



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

BORING NUMBER: B-101
 SHEET 1 of 1
 DATE STARTED: 6/04/09
 DATE COMPLETED: 6/04/09

PROJECT NAME: WINOOSKI
 SITE NAME: I-89 NB
 STATION: 16+32
 OFFSET: -40.00
 VTSPG NAD83: N 727292.62 ft E 1464850.97 ft

PROJECT NUMBER: NH 089-3(65)
 SITE NUMBER: EXIT#15 OFF RAMP
 GROUND ELEVATION: 272.14 ft
 GROUNDWATER DEPTH: NONE TAKEN
 PROJECT PIN NUMBER: 94A198

BORING CREW
 CREW CHIEF: PORTER
 DRILLER: PORTER
 LOGGER: WERNER

BORING RIG: LAG TRACK RIG #10 w/AUTO HAMMER
 BORING TYPE: HOLLOW STEM AUGER
 SAMPLE TYPE: SPLIT BARREL
 CHECKED BY: CEE

DEPTH (ft)	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. (%)	GRAVEL (%)	SAND (%)	FINES (%)	LL (%)	PI (%)
0		A-4, SiSa, brn, Moist, Rec. = 1.4 ft	2	12.5	5.2	52.0	42.8		
5		A-4, SiSa, brn, Wet, Rec. = 0.7 ft, Sample had a slight odor of possible septic.	WH	26.6	12.4	47.6	40.0		
10		A-4, Si, gry, Wet, Rec. = 1.3 ft	3	25.9	0.0	8.0	92.0	26	3
15		A-4, Si, gry, Wet, Rec. = 2.0 ft	WH	29.3	0.0	3.5	96.5	27	4
20		A-4, Si, gry, Wet, Rec. = 1.2 ft	9	25.8	0.0	19.0	81.0		
22.0		Hole stopped @ 22.0 ft							
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LOG OF BORING WINOOSKI NH 089-3(65).GPJ VT AOT.GDT 7/20/09



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BORING NUMBER: B-104
 SHEET 1 of 1
 DATE STARTED: 6/03/09
 DATE COMPLETED: 6/03/09

PROJECT NAME: WINOOSKI
 SITE NAME: I-89 NB
 STATION: 18+92
 OFFSET: 51.00
 VTSPG NAD83: N 727208.24 ft E 1465110.85 ft

PROJECT NUMBER: NH 089-3(65)
 SITE NUMBER: EXIT#15 OFF RAMP
 GROUND ELEVATION: 288.55 ft
 GROUNDWATER DEPTH: NONE TAKEN
 PROJECT PIN NUMBER: 94A198

BORING CREW
 CREW CHIEF: PORTER
 DRILLER: PORTER
 LOGGER: WERNER

BORING RIG: LAG TRACK RIG #10 w/AUTO HAMMER
 BORING TYPE: HOLLOW STEM AUGER
 SAMPLE TYPE: SPLIT BARREL
 CHECKED BY: CEE

DEPTH (ft)	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. (%)	GRAVEL (%)	SAND (%)	FINES (%)
0		A-2-4, GrSa, brn, Moist, Rec. = 1.3 ft	5	8.6	23.9	61.1	15.0
5		A-2-4, SiSa, brn, Moist, Rec. = 1.7 ft	7	9.2	2.2	75.1	22.7
10		A-3, Sa, brn, Wet, Rec. = 1.5 ft	12	19.1	11.9	80.2	7.9
15		A-2-4, SiSa, brn, Wet, Rec. = 1.7 ft	5	25.4	0.0	76.2	23.8
20		A-4, Si, gry, Wet, Rec. = 1.5 ft	4	28.3	0.0	11.8	88.2
Hole stopped @ 22.0 ft							
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LOG OF BORING WINOOSKI NH 089-3(65).CPJ VT.AOT.GDT 7/20/09



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BORING NUMBER: B-105
 SHEET 1 of 1
 DATE STARTED: 6/03/09
 DATE COMPLETED: 6/03/09

PROJECT NAME: WINOOSKI
 SITE NAME: I-89 NB
 STATION: 18+00
 OFFSET: 49.00
 VTSPG NAD83: N 727208.10 ft E 1465019.80 ft

PROJECT NUMBER: NH 089-3(65)
 SITE NUMBER: EXIT#15 OFF RAMP
 GROUND ELEVATION: 283.21 ft
 GROUNDWATER DEPTH: NONE TAKEN
 PROJECT PIN NUMBER: 94A198

BORING CREW
 CREW CHIEF: PORTER
 DRILLER: PORTER
 LOGGER: WERNER

BORING RIG: LAG TRACK RIG #10 w/AUTO HAMMER
 BORING TYPE: HOLLOW STEM AUGER
 SAMPLE TYPE: SPLIT BARREL
 CHECKED BY: CEE

DEPTH (ft)	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. (%)	GRAVEL (%)	SAND (%)	FINES (%)
0		A-2-4, GrSa, brn, Moist, Rec. = 1.2 ft	6	8.6	26.9	58.9	14.2
5		A-2-4, SiSa, brn, Moist, Rec. = 1.4 ft	10	25.7	0.0	73.5	26.5
10		A-4, SiSa, brn, Wet, Rec. = 1.5 ft	4	27.3	0.3	54.5	45.2
15		A-4, Si, gry, Wet, Rec. = 1.4 ft	3	27.0	0.0	13.7	86.3
20		A-4, SaSi, gry, Wet, Rec. = 2.0 ft	1	23.5	0.3	27.1	72.6
Hole stopped @ 22.0 ft							
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LOG OF BORING WINOOSKI NH 089-3(65).CPJ VT.AOT.GDT 7/20/09



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BORING NUMBER: B-106
 SHEET 1 of 1
 DATE STARTED: 6/03/09
 DATE COMPLETED: 6/03/09

PROJECT NAME: WINOOSKI
 SITE NAME: I-89 NB
 STATION: 16+97
 OFFSET: 41.00
 VTSPG NAD83: N 727207.57 ft E 1464917.53 ft

PROJECT NUMBER: NH 089-3(65)
 SITE NUMBER: EXIT#15 OFF RAMP
 GROUND ELEVATION: 275.95 ft
 GROUNDWATER DEPTH: NONE TAKEN
 PROJECT PIN NUMBER: 94A198

BORING CREW
 CREW CHIEF: PORTER
 DRILLER: PORTER
 LOGGER: WERNER

BORING RIG: LAG TRACK RIG #10 w/AUTO HAMMER
 BORING TYPE: HOLLOW STEM AUGER
 SAMPLE TYPE: SPLIT BARREL
 CHECKED BY: CEE

DEPTH (ft)	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. (%)	GRAVEL (%)	SAND (%)	FINES (%)
		Field Note: No Recovery, Cobbles	6				
		Cobbles with Gravely Sand, brn, Moist, Rec. = 0.6 ft, 2.0 ft - 3.0 ft	R	10.3	21.3	62.0	16.7
5		A-4, SaSi, brn, Moist, Rec. = 1.8 ft	12	22.1	1.7	37.7	60.6
10		A-4, SaSi, gry, Wet, Rec. = 1.4 ft	4	23.3	0.0	23.3	76.7
15		A-4, Si, gry, Wet, Rec. = 1.3 ft	3	26.3	0.0	12.1	87.9
20		A-4, SaSi, gry, Wet, Rec. = 2.0 ft	WH	24.6	0.0	27.6	72.4
		Hole stopped @ 22.0 ft					
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STATE OF VERMONT
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 SUBSURFACE INFORMATION

BORING NUMBER: B-107
 SHEET 1 of 1
 DATE STARTED: 6/02/09
 DATE COMPLETED: 6/02/09

PROJECT NAME: WINOOSKI
 SITE NAME: I-89 NB
 STATION: 57+50
 OFFSET: 42.00
 VTSPG NAD83: N 727002.30 ft E 1464907.52 ft

PROJECT NUMBER: NH 089-3(65)
 SITE NUMBER: EXIT#15 OFF RAMP
 GROUND ELEVATION: 269.31 ft
 GROUNDWATER DEPTH: HOLE CAVED IN
 PROJECT PIN NUMBER: 94A198

BORING CREW
 CREW CHIEF: PORTER
 DRILLER: PORTER
 LOGGER: WERNER

BORING RIG: LAG TRACK RIG #10 w/AUTO HAMMER
 BORING TYPE: HOLLOW STEM AUGER
 SAMPLE TYPE: SPLIT BARREL
 CHECKED BY: CEE

DEPTH (ft)	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. (%)	GRAVEL (%)	SAND (%)	FINES (%)
5		A-2-4, GrSa, brn, Wet, Rec. = 0.9 ft	6	17.4	23.3	64.8	11.9
		A-2-4, SiSa, brn, Wet, Rec. = 0.4 ft	6	28.5	17.3	53.3	29.4
		A-4, Si, gry, Wet, Rec. = 0.8 ft		24.2	0.0	13.3	86.7
		A-4, Si, gry, Wet, Rec. = 1.1 ft	7	22.8	0.0	17.8	82.2
		A-4, SaSi, gry, Wet, Rec. = 1.2 ft	6	20.3	0.0	44.6	55.4
		A-4, Si, gry, Wet, Rec. = 1.2 ft	2	26.3	0.0	19.8	80.2
		A-4, Si, gry, Wet, Rec. = 1.4 ft	1	24.4	0.0	16.1	83.9
		A-4, Si, gry, Wet, Rec. = 1.6 ft	1	27.7	0.0	6.8	93.2
		A-4, Si, gry, Wet, Rec. = 1.5 ft	1	29.1	0.0	3.8	96.2
		A-4, Si, gry, Wet, Rec. = 2.0 ft	1	28.9	0.0	4.4	95.6
20		A-4, Si, gry, Wet, Rec. = 2.0 ft	4	24.8	0.0	7.3	92.7
20		Hole stopped @ 20.0 ft					
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BORING NUMBER: B-108
 SHEET 1 of 1
 DATE STARTED: 6/02/09
 DATE COMPLETED: 6/02/09

PROJECT NAME: WINOOSKI
 SITE NAME: I-89 NB
 STATION: 57+50
 OFFSET: -32.00
 VTSPG NAD83: N 727006.74 ft E 1464836.18 ft

PROJECT NUMBER: NH 089-3(65)
 SITE NUMBER: EXIT#15 OFF RAMP
 GROUND ELEVATION: 271.57 ft
 GROUNDWATER DEPTH: NONE TAKEN
 PROJECT PIN NUMBER: 94A198

BORING CREW
 CREW CHIEF: PORTER
 DRILLER: PORTER
 LOGGER: WERNER

BORING RIG: LAG TRACK RIG #10 w/AUTO HAMMER
 BORING TYPE: HOLLOW STEM AUGER
 SAMPLE TYPE: SPLIT BARREL
 CHECKED BY: CEE

DEPTH (ft)	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. (%)	GRAVEL (%)	SAND (%)	FINES (%)	
5		A-4, SaSi, brn, Moist, Rec. = 1.5 ft	2	19.2	0.4	32.1	67.5	
5		A-4, SaSi, brn, Moist, Rec. = 1.4 ft	6	23.9	0.0	23.3	76.7	
10		A-4, Si, gry, Wet, Rec. = 1.1 ft	6	23.8	0.0	18.2	81.8	
15		A-4, Si, gry, Wet, Rec. = 1.5 ft	2	27.0	0.0	6.7	93.3	
20		A-4, Si, gry, Wet, Rec. = 2.0 ft	WH	23.9	0.0	7.3	92.7	
		Hole stopped @ 22.0 ft						
25		DRILLER'S NOTES: 1. Water table was at ground level.						
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BORING NUMBER: B-109
 SHEET 1 of 1
 DATE STARTED: 6/04/09
 DATE COMPLETED: 6/04/09

PROJECT NAME: WINOOSKI
 SITE NAME: I-89 NB
 STATION: 19+32
 OFFSET: -6.00
 VTSPG NAD83: N 727264.52 ft E 1465175.09 ft

PROJECT NUMBER: NH 089-3(65)
 SITE NUMBER: EXIT#15 OFF RAMP
 GROUND ELEVATION: 293.18 ft
 GROUNDWATER DEPTH: NONE TAKEN
 PROJECT PIN NUMBER: 94A198

BORING CREW
 CREW CHIEF: PORTER
 DRILLER: PORTER
 LOGGER: WERNER

BORING RIG: LAG TRACK RIG #10 w/AUTO HAMMER
 BORING TYPE: HOLLOW STEM AUGER
 SAMPLE TYPE: SPLIT BARREL
 CHECKED BY: CEE

DEPTH (ft)	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. (%)	GRAVEL (%)	SAND (%)	FINES (%)
5		A-2-4, SiGrSa with Cobbles, brn, Moist, Rec. = 0.8 ft	8	9.2	24.3	55.0	20.7
		A-2-4, GrSa with Cobbles, brn, Moist, Rec. = 1.1 ft, Broken rock was within sample.	37	5.1	33.9	49.3	16.8
		A-2-4, SiSa, brn, Moist, Rec. = 1.7 ft	6	11.3	3.7	63.1	33.2
		A-2-4, Sa, brn, Moist, Rec. = 1.5 ft	9	6.8	9.3	79.3	11.4
		A-2-4, SiSa, brn, Moist, Rec. = 2.0 ft	11	12.2	0.8	71.9	27.3
15		A-4, SaSi, brn, Wet, Rec. = 1.4 ft	4	27.9	0.0	48.5	51.5
20		A-4, Si, gry, Wet, Rec. = 1.5 ft	5	26.8	0.0	20.0	80.0
Hole stopped @ 22.0 ft							
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