BOTTOM OF MSE LEVELING
PAD EL. 205.702

CLOUGH, HARBOUR & ASSOCIATES LLP

Bennington-Hoosick D.P.I. 0146(1)
SUBSURFACE LOG
HOLE NUMBER B-408

PROJECT NUMBER: 5863.4.12 February 1996 — Page1 of1
LOCATION: Station:14+18.5 Offset:7m Lt
CLIENT: VAOT
CONTRACTOR: Northeast Diamond Drilling
DRILLER: — INSPECTOR: S. Pidgeon
START DATE: 2/1/96 — FINISH DATE: 2/1/96
SURFACE ELEV.: 207.75m — CHECKED BY: W. Harris
DRILL FLUID: Water — DRILLING METHOD: F.J.C.

WATER LEVEL OBSERVATIONS DURING DRILLING	DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
	2/1/96	16:00	2.9m	2.44m	5.79m

SAMP./CORE NUMBER	SAMP./ADV LEN CORE	RECOVERY	Blows per .152m on Split Spoon Sampler	"N" VALUE or RQD %	SAMPLE	DEPTH (Meters)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Meters)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
S1	.6m	.34m	2-4-9-10	13		.5		Davey SILT, little f.m.c. sand, trace f.c. gravel, brown, stiff, moist(A-4)(TILL)	207.5		
S2	.33m	.24m	10-60-50/.03	100		1		Similar soils(A-4)(TILL)	207		
S3	.6m	.15m	14-9-9-10	20		1.5		Davey SILT Some f.m.c. Sand, little f.c. gravel, brown, very stiff, moist(A-4)(TILL)	206.5		
S4	.6m	.49m	12-34-28-29	55		2		Grades with trace f. gravel, brown, hard, moist (A-4)(TILL)	206		
S5	.12m	.06m	60/.12	R		2.5		Grades with Some f.c. Gravel, broken limestone fragments(A-4)(TILL)	205.5	LABORATORY AASHTO CLASSIFICATION PERFORMED ON S4, LL=30, PL=20, PI=10	
R1	1.53m	1.43m		50%		3		LIMESTONE, gray, medium hard, slightly weathered, very thin bedding, close fracture spacing, poor RQD	205		
						3.5			204.5		
						4			204		
R2	1.53m	1.31m		30%		4.5		Similar Bedrock	203.5		
						5			203		
						5.5			202.5		
						6			202		
						6.5			201.5		
						7			201		
						7.5			200.5		
						8			200		
						8.5			199.5		
						9			199		
						9.5			198.5		
						10			198		
									197.5		

Final Depth: 5.8 Meters

BOTTOM OF MSE LEVELING
PAD EL. 205.702

CLOUGH, HARBOUR & ASSOCIATES LLP

Bennington-Hoosick D.P.I. 0146(1)
SUBSURFACE LOG
HOLE NUMBER B-409

PROJECT NUMBER: 5863.4.12 February 1996 — PAGE1 OF1
LOCATION: Station:14+18.5 Offset: 4.4 Rt
CLIENT: VAOT
CONTRACTOR: Northeast Diamond Drilling
DRILLER: — INSPECTOR: S. Pidgeon
START DATE: 2/12/96 — FINISH DATE: 2/13/96
SURFACE ELEV.:207.00m — CHECKED BY: W. Harris
DRILL FLUID: Water — DRILLING METHOD: F.J.C.

WATER LEVEL OBSERVATIONS DURING DRILLING	DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM

SAMP./CORE NUMBER	SAMP./ADV LEN CORE	RECOVERY	Blows per .152m on Split Spoon Sampler	"N" VALUE or RQD %	SAMPLE	DEPTH (Meters)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Meters)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
S1	.6m	.27m	4-16-18-7	34		.5		Davey SILT, little f.m.c. sand, trace f.c. gravel, brown, very stiff, moist A-4) (TILL	207		
S2	.6m	.2m	9-4-7-8	11		1		Becomes stiff(A-4)(TILL)	206.5		
S3	.6m	.24m	7-14-16-20	30		1.5		Becomes very stiff(A-4)(TILL)	206		
S4	.6m	.5m	9-8-18-13	26		2		Similar soils(A-4)(TILL)	205.5		
S5	.27m	.12m	9-50/.12	R		2.5		Similar soils(A-4)(TILL)	205		
R1	1.22m	.98m		35%		3		LIMESTONE, gray, Medium hard, moderate weathering, very close fracture spacing, poor RQD	204.5		
						3.5			204		
						4			203.5		
R2	.5m	.15m		0%		4.5		Very poor RQD	203		
R3	1.58m	1.58m		86%		5		Becomes dark gray, very slight weathering, very thin bedding, excellent RQD	202.5		
						5.5			202		
						6			201.5		
R4	1.55m	1.07m		65%		6.5		RQD becomes fair	201		
						7			200.5		
						7.5			200		
R5	1.45m	.94m		53%		8		Similar Bedrock	199.5		
						8.5			199		
						9			198.5		
						9.5			198		
						10			197.5		
									197		

Final Depth: 9.0 Meters

BOTTOM OF MSE LEVELING
PAD EL. 205.702

CLOUGH, HARBOUR & ASSOCIATES LLP

Bennington-Hoosick D.P.I. 0146(1)
SUBSURFACE LOG
HOLE NUMBER B-410

PROJECT NUMBER: 5863.4.12 January 1996 — PAGE 1 OF1
LOCATION: Station:14+18.5 Offset:7m Rt
CLIENT: VAOT
CONTRACTOR: Northeast Diamond Drilling
DRILLER: — INSPECTOR: S. Pidgeon
START DATE: 1/31/96 — FINISH DATE: 1/31/96
SURFACE ELEV.:207.8m — CHECKED BY: W. Harris
DRILL FLUID: Water — DRILLING METHOD: F.J.C.

WATER LEVEL OBSERVATIONS DURING DRILLING	DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
	2/1/96	07:30	1.26m	2.86m	6.22m
	2/1/96	15:00	1.46m	0.00m	6.22m

SAMP./CORE NUMBER	SAMP./ADV LEN CORE	RECOVERY	Blows per .152m on Split Spoon Sampler	"N" VALUE or RQD %	SAMPLE	DEPTH (Meters)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Meters)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
								SILT, SOME ORGANICS, BROWN, SOFT, MOIST (A-4)	207.5		
S1	.6m	.12m	1-1-3-13	4		.5		Davey SILT, little f.m.c. sand, trace f.c. gravel, brown, soft, moist (A-4)(TILL)	207		
S2	.6m	.37m	14-6-5-4	11		1		Becomes stiff(A-4)(TILL)	206.5		
S3	.6m	.37m	6-5-4-5	9		1.5		Similar soils(A-4)(TILL)	206		
S4	.6m	.55m	6-8-13-27	21		2		becomes v. stiff (A-4)(TILL)	205.5		
S5	.52m	.49m	15-26-36-50/.06	R		2.5		becomes v. hard (A-4)(TILL)	205		
R1	1.52m	1.52m		80%		3		LIMESTONE, gray, medium hard, very slight weathering, very thin bedding, good RQD	204.5		
						3.5			204		
						4			203.5		
						4.5			203		
						5			202.5		
						5.5			202		
						6			201.5		
R2	1.52m	1.52m		85%		6.5		Similar Bedrock	201		
						7			200.5		
						7.5			200		
						8			199.5		
						8.5			199		
						9			198.5		
						9.5			198		
						10					

Final Depth: 6.22 Meters

BOTTOM OF MSE LEVELING
PAD EL. 205.702

CLOUGH, HARBOUR & ASSOCIATES LLP

Bennington-Hoosick D.P.I. 0146(1)
SUBSURFACE LOG
HOLE NUMBER B-413

PROJECT NUMBER: 5863.07.04 March 1998 — Page1 of
LOCATION: Station:14+127.39 Offset: 0.36m Rt
CLIENT: VAOT
CONTRACTOR: Atlantic Testing
DRILLER: R.P. — INSPECTOR: C.Riccardi
START DATE: 3/30/98 — FINISH DATE:3/30/98
SURFACE ELEV.: 207.03 — CHECKED BY: MSO
DRILL FLUID: Water — DRILLING METHOD: 0.10m FJC

WATER LEVEL OBSERVATIONS DURING DRILLING	DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
	3-30-98	3:08pm	2.2m	2.7m	7.3m

SAMP./CORE NUMBER	SAMP./ADV LEN CORE	RECOVERY	Blows per .152m on Split Spoon Sampler	"N" VALUE or RQD %	SAMPLE	DEPTH (Meters)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Meters)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
S1	.6m	.30m	1-2-4-5	6		.5		SILT, some Organics, some Roots, dark brown, soft, moist(A-4)	207		
S2	.6m	.30m	5-8-9-11	19		1		SILT and CLAY, little f.m.c. sand, trace f. gravel, brown, m.stiff, moist (A-4)(TILL)	206.5		
S3	.30m	.27m	11-10-26-13	36		1.5		becomes v.stiff (A-4)(TILL)	206		
S4	.18m	.12m	10-50/0.03m	R		2		becomes hard (A-4)(TILL)	205.5	Boulder 2.0m to 2.6m	
S5	0m	0m	50/0m	R		2.5		Similar soils (A-4)(TILL)	205		
R1	1.52m	1.52m	NA	50%		3		LIMESTONE, gray with calcite seams, medium hard, slightly weathered, medium bedding, close fractures, fair RQD.	204.5		
						3.5			204		
						4			203.5		
R2	1.52m	1.52m	NA	94%		4.5		RQD becomes excellent	203		
						5			202.5		
						5.5			202		
						6			201.5		
R3	1.52m	1.52m	NA	84%		6.5		RQD becomes good	201		
						7			200.5		
						7.5		Bottom of Boring at 7.32 meters	200		
						8		Water level at boring completion: 2.2m (not static level)	199.5		
						8.5			199		
						9			198.5		
						9.5			198		
						10			197.5		

BOTTOM OF MSE LEVELING
PAD EL. 205.702

CLOUGH, HARBOUR & ASSOCIATES LLP

Bennington-Hoosick D.P.I. 0146(1)
SUBSURFACE LOG
HOLE NUMBER B-411

PROJECT NUMBER: 5863.07.04 March 1998 — Page 1 of 1
LOCATION:Station:14+130.7 Offset:10.0m Lt
CLIENT: VAOT
CONTRACTOR:Atlantic Testing
DRILLER: R.P. — INSPECTOR: C.Riccardi
START DATE: 3/26/98 — FINISH DATE: 3/27/98
SURFACE ELEV.: 207.09 — CHECKED BY: MSO
DRILL FLUID: Water — DRILLING METHOD: 0.10m FJC

WATER LEVEL OBSERVATIONS DURING DRILLING	DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
	3-27-98	1:15pm	3.3m	3.7m	9.7m

SAMP./CORE NUMBER	SAMP./ADV LEN CORE	RECOVERY	Blows per .152m on Split Spoon Sampler	"N" VALUE or RQD %	SAMPLE	DEPTH (Meters)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Meters)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
S1	.6m	.37m	5-3-3-4	6		.5		SILT and ORGANICS, some roots, dark brown, m.stiff, moist (A-4)	207		
S2	.6m	.03m	8-9-8-9	20		1		f. SAND and Silt, gray, loose, moist (A-4)	206.5		
S3	.30m	.12m	4-4	NA		1.5		Davey SILT, orange-brown, m.stiff, moist (A-4)	206	While rollerbitting to L22m, casing dropped to 1.52m	
S4	.6m	.27m	8-8-14-8	22		2		SILT and CLAY, little f.m.c. sand, brown, m.stiff, moist(A-4)(TILL)	205.5		
S5	.6m	.24m	9-19-12-15	31		2.5		Similar soils, becomes v.stiff (A-4)(TILL)	205		
S6	.12m	.06m	50/0.12m	R		3		Similar soils (A-4)(TILL)	204.5	Rollerbit rough at 2.4m, continued to rollerbit to 2.6m	
						3.5		f.m. SAND, little silt, gray-brown, m.dense, moist (A-2-4)	204	Laboratory AASHTO Classification performed on S4 & S5 LL=NP, PL=NP, LI=NP	
						4		f.m. SAND and f.c. GRAVEL, some clayey Silt, gray-brown, dense, wet (A-2-4)	203.5		
						4.5			203		
						5		f. GRAVEL, some m.c. Sand, black, v. dense, wet (A-1-a)	202.5		
R1	1.52m	1.52m	NA	82%		5.5		LIMESTONE, gray, medium hard, very slight weathering, very thin bedding, close fractures, good RQD.	202		
						6			201.5		
						6.5			201		
R2	1.52m	1.52m	NA	100%		7		RQD becomes excellent	200.5		
						7.5			200		
						8			199.5		
R3	1.52m	1.52m	NA	94%		8.5		Similar	199		
						9			198.5		
						9.5			198		
R4	1.52m	1.52m	NA	94%		10		Similar	197.5	Fractures in bedrock between 7.7m to 8.0m	
								Bottom of Boring at 9.75 meters	197		
								Water level at boring completion: 3.29m (not static level)			

BOTTOM OF MSE LEVELING
PAD EL. 205.702

CLOUGH, HARBOUR & ASSOCIATES LLP

Bennington-Hoosick D.P.I. 0146(1)
SUBSURFACE LOG
HOLE NUMBER B-412

PROJECT NUMBER: 5863.07.04 March 1998 — PAGE 1OF 2
LOCATION: Station:14+130.7 Offset:10.0m Lt
CLIENT: VAOT
CONTRACTOR:Atlantic Testing
DRILLER: R.P. — INSPECTOR: C.Riccardi
START DATE: 3/25/98 — FINISH DATE: 3/26/98
SURFACE ELEV.: 207.55 — CHECKED BY: MSO
DRILL FLUID: Water — DRILLING METHOD: 0.10m FJC

WATER LEVEL OBSERVATIONS DURING DRILLING	DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
	3-26-98	4:40pm	3.2m	7.2m	13.2m
	3-26-98	6:20pm	3.6m	out	13.2m
	3-27-98	7:35am	4.0m	out	7.0m
	3-27-98	11:32pm	3.7m	out	7.0m

SAMP./CORE NUMBER	SAMP./ADV LEN CORE	RECOVERY	Blows per .152m on Split Spoon Sampler	"N" VALUE or RQD %	SAMPLE	DEPTH (Meters)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Meters)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
S1	.6m	.30m	2-3-5-4	8		.5		SILT and ORGANICS, some roots, dark brown, m.stiff, moist(A-4)	207.5		
S2	.6m	.46m	5-5-7-7	12		1		SILT and CLAY, trace f.m.c. sand, dark brown, m.stiff, moist(A-4)(TILL)	207		
S3	.30m	.46m	10-17-20-20	37		1.5		grades with little f.m.c. sand, trace f. gravel, becomes stiff(A-4)(TILL)	206.5		
S4	.6m	.34m	17-16-13-13	29		2		grades with little f.c. gravel, becomes hard (A-4)(TILL)	206		
S5	.6m	.27m	10-10-18-22	28		2.5		Similar soils(A-4)(TILL)	205.5		
S6	.12m	.27m	13-25-103/0.15m	R		3		Similar soils(A-4)(TILL)	205		
						3.5			204.5		
R1	1.52m	1.52m	NA	60%		4		LIMESTONE, gray, med. hard, slightly weathered, thick bedding, close fractures, fair RQD.	204	Casing advanced easily from 3.5m to 3.8m interpreted to be weathered rock	
						4.5			203.5		
						5			203		
						5.5			202.5		
						6			202		
R2	1.52m	1.00m	NA	64%		6.5			201.5		
						7			201	Core advanced quickly from 6.4m to 6.6m	
S7	.12m	.12m	3-50/0.06m	R		7.5		Silty CLAY, little f.m.c. sand, trace f.c. gravel, brown, soft, wet (A-6)	200.5	Sample indicates soil filled void from 6.4m to 7.1m.	
R3	1.52m	1.52m	NA	100%		8		LIMESTONE, gray, med. hard, slightly weathered, thick bedding, close fractures, excellent RQD.	200		
						8.5			199.5		
						9			199		
R4	1.52m	1.52m	NA	84%		9.5		RQD becomes good	198.5		
						10			198		
R5	1.52m	1.52m	NA	100%				RQD becomes excellent	197.5		

BOTTOM OF MSE LEVELING
PAD EL. 205.702

CLOUGH, HARBOUR & ASSOCIATES LLP

Bennington-Hoosick D.P.I. 0146(1)
SUBSURFACE LOG
HOLE NUMBER B-412

PROJECT NUMBER: 5863.07.04 March 1998 — PAGE 2OF 2

SAMP./CORE NUMBER	SAMP./ADV LEN CORE	RECOVERY	Blows per .152m on Split Spoon Sampler	"N" VALUE or RQD %	SAMPLE	DEPTH (Meters)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Meters)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
									197		
						11			196.5		
						11.5			196		
						12			195.5		
						12.5			195		
						13			194.5		
						13.5		Bottom of Boring at 13.26 meters	194		
						14		Water level at boring completion: 3.20m (not static level)	193.5		
						14.5			193		
						15			192.5		
						15.5			192		
						16			191.5		
						16.5			191		
						17			190.5		
						17.5			190		
						18			189.5		
						18.5			189		
						19			188.5		
						19.5			188		
						20			187.5		
						20.5			187		
						21			186.5		
						21.5			186		
						22					
R6	1.52m	1.52m	NA	100%							

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR400
Highway No. VT. RTE. 9	Log Sta. / Surv. Sta. 14+140
VT. RTE. 9 OVER AIRPORT BROOK WEST	
SOIL BORING LOGS	
Designed By W. HARRIS	Drawn by M. CUEVAS/B. WEATHERBY
Checked By M. QUINN Date 11/01	Bridge Design Supervisor M. OLSTAD Date 11/01
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1)
I.G.C. Info.	
Bridge Sheet No. BR406	Sheet 195 OF 473

FILE NAME =u:\35723\15\b-400\blog1.PLT
DATE/TIME =10/11/2001
USER =6864