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

SOIL BORING LOG

PAGE 1 of 3
DATE 12/20/2010
LOGGED BY DR
GSI JOB No. 10023

ROUTE FAI 94 @ FAP 341
SECTION 1212B-1
COUNTY Cook
STRUCT. NO. SN 016-2438
Station
BORING NO. **S38-C**
Station: 217+18
Offset: 39.0' Left
Ground Surface Elev. 585.1

DESCRIPTION I-94/Stony Island Feeder Interchange Improvements #P-91-184-10
LOCATION SEC. 11, 12, 13, & 14, TWP. 37 N., RNG. 14 E., 3rd P.M.
DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

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 (%)
583.1			
10.5" ASPHALT, 13.5" CINDERS & STONE	12		
	3		
	6	NP	21
CLAY LOAM–dark brown & gray– very stiff (A–6) Possible Fill	4		99
	5		
–5	6	1.3B	22
579.6			
	3		102
	54		
CLAY–brown & gray– very stiff (A–6)	4	2.6B	21
	2		104
	2		
–10	3	2.1B	20
574.6			
	2		108
	3		
	4	2.7B	21
	4		108
CLAY–gray–stiff to very stiff (A–6)	7		
–15	9	3.4B	21
	4		110
	8		
	10	4.2B	20
	4		110
	8		
–20	11	4.6B	20

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY–gray–stiff to very stiff (A–6) 564.6			
	7		111
	9		
	11	5.0B	15
	6		121
	9		
–25	11	6.6B	14
	4		123
CLAY LOAM–gray– very stiff to hard (A–6)	6		
	18	5.8B	14
	4		124
	6		
–30	7	5.8B	13
	4		
	4		
	9		
–35	12	3.25P	18
	7		118
	9		
–40	11	4.8B	14

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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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 (%)
	5		119
	9		
–45	16	5.6B	13
CLAY LOAM–gray– very stiff to hard (A–6)			
	7		125
	10		
–50	14	5.6B	13
	19		117
	26		
–55	28	3.1B	16
	12		120
	21		
–60	23	6.2B	12

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	14		120
Silt seams from –63.5' to –65.0'.			
	21		
–65	25	7.5B	13
CLAY LOAM–gray– very stiff to hard (A–6)			
	13		121
	22		
–70	27	2.0B	14
	9		124
	14		
–75	17	5.25B	13
	13		118
	14		
–80	16	4.0B	15

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Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After ____ Hrs. ____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY LOAM–gray– very stiff to hard (A–6) 503.1			
	50/4"		
SILT–gray–very dense (A–4)			
–85		NP	20
497.6			
Drillers Observation: Apparent Bedrock 497.1			
RUN 1 (–88.0' to –98.0') Silurian System Niagaran Series Dolomite			
Gray & fine grained with horizontal bedding, becoming lighter gray with horizontal to wavy bedding @ –92.6'. Horizontal fractures @ –92.6' & –95.4'.			
Recovery=91.0% R.Q.D.=88.5%			
–90	RUN 1		
–95			
487.1			
–100			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
End Of Boring @ –98.0' Hollow Stem Augers To –10.0' Rotary Drilling To Completion CME Automatic Hammer 10.0' Of 4.0"ø Casing Used			
–105			
–110			
–115			
–120			

The Unconfinad Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer) ST–Shelby Tube Sample VS=Vane Shear Test
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BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbandainc.com

USER NAME =	DESIGNED - TL	REVISED -
	CHECKED - BAK	REVISED -
PLOT SCALE =	DRAWN - TL	REVISED -
PLOT DATE = 03/29/2013	CHECKED - BAK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS III
STRUCTURE NO. 016-2471
SHEET NO. S-43 OF S-63 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2012-059-BR	COOK	631	536
		CONTRACT NO. 60J12		
	ILLINOIS	FED. AID PROJECT		