109E: Tunbridge-Berkshire complex, 25 to 50 percent slopes, very stony

The Tunbridge, very stony component makes up 50 percent of the map unit. Slopes are 25 to 50 percent. This component is on mountains on glaciated uplands, hills on glaciated uplands. The parent material consists of loamy supraglacial till derived from granite and gneiss and/or phyllite and/or mica schist. Depth to a root restrictive layer, bedrock, lithic, is 20 to 40 inches (depth from the mineral surface is 19 to 33 inches). The natural drainage class is well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 85 percent. Below this thin organic horizon the organic matter content is about 3 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

The Berkshire, very stony component makes up 35 percent of the map unit. Slopes are 25 to 50 percent. This component is on hills on glaciated uplands, mountains on glaciated uplands. The parent material consists of loamy supraglacial meltout till derived from phyllite and/or granite and gneiss and/or mica schist. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 85 percent. Below this thin organic horizon the organic matter content is about 11 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

Important farmland classification: NPSL	Land capability: 7 s	Vermont Agricultural Value Group: 11

Vermont Residential Onsite Waste Disposal Group and Subgroup: IVb

This unit is generally not 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. Steep slopes in association with the depth to bedrock is the limiting condition. Cut and fill site modifications that reduce the slope gradient are difficult to achieve due to the depth to bedrock.

	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
Tunbridge, very stony	0-3	MPM	---	3.5 - 5.5	1-14	35-95	---	---	2
	3-5	HPM	---	3.5 - 5.5	1-14	35-95	---	---	
	5-8	FSL	1-10	3.5 - 6.0	0.1-14	1.4-5.7	.37	.37	
	8-11	FSL	1-10	3.5 - 6.0	0.1-14	3.1-25	.32	.32	
	11-26	FSL	1-10	3.5 - 6.0	0.1-14	2.2-18	.37	.37	
	26-28	FSL	1-10	5.1 - 6.5	0.1-14	1.0-4.2	.43	.43	
	28-38	BR	---	---	0.001-14	---	---	---	
Berkshire, very stony	0-2	SPM	---	3.5 - 5.5	1-14	35-95	---	---	5
	2-4	FSL	1-10	3.5 - 6.0	0.1-14	5.0-15	.32	.32	
	4-5	FSL	1-10	3.5 - 6.0	0.1-14	1.0-5.0	.37	.37	
	5-7	FSL	1-10	3.5 - 6.0	0.1-14	2.0-20	.32	.32	
	7-13	FSL	1-10	3.5 - 6.0	0.1-14	2.0-10	.32	.32	
	13-21	FSL	1-10	3.5 - 6.0	0.1-14	1.0-6.0	.43	.43	
	21-28	FSL	1-10	3.5 - 6.0	0.1-14	0.0-3.0	.49	.49	
	28-33	FSL	1-10	3.5 - 6.0	0.1-14	0.0-2.0	.49	.49	
	33-65	FSL	1-10	3.5 - 6.0	0.1-14	0.0-1.0	.55	.55	

		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		
Tunbridge, very stony	C	---	None		None		No	20-40
Berkshire, very stony	B	---	None		None		No	---

LAND USE LIMITATIONS				AGRICULTURAL YIELD DATA	
Soil name	Land use	Rating	Reason **	Crop name	Yield / acre
Tunbridge, very	Dwellings with basements:	Very limited	Slope		

stony			
Berkshire, very stony	Dwellings with basements:	Very limited	Slope
Tunbridge, very stony	Pond reservoir areas:	Very limited	Slope
Berkshire, very stony	Pond reservoir areas:	Very limited	Slope

WOODLAND MANAGEMENT

Soil name	Management concern	Rating	Reason	Vermont natural communities
Tunbridge	Harvest equip operability:	Poorly suited	Slope	Northern Hardwood Forest, Hemlock-Northern Hardwood Forest, Mesic Red Oak-Northern Hardwood Forest, Beech-Red Maple-Hemlock-Northern Hardwood Forest Variant, Hemlock Forest
Berkshire	Harvest equip operability:	Poorly suited	Slope	
Tunbridge	Road suitability:	Poorly suited	Slope	
Berkshire	Road suitability:	Poorly suited	Slope	
Tunbridge	Erosion hazard (off-road):	Severe	Slope/erodibility	
Berkshire	Erosion hazard (off-road):	Severe	Slope/erodibility	