
 <b>GEODESIGN INCORPORATED</b> <i>Geotechnical Engineers and Environmental Consultants</i> P.O. Box 699, Windsor, VT 05089 1233 Shelburne Rd., Suite 360, So. Burlington, VT 05403 Phone: 802-674-2033/Fax: 802-674-5943 Phone: 802-652-5140															<b>BORING LOG</b> Project Name <b>VTR Bridge #79</b> East Dorset, Vermont					Boring No.: <b>B-1</b> Page No.: <b>1 of 1</b> File No.: <b>837-27</b> Checked By: <b>JAG</b>	
Boring Company: <b>TransTech Drilling Services</b> Foreman: <b>John Leonhardt</b> GeoDesign Rep.: <b>Jacob Wmnett</b> Date Started: <b>January 12, 2009</b> Date Finished: <b>January 12, 2009</b> N. Coordinate: <b>267931</b> E. Coordinate: <b>1504337</b> Ground Surface Elevation (feet): <b>777</b> Station: <b>Offset: ft</b>			Casing: <b>Sampler:</b> Type: <b>H.S.A. SS</b> I.D.: <b>3.25 in. 1.38 in.</b>		Groundwater Observations Date: <b>Depth (ft): Elev. (ft):</b> <b>1/12/09 4.0 773.0 Wet sample</b> <b>1/13/09 3.1 773.9 Open hole</b>			Hammer Wt.: <b>NA 140 lbs</b> Hammer Fall: <b>NA 30 in</b> Rig Type: <b>CME 75</b> Hammer Type: <b>Automatic</b>													
Depth (ft)	Casing Blow/sft	Sample Information				Blows / 6 inch Interval	Depth (ft)	Strata Description	Symbol	Sample Description	Groundwater Observations										
		Number	Type	Penetration Resistance (lb/in <sup>2</sup> )	Recovery (inches)						0 - 6	6 - 12	12 - 18	18 - 24	PID Reading (ppm)	Moisture Content (%)					
0	S1	SS	24	13	0	1 2 4 2	Fill		S1) Loose, Top 12"; Black, SILT, some fine to coarse Sand, little Organics (root fibers), trace coarse Gravel, moist. Bottom 1"; Orange-brown, SILT and fine to coarse SAND.												
5	S2	SS	24	10	2	1 1 1 1			S2) Very loose, black, organic SILT, some wood fiber & pieces, trace fine Sand, very moist.												
5	S3	SS	24	10	4	WOH 2 2 2			S3) Very loose, black, organic SILT and WOOD, trace coarse Gravel, trace fine Sand, wet.												
7	S4	SS	24	10	6	WOH 6 4 1	Silly Sand & 770.0 Gravel (with Cobbles To 13")		S4) Medium dense, black, fine to coarse SAND, some Silt, trace root fibers, wet.												
10	S5	SS	24	24	9	4 10 4 7			S5) Medium dense, black, fine to coarse SAND and fine GRAVEL, little Silt, wet. (Fluid Consistency).												
10	S6	SS	24	7	11	15 10 9 3			S6) Medium dense, similar to S5.												
15	S7	SS	24	14	14	3 2 3 3			S7) Loose, brown, fine to coarse SAND, some fine Gravel, little Silt, wet. (Fluid Consistency).												
17.5							Weathered Rock		S8) Refusal, white highly weathered Rock.												
18	S8	SS	0.5	0.5	17.9	25@0.5"	Bedrock		C1) Buff to white, hard to moderately hard, fresh with slightly weathered fractures, moderately jointed, fair quality siliceous DOLOMITE (RQD=55%). Very weak reaction to diluted HCl.												
23							Bottom of Exploration at 23.0 ft														
Remarks: 1) Ground surface elevation estimated by GeoDesign personnel in the field from a site plan with survey points provided by VHB. 2) Light auger grinding on inferred Gravel/Cobbles from 7' to 13'. 3) Sample poured out of tip while opening S6 spoon. Unknown total recovery. (Estimated to be approximately 12"). 4) Hollow stem auger advance halted at 17.5', very slow advance and grinding. Hollow stem auger refusal at 18'. 5) Noted complete wash water loss at 19.1' to 23.1'. (Unable to approximate volume of water loss as reverse circulation was not used and water was pumped directly from the river.) Notes: 1) Stratification Lines Represent Approximate Boundary Between Material Types, Transitions May Be Gradual. 2) 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. A.C. = After casing, N.R. = Not Recorded. 3) Sample Type Coding: A=Auger, C=Core, D=Driven, G=Grab, PS=Piston Sampler, SS=Split Barrel (Split Spoon), ST=Shelby Tube, Geo = GeoProbe, V=Vane, WOR/H=Weight of Proportions Used: Trace = 1-10%; Little = 10-20%; Some = 20-35%; And = 35-50%. 4) Proportions Used: Trace = 1-10%; Little = 10-20%; Some = 20-35%; And = 35-50%.																					

ABUTMENT NO. 1  
BOTTOM OF FOOTING  
EL. = 772.68 FT

ESTIMATED PILE TIP  
EL. = 758 FT +/-

VT BORING LOG MC-PID 1/17/09 837-27 GPJ GEODESIGN STANDARD GDT 6/8/09

 <b>GEODESIGN INCORPORATED</b> <i>Geotechnical Engineers and Environmental Consultants</i> P.O. Box 699, Windsor, VT 05089 1233 Shelburne Rd., Suite 360, So. Burlington, VT 05403 Phone: 802-674-2033/Fax: 802-674-5943 Phone: 802-652-5140															<b>BORING LOG</b> Project Name <b>VTR Bridge #79</b> East Dorset, Vermont					Boring No.: <b>B-2</b> Page No.: <b>1 of 2</b> File No.: <b>837-27</b> Checked By: <b>JAG</b>	
Boring Company: <b>TransTech Drilling Services</b> Foreman: <b>John Leonhardt</b> GeoDesign Rep.: <b>Jacob Wmnett</b> Date Started: <b>January 13, 2009</b> Date Finished: <b>January 13, 2009</b> N. Coordinate: <b>267975</b> E. Coordinate: <b>1504341</b> Ground Surface Elevation (feet): <b>779</b> Station: <b>Offset: ft</b>			Casing: <b>Sampler:</b> Type: <b>Flush SS</b> I.D.: <b>3.0 in. 1.38 in.</b>		Groundwater Observations Date: <b>Depth (ft): Elev. (ft):</b> <b>1/13/09 5.0 774.0 Wet sample</b>			Hammer Wt.: <b>300 lbs 140 lbs</b> Hammer Fall: <b>24 in. 30 in.</b> Rig Type: <b>CME 75</b> Hammer Type: <b>Automatic</b>													
Depth (ft)	Casing Blow/sft	Sample Information				Blows / 6 inch Interval	Depth (ft)	Strata Description	Symbol	Sample Description	Groundwater Observations										
		Number	Type	Penetration Resistance (lb/in <sup>2</sup> )	Recovery (inches)						0 - 6	6 - 12	12 - 18	18 - 24	PID Reading (ppm)	Moisture Content (%)					
0	S1	SS	24	10	0	4 3 3 2	Fill		S1) Loose, black with tan fine to coarse SAND and SILT, little fine to coarse Gravel, trace ash, trace organics (root fibers), frozen, moist.												
5	S2	SS	24	8	2	5 5 5 4			S2) Medium dense, black and tan, fine to coarse SAND and fine to coarse GRAVEL, some Silt, moist.												
5	S3	SS	24	10	5	8 2 8 8	Cobbles 774.0 (inferred) Fill 773.0		S3) Medium dense, black to brown with orange, fine to coarse SAND and fine to coarse GRAVEL, some Silt, wet.												
10	S4	SS	18	0	7	7 4 2			S4) Loose, no recovery.												
10	S5	SS	24	10	10	13 14 14 11	Silly Sand & 769.0 gravel		S5) Medium dense, tannish brown, fine to coarse SAND and fine to coarse GRAVEL, little Silt, wet.												
10	S6	SS	18	6	12	12 5 5			S6) Medium dense, similar to S5.												
15	S7	SS	24	8	15	9 7 12 7			S7) Medium dense, orangish brown, fine to coarse SAND and fine to coarse GRAVEL, little Silt, wet.												
20	S8	SS	14	2	20	3 3 25@2"	Bedrock		S8) Refusal, similar to S7 with fractured rock in tip.												
21.2	C1	C	60	50	21.5		Bedrock 757.8		C1) White, moderately hard to hard, fresh to slightly weathered along fractures, moderately jointed, good quality siliceous DOLOMITE (RQD=83%). Very weak reaction to diluted HCl.												
Remarks: 1) Ground surface elevation estimated by GeoDesign personnel in the field from a site plan with elevation points provided by VHB. 2) Casing pushed from 0' to 7' with rig hydraulics. 3) Wash-drive drilling methods used. 4) Noted black water return at 4'. Note grinding and temporary loss of water return at 5' deep. 5) Tan return at nearly 6'. 6) Only sampled 18" at S4 and S6 due to hammer stroke. Notes: 1) Stratification Lines Represent Approximate Boundary Between Material Types, Transitions May Be Gradual. 2) 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. A.C. = After casing, N.R. = Not Recorded. 3) Sample Type Coding: A=Auger, C=Core, D=Driven, G=Grab, PS=Piston Sampler, SS=Split Barrel (Split Spoon), ST=Shelby Tube, Geo = GeoProbe, V=Vane, WOR/H=Weight of Proportions Used: Trace = 1-10%; Little = 10-20%; Some = 20-35%; And = 35-50%. 4) Proportions Used: Trace = 1-10%; Little = 10-20%; Some = 20-35%; And = 35-50%.																					

ABUTMENT NO. 2  
BOTTOM OF FOOTING  
EL. = 772.89 FT

VT BORING LOG MC-PID 1/17/09 837-27 GPJ GEODESIGN STANDARD GDT 6/8/09

BORING B-2 CONTINUED ON NEXT SHEET

PROJECT NAME: <b>DORSET</b>	FILE NAME: <b>z08q224bor logl.dgn</b>	PLOT DATE: <b>4/10/2014</b>
PROJECT NUMBER: <b>WCRS(8)</b>	PROJECT LEADER: <b>A.P. GUYETTE</b>	DRAWN BY: <b>GEODESIGN</b>
	DESIGNED BY: <b>M.A. COLGAN</b>	CHECKED BY: <b>S.E. BURBANK</b>
	BORING LOGS (1 OF 3)	SHEET <b>13</b> OF <b>33</b>

