STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 1887	6B-1	Williamson	27	27
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 5
5 SHEETS

Contract No. 98655

Illinois Department of Transportation — SOIL BORING LOG

Division of Highways, District Nine Materials

Page 1 of 2 — Date 92302

ROUTE FAS 1887 DESCRIPTION FAS 1884 (Old Rt 13) over Branch of Crab Orchard Creek LOGGED BY Bryan Keller

SECTION 6B-1 LOCATION East of Crab Orchard, SEC. 19, TWP. 9 S, RNG. 4 E, 3 PM

COUNTY Williamson DRILLING METHOD ____ HAMMER TYPE ____

STRUCT. NO. 100-0048
Station 262+90

BORING NO. 1-S
Station 263+33
Offset 14.00ft N CL
Ground Surface Elev. 99.3 ft

Surface Water Elev. 90.8 ft
Stream Bed Elev. ____ ft

Groundwater Elev.:
First Encounter 84.8 ft
Upon Completion 76.3 ft
After ____ Hrs. ____ ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Crushed Aggregate and Cinders	97.8				
Medium, very moist, brown, Silty Clay Loam A-6			1		
			WH	0.7	21
			1	S	
	94.8				
Stiff, very moist, brown, Silty Clay Loam A-6 with Cinder Layers		-5	1		
			WH	1.2	20
			1	S	
	92.3				
Medium, very moist, brown, Silty Clay Loam A-6 with a Sand Seam			WH		
			WH	0.7	24
			1	B	
	89.8				
Stiff, very moist, grey mottled brown, Silty Clay to Silty Clay Loam A-6		-10	1		
			1	1.2	23
			2	S	
	87.3				
Medium, moist to very moist, grey mottled brown, Silty Clay A-6 with a Sand Layer			1		
			1	0.9	21
			1	S	
	84.8				
Very soft, very moist to wet, brown, Silty Clay A-6 with Sand Layers		-15	WH		
			1	0.2	22
			WH	B	
	82.3				
Stiff to very stiff, moist, brown mottled grey, Clay A7-6			1		
			1	2.0	29
			1	S	
	79.8				
		-20	WH		
Stiff, very moist, brown mottled grey, Clay A7-6 (continued)			1	1.1	31
			1	S	
	74.8				
Stiff, very moist, grey, Silty Clay to Clay A7-6		-25	WH		
			2	1.2	24
			2	B	
	72.3				
Very stiff, moist, grey, Clay Loam A-6 with Sand Layers			1		
			3	2.4	19
			3	S	
	69.8				
Stiff, moist to very moist, grey, Silty Clay Loam A-6		-30	WH		
			2	1.6	24
			1	S	
			1		
			1	1.9	24
			2	S	
	64.8				
Very stiff, moist, grey, Silty Clay Loam A-6 with a Sand Layer		-35	1		
			2	2.2	22
			2	S	
	62.3				
Very stiff, moist, grey, Silty Clay Loam A-6 with some Pea Gravel			1		
			4	3.0	23
			4	S	
	59.8				
		-40	1		

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)

Illinois Department of Transportation — SOIL BORING LOG

Division of Highways, District Nine Materials

Page 2 of 2 — Date 92302

ROUTE FAS 1887 DESCRIPTION FAS 1884 (Old Rt 13) over Branch of Crab Orchard Creek LOGGED BY Bryan Keller

SECTION 6B-1 LOCATION East of Crab Orchard, SEC. 19, TWP. 9 S, RNG. 4 E, 3 PM

COUNTY Williamson DRILLING METHOD ____ HAMMER TYPE ____

STRUCT. NO. 100-0048
Station 262+90

BORING NO. 1-S
Station 263+33
Offset 14.00ft N CL
Ground Surface Elev. 99.3 ft

Surface Water Elev. 90.8 ft
Stream Bed Elev. ____ ft

Groundwater Elev.:
First Encounter 84.8 ft
Upon Completion 76.3 ft
After ____ Hrs. ____ ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Stiff, very moist, grey, Clay to Silty Clay A7-6 (continued)			1	1.1	22
			2	B	
	54.8				
Stiff, moist to very moist, grey, Silty Clay A-6 with some Coal Chips		-45	1		
			2	1.8	19
			4	B	
	49.8				
Very stiff, moist, grey, Silty Clay A-6		-50	1		
			5	2.9	17
			5	B	
	44.8				
Hard, dry, grey, Clay Shale		-55	2		
			100/1"		
Hard, dry, grey, Clay Shale		-60	1		
				100+*	
Hard, dry, grey, Clay Shale with a Sandstone Layer	34.3	-65			
				100+*	

Bottom of hole = 65.0 ft.

Free water observed at 14.5 ft.

Elevation referenced to center of Existing Structure; Assumed Elevation = 100.0 ft.

To convert "N" values to "N60" values, multiply by 1.25.

Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	-70			
	-75			
	-80			

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

Division of Highways, District Nine Materials

Page 1 of 2 — Date 92602

ROUTE FAS 1887 DESCRIPTION FAS 1884 (Old Rt 13) over Branch of Crab Orchard Creek LOGGED BY Bryan Keller

SECTION 6B-1 LOCATION East of Crab Orchard, SEC. 19, TWP. 9 S, RNG. 4 E, 3 PM

COUNTY Williamson DRILLING METHOD ____ HAMMER TYPE ____

STRUCT. NO. 100-0048
Station 262+90

BORING NO. 2-S
Station 262+47
Offset 13.00ft S CL
Ground Surface Elev. 99.8 ft

Surface Water Elev. 90.8 ft
Stream Bed Elev. ____ ft

Groundwater Elev.:
First Encounter 39.8 ft
Upon Completion 43.8 ft
After ____ Hrs. ____ ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Bituminous Pavement	98.3				
Very stiff, moist, brown, Silty Clay Loam A-6			1		
			3	2.2	17
			3	S	
	95.3				
Medium, moist, brown, Silt Loam A-4		-5	1		
			1	0.6	21
			1	S	
	92.8				
Medium, moist, brown, Silty Clay Loam A-6			1		
			WH	0.6	22
			1	S	
	90.3				
Stiff, very moist, brown, Silty Clay Loam A-6		-10	1		
			2	1.1	19
			3	S	
	87.8				
Medium, very moist, brown mottled grey, Silty Clay A-6 with some Gravel			WH		
			1	0.7	20
			1	B	
	85.3				
Stiff, very moist, grey mottled brown, Clay to Silty Clay A7-6		-15	1		
			1	1.2	22
			1	B	
	82.8				
Very stiff, moist, brown mottled grey, Silty Clay A-6 with some Pea Gravel			1		
			2	2.1	19
			4	S	
		-20	1		
Very stiff, moist, brown mottled grey, Silty Clay A-6 with some Pea Gravel (continued)			3	2.3	27
			5	S	
	77.8				
Very stiff, moist, grey, Silty Clay Loam A-6 with a Gravel Layer			1		
			3	3.5	16
			7	S	
	75.3				
Very stiff, moist, grey, Silty Clay Loam A-6		-25	1		
			3	3.9	20
			5	B	
	72.8				
Stiff, moist to very moist, grey, Silty Clay A-6			1		
			1	1.5	23
			3	B	
		-30	WH		
			WH	1.3	24
			1	B	
	67.8				
Very stiff, moist, grey, Silty Clay A-6			WH		
			1	2.1	21
			3	B	
	65.3				
Very stiff, damp to moist, grey, Silty Clay Loam A-6		-35	1		
			2	2.8	21
			3	S	
	62.8				
Very stiff, moist, grey, Silt Loam to Silty Clay Loam A-6			1		
			3	3.1	23
			5	S	
	60.3				
		-40	1		

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)

Illinois Department of Transportation — SOIL BORING LOG

Division of Highways, District Nine Materials

Page 2 of 2 — Date 92602

ROUTE FAS 1887 DESCRIPTION FAS 1884 (Old Rt 13) over Branch of Crab Orchard Creek LOGGED BY Bryan Keller

SECTION 6B-1 LOCATION East of Crab Orchard, SEC. 19, TWP. 9 S, RNG. 4 E, 3 PM

COUNTY Williamson DRILLING METHOD ____ HAMMER TYPE ____

STRUCT. NO. 100-0048
Station 262+90

BORING NO. 2-S
Station 262+47
Offset 13.00ft S CL
Ground Surface Elev. 99.8 ft

Surface Water Elev. 90.8 ft
Stream Bed Elev. ____ ft

Groundwater Elev.:
First Encounter 39.8 ft
Upon Completion 43.8 ft
After ____ Hrs. ____ ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Medium to stiff, moist to very moist, grey, Silty Clay Loam A-6 (continued)			2	1.0	32
			1	S	
	55.3				
Stiff, moist, grey, Silty Clay to Silty Clay Loam A-6		-45	1		
			1	1.9	19
			2	B	
	50.3				
Very stiff, moist, grey, Silty Clay A7-6		-50	1		
			3	2.2	18
			5	B	
	45.3				
Very stiff, moist, grey, Clay Loam A-6		-55	3		
			9	3.8	18
			18	S	
	40.3				
Hard, dry, grey, Clay Shale	39.8	-60	100/4"		

Bottom of hole = 60.0 ft.

Free water observed at 60.0 ft.

Elevation referenced to center of Existing Structure; Assumed Elevation = 100.0 ft.

To convert "N" values to "N60" values, multiply by 1.25.

Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	-70			
	-75			
	-80			

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 DETAILS
F.A.S. RT. 1887 SEC. 6B-1
WILLIAMSON COUNTY
STATION 262+90.00
S.N. 100-2021

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