127-066-BORING10.dgn

3/17/2010