



STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG

Guilford Bridge Replacement
23285.1000.32000

Boring No.: B-1
Page No.: 1 of 1
Pin No.: BRO 1442(36)
Checked By: _____

Boring Crew: S. Clavette, S. Johnston
Date Started: 11/22/11 Date Finished: 12/05/11
VTSPG NAD83: N 113488.19 ft E 1592811.68 ft
Station: 102+07.50 Offset: 4L
Ground Elevation: 1067.5 ft

Casing Sampler
Type: WASH BORE SS
I.D.: 4 in 1.25 in
Hammer Wt: 300 lb 140 lb.
Hammer Fall: 30 in. 30 in.
Hammer/Rod Type: Safety
Rig: B53 Mobile CE = 1

Groundwater Observations

Date	Depth (ft)	Notes
11/22/11	14.0	casing at 12 feet

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
5	× × ×	(Granular FILL), f.m.c. SAND, Some Silt, little f.c. gravel, very compact, brown, moist, Rec. = 1.3 ft	25-32-42-40 (74)	5.4	41.5	50.3	8.2
	× × ×	(Granular FILL), f.m.c. SAND, And f.c. Gravel, trace silt medium compact, Rec. = 1.4 ft	31-18-12-9 (30)				
	× × ×	(Granular FILL), becomes compact, Rec. = 0.6 ft	24-23-14-10 (37)				
	× × ×	(Fine Grained FILL), Clayey SILT, Some f.m.c. Sand, little f. gravel, hard, brownish gray, moist, Rec. = 1.2 ft	10-10-9-14 (19)				
	× × ×	(Fine Grained FILL), Similar Soil, Rec. = 1.2 ft	11-16-16-19 (32)				
	× × ×	(Fine Grained FILL), SILT, Some f. Sand, compact, light brown, moist, Rec. = 0.9 ft	32-20-22-23 (42)				
10	× × ×	(Fine Grained FILL), becomes very compact, Rec. = 1.3 ft	20-24-33-50/4" (57)				
	× × ×	(SM), f.m.c. SAND, Some Silt, little f.c. gravel, compact, light brown, moist, Rec. = 1.0 ft	16-23-20-43 (43)				
15		(SM), becomes very compact, Rec. = 1.2 ft	13-50-50/5" (>100)				
20		(ML)					
25		(ML), SILT, Some f. Sand, very compact, brown, wet, Rec. = 1.0 ft	38-32-39-43 (71)				
30		(Completely Weathered Bedrock)					
		(Completely Weathered Bedrock), f.m.c. SAND, little silt, little f. gravel, very compact, brown/black/gray, moist, Rec. = 1.2 ft	60-57-59-63 (>100)				
Hole stopped @ 32.0 ft Boring backfilled with cuttings and bituminous cold patch.							

Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
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3. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.



Boring Crew: S. Clavette, K. Owens
Date Started: 11/17/11 Date Finished: 11/22/11
VTSFG NAD83: N 113456.89 ft E 1592837.58 ft
Station: 102+43.50 Offset: 7R
Ground Elevation: 1066.5 ft

Casing Sampler
Type: WASH BORE SS
I.D.: 4 in 1.25 in
Hammer Wt: 300 lb 140 lb.
Hammer Fall: 30 in. 30 in.
Hammer/Rod Type: Safety
Rig: B53 Mobile CE = 1

Groundwater Observations
Date: 11/17/11 Depth (ft): 14.6 Notes: casing at 14 feet

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	
5	x x x	(Granular FILL), f.m.c. SAND, Some f.c. Gravel, trace silt, medium compact, brown, moist, Rec. = 0.9 ft			12-11-11-9 (22)					
		(Granular FILL), becomes loose, Rec. = 1.0 ft			7-4-4-8 (8)					
		(Fine Grained FILL), Clayey SILT, little f.m.c. sand, trace f.c. gravel, trace organics, medium compact, brown, moist, Rec. = 1.4 ft			4-6-6-6 (12)					
		(Fine Grained FILL), Similar Soil, Rec. = 1.4 ft			6-6-7-9 (13)					
10	x x x	(Fine Grained FILL), Similar Soil, Rec. = 1.2 ft			2-4-7-13 (11)					
		(SM), f.m.c. SAND, little silt, trace f. gravel, medium compact, brown, moist			29-44-27-25 (71)					
		(SM), f.m.c. SAND, Some f.c. Gravel, little silt, very compact, grayish brown, moist, Rec. = 0.4 ft			29-34-32-29 (66)					
15	x x x	(SM), f.m.c. SAND, little silt, compact, brown, wet, Rec. = 1.0 ft			14-19-23-31 (42)					
		(ML), SILT, little f. sand, trace f. gravel, compact, brown, wet			35-37-50/5- (>100)	24.4	1.8	16.3	81.9	
20	x x x	(ML), becomes very compact, Rec. = 1.0 ft			26-47-50/4- (>100)					
		(ML), Similar Soil, Rec. = 0.9 ft			19-25-25-30 (50)					
25	x x x	(ML), SILT, trace f.m.c. sand, very compact, brown, wet, Rec. = 0.6 ft, Strata change based on change in drilling.								
		(Completely Weathered Bedrock)								
30	x x x	(Completely Weathered Bedrock)								
		(Completely Weathered Bedrock), SILT, Some f.m.c. Sand, trace f.c. gravel, very compact, brown/black/orange, moist, Rec. = 0.7 ft			31-92-58 (>100)					

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Boring Crew: S. Clavette, K. Owens
Date Started: 11/17/11 Date Finished: 11/22/11
VTSFG NAD83: N 113456.89 ft E 1592837.58 ft
Station: 102+43.50 Offset: 7R
Ground Elevation: 1066.5 ft

Casing Sampler
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I.D.: 4 in 1.25 in
Hammer Wt: 300 lb 140 lb.
Hammer Fall: 30 in. 30 in.
Hammer/Rod Type: Safety
Rig: B53 Mobile CE = 1

Groundwater Observations
Date: 11/17/11 Depth (ft): 14.6 Notes: casing at 14 feet

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	
40	x x x	35.5 ft - 40.5 ft, White/gray/brown, Schist, very close fracture spacing. Medium hard, Moderately to severely weathered, NXDC, very poor RQD	R-1	36 (0)	Top of Bedrock	35.5 ft				
		40.5 ft - 42.0 ft, White/gray/brown, Schist, very close fracture spacing. Medium hard, Moderately to severely weathered, NXDC, very poor RQD	R-2	53 (0)						
		42.0 ft - 48.8 ft, White/gray/brown, Schist, close fracture spacing. Medium hard, Moderately weathered, NXDC, poor RQD	R-3	54 (43.4)						
		48.8 ft - 53.4 ft, White/gray/brown, Schist, close fracture spacing. Medium hard, Moderately weathered, NXDC, poor RQD	R-4	72 (46.7)						
55		Hole stopped @ 53.4 ft Boring backfilled with cuttings and bituminous cold patch.								

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BORING LOG

Guilford Bridge Replacement
23285.1000.32000

Boring No.: B-3
Page No.: 1 of 2
Pin No.: BRO 1442(36)
Checked By:

Boring Crew: M. D'Amdrosio, D. Spielvogel
Date Started: 12/05/11 Date Finished: 12/05/11
VTSFG NAD83: N 113439.01 ft E 1592928.49 ft
Station: 103+35.20 Offset: 8L
Ground Elevation: 1063.9 ft

Casing Sampler
Type: WASH BORE SS
I.D.: 4 in 1.25 in
Hammer Wt: 300 lb 140 lb.
Hammer Fall: 30 in. 30 in.
Hammer/Rod Type: Safety
Rig: Acker D52 CE = 1

Groundwater Observations		
Date	Depth (ft)	Notes
12/05/11	14.0	casing at 12 feet

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. (ROD %)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	
										Core Rec. (ROD %)
5	x x x	(Granular FILL), f.m.c. SAND, little silt, trace f.c. gravel, medium compact, brown, moist, Rec. = 0.5 ft			8-13-13-26 (26)					
		(Fine Grained FILL), Clayey SILT, Some f.m.c. Sand, little f.c. gravel, very stiff, dark brown, moist, Rec. = 1.3 ft			13-10-6-15 (16)					
		(Fine Grained FILL), becomes hard, Rec. = 1.5 ft			15-19-57-28 (76)					
10	x x x	(ML), Clayey SILT, Some f. Sand, hard, brown, moist, Rec. = 1.2 ft			20-21-21-29 (42)					
		(ML), Clayey SILT, Some f.m.c. Sand, trace f. gravel, hard, brown, moist, Rec. = 1.3 ft			27-29-29-40 (58)					
15	x x x	(SM), f.m.c. SAND, Some Silty Clay, Some f.c. Gravel, very compact, brown, moist, Rec. = 0.5 ft			34-39-43-42 (82)					
		(SM), Similar Soil., Rec. = 0.9 ft			36-39-47-44 (86)	13.9	28.4	42.3	29.3	
		(SM), becomes compact, wet, Rec. = 1.1 ft			25-18-27-31 (45)					
20	x x x	(SM)								
		(SM), f. SAND, Some Silt, very compact, brown, wet, Rec. = 1.2 ft			28-29-36-34 (65)					
25	x x x	(SM)								
		(SM), f.m.c. SAND, Some Silt, trace f. gravel, very compact, brown, wet, Rec. = 0.7 ft			32-37-60-31 (97)					
30	x x x	(SM), f.m.c. SAND, Some Silt, little f.c. gravel, very compact, brownish gray, wet, Rec. = 1.1 ft			60-65-42-44 (>100)					
		(ML)								

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Date	Depth (ft)	Notes
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										Core Rec. (ROD %)
40	x x x	(ML), Clayey SILT, Some f. Sand, hard, gray, wet, Rec. = 1.9 ft			17-21-31-36 (52)					
		(ML), Similar Soil., Rec. = 1.8 ft			19-20-30-30 (50)					
45	x x x	44.9 ft - 47.0 ft, Hard roller bit advancement @ 44.9 ft.								
		47.0 ft - 52.0 ft, White/gray/brown, Schist, very close fracture spacing. Medium hard, Moderately to severely weathered, NXDC, very poor RQD			R-1	46.7 (0)				
55	x x x	52.0 ft - 57.0 ft, White/gray/brown, Schist, close fracture spacing. Medium hard, Moderately weathered, NXDC, fair RQD								
		Hole stopped @ 57.0 ft Boring backfilled with cuttings and bituminous cold patch.			R-2	86.7 (52)				

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