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

BORING LOG

Culvert Nos. 83-1 S&N
Georgia, Vermont

Georgia IM CULV (25)

Boring No.: B-1
Page No.: 1 of 1
Pin No.: 11a218
Checked By: ASP

Boring Crew: Drilex/Terracon (RJF)
Date Started: 1/23/14 Date Finished: 1/23/14
VTSPG NAD83: N 798696.35 ft E 1477418.36 ft
Station: 2980+65.50 Offset: 93.00LT
Ground Elevation: 336.0 ft

	Casing	Sampler
Type:	H.S.A.	SS
I.D.:	4.25 in	2 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:		Auto
Rig:	CME 550 ATV	CE = 1.33

Groundwater Observations

Date	Depth (ft)	Notes
01/23/14	0.7	AB

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		6-inches topsoil		43.1	29.4	51.3	19.3
		A-2-4, SaGrSi, gray-brown, Rec. = 2.0 ft, frozen (FILL)	5-3-2-2 (5)				
2.5		Rec. = 2.0 ft A-2-4, SaGrSi, brown	3-3-3-3 (6)	18.7	31.7	55.8	12.5
		A-2-4, SaSi, gray-brown, Rec. = 2.0 ft, with wood pieces	2-1-2-2 (3)	44.0	0.2	80.6	19.2
5.0							
		A-2-4, SaSi, gray-brown, Rec. = 2.0 ft, with wood pieces	2-2-2-1 (4)	34.0		86.8	13.2
7.5							
		A-4, SiSa, gray, Rec. = 2.0 ft	1-1-1-1 (2)	25.6		40.4	59.6
10.0		A-4, SaSi, black, wet, Rec. = 2.0 ft	1-1-1-1 (2)	41.0	1.4	52.0	46.6
		Organics from 11 to 13 feet, 4rganic content					
12.5		A-4, SiSa, black-gray, very wet, Rec. = 2.0 ft, 15rganic content	2-2-2-2 (4)	70.5	0.3	33.2	66.5
		.					
		A-2-4, SaSi, gray, Rec. = 2.0 ft	2-2-2-3 (4)	30.9	0.2	65.0	34.8
15.0							
		Hole stopped @ 16.0 ft					
17.5							
20.0							

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. CE is the hammer energy correction factor. CE is an estimated value.
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.
4. Ground surface elevations indicated on the boring logs were estimated based on the grading plan provided by VAOT.

2010 COPY J1135172.GPJ VERMONT AOT.GDT 3/21/14

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

BORING LOG

Culvert Nos. 83-1 S&N
Georgia, Vermont
Georgia IM CULV (25)

Boring No.: B-2
Page No.: 1 of 3
Pin No.: 11a218
Checked By: ASP

Boring Crew: Drilex/Terracon (RJF)
Date Started: 1/23/14 Date Finished: 1/23/14
VTSPG NAD83: N 798730.52 ft E 1477510.83 ft
Station: 2981+37.00 Offset: 15.00LT
Ground Elevation: 370.0 ft

	Casing	Sampler
Type:	H.S.A.	SS
I.D.:	4.25 in	2 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:		Auto
Rig:	CME 550 ATV	CE = 1.33

Groundwater Observations

Date	Depth (ft)	Notes
01/23/14	39.5	AB

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		4-inches Bituminous concrete pavement					
		A-1-a, GrSaSi, brown, auger sample (FILL) Rec. = 0.0 ft	50/3"	1.0	54.7	34.9	10.4
5.0		A-2-4, SaSi, brown, Rec. = 2.0 ft, (FILL)	4-12-18-20 (30)	5.9	1.4	74.7	23.9
10.0		A-2-4, SaSi, brown, Rec. = 2.0 ft, (FILL)	6-13-17-22 (30)	5.8	0.4	78.8	20.8
15.0		A-2-4, SaSi, brown, Rec. = 2.0 ft, (FILL)	6-14-17-24 (31)	8.0	3.1	72.2	24.7
20.0		A-2-4, SaSi, brown, Rec. = 2.0 ft, (FILL)	10-17-20-25 (37)	8.7	0.8	67.2	32.2

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. CE is the hammer energy correction factor. CE is an estimated value.
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.
4. Ground surface elevations indicated on the boring logs were estimated based on the grading plan provided by VAOT.

2016 COPY J:\1SSV\72.GPJ VERMONT.GDT.GDT 3/21/14

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

BORING LOG

Culvert Nos. 83-1 S&N
Georgia, Vermont
Georgia IM CULV (25)

Boring No.: B-2
Page No.: 2 of 3
Pin No.: 11a218
Checked By: ASP

Boring Crew: Drilex/Terracon (RJF)
Date Started: 1/23/14 Date Finished: 1/23/14
VTSPG NAD83: N 798730.52 ft E 1477510.83 ft
Station: 2981+37.00 Offset: 15.00LT
Ground Elevation: 370.0 ft

	Casing	Sampler
Type:	H.S.A.	SS
I.D.:	4.25 in	2 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:		Auto
Rig:	CME 550 ATV	CE = 1.33

Groundwater Observations

Date	Depth (ft)	Notes
01/23/14	39.5	AB

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
25.0		A-2-4, SaGrSi, brown, Rec. = 2.0 ft, (FILL)	10-18-26-15 (34)	13.8	27.0	57.7	15.3
		A-1-A, GrSaSi, brown, Rec. = 2.0 ft, (FILL)		2.5	73.6	19.8	6.6
30.0		A-2-4, SaSi, brown, Rec. = 2.0 ft, (FILL)	6-16-17-23 (33)	7.7	2.7	78.6	20.7
35.0		A-2-4, SaSi, brown, Rec. = 2.0 ft, (FILL)	5-4-3-4 (7)	11.6	4.6	84.6	10.8
37.5		A-3, SaSi, brown, Rec. = 2.0 ft, (FILL)	6-8-8-8 (12)	20.1	0.6	89.5	9.9
40.0		A-2-4, SaSi, brown, Rec. = 2.0 ft, (FILL)	3-4-7-5 (11)	21.9	0.7	86.5	12.8
42.5		A-2-4, SaSi, gray-brown, Rec. = 2.0 ft, (FILL)	6-10-13-18 (23)	17.0	0.8	83.4	15.8

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. CE is the hammer energy correction factor. CE is an estimated value.
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.
4. Ground surface elevations indicated on the boring logs were estimated based on the grading plan provided by VAOT.

2016 COPY J:\1SSV\72.GPJ VERMONT.GDT.GDT 3/21/14

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

BORING LOG

Culvert Nos. 83-1 S&N
Georgia, Vermont
Georgia IM CULV (25)

Boring No.: B-2
Page No.: 3 of 3
Pin No.: 11a218
Checked By: ASP

Boring Crew: Drilex/Terracon (RJF)
Date Started: 1/23/14 Date Finished: 1/23/14
VTSPG NAD83: N 798730.52 ft E 1477510.83 ft
Station: 2981+37.00 Offset: 15.00LT
Ground Elevation: 370.0 ft

	Casing	Sampler
Type:	H.S.A.	SS
I.D.:	4.25 in	2 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:		Auto
Rig:	CME 550 ATV	CE = 1.33

Groundwater Observations

Date	Depth (ft)	Notes
01/23/14	39.5	AB

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		A-2-4, SaSi, gray-brown, Rec. = 2.0 ft, with wood pieces at 45 feet (FILL)	4-4-5-5 (10)	30.5	1.0	81.2	17.8
47.5		A-2-4, SaSi, gray, Rec. = 2.0 ft, stratified sand and clay layers	8-8-7-8 (15)	22.3	1.5	78.7	21.8
		A-4, SlSaGr, gray, Rec. = 2.0 ft, stratified sand and clay layers	3-4-4-4 (8)	29.0	6.4	46.6	47.0
50.0		A-4, SaSi, gray, Rec. = 2.0 ft	2-3-4-3 (7)	27.5	0.3	54.3	45.4
52.5		Blow-in, no sample recovery, advance to 54 feet					
55.0		A-2-4, SaSlGr, gray, Rec. = 2.0 ft	2-2-2-2 (4)	24.4	21.6	54.4	24.0
		A-4, Si, Rec. = 2.0 ft	1-3-5-8 (11)	24.4	1.2	3.1	95.7
57.5		A-7-6, ClGr, gray, Rec. = 2.0 ft	3-4-4-4 (8)	38.0	16.7	3.4	79.9
60.0		Hole stopped @ 60.0 ft					

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. CE is the hammer energy correction factor. CE is an estimated value.
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.
4. Ground surface elevations indicated on the boring logs were estimated based on the grading plan provided by VAOT.

2016 COPY J:\1SSV\72.GPJ VERMONT.GDT.GDT 3/21/14

VTrans Working to Get You There — Vermont Agency of Transportation

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

BORING LOG

Culvert Nos. 83-1 S&N
Georgia, Vermont
Georgia IM CULV (25)

Boring No.: B-3
Page No.: 1 of 1
Pin No.: 11a218
Checked By: ASP

Boring Crew: Drilex/Terracon (RJF)
Date Started: 1/24/14 Date Finished: 1/24/14
VTSPG NAD83: N 798680.15 ft E 1477624.42 ft
Station: 2980+99.00 Offset: 84.00LT
Ground Elevation: 334.0 ft

	Casing	Sampler
Type:	H.S.A.	SS
I.D.:	4.25 in	2 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:		Auto
Rig:	CME 550 ATV	CE = 1.33

Groundwater Observations

Date	Depth (ft)	Notes
01/23/14	0.0	@GS

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		A-1-a, GrSaSi, gray-brown, Rec. = 2.0 ft, (FILL)	1-1-6-6 (7)	28.6	70.9	21.6	7.5
2.5		A-2-4, SaSiGr, gray, Rec. = 2.0 ft	6-7-7-9 (14)	18.4	15.4	55.4	29.2
		A-2-4, SaSiGr, gray, Rec. = 2.0 ft	3-4-6-9 (10)	8.9	7.7	60.3	32.0
5.0		A-4, SaSiGr, gray, Rec. = 2.0 ft	4-10-4-5 (14)	20.5	3.3	51.2	45.5
7.5		SaSi, gray, Rec. = 2.0 ft, 8.0 ft - 9.0 ft	3-3-2-3 (5)				
		A-4, SaSi, gray		24.7	4.2	43.7	52.1
10.0		A-7-6, SiSaGr, gray, Rec. = 2.0 ft	2-2-1-2 (3)	37.5	3.8	10.9	85.3
12.5		A-7-6, Cl, gray, Rec. = 2.0 ft	2-2-2-2 (4)	51.5		4.4	95.6
		A-4, Si, gray, Rec. = 2.0 ft	3-3-3-3 (6)	22.5	5.4	15.7	78.9
15.0		Hole stopped @ 16.0 ft					
17.5							
20.0							

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. CE is the hammer energy correction factor. CE is an estimated value.
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.
4. Ground surface elevations indicated on the boring logs were estimated based on the grading plan provided by VAOT.

2010 COPY J1135172.GPJ VERMONT AOT.GDT 3/21/14

VTrans — Vermont Agency of Transportation

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

BORING LOG

Culvert Nos. 83-1 S&N
Georgia, Vermont
Georgia IM CULV (25)

Boring No.: B-4
Page No.: 1 of 3
Pin No.: 11a218
Checked By: ASP

Boring Crew: Ortiex/Terracon (RJF)
Date Started: 1/24/14 Date Finished: 1/24/14
VTSPG NAD83: N 798677.70 ft E 1477736.55 ft
Station: 2981+48.50 Offset: 16.00RT
Ground Elevation: 368.0 ft

	Casing	Sampler
Type:	H.S.A.	SS
I.D.:	4.25 in	2 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:		Auto
Rig:	CME 550 ATV	CE = 1.33

Groundwater Observations

Date	Depth (ft)	Notes
01/23/14	31.5	AB

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		5-inches Bituminous concrete pavement					
		A-2-4, SaSiGr, brown, auger sample (FILL) Rec. = 2.0 ft		9.0	21.8	52.8	25.4
2.5		Drill action indicates frequent cobbles to 17 feet.					
5.0		A-1-a, Gr., brown, poor recovery (FILL)	9-50/3" (50+)	1.2	92.6	4.7	2.7
7.5							
10.0		A-1-A, GrSaSi, brown, Rec. = 2.0 ft, (FILL)	6-8-13-20 (21)	1.5	75.9	17.6	6.5
12.5							
15.0		A-1-A, GrSaSi, brown and gray, Rec. = 2.0 ft, (FILL)	6-12-18-10 (28)	2.4	59.1	32.2	8.7
17.5							
20.0		A-3, SaSi, brown, Rec. = 2.0 ft, (FILL)	8-15-18-23 (33)	4.7	1.6	88.6	9.8

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. CE is the hammer energy correction factor. CE is an estimated value.
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.
4. Ground surface elevations indicated on the boring logs were estimated based on the grading plan provided by VAOT.

2010 COPY #11S0172.GPJ VERMONT.GDT.GDT 3/21/14

VTrans — Vermont Agency of Transportation

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

BORING LOG

Culvert Nos. 83-1 S&N
Georgia, Vermont
Georgia IM CULV (25)

Boring No.: B-4
Page No.: 2 of 3
Pin No.: 11a218
Checked By: ASP

Boring Crew: Ortiex/Terracon (RJF)
Date Started: 1/24/14 Date Finished: 1/24/14
VTSPG NAD83: N 798677.70 ft E 1477736.55 ft
Station: 2981+48.50 Offset: 16.00RT
Ground Elevation: 368.0 ft

	Casing	Sampler
Type:	H.S.A.	SS
I.D.:	4.25 in	2 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:		Auto
Rig:	CME 550 ATV	CE = 1.33

Groundwater Observations

Date	Depth (ft)	Notes
01/23/14	31.5	AB

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
22.5							
25.0		A-2-4, SaSi, brown, Rec. = 2.0 ft, (FILL)	13-14-18-18 (32)	10.4	1.1	85.6	13.3
27.5							
30.0		A-3, SaSi, gray-brown, Rec. = 2.0 ft, (FILL)	6-12-15-17 (27)	17.6	0.6	89.5	9.9
32.5							
35.0		A-2-4, SaSi, gray-brown, Rec. = 2.0 ft, (FILL)	4-5-6-8 (11)	20.0	1.3	67.9	30.8
37.5		A-4, SiSa, gray, Rec. = 2.0 ft, faint organic odor	9-5-8-7 (13)	27.3		34.6	65.4
40.0		A-4, SiSa, gray, Rec. = 2.0 ft	2-4-6-7 (8)	29.2		20.7	79.3
42.5		A-4, SaSi, gray, Rec. = 2.0 ft, stratified	8-15-23-21 (28)	22.6	0.2	55.7	44.1

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. CE is the hammer energy correction factor. CE is an estimated value.
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.
4. Ground surface elevations indicated on the boring logs were estimated based on the grading plan provided by VAOT.

2010 COPY #11S0172.GPJ VERMONT.GDT.GDT 3/21/14

VTrans — Vermont Agency of Transportation

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

BORING LOG

Culvert Nos. 83-1 S&N
Georgia, Vermont
Georgia IM CULV (25)

Boring No.: B-4
Page No.: 3 of 3
Pin No.: 11a218
Checked By: ASP

Boring Crew: Ortiex/Terracon (RJF)
Date Started: 1/24/14 Date Finished: 1/24/14
VTSPG NAD83: N 798677.70 ft E 1477736.55 ft
Station: 2981+48.50 Offset: 16.00RT
Ground Elevation: 368.0 ft

	Casing	Sampler
Type:	H.S.A.	SS
I.D.:	4.25 in	2 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:		Auto
Rig:	CME 550 ATV	CE = 1.33

Groundwater Observations

Date	Depth (ft)	Notes
01/23/14	31.5	AB

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
45.0		A-4, SiSa, gray, Rec. = 2.0 ft, stratified	4-8-8-9 (17)	21.8	2.0	42.9	55.1
		A-4, Si, gray, Rec. = 2.0 ft	8-8-13-11 (19)	27.4		0.9	99.1
47.5		A-4, Si, gray, Rec. = 2.0 ft	4-3-8-4 (13)	30.5	0.1	4.3	95.6
50.0		A-6, ClSa, gray, Rec. = 2.0 ft	1-2-3-3 (5)	32.2	4.7	12.9	82.4
		ClSa, gray, 51.0 ft - 52.0 ft					
52.5		A-6, ClSa, gray, Rec. = 2.0 ft	2-3-3-4 (6)	39.6	2.1	10.0	87.9
55.0		A-7-6, Cl, gray, Rec. = 2.0 ft	woh/12"-4-3	46.4		1.0	99.0
		A-7-6, Cl, gray, Rec. = 2.0 ft	woh/12"-2-3	49.6		1.3	98.7
57.5		A-7-6, Cl, gray, Rec. = 2.0 ft	woh/12"-2-3	44.1	0.1	1.1	98.8
60.0		Hole stopped @ 60.0 ft					
62.5							
65.0							

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. CE is the hammer energy correction factor. CE is an estimated value.
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.
4. Ground surface elevations indicated on the boring logs were estimated based on the grading plan provided by VAOT.

2010 COPY #11S0172.GPJ VERMONT.GDT.GDT 3/21/14

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

BORING LOG

Culvert Nos. 83-1 S&M
Georgia, Vermont

Georgia IM CULV (25)

Boring No.:	B-6
Page No.:	1 of 2
Pin No.:	11c218
Checked By:	ASP

Boring Crew: NE Boring/Ben
Date Started: 5/30/14 Date Finished: 6/02/14
VTSPG NAD83: N 798731.84 ft E 1477411.65 ft
Station: 2801+28.50 Offset: 121.72LT
Ground Elevation: 334.0 ft

	Casing	Sampler
Type:	WASH BORE	SS
I.D.:	4.25 in	2 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:		Safety
Rig:	Mobile - 50	CE = 1.33

Groundwater Observations

Date	Depth (ft)	Notes
05/30/14	12.8	WD
05/30/14	10.3	AD
06/02/14	9.2	WD

Top of Well Elevation: 337.0 ft

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Well Diagram	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		A-2-4, SiSa, Rec. = 1.08 ft		1-1-3-5 (4)	26.4	1.5	74.3	24.2
2.5		A-2-4, SiSa, Rec. = 1.42 ft		6-9-9-9 (18)	21.1	1.6	72.8	25.6
5.0		A-2-4, SiSa, Rec. = 1.58 ft		6-8-12-10 (20)	26.2	0.8	67.3	31.9
7.5		A-2-4, SiSa, Rec. = 1.33 ft		5-4-4-6 (8)	28.2	3.0	70.7	26.3
		A-2-4, Sa, Rec. = 1.33 ft		5-6-7-7 (13)	27.3	1.3	80.7	18.0
10.0		A-4, SaSi, Rec. = 1.42 ft		1-2-1-2 (3)	48.2	0.4	37.9	61.7
12.5		Shelby tube sample, 12.0 ft - 14.0 ft						
15.0		A-2-4, SiSa, Rec. = 1.17 ft		5-8-5-7 (13)	20.6	12.0	63.0	25.0
17.5		16.0 ft - 18.0 ft (MARINE SILTY SAND) (MARINE SILT AND CLAY)						
20.0		A-7-6, Cl, Rec. = 2.0 ft Note: Bottom of casing at 22.5 feet		1-1-3-4 (4)	45.8	2.9	7.0	90.1

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. CE is the hammer energy correction factor. CE is an estimated value.
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.
4. Ground surface elevations indicated on the boring logs were estimated based on the grading plan provided by VAOT.

Terracon

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

BORING LOG

Culvert Nos. 83-1 S&M
Georgia, Vermont

Georgia IM CULV (25)

Boring No.:	B-6
Page No.:	2 of 2
Pin No.:	11c218
Checked By:	ASP

Boring Crew: NE Boring/Ben
Date Started: 5/30/14 Date Finished: 6/02/14
VTSPG NAD83: N 798731.84 ft E 1477411.65 ft
Station: 2801+28.50 Offset: 121.72LT
Ground Elevation: 334.0 ft

	Casing	Sampler
Type:	WASH BORE	SS
I.D.:	4.25 in	2 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:		Safety
Rig:	Mobile - 50	CE = 1.33

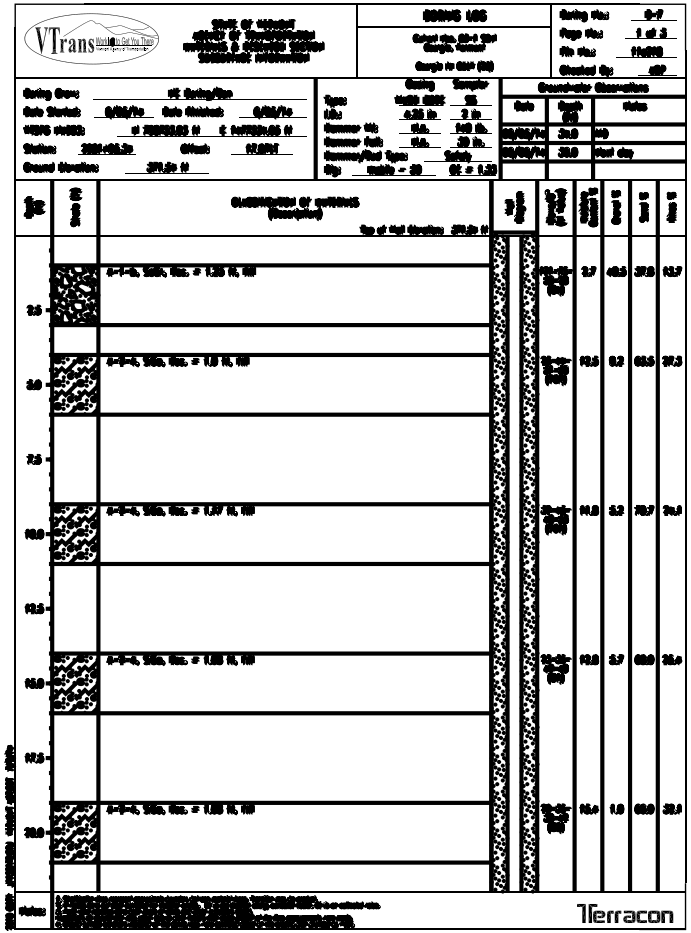
Groundwater Observations

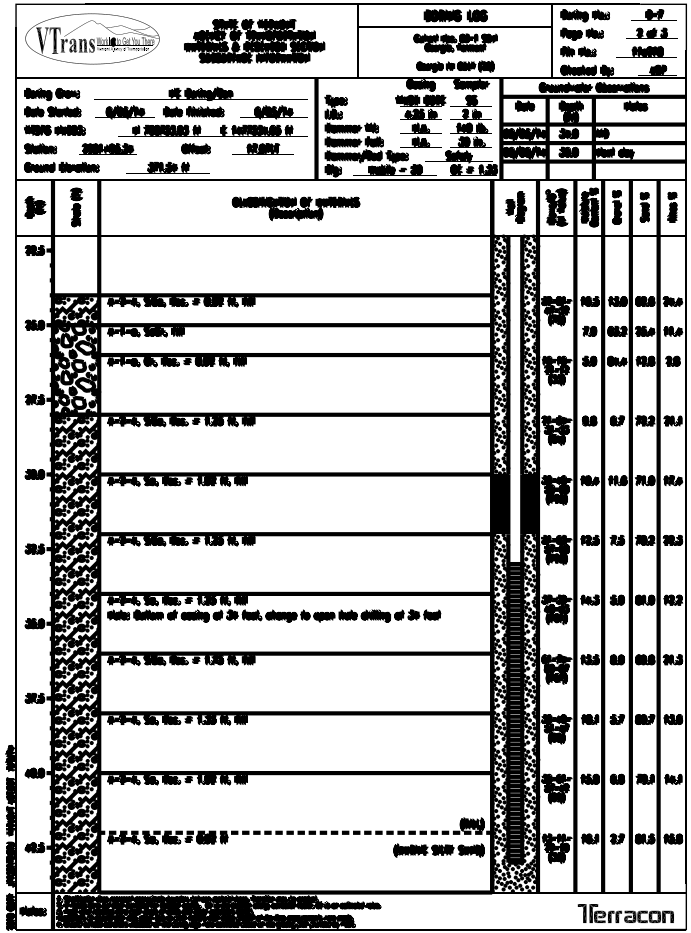
Date	Depth (ft)	Notes
05/30/14	12.8	WD
05/30/14	10.3	AD
06/02/14	9.2	WD

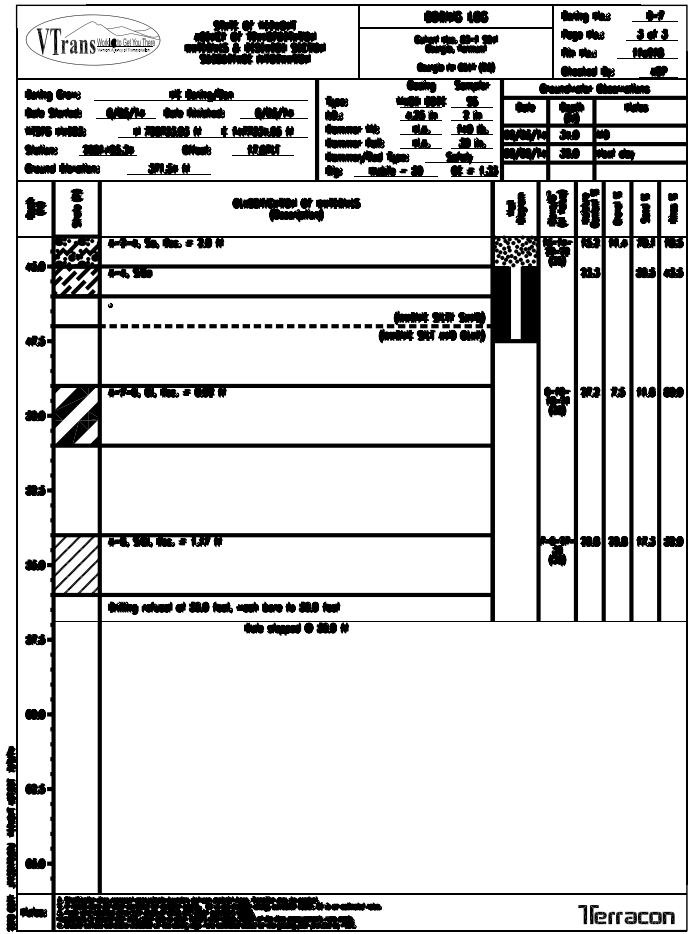
Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Well Diagram	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
22.5		Shelby tube sample, 22.0 ft - 24.0 ft						
		Field Vane: Su,peak=682psf; Su,remolded=220psf, 24.0 ft						
25.0		A-6, SiCl, Rec. = 2.0 ft		woh/12"-2-3 (2)	34.2	5.0	12.3	82.7
27.5		Field Vane: Su,peak=728psf; Su,remolded=240psf, 27.0 ft						
30.0		A-7-6, Cl, Rec. = 2.0 ft		1-1-1-3 (2)	52.8	0.1	0.9	99.0
32.5		Field Vane: Su,peak=1280psf; Su,remolded=601psf, 32.0 ft						
35.0		A-4, SaSi, Rec. = 1.67 ft		3-2-6-4 (8)	16.5	13.1	31.0	55.9
37.5								
40.0		A-1-b, SaGr, Rec. = 0.08 ft Refusal of split spoon at 40.1 feet Hole stopped @ 40.1 ft		100/1" (100+)	10.7	55.3	26.2	18.5
42.5								

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. CE is the hammer energy correction factor. CE is an estimated value.
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.
4. Ground surface elevations indicated on the boring logs were estimated based on the grading plan provided by VAOT.

Terracon


VTrans
BORING LOG
Terracon


VTrans
BORING LOG
Terracon


VTrans
BORING LOG
Terracon

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

BORING LOG

Culvert Nos. 85-1 S&N
Georgia, Vermont

Georgia IM CULV (25)

Boring No.: B-8
Page No.: 1 of 2
Pin No.: 11c218
Checked By: ASP

Boring Crew: NE Boring/Dan
Date Started: 6/06/14 Date Finished: 6/09/14
VTSPG NAD83: N 798720.92 ft E 1477647.22 ft
Station: 2981+58.50 Offset: 81.34LT
Ground Elevation: 333.0 ft

	Casing	Sampler
Type:	WASH BORE	SS
I.D.:	4.25 in	2 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Safety	
Rig:	Mobile - 50	CE = 1.33

Groundwater Observations

Date	Depth (ft)	Notes
06/09/14	0.0	BD 2nd day

Top of Well Elevation: 338.0 ft

Depth (ft)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
	A-2-4, Sa, Rec. = 0.83 ft				3-3-3-10 (6)	21.6	5.3	76.4	18.3
2.5	A-1-a, SaGr, Rec. = 0.75 ft				9-24-21-14 (45)	13.7	60.6	29.9	9.5
5.0	A-1-a, SaGr, Rec. = 0.75 ft				16-23-11-2 (34)	7.7	72.6	24.0	3.4
	A-1-a, SaGr, Rec. = 1.33 ft				3-6-7-3 (13)	12.5	59.9	34.6	5.5
7.5	A-4, SaSi					28.7	0.8	35.8	63.4
	A-2-4, Sa					24.9	0.3	81.7	18.0
	A-2-4, Sa, Rec. = 1.42 ft				2-2-4-6 (6)	17.9	1.6	83.6	14.8
	A-4, SaSi					65.8	7.7	23.4	68.9
10.0	A-4, SiSa, Rec. = 1.42 ft				2-2-4-3 (6)	35.6	0.9	55.3	43.8
12.5									
15.0	A-2-4, SiGrSa, Rec. = 1.08 ft				9-11-12-8 (23)	19.9	33.6	44.1	22.3
17.5	(MARINE SAND AND SILT) - - - (MARINE SILT AND CLAY)								
20.0	A-6, SiCl, Rec. = 1.5 ft				2-2-4-6 (6)	29.0	11.7	13.0	75.3

Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual. 2. N Values have not been corrected for hammer energy. CE is the hammer energy correction factor. CE is an estimated value. 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. 4. Ground surface elevations indicated on the boring logs were estimated based on the grading plan provided by VAOT.

Terracon

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

BORING LOG

Culvert Nos. 85-1 S&N
Georgia, Vermont

Georgia IM CULV (25)

Boring No.: B-8
Page No.: 2 of 2
Pin No.: 11c218
Checked By: ASP

Boring Crew: NE Boring/Dan
Date Started: 6/06/14 Date Finished: 6/09/14
VTSPG NAD83: N 798720.92 ft E 1477647.22 ft
Station: 2981+58.50 Offset: 81.34LT
Ground Elevation: 333.0 ft

	Casing	Sampler
Type:	WASH BORE	SS
I.D.:	4.25 in	2 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Safety	
Rig:	Mobile - 50	CE = 1.33

Groundwater Observations

Date	Depth (ft)	Notes
06/09/14	0.0	BD 2nd day

Depth (ft)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
22.5	Shelby tube sample, 22.0 ft - 24.0 ft								
	Field Vane: Su,peak=624psf; Su,remolded=200psf (MARINE SILT AND CLAY)								
25.0	A-1-a, SaGr, Rec. = 1.67 ft (MARINE GRAVEL)				7-11-30-58 (41)	14.5	56.7	35.9	7.4
	A-4, SaGrSi					8.9	30.6	25.2	44.2
27.5	Drilling refusal at 28.5 feet, wash bore to 29.3 feet								
30.0	29.3 ft - 34.3 ft, Dark gray to blue with white bands, SLATE, hard, slight to moderate weathering	1 (40)	88.3 (63.3)	4.5					
				4.5					
				5					
32.5				4					
				5					
35.0	Hole stopped @ 34.3 ft								
37.5									
40.0									
42.5									

Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual. 2. N Values have not been corrected for hammer energy. CE is the hammer energy correction factor. CE is an estimated value. 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. 4. Ground surface elevations indicated on the boring logs were estimated based on the grading plan provided by VAOT.

Terracon

VTrans Working to Get You There — Vermont Agency of Transportation

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

BORING LOG

Culvert No. [illegible]
[illegible], Vermont

Boring No.: B-[illegible]
Page No.: 1 of 3
Pin No.: [illegible]
Checked By: [illegible]

Boring Crew:	[illegible]
Date Started:	5/28/14
Date Finished:	5/28/14
VTSPG NAD83:	N [illegible] ft E [illegible] ft
Station:	[illegible]
Offset:	[illegible]
Ground Elevation:	[illegible] ft

	Casing	Sampler
Type:	[illegible]	SS
I.D.:	4.25 in	2 in
Hammer Wt:	N/A	140 lb.
Hammer Fall:	N/A	30 in.
Hammer/Rod Type:	Safety	
Rig:	[illegible]	CE = 1.33

Groundwater Observations

Date	Depth (ft)	Notes
06/05/14	[illegible]	after 7 days

CLASSIFICATION OF MATERIALS (Description) — Top of Well Elevation: [illegible] ft

CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
A-1-b, SaGr, Rec. = 1.17 ft, Fill		4.9	64.5	27.7	7.8
A-2-4, SiSa, Rec. = 1.33 ft, Fill	[illegible]	14.6	13.1	63.1	23.8
A-1-b, SaGr, Rec. = 1.75 ft, Fill	[illegible]	5.4	48.6	33.2	18.2
A-1-b, SaGr, Rec. = 1.25 ft, Fill	[illegible]	6.0	35.2	28.9	17.9
A-1-b, Gr, Rec. = 1.00 ft, Fill	[illegible]	7.8	75.8	18.1	6.1
A-1-b, Gr, Rec. = 0.75 ft, Fill	[illegible]	7.2	75.1	17.6	7.3
A-2-4, SiSa, Rec. = 1.33 ft, Fill	[illegible]	15.5	18.3	49.5	32.2
A-2-4, Sa, Fill		7.1	1.9	86.5	11.6

Notes: [illegible]

Terracon

VTrans Working to Get You There — Vermont Agency of Transportation

BORING LOG

Page No.: 2 of 3

CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
A-1-b, Gr, Rec. = 1.67 ft, Fill	[illegible]	13.7	61.2	18.1	18.7
A-2-4, SiSa, Fill		12.4	1.4	66.6	32.0
A-4, SaSi, Rec. = 1.17 ft, Fill	[illegible]	17.9	4.9	41.2	53.9
A-1-b, SaGr, Rec. = 1.33 ft, Fill	[illegible]	13.4	43.3	37.2	19.5
A-2-4, SiSa, Fill		12.3	2.6	73.5	23.9
A-2-4, SiSa, Rec. = 1.08 ft, Fill	[illegible]	18.4	3.3	72.0	24.7
A-2-4, Sa, Rec. = 1.33 ft, Fill (Fill)	[illegible]	15.1	3.4	78.6	18.0
A-2-4, SiSa, Rec. = 1.17 ft (Native SILTY SAND)	[illegible]	34.1	2.4	73.5	24.1
A-2-4, Sa, Rec. = 2.0 ft	[illegible]	25.4	4.2	77.9	17.9
A-4, SaSi		42.5	3.9	34.1	62.0
A-2-4, SiSa, Rec. = 1.75 ft (Native SILTY SAND)	[illegible]	28.4	5.2	61.3	33.5
A-4, [illegible], Rec. = 1.67 ft (Native SILT and CLAY)	[illegible]	28.6	0.1	4.6	95.3

Notes: [illegible]

Terracon

VTrans Working to Get You There — Vermont Agency of Transportation

BORING LOG

Page No.: 3 of 3

CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
A-6, CL, Rec. = 2.0 ft	[illegible]	38.3	0.4	6.8	92.8
A-7-6, CL, Rec. = 2.0 ft	[illegible]	38.8	2.1	11.1	86.8
A-7-6, CL, Rec. = 2.0 ft	[illegible]	40.9	0.1	7.3	92.6
A-4, [illegible], Rec. = 2.0 ft	[illegible]	21.7	13.8	13.5	72.7

Split spoon refusal at 59.8 feet

Hole stopped @ 59.8 ft

Notes: [illegible]

Terracon

STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH SECTION SUBSURFACE INFORMATION	BORING LOG Culvert No. 83-1 S&M Georgia, Vermont Georgia IM CULV (25)	Boring No.: B-10 Page No.: 1 of 2 Pin No.: 11c218 Checked By: ASP

Boring Crew: NE Boring/Dan
Date Started: 6/03/14 Date Finished: 6/04/14
VTSPG NAD83: N 788752.29 ft E 1477854.86 ft
Station: 2882+78.50 Offset: 96.33RT
Ground Elevation: 334.0 ft

	Casing	Sampler
Type:	WASH BORE	SS
I.D.:	4.25 in	2 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:		Safety
Rig:	Mobile - 50	CE = 1.33

Groundwater Observations

Date	Depth (ft)	Notes
06/03/14	0.0	AB
06/04/14	1.5	AB

Top of Well Elevation: 338.0 ft

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Well Diagram	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate (minutes/ft)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		A-2-4, SiSa, Rec. = 0.42 ft					1-1-2-8 (3)	33.5	1.8	76.5	21.7
2.5		Rec. = 0.0 ft, 2.0 ft - 4.0 ft					4-4-5-7 (9)				
		Rec. = 0.08 ft, 4.0 ft - 6.0 ft					5-4-5-3 (9)				
5.0											
		A-2-4, SiSa, Rec. = 0.67 ft					5-2-3-4 (5)	44.6	2.7	66.9	30.4
7.5											
		A-4, SiSa, Rec. = 0.75 ft					5-12-8-8 (20)	21.7	8.4	53.7	37.9
10.0		A-2-4, SiSa, Rec. = 1.25 ft (MARINE SILTY SAND)					10-7-4-4 (11)	20.7	3.2	63.2	33.6
		A-7-6, Cl (MARINE CLAY)						32.9	0.7	9.0	90.3
12.5											
15.0		A-7-6, Cl, Rec. = 2.0 ft					2-1-1-3 (2)	42.6	2.1	7.3	90.6
17.5		Shelby tube sample, Rec. = 2.33 ft Field Vane: Su,peak=763psf; Su,remolded=150psf, 19.0 ft									
20.0		A-7-6, Cl, Rec. = 2.0 ft					woh/18"-1-3 (1)	50.3		0.5	98.5

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. CE is the hammer energy correction factor. CE is an estimated value.
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.
4. Ground surface elevations indicated on the boring logs were estimated based on the grading plan provided by VAOT.

Terracon

2000 GDPT J1135172.GPJ VERMONT AOT.GDT 7/2/14

STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH SECTION SUBSURFACE INFORMATION	BORING LOG Culvert No. 83-1 S&M Georgia, Vermont Georgia IM CULV (25)	Boring No.: B-10 Page No.: 2 of 2 Pin No.: 11c218 Checked By: ASP

Boring Crew: NE Boring/Dan
Date Started: 6/03/14 Date Finished: 6/04/14
VTSPG NAD83: N 788752.29 ft E 1477854.86 ft
Station: 2882+78.50 Offset: 96.33RT
Ground Elevation: 334.0 ft

	Casing	Sampler
Type:	WASH BORE	SS
I.D.:	4.25 in	2 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:		Safety
Rig:	Mobile - 50	CE = 1.33

Groundwater Observations

Date	Depth (ft)	Notes
06/03/14	0.0	AB
06/04/14	1.5	AB

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Well Diagram	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate (minutes/ft)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
22.5		Shelby tube sample, Rec. = 2.33 ft									
25.0		A-4, ClGr, Rec. = 0.25 ft					100/3" (100+)	17.8	42.3	17.7	40.0
		Weathered bedrock 25.6 ft - 30.6 ft, Dark gray to blue with white bands, SLATE, hard, fresh to slight weathering		1 (65)	93 (88.3)	6 6 6 5 6					
27.5											
30.0		30.6 ft - 35.6 ft, Dark gray to blue with white bands, SLATE, hard, fresh to slight weathering		2 (35)	63 (63)	4 6 5 5 5					
32.5											
35.0											
		Hole stopped @ 35.6 ft									
37.5											
40.0											
42.5											

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. CE is the hammer energy correction factor. CE is an estimated value.
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.
4. Ground surface elevations indicated on the boring logs were estimated based on the grading plan provided by VAOT.

Terracon

2000 GDPT J1135172.GPJ VERMONT AOT.GDT 7/2/14