STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Geo Services Inc
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 200
Naperville, Illinois 60563
(630) 305-3535

SOIL BORING LOG

PAGE 1 of 1
DATE 11/11-17/2008
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-7
Station: 258+67
Offset: 118.0' Right
Ground Surface Elev. 614.2

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 (%)	Description
				12.0" ASPHALT
613.2				
	5			
	3			
	5	4.25P	19	
				SILTY LOAM to LOAM-gray-
	2			medium dense to very dense (A-4)
	6			
–5	7	3.25P	18	CLAY-brown & gray-
				very stiff to hard (A-6) Fill
	4		110	
	13			
	12	7.1B	18	
	5		109	
	7			
–10	9	6.9B	19	
603.7				
	2			
	2			SILTY CLAY LOAM-dark brown & gray-
	3	0.25P	30	loose (A-4) Wet
601.2				
	4			
	4			SANDY LOAM to LOAM-
–15	3	–	22	brown & gray-loose (A-4)
598.7				
	3			
	4			SAND-gray-loose (A-3)
	4	NP	19	
596.2				
	8			
	9			SILTY LOAM to LOAM-gray-
–20	9	NP	12	medium dense to very dense (A-4)

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
	20			
	32			
	32	NP	10	
	48			
	50/4"			
–25		NP	15	
	31			
	50/5"			
		NP	10	
	45			
	50/5"			
–30		NP	9	
582.2				
				Drillers Observation: Fractured Rock.
–35				

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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SOIL BORING LOG

PAGE 2 of 2
DATE 11/11-17/2008
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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 DRILLING METHOD Straight Flight Auger/Rotary HAMMER TYPE CME Automatic
STRUCT. NO. 016-1096 & 016-1097
Station –
BORING NO. I57-I294 B-7
Station: 258+67
Offset: 118.0' Right
Ground Surface Elev. 614.2

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 (%)	Description
				Drillers Observation: Fractured Rock.
570.2				
–45				Run 1 (–44.0' to –54.0')
				Silurian System Niagaran Series Dolomite
				Light gray to gray with horizontal
				bedding. Fine grained with some
				varving. Horizontal fracture @ –44.2',
				–44.5' & –45.4'. Horizontal fracture
				with thin clay parting @ –50.0'.
				Horizontal fractures @ –53.0' & –53.6'.
				Recovery = 99.0%
				R.Q.D. = 90.3%
–50				RUN 1
560.2				
–55				End Of Boring @ –54.0'
				Straight Flight Augers To –10.0'
				Rotary Drilling To Completion
				CME Automatic Hammer
				10.0' 4.0"* Casing Used
				3.0"* Casing Used
–60				

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
–65			
–70			
–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

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ROCK CORE LOG

PAGE 1 of 1
DATE 11/11-17/2008
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-7
Station: 258+67
Offset: 118.0' Right
Top of Rock Elev. 570.2
Begin Core Elev. 570.2
Ground Surface Elev. 614.2

DEPTH (ft)	CORE RUN (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)	Description
570.2						
	1	99.0	90.3	n/a	592@ -44.9'	Run 1 (–44.0' to –54.0')
						Silurian System Niagaran Series Dolomite
						Light gray to gray with horizontal bedding. Fine grained with some varving. Horizontal
						fracture @ –44.2', –44.5' & –45.4'. Horizontal fracture with thin clay parting @ –50.0'.
						Horizontal fractures @ –53.0' & –53.6'.
–5						
–10						

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)

BORING LOGS 7
STRUCTURE NO. 016-1251

TYLIN INTERNATIONAL	DESIGNED - JMA	REVISIONS		SHEET NO. 63	F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CHECKED - SP,	NAME	DATE		57	1414.2B	COOK	516	308
	DRAWN - JMA			68 SHEETS			CONTRACT NO. 60J27		
	CHECKED - SP,PDF								
	DATE - 03/18/10				FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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3/17/2010