STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOG

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amberst Court, Suite 200
Naperville, Illinois 60563
(630) 355-2616

PAGE 1 of 2
DATE 9/9/2008
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 Straight Flight Auger/Rotary
HAMMER TYPE CME Automatic

STRUCT. NO. 016-1096 & 016-1097
Station –
BORING NO. I57-I294 B-8
Station: 260+46
Offset: 67.5' Left
Ground Surface Elev. 635.1

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 (%)
18.0" ASPHALT	633.6		5		
CRUSHED STONE with Clay- very dense (Fill)	632.1		21 / 50/0"	NP	9
CLAY-brown & gray- very stiff to hard (A-6) Fill			2 / 4 / 5	4.9B	111 / 18
CLAY-brown & gray- very stiff to hard (A-6) Fill		–5	4 / 5 / 4	3.2B	107 / 20
			4 / 7 / 7	4.4S@ 12.7%	108 / 20
		–10	4 / 5 / 8	4.3S@ 14.1%	108 / 19
			3 / 5 / 7	3.0B	104 / 23
		–15	4 / 4 / 5	2.3B	107 / 19
			2 / 3 / 6	3.25B	109 / 20
CLAY-brown & gray- very stiff to hard (A-6) Fill		–25	6 / 7 / 9	5.1B	110 / 18
			6 / 8 / 12	3.6B	108 / 19
		–30	6 / 6 / 8	4.0B	106 / 20
			5 / 6 / 8	3.2B	107 / 21
SILTY LOAM to LOAM- dark brown & gray- medium dense (A-4)	604.1	–35	5 / 7 / 7	NP	19
SANDY LOAM with Fractured Rock- gray-dense to very dense (A-2/A-4)	598.1	–40	17 / 23 / 27	NP	10

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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After ___ Hrs.

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SANDY LOAM with Fractured Rock- gray-dense to very dense (A-2/A-4)			26 / 50/5"	NP	12
		–45			
		–50	23 / 30 / 28	NP	12
		–55	50/6"	NP	11
	580.1				
Drillers Observation: Fractured rock.	577.6				
Run 1 (–57.5' to –65.5') Silurian System Niagaran Series Dolomite Light gray to gray with horizontal bedding. Fine grained with some varving. Highly fractured from –57.5' to –58.5' with 4.0" clay parting @ –57.8'.		–60	RUN 1		
Transverse from –58.5' to –58.9'. Horizontal fractures @ –59.2', –59.3' & –60.3'. 2.0" clay parting @ –66.5'. Horizontal fracture @ –61.9'. Vertical fracture with intersecting horizontal fractures from –61.9' to –63.7'. Horizontal fractures @ –64.0' & –63.7'. Recovery=97.5% R.Q.D.=41.9%			RUN 1		
	569.6	–65			
Run 2 (–65.5' to –73.5') Silurian System Niagaran Series Dolomite Light gray to gray with horizontal bedding. Fine grained with some varving. Horizontal fractures @ –66.1 & –66.6'. Tight vertical fracture from –67.8' to –69.5'. Horizontal fractures @ –68.4', –70.4', –70.8' & –71.5'. Recovery=97.5% R.Q.D.=95.6%		–70	RUN 2		
	561.6				
End Of Boring @ –73.5' Straight Flight Augers To –10.0' Rotary Drilling To Completion CME Automatic Hammer 10.0' 4.0"* Casing Used 58.0' 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
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

BORING LOGS 1
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. 57
62 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	1414.2B	COOK	516	370
		CONTRACT NO. 60J27		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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3/18/2010