

BORING 1

M & W Soils Engineering Inc.
Main St. Charlestown, NH 03603

TO CLOUGH HARBOUR & ASSOCIATES ADDRESS ALBANY, NY
PROJECT NAME ROCKINGHAM RAILROAD BRIDGE LOCATION ROCKINGHAM, VT
REPORT SENT TO CARSTEN FLOESS PROJ. NO. 7858-99
SAMPLES RETAINED BY CLOUGH HARBOUR OUR JOB NO. 7858-99

SHEET 1 OF 2
DATE 8/23/99
HOLE NO. B-1
LINE & STA.
OFFSET

GROUND WATER OBSERVATIONS
AT 43'9" AT 1/2 HOURS
Type HSA SS
Size I. D. 3 1/4" 1 1/2"
Hammer Wt. 140# BIT
Hammer Fall 30"

DATE STARTED 8/23/99
DATE COMPL. 8/23/99
BORING FORMAN M.D. & C.C.
INSPECTOR C. FLOESS
SOILS ENGR.

LOCATION OF BORING 28' WEST OF BRIDGE OFF NORTH EDGE OF TIES - BRIDGE AT MP 5

Depth	SAMPLE DEPTHS FROM TO	TYPE OF SAMPLE	Blows per 6" on sampler	MOISTURE DENSITY OR CONSIST.	STRATA CHANGE ELEV.	FIELD SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock color, type, cond., hardness, Drilling time, seams and etc.	SAMPLE NO. P.B. P.E.C.
						BALLAST	
5'	4' - 6'	SS	3 3 3 4	LOOSE		BROWN MEDIUM TO COARSE SAND - TRACE TO SOME FINE GRAVEL WITH AN OCCASIONAL COBBLE	1 24" 14"
10'	9' - 11'	SS	3 6 7 9	MED. DENSE		SAME MATERIAL	2 24" 16"
15'	16' - 16'	SS	2 4 9 6			SAME MATERIAL	3 24" 15"
20'	19' - 21'	SS	6 16 22 32		20' +/-	OLD GROUND	4 24" 15"
25'	24' - 25'	SS	53 28 13 9	DENSE		BROWN SANDY COARSE GRAVELS WITH COBBLES	5 24" 18"
30'	29' - 31'	SS	4 6 9 11	MED. DENSE		BROWN MEDIUM SANDS	6 24" 20"
35'	34' - 35'	SS	7 11 13 16		33'	LIGHT BROWN FINE SAND	7 24" 21"
	39' - 41'	SS	9 15 18 18	MED. DENSE	40'		8 24" 16"

GROUND SURFACE TO 51' USED HSA CASING THEN DROVE SS 24'

Sample Type: D-Dry C-Cored W-Washed UP-Unfinished Piston TP-Test Pit A-Auger V-Vane UT-Undisturbed Thinwall

Proportions Used: trace 0 to 10% little 10 to 20% some 20 to 35% and 35 to 50%

USED 140 lb. wt. x 30" fall an 2" O.D. Sampler
Cohesionless Density: 0-10 Loose 10-30 Med. Dense 30-50 Dense 50+ Very Dense
Cohensive Consistency: 0-4 Soft 30 + Hard 4-8 M/S/III 8-15 Still 15-30 V-Still

summary: EARTH BORING ROCK CORING SAMPLES HOLE NO. B-1

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SHEET 2 OF 2
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45'	44' - 45'	SS	9 12 19 19	DENSE - WET		LIGHT BROWN FINE SAND	9 24" 20"
50'	49' - 51'	SS	11 12 15 14		51'	NO BEDROCK TO DEPTH MIXED BENTONITE CHIPS WITH NATIVE BACKFILL MATERIALS USED: 150# OF BENTONITE CHIPS	10 24" 22"

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summary: EARTH BORING 51' ROCK CORING SAMPLES 10 HOLE NO. B-1

APPROX. BOTTOM OF EXCAVATION



**STATE OF VERMONT
AGENCY OF TRANSPORTATION**

Town Of **ROCKINGHAM** Bridge No. **107**
Highway No. **Green Mountain Railroad** Log Sta. **Surv. Sta.**
BRIDGE OVER WILLIAMS RIVER
BORING LOGS

Designed By **J. Wilson** Drawn By **S. Gunn**
Checked By **S. Halloran** Date **6/02** Bridge Design Supervisor Date

PROJECT **ROCKINGHAM** PROJECT NO. **RAI-04-9044 C/7 PHASE II**
I.G.C. Info. Bridge Sheet No. **Sheet 4 of 11**

EDWARDS & KELCEY, INC. PLOTTED 07/16/02