

**STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH DIVISION
SUBSURFACE INFORMATION**

HOLE NO.: B-1
SHEET 1 OF 2
DATE STARTED: 2/19/03
DATE COMPLETED: 03/17/03

PROJECT NAME: RUTLAND TOWN
SITE NAME: BR 103
STATION: 2+286.70
GROUND EL.: 194.338

PROJECT NUMBER: BRF 019-3 (48)
SITE NO.: US 7
OFFSET: -10.00
G.W. DEPTH: 1.52 3/18/03

BORING CREW
CREW CHIEF: TALLMAN
DRILLER: TALLMAN
LOGGER: RUSSELL
ADDITIONAL CREW: GARROW

BORING RIG: TRACTOR
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER 0.3 m	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
		0.00m-1.10m, Boulders							
		1.10m-1.40m, Concrete							
		A-3, Sa, Lt/gry, Moist, Rec. = 0.20m	NXMDC, 1.15m-1.50m, Cleaned out	12	21	5.6	86.4	8	
		NXGDC, 2.60m-3.00m, Cleaned out casing.							
		NXGDC, 3.00m-3.50m, Boulder, Cored ahead.							
		A-1-b, GrSa, gry, Moist, Rec. = 0.04m	NXGDC, 4.40m-4.50m, Cleaned out	11	18.3	43.5	53.6	2.9	
		A-4, Si, gry, Moist, Rec. = 0.40m		8	31.5	2.2	19.2	78.6	
		A-4, SaSi, gry, Moist, Rec. = 0.38m		7	28.1	4.9	47.2	47.9	
		A-4, SaSi, gry, Moist, Rec. = 0.50m		10	27.6	8.4	41.6	50	
		A-4, Si, gry, Moist, Rec. = 0.28m		11	27.8	14.7	16.7	68.6	
		A-4, Si, gry, Moist, Rec. = 0.18m		4	30.6	6.5	14.9	78.6	
		A-4, Si, gry, Moist, Rec. = 0.32m		7	26.7	17.6	17.7	64.7	

GEOLOGISTS REPORT:

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SHEET 2 OF 2
DATE STARTED: 2/19/03
DATE COMPLETED: 3/17/03

PROJECT NAME: RUTLAND TOWN
SITE NAME: BR 103
STATION: 2+286.70
GROUND EL.: 194.338

PROJECT NUMBER: BRF 019-3 (48)
SITE NO.: US 7
OFFSET: -10.00
G.W. DEPTH: 1.52 3/18/03

BORING CREW
CREW CHIEF: TALLMAN
DRILLER: TALLMAN
LOGGER: RUSSELL
ADDITIONAL CREW: GARROW

BORING RIG: TRACTOR
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER 0.3 m	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
		A-4, SaSi, gry, Moist, Rec. = 0.20m	10	31.1	0.2	31.6	68.2		
		No Rec.	21						
		A-2-4, SiSaGr, gry, Moist, Rec. = 0.18m	32	12.4	34.5	33.1	32.4		
		NXGDC, 19.3m-19.5m, Cleaned out							
		A-1-b, GrSa, brn, Moist, Rec. = 0.40m	43	18.9	22.4	67	10.6		
		No Rec., Stone in end of sampler	42						
		NXMDC, 22.40m-23.30m, Boulder, No sample.							
		A-2-4, SiGr, brn, Moist, Rec. = 0.15m	R	13.1	56.1	13.9	30		
		A-2-4, GrSiSa, Lt/gry, Moist, Rec. = 0.15m	R	12.8	22.6	50.5	26.9		
		NXMDC, 26.40m-27.96m, No sample, Boulder							
		Top of bedrock @ 28.50 m							
		Run#1: NXMDC, 28.50m-29.87m, Rec. = 0.85m See Geologist's Report.	RUN	REC%	RQD%	Dip°			
			1	62	0	30			
		Run#2: NXMDC, 29.87m-30.80m, Rec. = 0.50m See Geologist's Report.	2	54	0	30			
		Run#3: NXMDC, 30.80m-32.32m, Rec. = 0.77m See Geologist's Report.	3	51	0	30			

32.5 Hole stopped @ 32.32m

GEOLOGISTS REPORT:

Run#1: Light gray dolomite with some stained jointing, Hard, Moderately weathered, Poor RQD.

Run#2: Light gray dolomite with stained and weathered jointing, Hard, Moderately weathered, Poor RQD.

Run#3: Light gray dolomite with stained and weathered jointing, Hard, Moderately weathered, Poor RQD.

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HOLE NO.: B-3
SHEET 1 OF 2
DATE STARTED: 3/25/03
DATE COMPLETED: 3/31/03

PROJECT NAME: RUTLAND TOWN
SITE NAME: BR 103
STATION: 2+325.00
GROUND EL.: 197.746

PROJECT NUMBER: BRF 019-3 (48)
SITE NO.: US 7
OFFSET: -6.70
G.W. DEPTH: Hole caved in @ 0.75m

BORING CREW
CREW CHIEF: TALLMAN
DRILLER: TALLMAN
LOGGER: RUSSELL
ADDITIONAL CREW: GARROW

BORING RIG: BIG SKID RIG
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER 0.3 m	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
		No sample, Boulders							
		A-1-a, SaGr, brn, Moist, Rec. = 0.05m	12	5.6	75.1	20.3	4.6		
		Cleaned out casing.							
5		A-1-a, SaGr, brn, Moist, Rec. = 0.07m	R	11.1	66.7	29.1	4.2		
		5.50m-6.25m, Boulder, Cleaned out casing.							
		No sample, Into Boulder							
		A-2-4, Sa, brn, Moist, Rec. = 0.60m	7	22.8	1.2	87.5	11.3		
10		A-3, Sa, brn, Moist, Rec. = 0.60m	4	18.9	7.2	88	4.8		
		A-3, Sa, brn, Moist, Rec. = 0.60m	4	19.4	0.7	92.4	6.9		
		A-1-b, Sa, gry, Moist, Rec. = 0.35m	5	18.7	13.7	80.5	5.8		

GEOLOGISTS REPORT:

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HOLE NO.: B-3
SHEET 2 OF 2
DATE STARTED: 3/25/03
DATE COMPLETED: 3/31/03

PROJECT NAME: RUTLAND TOWN
SITE NAME: BR 103
STATION: 2+325.00
GROUND EL.: 197.746

PROJECT NUMBER: BRF 019-3 (48)
SITE NO.: US 7
OFFSET: -6.70
G.W. DEPTH: Hole caved in @ 0.75m

BORING CREW
CREW CHIEF: TALLMAN
DRILLER: TALLMAN
LOGGER: RUSSELL
ADDITIONAL CREW: GARROW

BORING RIG: BIG SKID RIG
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER 0.3 m	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
		A-2-4, SiSa, gry, Moist, Rec. = 0.10m	8	33	0.3	67.8	31.9		
		A-4, SiSa, gry, Moist, Rec. = 0.15m	9	29.5		54.4	45.6		
		A-4, SaSi, gry, Moist, Rec. = 0.38m	8	25.8	10.7	29.8	59.5		
		A-1-b, Gr, brn, Moist, Rec. = 0.15m	33	4.9	69.8	12.6	17.6		
20		Top of bedrock @ 20.42 m							
		Run#1: BXGDC, 20.42m-21.94m, Rec. = 1.52m See Geologist's Report.	RUN	REC%	RQD%	Dip°			
			1	100	53	-			
		Run#2: BXGDC, 21.94m-23.46m, Rec. = 1.38m See Geologist's Report.	2	91	40	-			
		Hole stopped @ 23.46m							
25		DRILLER'S NOTES: 1. Moved hole 3.30m to the right.							

GEOLOGISTS REPORT:

Run#1: Dark gray dolomite with thin calcite veins, Hard, Unweathered, Competent.
Run#2: Dark gray dolomite with thin calcite veins, Hard, Unweathered, Competent.

**STATE OF VERMONT
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HOLE NO.: B-4
SHEET 1 OF 1
DATE STARTED: 3/17/03
DATE COMPLETED: 3/24/03

PROJECT NAME: RUTLAND TOWN
SITE NAME: BR 103
STATION: 2+325.00
GROUND EL.: 194.272

PROJECT NUMBER: BRF 019-3 (48)
SITE NO.: US 7
OFFSET: 12.00
G.W. DEPTH: 1.38 3/24/03

BORING CREW
CREW CHIEF: TALLMAN
DRILLER: TALLMAN
LOGGER: RUSSELL
ADDITIONAL CREW: GARROW

BORING RIG: BIG SKID RIG
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER 0.3 m	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
		BXDC, 0.76m-1.21m, Boulders							
		A-1-a, SaGr, brn, Moist, Rec. = 0.26m	17	10.8	65.4	27.3	7.3		
		BXDC, 2.20m-3.00m, Cleaned out casing and cored ahead.							
		A-1-a, SaGr, gry, Moist, Rec. = 0.10m	5	13.3	63.6	31.9	4.5		
5		No Rec., Stone in sampler.	2						
		BXDC, 5.95m-6.05m, Boulder							
		BXDC, 6.85m-7.31m Cored ahead.							
		A-3, Sa, br-gy, M, Rec. = 0.15m		31.1	0.2	93.2	6.6		
		Top of bedrock @ 7.85 m							
		Run#1: BXGDC, 7.85m-9.37m, Rec. = 1.35m See Geologist's Report.	RUN	REC%	RQD%	Dip°			
			1	89	17	30			
10		Run#2: BXMDC, 9.37m-10.89m, Rec. = 1.52m See Geologist's Report.	2	100	100	30			
	Hole stopped @ 10.89m								

GEOLOGISTS REPORT:

Run#1: Light gray dolomite with closely spaced horizontal jointing,
Hard, Unweathered, Fair to poor RQD.

Run#2: Light gray dolomite, Hard, Moderately weathered, Competent.