Kaskaskia Engineering Group, LLC

SOIL BORING LOG

Page 1 of 2

Date 6/10/10

ROUTE FA 14 DESCRIPTION IL 15 Bridge over IL 13 (Old Freeburg Rd) & ICG Railroad LOGGED BY KEG

SECTION 27-1-VHB LOCATION St. Clair Twp - 1.4m E of IL 159; W1/2

COUNTY St. Clair DRILLING METHOD CME 550 w/HSA & Mud Rotary HAMMER TYPE Automatic

STRUCT. NO. 082-0051/0052 (existing)
Station
BORING NO. SB-4/SB-5
Station
Offset 55.0 ft East of SB-4
Ground Surface Elev. 465.00 ft

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.:
First Encounter 454.0 ft ▼
Upon Completion - ft
After - Hrs. - ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
TOPSOIL & CRUSHED ROCK - 12 inches	464.0				
FILL: Brown, silty clay (A-6)			1		
			1	0.5	25
			2	B	
NO RECOVERY			2		
			3	-	
		-5	2		
FILL: Grayish brown, clay (A-7)	459.5				
			WH		
			WH	0.3	42
			WH	B	
CLAY: Grayish brown (A-7)	457.0				
			WH		
			1	0.2	33
		-10	1	B	
SILTY CLAY: Grayish brown (A-7) ▼	454.5				
			WH		
			1	0.4	30
			2	B	
SILTY CLAY: Brown (A-6)	452.0				
			2		
			3	0.7	27
		-15	4	B	
SILTY CLAY: Brown and gray (A-7)	449.5				
			1		
			2	0.5	27
			3	B	
CLAY: Gray (A-7)	447.0				
			2		
			2	0.8	24
		-20	2	B	
CLAY: Gray (A-7) *(continued)*					
Becomes gray and brown			2		
			4	1.2	24
			4	B	
SANDY CLAY: Gray (A-6)	442.0				
			2		
			3	0.8	19
		-25	8	B	
CLAYEY SAND: Gray, fine (A-2)	439.5				
Mud rotary drilling started at approximately 26 feet.			1		
			4	-	20
			2		
CLAY: Greenish gray and bluish gray (A-7)	437.0				
			2		
			3	1.2	25
		-30	3	B	
Mud rotary drilling started at approximately 30 feet.					
			3		
			5	2.7	21
		-35	7	B	
Some sand			4		
			5	2.2	21
		-40	8	B	

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

Kaskaskia Engineering Group, LLC

SOIL BORING LOG

Page 2 of 2

Date 6/10/10

ROUTE FA 14 DESCRIPTION IL 15 Bridge over IL 13 (Old Freeburg Rd) & ICG Railroad LOGGED BY KEG

SECTION 27-1-VHB LOCATION St. Clair Twp - 1.4m E of IL 159; W1/2

COUNTY St. Clair DRILLING METHOD CME 550 w/HSA & Mud Rotary HAMMER TYPE Automatic

STRUCT. NO. 082-0051/0052 (existing)
Station
BORING NO. SB-4/SB-5
Station
Offset 55.0 ft East of SB-4
Ground Surface Elev. 465.00 ft

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.:
First Encounter 454.0 ft ▼
Upon Completion - ft
After - Hrs. - ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY: Greenish gray and bluish gray (A-7) *(continued)*					
Becomes bluish gray, trace sand			2		
			4	1.8	22
		-45	6	B	
Becomes brown, trace sand, gravel			3		
			4	1.4	20
		-50	5		
			2		
			3	0.7	25
		-55	4	B	
SILTY CLAY: Brown (A-7)	408.0				
			1		
			1	-	24
		-60	3		
SILTY CLAY: Brown (A-7) *(continued)*					
			2		
			4	1.0	24
		-65	4	B	
CLAY: Bluish gray (A-7)	403.0				
SANDY CLAY: Gray, some silt and shale fragments (A-6)	398.0				
WEATHERED LIMESTONE	396.2 / 396.1		50/5"	-	16
End of Boring		-70			
		-75			
		-80			

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

Page 1 of 2

Date 6/9/10

ROUTE FA 14 DESCRIPTION IL 15 Bridge over IL 13 (Old Freeburg Rd) & ICG Railroad LOGGED BY KEG

SECTION 27-1-VHB LOCATION St. Clair Twp - 1.4m E of IL 159; W1/2

COUNTY St. Clair DRILLING METHOD CME 55 w/HSA & Mud Rotary HAMMER TYPE Automatic

STRUCT. NO. 082-0051/0052 (existing)
Station
BORING NO. SB-6
Station 708+21
Offset 32.0 ft Lt
Ground Surface Elev. 466.46 ft

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.:
First Encounter 453.0 ft ▼
Upon Completion - ft
After 24 Hrs. 462.2 ft ▼

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
TOPSOIL & CRUSHED ROCK - 12 inches	465.5				
FILL: Dark brown, sandy clay, some cinders, trace crushed rock (A-6)			7		
			5	-	17
			7		
			4		
		▼	5	-	18
		-5	7		
FILL: Brown, silt (A-4)	461.0				
			3		
			6	2.2	21
			3	S	
FILL: Brown, silty clay (A-6)	458.5				
			1		
			2	1.0	28
		-10	2	B	
CLAY: Brown (A-7)	456.0				
			2		
			1	0.6	30
			2	B	
SILTY CLAY: Brown and grayish brown (A-6) ▼	453.5				
			1		
			2	0.8	29
		-15	2	B	
Becomes grayish brown			WH		
			2	0.1	29
			3	B	
CLAY: Brown (A-7)	448.5				
			1		
			2	1.2	25
		-20	4	B	
SILTY CLAY: Gray and brown, trace to some sand (A-7)	446.0				
			WH		
			2	0.7	22
			2	B	
SANDY CLAY: Brown (A-6)	443.5				
			1		
			2	0.5	22
		-25	3	B	
SILTY CLAY: Bluish gray, trace to some sand (A-7)	441.0				
			WH		
			1	0.6	23
			3	B	
SILT: Brown (A-4)	438.5				
			1		
			4	4.4	20
		-30	7	S	
Mud rotary drilling started at approximately 30 feet.					
ORGANIC SILT: Brown (A-4)	434.5				
			3		
			2	0.5	51
		-35	3	B	
			4	0.4	44
		-40	4	B	

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
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BBS, form 137 (Rev. 8-99)

FILE NAME = 082017-0118-76884-055-Boring Logs.dgn

STV

USER NAME = brazzara	DESIGNED - RAB	REVISED -	
	CHECKED - JAN	REVISED -	
PLOT SCALE = 2:0.0000 ':' / IN.	DRAWN - RAB	REVISED -	
PLOT DATE = 10/19/2011	CHECKED - JAN	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS
STRUCTURE NO. 082-0117 (E.B.) & 082-0118 (W.B.)
SHEET NO. S-55 OF S-62 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
103	27-1-VHB-1	ST. CLAIR	277	170
		CONTRACT NO. 76884		
		ILLINOIS FED. AID PROJECT		