

PAGE 1 of 2

SOIL BORING LOG

DATE 4/19/2010

LOGGED BY MD

GSI JOB No. 10047

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Archerist Court, Suite 204
Naperville, Illinois 60565
(830) 355-2838

ROUTE FAI Route 90/94 DESCRIPTION Pump Station 26 Rehabilitation IDOT Project No. C-91-411-99

SECTION 1999-161-I LOCATION Township 39 N, Range 14 E, SW 1/4 of SW 1/4 Section 16

COUNTY Cook DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO. XX Station XX

BORING NO. B-2 Station: 6+91 Union Avenue
Offset: 74.0' Left
Ground Surface Elev. -3.5 CCD

DEPTH (ft)	B L O W S (/6")	U C S Qu	M O I S T (%)	SOIL			
				DESCRIPTION	TEST	VALUE	UNIT
				Surface Water Elev.	<u>n/a</u>		
				Stream Bed Elev.	<u>n/a</u>		
				Groundwater Elevation:			
				First Encounter	<u>n/a</u>		
				Upon Completion	<u>n/a</u>		
				After _____ Hrs.			
15.0'				ASPHALT			
				Vane Shear @ -21.0'			
				Shear Strength=269 psf			
				CRUSHED STONE-medium dense (Fill)			
				Torvane @ -22.5'			
				Shear Strength=410 psf			
				CLAY-gray-very soft to medium stiff (A-6)			
				Vane Shear @ -26.0'			
				Shear Strength=324 psf			
				Torvane @ -27.5'			
				Shear Strength=1106 psf			
				Torvane @ -30.0'			
				Shear Strength=287 psf			
				CLAY-gray-very soft to medium stiff (A-6)			
				Vane Shear @ -31.0'			
				Shear Strength=280 psf			
				Torvane @ -12.5'			
				Shear Strength=246 psf			
				SILTY LOAM to SILT-gray-medium dense to very dense (A-4)			
				Vane Shear @ -16.0'			
				Shear Strength=938 psf			
				Torvane @ -17.5'			
				Shear Strength=225 psf			
				Torvane @ -20.0'			
				Shear Strength=358 psf			

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

PAGE 2 of 2

SOIL BORING LOG

DATE 4/19/2010

LOGGED BY MD

GSI JOB No. 10047

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Archerist Court, Suite 204
Naperville, Illinois 60565
(830) 355-2838

ROUTE FAI Route 90/94 DESCRIPTION Pump Station 26 Rehabilitation IDOT Project No. C-91-411-99

SECTION 1999-161-I LOCATION Township 39 N, Range 14 E, SW 1/4 of SW 1/4 Section 16

COUNTY Cook DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO. XX Station XX

BORING NO. B-2 Station: 6+91 Union Avenue
Offset: 74.0' Left
Ground Surface Elev. -3.5 CCD

DEPTH (ft)	B L O W S (/6")	U C S Qu	M O I S T (%)	SOIL			
				DESCRIPTION	TEST	VALUE	UNIT
				Surface Water Elev.	<u>n/a</u>		
				Stream Bed Elev.	<u>n/a</u>		
				Groundwater Elevation:			
				First Encounter	<u>n/a</u>		
				Upon Completion	<u>n/a</u>		
				After _____ Hrs.			
				SILTY LOAM to SILT-gray-medium dense to very dense (A-4)			
				Vane Shear @ -21.0'			
				Shear Strength=269 psf			
				CRUSHED STONE-medium dense (Fill)			
				Torvane @ -22.5'			
				Shear Strength=410 psf			
				CLAY-gray-very soft to medium stiff (A-6)			
				Vane Shear @ -26.0'			
				Shear Strength=324 psf			
				Torvane @ -27.5'			
				Shear Strength=1106 psf			
				Torvane @ -30.0'			
				Shear Strength=287 psf			
				CLAY-gray-very soft to medium stiff (A-6)			
				Vane Shear @ -31.0'			
				Shear Strength=280 psf			
				Torvane @ -12.5'			
				Shear Strength=246 psf			
				SILTY LOAM to SILT-gray-medium dense to very dense (A-4)			
				Vane Shear @ -16.0'			
				Shear Strength=938 psf			
				Torvane @ -17.5'			
				Shear Strength=225 psf			
				Torvane @ -20.0'			
				Shear Strength=358 psf			

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

DESIGNED JW

CHECKED YMM

DRAWN JLS & PS

CHECKED TPG & JXH

Primer

100 S. WACKER DRIVE SUITE 700 CHICAGO IL 60606 P.312.686.8900 F.312.686.9415

SOIL BORING LOG 2
STRUCTURE NUMBER 016-1308

SHEET NO. <u>S19</u>	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	<u>90/94</u>	<u>2010-075-I</u>	<u>COOK</u>	<u>33</u>	<u>28</u>
S19 SHEETS		CONTRACT NO. <u>60L61</u>			
DATE: <u>12-03-10</u>		ILLINOIS FED. AID PROJECT			