

**SIE42N: Tunbridge-Colonel-Cabot complex, 8 to 15 percent slopes, rocky**

The Colonel, rocky component makes up 35 percent of the map unit. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately low. This component is on hills, mountains. The parent material consists of loamy basal till. Depth to a root restrictive layer, densic material, is 10 to 20 inches.

The Tunbridge, rocky component makes up 35 percent of the map unit. The natural drainage class is well drained. Water movement in the most restrictive layer is low. This component is on hills, mountains. The parent material consists of loamy till. Depth to a root restrictive layer, bedrock, lithic, is 20 to 40 inches.

The Cabot, rocky component makes up 12 percent of the map unit. The natural drainage class is poorly drained. Water movement in the most restrictive layer is low. This component is on hills, mountains. The parent material consists of loamy basal till. Depth to a root restrictive layer, densic material, is 10 to 20 inches.

<b>Important farmland classification:</b> Statewide (b)	<b>Land capability:</b> 3 e	<b>Vermont Agricultural Value Group:</b> 7d
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**Vermont Residential Onsite Waste Disposal Group and Subgroup: IIIf**

This unit is marginally suited as a site for soil-based residential wastewater disposal systems, based on a review by the Natural Resources Conservation Service of criteria set forth in the Vermont 2007 Environmental Protection Rules. The depth to the seasonal high water table and the restricted depth to bedrock in some areas are the major limitations. On-site investigations can help avoid areas with limited depth to bedrock. Additional fill material may be needed in some areas in order to meet the separation distance requirement between the bottom of the leachfield and bedrock. A detailed, site-specific analysis with groundwater level monitoring and determination of induced groundwater mounding may be required to establish the suitability of this unit. Mound system construction and other site modifications are often necessary. On sloping sites, curtain drains can help lower the water table to an acceptable level.

PHYSICAL and CHEMICAL PROPERTIES							EROSION FACTORS		
Soil name	Depth (In)	Typical texture	Clay (Pct)	Soil reaction (pH)	Permeability (In/Hr)	Organic matter (Pct)	Kw	Kf	T
Colonel, rocky	0-7	FSL	1-10	3.5 - 6.5	0.1-14	4.0-13	.37	.37	2
	7-9	FSL	1-10	3.5 - 6.5	0.1-14	2.0-10	.37	.37	
	9-12	FSL	1-10	3.5 - 6.5	0.1-14	2.0-6.0	.37	.37	
	12-18	GR-FSL	1-10	3.5 - 6.5	0.1-14	0.5-2.0	.37	.55	
	18-65	GR-FSL	1-10	4.5 - 7.3	0.001-1	0.0-1.0	.37	.49	
Tunbridge, rocky	0-7	FSL	1-10	3.5 - 6.0	0.1-14	4.0-13	.32	.32	2
	7-8	FSL	1-10	3.5 - 6.0	0.1-14	3.1-25	.37	.37	
	8-23	FSL	1-10	3.5 - 6.0	0.1-14	2.2-18	.37	.37	
	23-25	FSL	1-10	5.1 - 6.5	0.1-14	1.0-4.2	.43	.43	
	25-35	BR	---	---	0.001-14	---	---	---	
Cabot, rocky	0-7	SIL	1-15	5.1 - 7.3	0.1-14	3.5-20	.43	.43	2
	7-13	FSL	1-15	5.1 - 7.3	0.1-14	0.3-3.5	.49	.49	
	13-65	FSL	1-15	5.6 - 7.8	0.001-1	0.2-1.0	.43	.43	

WATER FEATURES						SOIL FEATURES		
Soil name	Hydrologic group	Depth to seasonal high water table (Feet)	Flooding		Ponding		Hydric soil?	Depth to bedrock (range in inches)
			Frequency	Duration	Frequency	Duration		
Colonel, rocky	D	0.5-1.5	None		None		No	---
Tunbridge, rocky	C	---	None		None		No	20-39
Cabot, rocky	D	0.0-1.5	None		None		Yes	---

LAND USE LIMITATIONS				AGRICULTURAL YIELD DATA	
Soil name	Land use	Rating	Reason **	Crop name	Yield / acre
Colonel, rocky	Dwellings with basements:	Very limited	Depth to saturated zone	Grass-clover	5.6 AUM
Cabot, rocky	Dwellings with basements:	Very limited	Depth to saturated zone	Grass-legume hay	3.5 Tons
Tunbridge, rocky	Dwellings with basements:	Very limited	Depth to hard bedrock	Corn silage	18 Tons

## Soil Fact Sheet - Continued

Essex County, Vermont

Grass-legume hay	3 Tons
Corn silage	14 Tons
Pasture	5.5 AUM
Corn silage	13 Tons
Grass-clover	5.6 AUM
Grass-legume hay	3.5 Tons

### WOODLAND MANAGEMENT

Soil name	Management concern	Rating	Reason	Vermont natural communities
Colonel	Harvest equip operability:	Poorly suited	<30cm to water table for >=6mos	Northern Hardwood Forest, Red Spruce-Northern Hardwood Forest, Lowland Spruce-Fir Forest, Hemlock Forest
Cabot	Harvest equip operability:	Poorly suited	<30cm to water table for >=6mos	
Tunbridge	Harvest equip operability:	Well suited		
Colonel	Road suitability:	Poorly suited	Wetness	
Cabot	Road suitability:	Moderately suited	Slope	
Tunbridge	Road suitability:	Moderately suited	Slope	
Colonel	Erosion hazard (off-road):	Moderate	Slope/erodibility	
Cabot	Erosion hazard (off-road):	Moderate	Slope/erodibility	
Tunbridge	Erosion hazard (off-road):	Slight		