



STATE OF VERMONT  
 AGENCY OF TRANSPORTATION  
 CONSTRUCTION AND  
 MATERIALS BUREAU  
 CENTRAL LABORATORY

BORING LOG

CAMBRIDGE-BAKERSFIELD  
 STP 2926(1)  
 VT-108

Boring No.: B-101

Page No.: 1 of 1

Pin No.: 10B258

Checked By: MJB

Boring Crew: GARROW, NIETO  
 Date Started: 8/24/15 Date Finished: 8/24/15  
 VTSPG NAD83: N 792532.31 ft E 1555720.32 ft  
 Station: 580+13 Offset: 15.20  
 Ground Elevation: 516.0 ft

Casing: WB Sampler: SS  
 I.D.: 4 in 1.5 in  
 Hammer Wt: N.A. 140 lb.  
 Hammer Fall: N.A. 30 in.  
 Hammer/Rod Type: Auto/AWJ  
 Rig: CME 45C TRACK C = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
08/24/15	9.8	After drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
	x x x	Visual Description:, Crushed Stone Fill, Lt/brn-blk, Moist, Rec. = 0.4 ft, Insufficient sample for testing.	WH-WH-WH-2 (WH)	4.3			
		A-1-a, SaGr, brn, Moist, Rec. = 0.6 ft	2-2-2-2 (4)	12.9	51.4	37.9	10.7
5		Field Note:, No Recovery	7-4-4-3 (8)				
		A-4, SiSa, brn, Moist, Rec. = 0.6 ft	3-2-2-1 (4)	19.3	17.9	43.7	38.4
		A-4, SaSi, brn, Moist, Rec. = 0.8 ft	1-2-1-2 (3)	23.4	15.1	38.2	46.7
10		A-4, SiSa, brn, Moist, Rec. = 0.8 ft	1-2-1-1 (3)	22.6	5.6	58.1	36.3
		A-2-4, SiSa, brn, Moist, Rec. = 1.0 ft	2-1-1-1 (2)	26.7	15.0	64.5	20.5
15		A-1-b, Sa, Lt/brn, Moist, Rec. = 1.3 ft	3-3-5-6 (8)	16.5	14.6	75.7	9.7
		A-1-b, Sa, Lt/brn, Moist, Rec. = 1.5 ft	5-6-5-7 (11)	15.7	10.7	77.4	11.9
		A-2-4, Sa, Lt/brn, Moist, Rec. = 1.1 ft	5-5-6-7 (11)	12.5	8.1	78.8	13.1
20		A-1-b, GrSa, brn, Moist, Rec. = 0.5 ft	1-3-5-7 (8)	15.1	32.2	60.8	7.0
		A-2-4, Sa, brn, Moist, Rec. = 1.1 ft	4-4-6-7 (10)	14.2	4.2	81.3	14.5
25		A-2-4, Sa, brn, Moist, Rec. = 1.0 ft	5-6-7-6 (13)	14.9	1.8	80.3	17.9
		A-2-4, Sa, brn, Moist, Rec. = 1.0 ft	6-7-9-9 (16)	15.3	15.4	72.0	12.6
30		Hole stopped @ 28.0 ft					
35		Remarks: Hole collapsed at 15.8 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. C is the hammer energy correction factor.  
 3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 CAMBRIDGE-BAKERSFIELD STP 2926(1).GPJ VERMONT AOT.GDT 10/13/15



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BORING LOG

CAMBRIDGE-BAKERSFIELD  
 STP 2926(1)  
 VT-108

Boring No.: B-102

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Pin No.: 10B258

Checked By: MJB

Boring Crew: GARROW, HOOK, NIETO  
 Date Started: 8/21/15 Date Finished: 8/21/15  
 VTSPG NAD83: N 792512.75 ft E 1555715.53 ft  
 Station: 579+95 Offset: 16.50  
 Ground Elevation: 518.0 ft

Casing: WB Sampler: SS  
 I.D.: 4 in 1.5 in  
 Hammer Wt: N.A. 140 lb.  
 Hammer Fall: N.A. 30 in.  
 Hammer/Rod Type: Auto/AWJ  
 Rig: CME 45C TRACK C<sub>c</sub> = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
08/21/15	13.7	After drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
0-1		Visual Description: Lots of Asphalt Pavement with sandy gravel, Lt/brn-blk, Moist, Rec. = 0.8 ft	WH-2-1-1 (3)	5.1			
1-5		Field Note: No Recovery	WH-WH-WH-1 (WH)				
5-6		A-1-b, SiGrSa, brn, Moist, Rec. = 0.7 ft	2-2-1-2 (3)	12.2	37.0	38.7	24.3
6-7		Visual Description: Lots of Asphalt Pavement with sandy gravel, blk-red, Moist, Rec. = 0.5 ft	3-2-3-2 (5)	4.7			
7-8		A-2-4, SiSa, Lt/brn, Moist, Rec. = 0.6 ft	3-2-2-2 (4)	13.2	15.0	51.1	33.9
8-9		A-4, SiSa, orange-brn, Moist, Rec. = 0.9 ft, Lab Note: A mild odor of petroleum was noticeable	2-2-3-2 (5)	23.6	11.2	47.4	41.4
9-10		A-4, SaSi, brn, MTW, Rec. = 0.5 ft	2-2-3-2 (5)	31.0	3.1	44.8	52.1
10-11		A-4, SaSi, brn-Lt/brn, MTW, Rec. = 1.7 ft	WH-1-1-1 (2)	43.6	2.1	48.4	49.5
11-12		A-1-b, GrSa, brn, Moist, Rec. = 0.3 ft	1-2-3-4 (5)	16.7	21.4	63.3	15.3
12-13		A-1-b, GrSa, brn, MTW, Rec. = 0.7 ft	2-3-3-4 (6)	19.1	28.3	55.8	15.9
13-14		A-1-b, GrSa, brn, Moist, Rec. = 1.4 ft	5-8-5-7 (13)	13.6	23.8	64.4	11.8
14-15		A-2-4, Sa, brn, Moist, Rec. = 1.2 ft	9-6-6-6 (12)	14.9	16.3	71.3	12.4
15-16		A-1-b, Sa, brn, Moist, Rec. = 1.1 ft	5-7-6-7 (13)	14.1	13.5	75.5	11.0
16-17		A-1-b, Sa, brn, Moist, Rec. = 1.2 ft	5-7-6-9 (13)	12.4	16.8	70.5	12.7
17-18		A-2-4, Sa, brn, Moist, Rec. = 1.1 ft	1-7-6-7 (13)	18.4	3.2	81.4	15.4
18-28	Hole stopped @ 28.0 ft						
28-30	Remarks: Hole collapsed at 1.0 ft.						

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 may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 CAMBRIDGE-BAKERSFIELD STP 2926(1).GPJ VERMONT AOT.GDT 10/13/15



Boring Crew: JUDKINS, HOOK  
 Date Started: 8/26/15 Date Finished: 8/26/15  
 VTSPG NAD83: N 793127.00 ft E 1555654.20 ft  
 Station: 585+20 Offset: 15.60  
 Ground Elevation: 499.0 ft

Casing Type: WB Sampler: SS  
 I.D.: 4 in 1.5 in  
 Hammer Wt: N.A. 140 lb.  
 Hammer Fall: N.A. 30 in.  
 Hammer/Rod Type: Auto/AWJ  
 Rig: CME 45C TRACK C<sub>e</sub> = 1.34

Groundwater Observations		
Date	Depth (ft)	Notes
08/26/15	3.0	After drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
0.0 - 0.5		Visual Description: Sandy Gravel with lots of Asphalt Pavement, blk-brn, Moist, Rec. = 0.5 ft	2-2-2-2 (4)	4.2					
0.5 - 0.7		A-1-a, SaGr, blk-brn, Moist, Rec. = 0.7 ft, Lab Note: Possible Crushed Stone Fill	1-2-1-2 (3)	6.0	54.9	33.0	12.1		
0.7 - 1.0		A-1-a, SaGr, blk-brn, Moist, Rec. = 0.5 ft, Lab Note: Possible Crushed Stone Fill	2-2-1-2 (3)	4.8	57.0	33.1	9.9		
1.0 - 1.5		A-4, SaSi, brn, MTW, Rec. = 1.5 ft, Lab Note: A trace of clay was noticeable. Sample tested (NP).	2-2-1-2 (3)	32.5	7.4	41.9	50.7		
1.5 - 2.2		A-2-4, SiSaGr, brn, Moist, Rec. = 0.7 ft	3-3-3-3 (6)	17.0	41.8	32.3	25.9		
2.2 - 8.8		Field Note: No Recovery. Appears to be silty sand, Cleaned out with roller cone.	2-2-3-6 (5)						
8.8 - 10.0		A-4, Cisi, gry-brn, MTW, Rec. = 1.2 ft	3-4-5-6 (9)	31.2	0.6	1.7	97.7	34	8
10.0 - 12.5		A-4, Cisi, gry-brn, MTW, Rec. = 1.5 ft	4-3-6-7 (9)	33.0	0.2	1.7	98.1	32	7
12.5 - 15.0		A-4, Cisi, gry-brn, Moist, Rec. = 1.6 ft	5-4-7-8 (11)	29.6	2.5	1.9	95.6	32	8
15.0 - 16.0		Hole stopped @ 16.0 ft							
16.0 - 17.5		Remarks: Hole collapsed at 8.8 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. C<sub>e</sub> is the hammer energy correction factor.  
 3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 CAMBRIDGE-BAKERSFIELD STP 2926(1).GPJ VERMONT AOT.GDT 10/13/15



Boring Crew: JUDKINS, HOOK, NIETO

Date Started: 8/25/15 Date Finished: 8/25/15

VTSPG NAD83: N 793080.49 ft E 1555671.31 ft

Station: 584+70 Offset: 16.20

Ground Elevation: 501.0 ft

Casing	WB	Sampler	SS
Type:	WB	SS	
I.D.:	4 in	1.5 in	
Hammer Wt:	N.A.	140 lb.	
Hammer Fall:	N.A.	30 in.	
Hammer/Rod Type:	Auto/AWJ		
Rig:	CME 45C TRACK	$C_c = 1.34$	

Groundwater Observations

Date	Depth (ft)	Notes
08/25/15	6.6	After drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
0.0 - 2.5		A-1-a, SaGr, blk-brn, Moist, Rec. = 0.4 ft, Lab Note: Asphalt Pavement & Broken Rock were within sample.	WH-1-2-3 (3)	4.5	61.8	29.1	9.1		
2.5 - 5.0		A-1-b, SaGr, brn, Moist, Rec. = 1.2 ft	3-1-4-1 (5)	7.4	42.6	42.3	15.1		
5.0 - 7.4		Visual Description: SaGr, brn, Moist, Rec. = 0.1 ft, NXDC. Lab Note: Insufficient sample for testing.	2-2-2-1 (4)						
7.4 - 10.0		A-4, SaSi, blk-brn, MTW, Rec. = 0.7 ft, NXDC. Lab Note: A trace of clay was noticeable. Sample tested (NP).	3-1-2-3 (3)	38.9	3.6	20.9	75.5		
10.0 - 12.5		A-4, Si, brn, MTW, Rec. = 1.2 ft, Lab Note: A trace of clay was noticeable. Sample tested (NP).	3-2-3-5 (5)	33.3	7.2	17.8	75.0		
12.5 - 15.0		A-4, SaSi, brn-gry, Moist, Rec. = 1.2 ft	3-4-5-5 (9)	21.1	11.8	31.3	56.9		
15.0 - 17.5		A-4, SaSi, brn-gry, Moist, Rec. = 0.6 ft, Lab Note: A trace of clay was noticeable. Sample tested (NP).	3-4-5-5 (9)	20.2	15.9	34.4	49.7		
17.5 - 19.0		A-4, Si, brn, Moist, Rec. = 1.1 ft	3-3-3-6 (6)	24.0	11.1	13.6	75.3	30	6
19.0 - 20.0		Hole stopped @ 16.0 ft							
20.0 - 21.0		Remarks: Hole collapsed at 7.4 ft.							

Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual.  
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BORING LOG 2 CAMBRIDGE-BAKERSFIELD STP 2926(1).GPJ VERMONT AOT.GDT 10/13/15



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CAMBRIDGE-BAKERSFIELD  
STP 2926(1)  
VT-108

Boring No.: **B-105**

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Pin No.: 10B258

Checked By: MJB

Boring Crew: JUDKINS, HOOK, NIETO

Date Started: 8/24/15 Date Finished: 8/25/15

VTSPG NAD83: N 793106.68 ft E 1555672.59 ft

Station: 584+95 Offset: 27.30

Ground Elevation: 493.0 ft

Casing: WB  
Sampler: SS  
Type: WB  
I.D.: 4 in  
Hammer Wt: N.A.  
Hammer Fall: N.A.  
Hammer/Rod Type: Auto/AWJ  
Rig: CME 45C TRACK  
C<sub>c</sub> = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
08/24/15	6.8	End of Day.
08/25/15	3.5	After drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
		A-4, SaSi, brn, Moist, Rec. = 1.1 ft, Lab Note: Grass & roots were within sample	WH-1-1-2 (2)	29.0	14.7	34.0	51.3		
2.5		A-4, SaSi, brn, MTW, Rec. = 2.0 ft	WH-1-2-4 (3)	32.9		29.8	70.2		
5.0		A-4, GrSaSi, Lt/brn, Moist, Rec. = 1.4 ft, Lab Note: A trace of clay was noticeable. Sample tested (NP).	WH-3-3-3 (6)	24.2	24.0	27.4	48.6		
7.5		A-4, Si, Lt/brn, MTW, Rec. = 1.4 ft	1-3-3-3 (6)	33.0		2.5	97.5		
10.0		A-4, ClSi, Lt/brn, MTW, Rec. = 1.7 ft	3-4-3-5 (7)	34.3		1.8	98.2	35	9
10.0 - 12.0		No Recovery, 10.0 ft - 12.0 ft	8-9-10-11 (19)						
12.5		A-4, ClSi, gry, MTW, Rec. = 1.5 ft	2-4-6-4 (10)	32.0	0.6	3.6	95.8	32	7
15.0		A-4, GrSi, gry, Moist, Rec. = 2.0 ft	3-4-5-5 (9)	23.8	23.5	14.8	61.7	31	5
16.0 - 18.0		No Recovery, 16.0 ft - 18.0 ft	5-6-4-6 (10)						

Hole stopped @ 18.0 ft

Remarks:  
Hole collapsed at 12.3 ft.

- Notes:
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BORING LOG 2 CAMBRIDGE-BAKERSFIELD STP 2926(1).GPJ VERMONT AOT.GDT 10/13/15