STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Geo Services Inc
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 202
Naperville, Illinois 60563
(630) 305-2515

SOIL BORING LOG

PAGE 1 of 2
DATE 9/8/2008
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-1
Station: 256+70
Offset: 66.0' Left
Ground Surface Elev. 635.2

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

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)	
				18.0" ASPHALT
633.7				
	7			
	8			CLAY with Crushed Stone–
	6	NP	8	medium dense (Fill)
632.2				
	3		106	CLAY–very stiff to hard (A–6) Fill
	5			
–5	6	3.5B	20	
	3		107	
	4			CLAY–very stiff to hard (A–6) Fill
	5	2.8B	19	
	4		106	
	4			
–10	5	4.6B	19	
	3		109	
	4			CLAY–brown & gray–
	8	4.4B	19	medium stiff (A–6) Wet
	4		112	
	6			Silt seams from –33.5' to –35.0'
–15	8	4.1B	18	
	3		109	
	5			
	7	3.25B	20	
	4		111	SAND & GRAVEL–gray–loose (A–1)
	5			
–20	8	4.0B	19	

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)	
	3		105	
	5			
	8	2.5B	22	
	7		113	
	8			
–25	11	4.4B	18	
	8		112	
	10			
	13	4.4B	19	
	4		106	
605.7				
	4			
–30	8	3.6B	22	
	2			
	3			
	4			
	8			
	2			
	3			
	3			
–35	3	0.75P	31	
	2			
	1			
	2			
–40	2	NP	16	

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-1
Station: 256+70
Offset: 66.0' Left
Ground Surface Elev. 635.2

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

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)	
				SAND & GRAVEL–gray–loose (A–1)
593.2				
	37			
	38			
–45	50/4"	NP	14	
				SILT–gray–very dense (A–4)
	19			
	35			
–50	50/3"	NP	20	
583.2				
	25			
	24			
–55	26	NP	10	SILTY LOAM with Fractured Rock–
				gray–dense to very dense (A–4)
	37			
575.7				
Drillers Observation: Fractured rock. –60	50/4"	NP	12	

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)	
				Drillers Observation: Fractured rock.
573.2				
				Drillers Observation: Apparent Bedrock.
571.7				
				Run 1 (–63.5' to –73.5')
				Silurian System Niagaran Series Dolomite
–65				
				Light gray to gray with horizontal bedding.
				Fine grained with some varving. Horizontal
				fractures @ –68.4', –71.6' & –71.9'.
				Recovery=100.0%
				R.Q.D.=97.5%
				Core Time=3.0 minutes/foot.
				50.0% Water Loss.
				RUN 1
–70				
561.7				
				End Of Boring @ –73.5'
				Straight Flight Augers To –10.0'
–75				Rotary Drilling To Completion
				CME Automatic Hammer
				10.0' 4.0"* Casing Used
–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

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ROCK CORE LOG

PAGE 1 of 1
DATE 9/8/2008
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 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-1 Top of Rock Elev. 573.2
Station: 256+70 Begin Core Elev. 571.7
Offset: 66.0' Left
Ground Surface Elev. 635.2

DEPTH (ft)	CORE RUN (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)	
571.7						Run1 (–63.5' to –73.5')
	1	100.0	97.5	3.0	1135@ –63.5'	Silurian System Niagaran Series Dolomite
						Light gray to gray with horizontal bedding. Fine grained with some varving. Horizontal fractures @ –68.4', –71.6' & –71.9'.
						50.0% Water Loss.
–68.5						
–73.5						

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)

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3/17/2010

BORING LOGS 1
STRUCTURE NO. 016-1251

TYLIN INTERNATIONAL			
DESIGNED - JMA	REVISIONS		
CHECKED - SP,	NAME	DATE	
DRAWN - JMA			
CHECKED - SP,PDF			
DATE - 03/18/10			

SHEET NO. 57
68 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	1414.2B	COOK	516	302
		CONTRACT NO. 60J27		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		