Kaskaskia Engineering Group, LLC

SOIL BORING LOG

ROUTE FA 14 DESCRIPTION IL 15 Bridge over IL 13 (Old Freeburg Rd) & ICG Railroad Date 6/10/10 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-6 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

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
TOPSOIL & CRUSHED ROCK - 12 inches 464.0			
FILL: Brown, silty clay (A-6)	1		
	1 2	0.5 B	25
	2		
NO RECOVERY	3 -5 2	-	
459.5			
FILL: Grayish brown, clay (A-7)	WH		
	WH WH	0.3 B	42
457.0			
CLAY: Grayish brown (A-7)	WH		
	1 -10 1	0.2 B	33
454.5			
SILTY CLAY: Grayish brown (A-7) ▼	WH		
	1 2	0.4 B	30
452.0			
SILTY CLAY: Brown (A-6)	2		
	3 -15 4	0.7 B	27
449.5			
SILTY CLAY: Brown and gray (A-7)	1		
	2 3	0.5 B	27
447.0			
CLAY: Gray (A-7)	2		
	-20 2 2	0.8 B	24

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY: Gray (A-7) *(continued)*			
Becomes gray and brown	2		
	4 4	1.2 B	24
442.0			
SANDY CLAY: Gray (A-6)	2		
	3 -25 8	0.8 B	19
439.5			
CLAYEY SAND: Gray, fine (A-2)	1		
Mud rotary drilling started at approximately 26 feet.	4 2	-	20
437.0			
CLAY: Greenish gray and bluish gray (A-7)	2		
	3 -30 3	1.2 B	25
Mud rotary drilling started at approximately 30 feet.			
	3		
	5 -35 7	2.7 B	21
	4		
Some sand	5 -40 8	2.2 B	21

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

ROUTE FA 14 DESCRIPTION IL 15 Bridge over IL 13 (Old Freeburg Rd) & ICG Railroad Date 6/10/10 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-6 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

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY: Greenish gray and bluish gray (A-7) *(continued)*			
Becomes bluish gray, trace sand	2		
	-45 4 6	1.8 B	22
Becomes brown, trace sand, gravel	3		
	4 -50 5	1.4	20
	2		
	3 -55 4	0.7 B	25
408.0			
SILTY CLAY: Brown (A-7)	1		
	-60 1 3	-	24

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SILTY CLAY: Brown (A-7) *(continued)*			
403.0			
CLAY: Bluish gray (A-7)	2		
	-65 4 4	1.0 B	24
398.0			
SANDY CLAY: Gray, some silt and shale fragments (A-6)			
396.2			
WEATHERED LIMESTONE 396.1	50/5"	-	16
End of Boring			

The Uncorfined 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

ROUTE FA 14 DESCRIPTION IL 15 Bridge over IL 13 (Old Freeburg Rd) & ICG Railroad Date 6/9/10 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 ▼

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 -5 7	-	18
461.0			
FILL: Brown, silt (A-4)	3		
	6 3	2.2 S	21
458.5			
FILL: Brown, silty clay (A-6)	1		
	2 -10 2	1.0 B	28
456.0			
CLAY: Brown (A-7)	2		
	1 2	0.6 B	30
453.5			
SILTY CLAY: Brown and grayish brown (A-6) ▼	1		
	2 -15 2	0.8 B	29
Becomes grayish brown	WH		
	2 3	0.1 B	29
448.5			
CLAY: Brown (A-7)	1		
	-20 2 4	1.2 B	25

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
446.0			
SILTY CLAY: Gray and brown, trace to some sand (A-7)	WH		
	2 2	0.7 B	22
443.5			
SANDY CLAY: Brown (A-6)	1		
	2 -25 3	0.5 B	22
441.0			
SILTY CLAY: Bluish gray, trace to some sand (A-7)	WH		
	1 3	0.6 B	23
438.5			
SILT: Brown (A-4)	1		
	4 -30 7	4.4 S	20
Mud rotary drilling started at approximately 30 feet.			
434.5			
ORGANIC SILT: Brown (A-4)	3		
	2 -35 3	0.5 B	51
	2		
	4 -40 4	0.4 B	44

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)

FILE NAME = 082019-0120-76884-044-Boringlogs.dgn

STV

USER NAME = brazzaro	DESIGNED - MJK	REVISED - -
	CHECKED - JAN	REVISED - -
PLOT SCALE = 20.0000 '' / IN.	DRAWN - MJK	REVISED - -
PLOT DATE = 10/19/2011	CHECKED - JAN	REVISED - -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS
STRUCTURE NO. 082-0119 (E.B.) & 082-0120 (W.B.)
SHEET NO. S-44 OF S-51 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
103	27-1-VHB-1	ST. CLAIR	277	221
		CONTRACT NO. 76884		
	ILLINOIS FED. AID PROJECT			