Illinois Department of Transportation
Division of Highways
Kaskaskia Engineering Group

SOIL BORING LOG

Page 1 of 2

ROUTE 331 DESCRIPTION IL Route 13 over BNSF Railroad near Marathon Drive LOGGED BY KEG
SECTION LOCATION Marion, SECS. 10SW & 15NW, TWP. 9S, RNG. 2E
COUNTY Williamson DRILLING METHOD CME 55LC w/HSA HAMMER TYPE Automatic
STRUCT. NO. Station
BORING NO. SB-4 Station 743+60.8 Offset 56.00ft Lt Ground Surface Elev. 446.74 ft
Surface Water Elev. ft Stream Bed Elev. ft
Groundwater Elev.: First Encounter 432.2 ft ▼ Upon Completion - ft After - Hrs. - ft
Date 11/6/09

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
GRASS, TOPSOIL, & CRUSHED ROCK - 12 Inches 444.74			
FILL: Brown, clayey silt, trace sand, organics (A-4)	1 2 2	0.5 B	32
442.74 SILTY CLAY: Grayish brown, trace sand (A-6)	1 2 2	0.0 B	28
-5			
440.24 CLAY: Brown and grayish brown (A-7)	WH 1 3	2.0 P	30
437.74 SILTY CLAY: Gray and brown (A-6)	2 2 4	1.0 B	25
-10			
435.24 CLAY: Brown and grayish brown (A-7)	2 2 3	1.3 B	22
▼			
-15	1 3 3	1.5 B	23
Becomes brown and gray, trace sand	1 2 2	1.0 B	27
Becomes brown, some sand, trace fine gravel	2 1 2	<0.25 P	21
-20			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
425.24 SILTY CLAY: Brown and grayish brown, trace to some sand, trace fine gravel (A-6)	2 2 3	0.8 B	24
-25	3 4 4	0.4 B	25
417.74 CLAY: Brown, some sand (A-7)	1 2 3	1.5 P	24
-30	3 3 5	1.0 B	18
411.74 CLAYEY SHALE: Tan and brown	6 10 24	4.5 P	14
-35			
Becomes brown	42 50/3"	-	13
-40	50/2"		

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, from 137 (Rev. 8-99)

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ROUTE 331 DESCRIPTION IL Route 13 over BNSF Railroad near Marathon Drive LOGGED BY KEG
SECTION LOCATION Marion, SECS. 10SW & 15NW, TWP. 9S, RNG. 2E
COUNTY Williamson DRILLING METHOD CME 55LC w/HSA HAMMER TYPE Automatic
STRUCT. NO. Station
BORING NO. SB-4 Station 743+60.8 Offset 56.00ft Lt Ground Surface Elev. 446.74 ft
Surface Water Elev. ft Stream Bed Elev. ft
Groundwater Elev.: First Encounter 432.2 ft ▼ Upon Completion - ft After - Hrs. - ft
Date 11/6/09

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAYEY SHALE: Tan and brown *(continued)*			
Becomes gray	50/4" 50/1"	-	14
-45			
397.04	50/1" 50/1"	-	14
-50			
-55			
-60			

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)

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ROUTE 331 DESCRIPTION IL Route 13 over BNSF Railroad near Marathon Drive LOGGED BY KEG
SECTION LOCATION Marion, SECS. 10SW & 15NW, TWP. 9S, RNG. 2E
COUNTY Williamson DRILLING METHOD CME 55LC w/HSA HAMMER TYPE Automatic
STRUCT. NO. Station
BORING NO. SB-7 Station 745+27.6 Offset 56.00ft Rt Ground Surface Elev. 446.20 ft
Surface Water Elev. ft Stream Bed Elev. ft
Groundwater Elev.: First Encounter 425.2 ft ▼ Upon Completion 429.2 ft ▽ After - Hrs. - ft
Date 11/10/09

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
GRASS, TOPSOIL, & CRUSHED ROCK - 12 Inches 445.20			
No Recovery	3 3 3	-	
443.20 CLAY: Grayish brown, trace sand (A-7)	3 3 3	2.5 P	26
-5			
440.70 SILTY CLAY: Grayish brown, trace sand (A-6)	1 1 1	0.5 P	31
438.20 CLAY: Gray, trace sand (A-7)	3 4 4	2.0 B	25
-10			
435.70 SILTY CLAY: Grayish brown and brown, some sand (A-7)	1 2 3	0.8 B	23
433.20 CLAY: Grayish brown and brown, trace to some sand (A-7)	2 3 3	1.1 B	21
-15			
Becomes brown, trace fine gravel ▽	WH 2 3	1.0 B	28
-20	WH 2 3	0.8 B	24

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY: Grayish brown and brown, trace to some sand (A-7) *(continued)* 424.70	1 1 1	<0.25 P	25
SANDY CLAY: Brown, trace fine gravel (A-4)	1 2 3	0.8 B	14
-25			
420.70 SANDY CLAY: Brown, trace fine gravel (A-6)	2 3 5	2.0 P	20
418.20 CLAY: Brown, some sand (A-7)	2 3 5	1.3 B	18
-30			
414.40 CLAYEY SHALE: Gray	14 20 47	4.5 P	13
-35			
Very hard drilling at 38.5 feet.	50/3" 50/1"	-	12
-40			

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, from 137 (Rev. 8-99)

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CMT
CRAWFORD MURPHY & TILLY, INC.
CONSULTING ENGINEERS
SPRINGFIELD, IL ■ AURORA, IL ■ ST. LOUIS, MO
ROCKFORD, IL ■ PEORIA, IL ■ CHICAGO, IL

USER NAME = Gary Davis	DESIGNED - MCC	REVISED -	
	CHECKED - ATI	REVISED -	
PLOT SCALE =	DRAWN - GLD	REVISED -	
PLOT DATE = 12/7/2011	CHECKED - ATI	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS I
STRUCTURE NO. 100-0093 (W.B.) & 100-0094 (E.B.)
SHEET NO.S-340F S-41 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(IX-1)VB-1	WILLIAMSON	367	200
		CONTRACT NO. 98859		
	ILLINOIS FED. AID PROJECT			