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SOIL BORING LOG

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

DATE 1/26-27/2012
LOGGED BY DR
GSI JOB No. 09174

ROUTE FAP 353 (US 30) DESCRIPTION US Route 30 @ EJ&E/CN Railroad, IDOT Job No. D-91-046-12
SECTION 11-Y-A LOCATION SEC 20 & 29, T 35 N, R 15 E, 3rd PM
COUNTY Cook DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE Diedrich Automatic

STRUCT. NO. ---
Station ---
BORING NO. **BS-07**
Station 281+25
Offset 44.5' Left
Ground Surface Elev. 631.2

| DEPTH (ft) | BLOWS (blows/ft) | UCS (tsf) | MOIST (%) | Surface Water Elev. (ft) | Stream Bed Elev. (ft) | Groundwater Elevation: First Encounter (ft) | Upon Completion (ft) | After (ft) | DEPTH (ft) | BLOWS (blows/ft) | UCS (tsf) | MOIST (%) |
|------------|------------------|-----------|-----------|--------------------------|-----------------------|---|----------------------|------------|------------|------------------|-----------|-----------|
| --- | --- | --- | --- | n/a | n/a | 624.2 | n/a | --- | --- | --- | --- | --- |
| 125 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 505.7 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 130 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 135 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 140 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

Recovery=100.0%
RQD=82.0%

Recovery=100.0%
RQD=94.0%

End Of Boring @ -131.5
Hollow Stem Augers To -10.0'
Rotary Drilling To Completion
10.0' Of 4.0" Casing Used
117.0' Of 3.0" Casing Used
CME Automatic Hammer

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-S 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

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SECTION 11-Y-A LOCATION SEC 20 & 29, T 35 N, R 15 E, 3rd PM
COUNTY Cook CORING METHOD Rotary Wash

STRUCT. NO. ---
Station ---
BORING NO. **BS-07**
Station 281+25
Offset 44.5' Left
Ground Surface Elev. 631.2

CORING BARREL TYPE & SIZE NX Double Swivel-10 ft
Core Diameter 2.0 in
Top of Rock Elev. 515.7
Begin Core Elev. 515.7

| DEPTH (ft) | CORING (%) | RECOVERY (%) | R.Q.D. (%) | CORRECTION (min/ft) | STRENGTH (tsf) |
|------------|------------|--------------|------------|---------------------|----------------|
| 1 | 100.0 | 82.0 | n/a | 1170 | 1125.5 |
| 125.5 | --- | --- | --- | --- | --- |

Silurian System, Niagaran Series Dolomite
RUN 1 (-115.5' to -125.5')
Gray & fine grained with horizontal to wavy bedding becoming light gray mottled gray & slightly porous @ -119.2', changing to light gray & fine grained with horizontal bedding @ -122.0'. Horizontal fractures @ -118.8', -119.2', -119.5', -120.0', -121.5', -121.7', -123.1' & -123.4'.



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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COUNTY Cook CORING METHOD Rotary Wash

STRUCT. NO. ---
Station ---
BORING NO. **BS-07**
Station 281+25
Offset 44.5' Left
Ground Surface Elev. 631.2

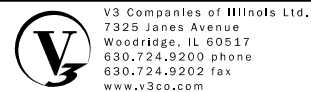
CORING BARREL TYPE & SIZE NX Double Swivel-10 ft
Core Diameter 2.0 in
Top of Rock Elev. 505.7
Begin Core Elev. 505.7

| DEPTH (ft) | CORING (%) | RECOVERY (%) | R.Q.D. (%) | CORRECTION (min/ft) | STRENGTH (tsf) |
|------------|------------|--------------|------------|---------------------|----------------|
| 2 | 100.0 | 94.0 | n/a | 1102 | 1125.5 |
| 135.5 | --- | --- | --- | --- | --- |

Silurian System, Niagaran Series Dolomite
RUN 2 (-125.5' to -131.5')
Light gray to gray with horizontal to wavy bedding and some varving becoming slightly porous from -128.0' to -129.0'. Horizontal fractures @ -126.4' & -126.7'. Weathered horizontal fracture with thin clay parting @ -126.9'. Transverse fracture from -127.0' to -127.4'. Horizontal fractures @ -127.7' & -131.1'.



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)



USER NAME =
DESIGNED - WJV
CHECKED - CJB
PLOT SCALE =
DRAWN - WJV
PLOT DATE =
CHECKED - CJB

REVISED
REVISED
REVISED
REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SOIL BORING LOGS
STRUCTURE NO. 016-1350
SHEET NO. 27 OF 35 SHEETS**

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------|--------|--------------|-----------|
| 353 | 11-Y-A | COOK | 354 | 212 |
| CONTRACT NO. 60R19 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |