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 12/30/2010
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-A**
Station: 214+67
Offset: 12.5' Right
Ground Surface Elev. 586.0

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 583.0
Upon Completion n/a
After ____ Hrs. ____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
584.5				10.0" ASPHALT, 8.0" CRUSHED STONE
	10			
	4			Clayey SAND, GRAVEL & STONE-
	8	NP	14	medium dense (Fill)
583.0				▼
	1		*92*	
	1			TOPSOIL-black
−5	2	0.4B	31	
580.5				
	1		*113*	
	4			
	7	5.4B	18	CLAY-brown & gray-hard (A-6)
	5		*113*	
	7			
−10	8	5.4B	18	
575.5				
	3		*113*	
	5			
	7	2.2B	18	
	3		*114*	CLAY-gray-very stiff (A-6)
	5			
−15	8	3.0B	18	
	4		*110*	
	6			
	10	3.7B	20	
	4		*109*	
	7			
−20	12	3.7B	20	

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
	5		*112*	CLAY-gray-very stiff (A-6)
	6			
	9	3.1B	19	
563.0				
	10		*119*	
	12			
−25	12	2.7B	15	
	9		*113*	
	10			
	14	3.0B	18	CLAY LOAM-gray-
	5		*124*	very stiff to hard (A-6)
	7			
−30	9	6.1B	13	
	5		*124*	
	9			
−35	9	5.8B	13	
	6		*121*	
	8			
−40	10	2.8B	15	

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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DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter 583.0
Upon Completion n/a
After ____ Hrs. ____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
	5		*122*	CLAY LOAM-gray-
	8			very stiff to hard (A-6)
−45	10	4.1B	14	
	8		*125*	
	11			
−50	13	5.4B	13	
529.0				
	17			SILTY LOAM-gray-dense (A-4)
	24			
−60	29	NP	22	

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
				SILTY LOAM-gray-dense (A-4)
524.0				
	14		*128*	
	20			
−65	26	7.6B	11	
	13		*122*	CLAY LOAM-gray-
	24			very stiff to hard (A-6)
−70	32	8.0B	12	
	12		*120*	
	19			
−75	25	5.4B	15	
	27		*120*	
	50/3"			
−80		3.4B	15	

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Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter 583.0
Upon Completion n/a
After ____ Hrs. ____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
				CLAY LOAM-gray-
504.0				very stiff to hard (A-6)
	50			Clayey SAND, GRAVEL & FRACTURED
	50/4"			ROCK-grcy-very dense (A-2)
−85		NP	12	
499.5				
				Drillers Observation: Apparent Bedrock
497.5	50/3"	NP	10	
				RUN 1 (−88.5' to −98.5')
				Silurian System Niagaran Series Dolomite
−90				Light gray to gray & fine grained with
				horizontal bedding. Horizontal fractures
				@ −88.7', −88.9' & −89.8'.
				Recovery=96.0%
				R.Q.D.=92.0%
				RUN 1
487.5				
−100				

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
				End Of Boring @ −98.5,
				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 Unconfined 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 I
STRUCTURE NO. 016-2471
SHEET NO. S-41 OF S-63 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2012-059-BR	COOK	631	534
		CONTRACT NO. 60J12		
	ILLINOIS FED. AID PROJECT			