



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

BORING NUMBER: B-101
 SHEET 1 of 1
 DATE STARTED: 10/26/06
 DATE COMPLETED: 10/26/06

PROJECT NAME: SOUTH BURLINGTON
 SITE NAME: I-89
 STATION: 214+62.83
 OFFSET: 91.56
 VTSPG: N 715591.28 ft E 1461610.91 ft

PROJECT NUMBER: IM CULV(9)
 SITE NUMBER: MM 88.1
 GROUND ELEVATION:
 GROUNDWATER DEPTH: Hole caved in.
 PROJECT PIN NUMBER: 06A136

BORING CREW
 CREW CHIEF: HOLT
 DRILLER: GARROW
 LOGGER: WERNER

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

DEPTH (ft)	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. (%)	GRAVEL (%)	SAND (%)	FINES (%)	LL (%)	PI (%)
5		A-2-4, GrSa, brn, Moist, Rec. = 0.6 ft	16	10.4	27.9	54.2	17.9		
		Visual Class., A-2-4, SaSiGr, brn, Moist, Rec. = 0.1 ft	7						
		No Recovery, Rock in end of sampler., 4.0 ft - 6.0 ft	3						
10		A-2-4, SiSa, gry, Moist, Rec. = 0.6 ft	2	24.1	5.1	69.6	25.3		
		A-4, Si, gry, Moist, Rec. = 0.9 ft	2	31.3	0.0	6.5	93.5	24	2
		A-4, Si, gry, Wet, Rec. = 1.2 ft	2	31.4	0.3	11.1	88.6	25	3
		No Recovery, Rock in end of sampler., 10.0 ft - 12.0 ft	2						
15		A-4, Si, gry, Wet, Rec. = 2.0 ft	2	30.8	0.0	1.3	98.7	28	5
		A-6, SiCl, gry, Wet, Rec. = 2.0 ft	1	35.7	0.0	1.6	98.4	32	11
20		A-7-6, Cl, gry, MTW, Rec. = 2.0 ft	1	61.2	0.0	4.8	95.2	65	38
25		A-7-6, Cl, gry, MTW, Rec. = 2.0 ft	1	65.4	0.0	1.9	98.1	68	39
30		A-7-6, Cl, gry, MTW, Rec. = 2.0 ft	1	59.5	0.6	4.2	95.2	64	38
35		A-7-6, Cl, gry, MTW, Rec. = 2.0 ft	WH	43.6	0.2	4.7	95.1	45	24
		Hole stopped @ 37.0 ft							
40		DRILLER'S NOTES: 1. Hole stopped at 37.0 feet on possible Boulder or Ledge. 2. The Kelly Bar broke on the drill rig when we reached 37.0 feet.							
45									

LOG OF BORING - SOUTH BURLINGTON IM CULV(9).DPI VT AOT.GDT 11/29/06



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BORING NUMBER: B-102
 SHEET 1 of 1
 DATE STARTED: 10/31/06
 DATE COMPLETED: 10/31/06

PROJECT NAME: SOUTH BURLINGTON
 SITE NAME: I-89
 STATION: 214+54.01
 OFFSET: -1.50
 VTSPG: N 715571.69 ft E 1461519.51 ft

PROJECT NUMBER: IM CULV(9)
 SITE NUMBER: MM 88.1
 GROUND ELEVATION:
 GROUNDWATER DEPTH: Hole caved in.
 PROJECT PIN NUMBER: 06A136

BORING CREW
 CREW CHIEF: GARROW
 DRILLER: GARROW
 LOGGER: WERNER

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

DEPTH (ft)	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. (%)	GRAVEL (%)	SAND (%)	FINES (%)	LL (%)	PI (%)
0		A-4, SiSa, brn, Moist, Rec. = 1.1 ft	3	20.0	0.4	58.5	41.1		
5		A-4, SiSa, gry-brn, Moist, Rec. = 1.7 ft	13	21.5	0.1	54.3	45.6		
10		A-4, SaSi, gry, Moist, Rec. = 1.8 ft	6	28.1	0.1	40.9	59.0		
15		A-2-4, SiSa, gry, Moist, Rec. = 0.6 ft	3	25.1	0.5	73.4	26.1		
20		A-2-4, Sa, gry, MTW, Rec. = 0.5 ft	WH	25.2	2.9	78.1	19.0	29	5
		A-4, Si, gry, MTW, Rec. = 1.5 ft		32.6	0.0	1.0	99.0		
25		A-6, Cl, gry, MTW, Rec. = 1.8 ft	WH	41.5	0.0	6.1	93.9	39	20
30		A-7-6, Cl, gry, MTW, Rec. = 2.0 ft	WH	55.4	3.6	15.0	81.4	53	30
35		A-7-6, Cl, gry, MTW, Rec. = 2.0 ft	WH	68.8	0.7	5.0	94.3	70	41
40		A-7-6, Cl, gry, MTW, Rec. = 2.0 ft	WH	47.9	0.5	5.8	93.7	49	27
42.0		Hole stopped @ 42.0 ft							
45		DRILLER'S NOTES: 1. No Ground Water Elevation. Hole caved in.							

LOG OF BORING - SOUTH BURLINGTON, IM CULV(9).LSP.J VT.AOT.GDT 11/29/06



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

BORING NUMBER: B-103
 SHEET 1 of 1
 DATE STARTED: 11/01/06
 DATE COMPLETED: 11/01/06

PROJECT NAME: SOUTH BURLINGTON
 SITE NAME: I-89
 STATION: 214+33.44
 OFFSET: -85.37
 VTSPG: N 715541.50 ft E 1461438.60 ft

PROJECT NUMBER: IM CULV(9)
 SITE NUMBER: MM 88.1
 GROUND ELEVATION:
 GROUNDWATER DEPTH: 3.9 ft 11/01/06
 PROJECT PIN NUMBER: 06A136

BORING CREW
 CREW CHIEF: GARROW
 DRILLER: GARROW
 LOGGER: WERNER

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

DEPTH (ft)	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. (%)	GRAVEL (%)	SAND (%)	FINES (%)	LL (%)	PI (%)
5		A-4, SiSa, brn, Moist, Rec. = 1.3 ft	5	32.2	0.5	60.7	38.8		
		A-4, SiSa, brn, Moist, Rec. = 0.8 ft	2	27.8	1.7	59.6	38.7		
		A-4, SiSa, brn, Wet, Rec. = 0.4 ft	WH	29.1	0.7	52.6	46.7		
10		A-4, SiSa, gry, Wet, Rec. = 1.1 ft	5	27.0	0.9	50.8	48.3		
		A-4, SaSi, gry, Wet, Rec. = 1.0 ft	2	30.3	0.0	23.7	76.3		
		A-4, Si, gry, Wet, Rec. = 1.2 ft	WH	33.6	0.0	5.2	94.8	27	4
15		A-4, Si, gry, Wet, Rec. = 1.7 ft	WH	32.4	0.0	1.5	98.5	28	3
20		A-4, ClSi, gry, Wet, Rec. = 2.0 ft	WH	34.5	0.0	0.6	99.4	31	8
25		A-7-6, Cl, gry, Wet, Rec. = 2.0 ft	WH	48.3	0.0	6.1	93.9	55	32
30		A-7-6, Cl, gry, Wet, Rec. = 2.0 ft	WH	65.8	1.1	3.8	95.1	73	45
35		A-7-6, Cl, gry, Wet, Rec. = 2.0 ft	WH	48.7	0.0	2.1	97.9	57	30
40		A-7-6, Cl, gry, Wet, Rec. = 2.0 ft	WH	51.4	0.0	2.4	97.6	54	31
45		Hole stopped @ 42.0 ft							

LOG OF BORING - SOUTH BURLINGTON, IM CULV(9).DPT 11/20/06