

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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SOIL BORING LOG

DATE 11/3/2008

LOGGED BY MR

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-5

Station: 258+82

Offset: 80.5' Left

Ground Surface Elev. 614.9

D E P T H (ft)	B L O W S (blows)	U C S (tsf)	M O S T Q U I S T T Y P E (%)	Soil Description				D E P T H (ft)	B L O W S (blows)	U C S (tsf)	M O S T Q U I S T T Y P E (%)
				Surface Water Elev.	Stream Bed Elev.	Groundwater Elevation:	First Encounter				
				SILTY LOAM-medium dense (A-4)				594.4			
				12.0" ASPHALT							
				24.0" CRUSHED STONE-dense							
611.9				SILTY LOAM-gray-very dense (A-4)							
				CLAY LOAM-brown & gray-hard (A-6) Fill							
				FRACTURED ROCK-gray-very dense (A-1)							
604.4				SILTY LOAM-dark brown & gray-medium dense (A-4)							
601.9				SILTY CLAY LOAM-brown & gray-medium stiff (A-4/A-6) Wet							
589.4				SAND-gray-loose (A-3)							
596.9				SILTY LOAM-brown & gray-medium dense (A-4)							

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 (ASTM D 1586) 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-5

Station: 258+82

Offset: 80.5' Left

Ground Surface Elev. 614.9

Drillers Observation: Cobbles & Boulders. 573.9

Run 1 (-41.0' to -47.0')
Silurian System Niagaran Series Dolomite

Light gray to gray with horizontal bedding. Fine grained with some pyrite inclusions. Highly fractured & weathered to -43.0' with 2.0" clay parting @ -41.6' & 0.25" clay parting @ -43.4'. Horizontal fractures @ -43.6', -43.8' & -43.9'. Weathered fracture zone from -44.2' to -44.4'. Horizontal fractures @ -44.6', -45.6', -45.7' & -46.1'. Recovery = 98.3% R.Q.D. = 45.8% 100.0% Water Loss 567.9

End Of Boring @ -47.0'
Straight Flight Augers To -10.0'
Rotary Drilling To Completion
CME Automatic Hammer
10.0' 4.0" Casing Used
3.0" Casing Used

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 (ASTM D 1586) The Unit Dry Weight (pcf) is noted in italics above moist (%)
NR-No Recovery

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ROCK CORE LOG

DATE 11/3/2008

LOGGED BY MR

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-5

Station: 258+82 Top of Rock Elev. 573.9

Offset: 80.5' Left Begin Core Elev. 573.9

Ground Surface Elev. 614.9

DEPTH (ft)	CORE RETURN (#)	RECOVERY (%)	ROQ (%)	CORRECTION (min)	STRENGTH (tsf)
Run 1 (-41.0' to -47.0')	1	98.3	48.5	n/a	568.9
Silurian System Niagaran Series Dolomite					-43.0'
Light gray to gray with horizontal bedding. Fine grained with some pyrite inclusions. Highly fractured & weathered to -43.0' with 2.0" clay parting @ -41.6' & 0.25" clay parting @ -43.4'. Horizontal fractures @ -43.6', -43.8' & -43.9'. Weathered fracture zone from -44.2' to -44.4'. Horizontal fractures @ -44.6', -45.6', -45.7' & -46.1'. 100.0% Water Loss					
					-51

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 5
STRUCTURE NO. 016-1251

TYLIN INTERNATIONAL	DESIGNED - JMA	REVISIONS		SHEET NO. 61	F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.									
	CHECKED - SP,	NAME	DATE							68 SHEETS	57	1414.2B	COOK	516	306			
	DRAWN - JMA																	
	CHECKED - SP,PDF															CONTRACT NO. 60J27		
	DATE - 03/18/10															FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		

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3/17/2010