STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOG

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60563
(630) 355-3848

PAGE 1 of 2
DATE 10/08
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

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After ___ Hrs. ___

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
17.0" ASPHALT, 2.0" CRUSHED STONE	633.9				
			13		
			3		
			6	3.5P	14
			3		113
			3		
		–5	5	4.3B	16
CLAY to CLAY LOAM– dark brown & gray– very stiff to hard (A–6) Fill			6		
			6		
			6	4.5+P	14
	607.4				
SILTY LOAM to LOAM–gray– medium dense to dense (A–4)			3		
			4		
		–10	5	4.5+P	15
			4		
			5		
			5	2.25P	15
			45		
			9		
		–15	6	2.0P	21
			3		110
			5		
			7	2.2B	18
			3		114
			5		
	595.4	–20	6	5.0B	14

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	3		111
	3		
	7	4.6B	17
	3		
	6		
–25	7	2.0P	17
	5		108
	8		
	11	2.1B	18
	7		
	11		
–30	13	NP	13
	3		
	4		
–35	6	NP	25
	11		
	20		
–40	21	NP	12

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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Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After ___ Hrs. ___

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SILTY LOAM with Fractured Rock– gray–very dense (A–4)			50/5"		
		–45		NP	9
			30		
			50/5"		
		–50		NP	11
	583.4				
SANDY LOAM with Fractured Rock– gray–dense to very dense (A–2)			24		
			27		
		–55	24	NP	10
			42		
			50/4"		
		–60		NP	9

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
...continued	574.9		
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'.			
–65	RUN 1		
Recovery = 98.9% R.Q.D. = 88.4%			
100.0% Water Loss			
	565.4		
–70			
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			
–75			
–80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelby Tube Sample VS=Vane Shear Test
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NR-No Recovery

BORING LOGS 3
S.N. 016-1252

TY·LIN INTERNATIONAL

DESIGNED	-	DY
CHECKED	-	AD,LS
DRAWN	-	DY,EI
CHECKED	-	LS,SP,PDF
DATE	-	03/18/10

REVISIONS	
NAME	DATE

SHEET NO. 59
62 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	1414.2B	COOK	516	372
		CONTRACT NO. 60J27		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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