BORING LOG SB-1 (Page 1)

Kaskaskia Engineering Group, LLC

SOIL BORING LOG

Page 1 of 2

Date 6/14/10

ROUTE FAP 103 DESCRIPTION IL 15 over IL 13 (Freeburg Avenue) and CN-IC RR LOGGED BY KEG

SECTION 27-1-VHB-1 LOCATION Belleville, Illinois

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

STRUCT. NO. 082-0051/0052
Station

BORING NO. SB-1
Station 703+65
Offset 53.1 ft Lt
Ground Surface Elev. 469.00 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 455.5 ft ▼
Upon Completion - ft
After - Hrs. - ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
TOPSOIL - 12 inches 468.0				SILTY CLAY: Brown (A-7) *(continued)*			
	5				WH		
FILL: Dark brown to black cinders	2	-	8		2	0.7	28
466.0	2				3	B	
FILL: Brown, silty clay (A-7)	2				2		
	2	1.1	22		2	0.8	24
463.5	2	B		-25	4	B	
FILL: Gray, clay (A-7)	1			443.5			
	2	0.3	33	SILTY CLAY: Grayish brown, some sand (A-6)	1		
	2	B			3	0.5	21
461.0					4	B	
CLAY: Gray (A-7)	1			441.0			
	2	1.1	25	CLAY: Brown and gray, some sand, trace gravel (A-7)	3		
	3	B			3	0.9	19
-10					3	B	
	1						
	2	1.2	28	Mud rotary drilling started at approximately 30 feet.			
	2	B					
456.0							
SILTY CLAY: Grayish brown (A-7) ▼	1			Becomes gray and brown, trace sand	3		
	2	0.7	27		4	1.2	21
	3	B			5	B	
-15 453.5				-35			
SILTY CLAY: Grayish brown (A-6)	1						
	2	0.5	27				
	2	B					
451.0							
SILTY CLAY: Brown (A-7)	WH			Becomes brown, some sand, trace gravel	2		
	1	0.2	32		4	1.0	19
-20	2	B		-40	4	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)

BORING LOG SB-1 (Page 2)

Kaskaskia Engineering Group, LLC

SOIL BORING LOG

Page 2 of 2

Date 6/14/10

ROUTE FAP 103 DESCRIPTION IL 15 over IL 13 (Freeburg Avenue) and CN-IC RR LOGGED BY KEG

SECTION 27-1-VHB-1 LOCATION Belleville, Illinois

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

STRUCT. NO. 082-0051/0052
Station

BORING NO. SB-1
Station 703+65
Offset 53.1 ft Lt
Ground Surface Elev. 469.00 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 455.5 ft ▼
Upon Completion - ft
After - Hrs. - ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY: Brown and gray, some sand, trace gravel *(A-7) (continued)*				CLAYEY SHALE: Tan, trace limestone rock *(continued)*			
No sand and gravel	3			Becomes tan and gray	27		
	5	2.3	22		50/1"	-	20
	6	B		-65			
-65				403.4			
				WEATHERED LIMESTONE			
				400.5			
Becomes bluish gray and greenish gray	4			NO RECOVERY End of Boring	50/0"	-	
	5	2.5	26				
	6	S					
-80 417.0							
SHALEY CLAY: Bluish gray and greenish gray (A-7)	9						
	15	3.3	22				
	16	B					
-95 412.0							
CLAYEY SHALE: Tan, trace limestone rock	6						
	12	-	22				
	50						
-100							

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)

BORING LOG SB-2 (Page 1)

Kaskaskia Engineering Group, LLC

SOIL BORING LOG

Page 1 of 2

Date 6/15/10

ROUTE FAP 103 DESCRIPTION IL 15 Bridge over IL 13 (Old Freeburg Rd) & ICG Railroad LOGGED BY KEG

SECTION 27-1-VHB-1 LOCATION Belleville, Illinois

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

STRUCT. NO. 082-0051/0052
Station

BORING NO. SB-2
Station 704+62
Offset 13.5 ft Lt
Ground Surface Elev. 464.97 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 451.5 ft ▼
Upon Completion - ft
After - Hrs. - ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CRUSHED ROCK - 12 inches 464.0				444.5			
	2			SILTY CLAY: Gray, some sand (A-6)	1		
FILL: Brown, clay, with some crushed rock (A-7)	2	-	22		2	0.9	22
	2				3	B	
Some sand and trace coal	1				4		
	1	0.1	39		5	1.0	20
-5	1	B		-25	8	S	
439.5							
Some cinders	WH			SANDY CLAY: Grayish brown (A-4)	1		
	WH	-	23		2	0.5	23
	WH				3	B	
457.0				437.0			
FILL: Grayish brown, silty clay (A-6)	WH			CLAY: Gray, trace sand (A-7)	1		
	2	0.5	26		2	1.3	25
-10	2	B			4	B	
454.5				-30			
SILTY CLAY: Grayish brown and brown (A-6)	WH						
	WH	-	32	Mud rotary drilling started at approximately 30 feet.			
	1						
452.0							
CLAYEY SILT: Gray and brown (A-4) ▼	2			Becomes gray and brown	5		
	2	1.6	25		5	1.8	23
-35	3	B		-40	6	B	
449.5							
SILTY CLAY: Gray (A-6)	2						
	3	0.2	29				
	2	B					
446.0							
CLAY: Gray and brown (A-7)	2	0.4	31	Becomes brown and gray, some sand	5		
-50	2	B			6	2.5	17
				-60	11	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)

FILE NAME = d82w311_76884_004_BoringLogs1.dgn

ZROKA engineering
Zroka Engineering, P.C.
4216 North Hermitage
Chicago, IL 60613

USER NAME = Scott Whitney	DESIGNED - PMM	REVISED -	---
	CHECKED - DAZ	REVISED -	---
PLOT SCALE = 0:2.0000 ':' / IN.	DRAWN - SAW	REVISED -	---
PLOT DATE = 10/18/2011	CHECKED - PMM	REVISED -	---

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS 1
STRUCTURE NO. 082–W311
SHEET NO. 4 OF 5 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
103	27-1-VHB-1	ST. CLAIR	277	232
		CONTRACT NO. 76884		
	ILLINOIS FED. AID PROJECT			