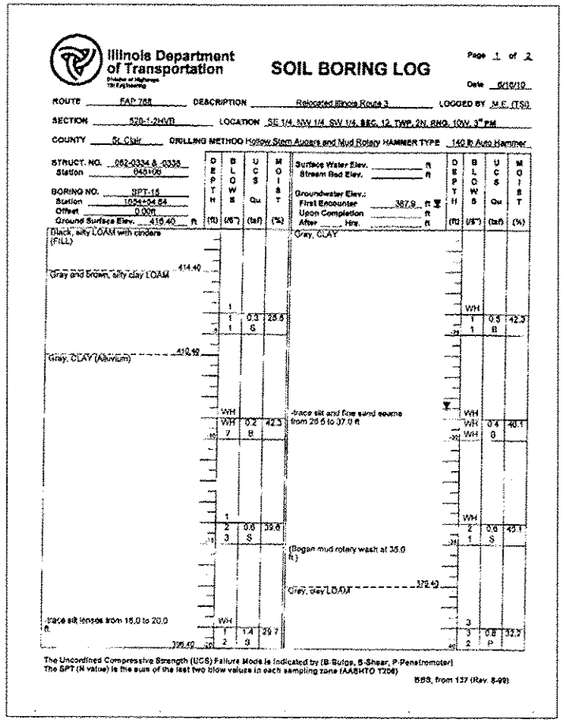


Illinois Department of Transportation
Division of Highways
TSI Engineering

SOIL BORING LOG

Page 1 of 2
Date 6/16/10

ROUTE FAP 788 DESCRIPTION Relocated Illinois Route 3 LOGGED BY M.E. (TSI)
SECTION 520-1-2HVB LOCATION SE 1/4, NW 1/4, SW 1/4, SEC. 12, TWP. 2N, RNG. 10W, 3rd PM
COUNTY St. Clair DRILLING METHOD Hollow Stem Augers and Mud Rotary HAMMER TYPE 140 lb Auto Hammer

STRUCT. NO. 082-0334 & -0335
Station 045+06
BORING NO. SPT-15
Station 1054+54.84
Offset 0.00ft
Ground Surface Elev. 416.40 ft

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.:
First Encounter 387.9 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
0			
1	1		
2	1	0.3	25.6
3	5	S	
4			
5			
6			
7	WH		
8	WH	0.2	42.3
9	7	B	
10			
11			
12	1		
13	2	0.6	35.6
14	3	S	
15			
16			
17	WH		
18	1	1.4	29.7
19	2	S	
20			

(Black, silty LOAM with cinders (FILL) 414.40
Gray and brown, silty clay LOAM 410.90
Gray, CLAY (Alluvium)
Trace silt and fine sand seams from 25.5 to 37.0 ft
(Began mud rotary wash at 35.0 ft.)
Gray, clay LOAM 379.40
Trace silt lenses from 15.0 to 20.0 ft
396.40

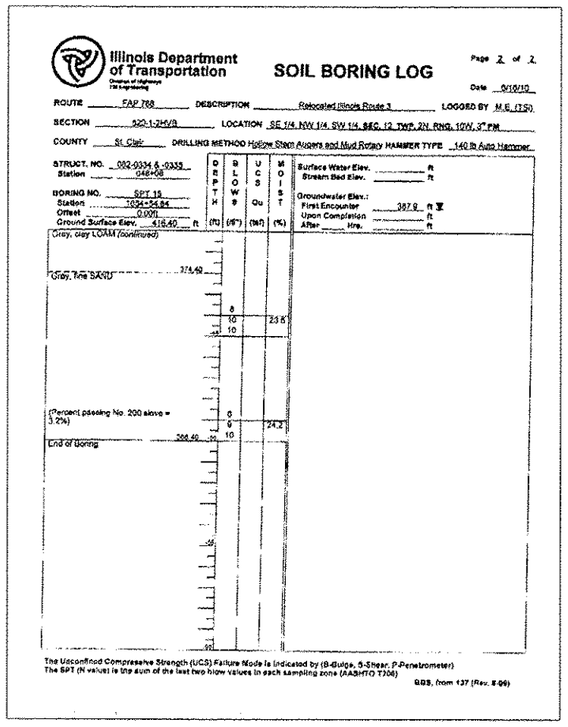
DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
20			
21	WH		
22	WH	0.4	40.1
23	WH	6	
24			
25			
26	WH		
27	2	0.6	45.1
28	1	S	
29			
30			
31	3		
32	3	0.8	32.7
33	2	P	
34			
35			

Gray, CLAY

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)

BORING SPT-15
(1 of 2)



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ROUTE FAP 788 DESCRIPTION Relocated Illinois Route 3 LOGGED BY M.E. (TSI)
SECTION 520-1-2HVB LOCATION SE 1/4, NW 1/4, SW 1/4, SEC. 12, TWP. 2N, RNG. 10W, 3rd PM
COUNTY St. Clair DRILLING METHOD Hollow Stem Augers and Mud Rotary HAMMER TYPE 140 lb Auto Hammer

STRUCT. NO. 082-0334 & -0335
Station 045+06
BORING NO. SPT-15
Station 1054+54.84
Offset 0.00ft
Ground Surface Elev. 416.40 ft

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.:
First Encounter 387.9 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
0			
1			
2			
3			
4			
5			
6			
7			
8	8		
9	10		23.6
10	10		
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

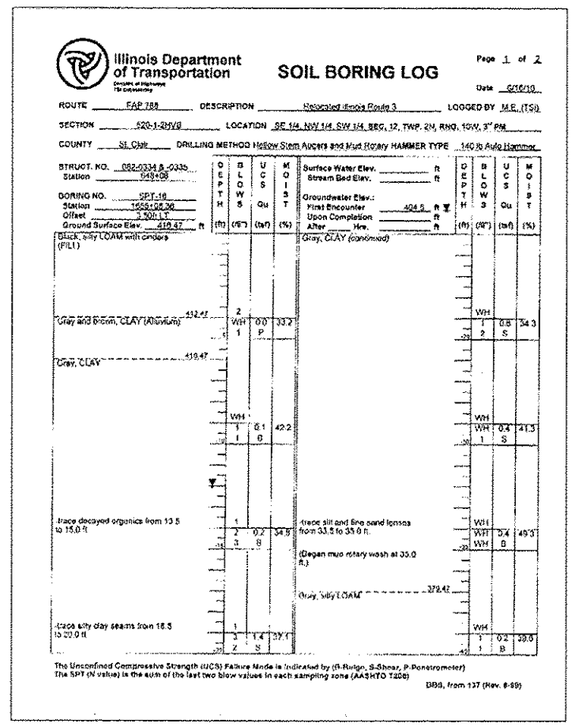
Gray, clay LOAM (continued)
Gray, fine SAND 374.50
(Percent passing No. 200 sieve = 3.2%)
End of Boring 366.40

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32	6		
33	9		24.2
34	10		
35			

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)

BORING SPT-15
(2 of 2)



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ROUTE FAP 788 DESCRIPTION Relocated Illinois Route 3 LOGGED BY M.E. (TSI)
SECTION 520-1-2HVB LOCATION SE 1/4, NW 1/4, SW 1/4, SEC. 12, TWP. 2N, RNG. 10W, 3rd PM
COUNTY St. Clair DRILLING METHOD Hollow Stem Augers and Mud Rotary HAMMER TYPE 140 lb Auto Hammer

STRUCT. NO. 082-0334 & -0335
Station 045+06
BORING NO. SPT-16
Station 1055+05.36
Offset 3.50ft LT
Ground Surface Elev. 416.47 ft

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.:
First Encounter 404.5 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
0			
1			
2	2		
3	WH	0.0	33.2
4	1	P	
5			
6			
7	WH		
8	1	0.1	42.2
9	1	B	
10			
11			
12	1		
13	2	0.2	34.9
14	3	B	
15			
16			
17	WH		
18	1	1.4	37.1
19	2	S	
20			

Black, silty LOAM with cinders (FILL)
Gray and brown, CLAY (Alluvium) 412.47
Gray, CLAY 410.47
Trace decayed organics from 13.5 to 15.0 ft
Trace silty clay seams from 18.5 to 20.0 ft

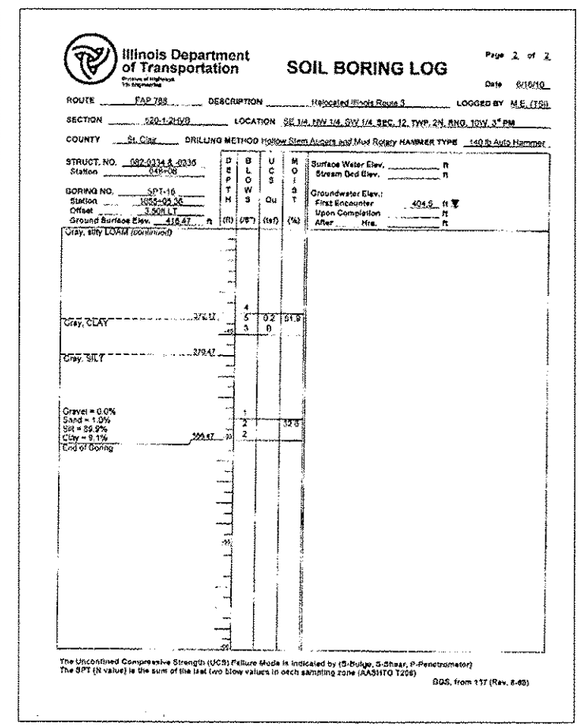
DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
20			
21	WH		
22	WH	0.4	49.3
23	WH	B	
24			
25			
26	WH		
27	1	0.2	28.6
28	1	B	
29			
30			
31			
32			
33			
34			
35			

Gray, CLAY (continued)
Trace silt and fine sand lenses from 33.5 to 35.0 ft.
(Began mud rotary wash at 35.0 ft.)
Gray, silty LOAM 378.42

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)

BORING SPT-16
(1 of 2)



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COUNTY St. Clair DRILLING METHOD Hollow Stem Augers and Mud Rotary HAMMER TYPE 140 lb Auto Hammer

STRUCT. NO. 082-0334 & -0335
Station 045+06
BORING NO. SPT-16
Station 1055+05.36
Offset 3.50ft LT
Ground Surface Elev. 416.47 ft

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.:
First Encounter 404.5 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
0			
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

Gray, silty LOAM (continued)
Gray, CLAY 376.47
Gray, SILT 379.47
Gravel = 0.0%
Sand = 1.0%
Silt = 59.9%
Clay = 9.1%
End of Boring 399.47

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32	4		
33	5		
34	5	0.2	31.8
35	5	P	

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)

BORING SPT-16
(2 of 2)

JACOBS	USER NAME =	DESIGNED - TSI ENGINEERING	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING LOGS STRUCTURE NO. 082-0334 (N.B.) & 082-0335 (S.B.)	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - TSI ENGINEERING	REVISED -			788	520-1-2HVB	ST. CLAIR	237	128
	PLOT DATE = 17-OCT-2012	DRAWN - M. MEYER	REVISED -		SHEET NO. C71 OF 76 SHEETS			CONTRACT NO. 76848		
FILE NAME = 0820334-76848-071-Boring Log.dgn		CHECKED - R. RILEY	REVISED -			ILLINOIS FED. AID PROJECT				

17-OCT-2012 P:\Civil\3000\700cadd\709str\FINAL PLANS\0820334-76848-071-Boring Log.dgn 16:43