STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOG

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Ambiger Court, Suite 400
Naperville, Illinois 60563
(630) 305-3518

PAGE 1 of 2
DATE 9-22-2/2008
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-2
Station: 256+40
Offset: 14.0' Left
Ground Surface Elev. 634.7

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	633.3				
CLAY with Crushed Stone- medium dense (Fill)	631.7		3 4 10	2.5P	10
CRUSHED STONE SCREENINGS- loose (Fill)	629.2	–5	3 3 5	NP	8
CLAY-brown & gray- stiff to hard (A-6) Fill		–10	3 4 7 3 5 7	4.0B 4.5P 3.5B	108 19 16 108 20
CLAY-brown & gray- stiff to hard (A-6) Fill		–15	3 4 6 4 4 7	2.4B 3.1B	104 23 106 20
CLAY-brown & gray- stiff to hard (A-6) Fill	606.7	–20	3 5 8	3.2B	107 20
TOPSOIL-black	604.7				
CLAY-brown & gray- medium stiff (A-6) Wet	597.7				
SAND & GRAVEL-gray- medium dense (A-1)		–40			

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
4 4 5	1.8B	22			
6 6 9	3.5B	16			
5 6 8	2.7B	103 24			
3 5 7	2.0P	26			
2 2 2	0.5P	30			
4 5 7	NP	17			

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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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-2
Station: 256+40
Offset: 14.0' Left
Ground Surface Elev. 634.7

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 (%)
SAND & GRAVEL-gray- medium dense (A-1)	592.7				
SILTY LOAM-gray-very dense (A-4)		–45	5 6"	NP	11
SILTY LOAM-gray-very dense (A-4)		–50	5 6"	NP	10
SILTY LOAM-gray-very dense (A-4)		–55	2 6"	NP	12
SILTY LOAM with Fractured Rock- gray-dense to very dense (A-2/A-4)	577.7	–60	3 5 6"	NP	10

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SILTY LOAM with Fractured Rock- gray-dense to very dense (A-2/A-4)		–65	12 24 22	NP	10
Drillers Observation: Apparent Bedrock.	568.7				
Run 1 (–68.5' to –78.5') Silurian System Niagaran Series Dolomite Light gray mottled gray with horizontal bedding. Fine grained with some varving. Horizontal fractures @ –69.5', –70.2', –70.3', –70.5', –70.8', –70.9', –70.7', –72.5', –73.6', –74.4', –74.7', –77.0', –77.1', –77.5' & –78.2'. Recovery=97.0% R.Q.D.=88.5%	566.2	–70			
End Of Boring @ –78.5' Straight Flight Augers To –10.0' Rotary Drilling To Completion CME Automatic Hammer 10.0' 4.0"* Casing Used 70.0' 3.0"* Casing Used	556.2	–80			

RUN 1

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

ROCK CORE LOG

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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
Station –
BORING NO. I57-I294 B-2
Station: 256+40
Offset: 14.0' Left
Ground Surface Elev. 634.7

CORING BARREL TYPE & SIZE NX Double Swivel-10 ft
Core Diameter 2.0 in
Top of Rock Elev. 568.7
Begin Core Elev. 566.2

Description	Elev.	DEPTH (ft)	CORE RUN (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Run 1 (–68.5' to –78.5') Silurian System Niagaran Series Dolomite Light gray mottled gray with horizontal bedding. Fine grained with some varving. Horizontal fractures @ –69.5', –70.2', –70.3', –70.5', –70.8', –70.9', –70.7', –72.5', –73.6', –74.4', –74.7', –77.0', –77.1', –77.5' & –78.2'.	566.2	–73.5	1	97.0	88.5	n/a	924@ –68.5'
		–78.5					

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

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BORING LOGS 2
STRUCTURE NO. 016-1251

TYLIN INTERNATIONAL

DESIGNED	-	JMA
CHECKED	-	SP,
DRAWN	-	JMA
CHECKED	-	SP,PDF
DATE	-	03/18/10

REVISIONS

NAME	DATE

SHEET NO. 58
68 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	1414.2B	COOK	516	303

CONTRACT NO. 60J27

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

3/17/2010