

SIE55: Lyman-Knob Lock-Rock outcrop complex, 60 to 80 percent slopes, very stony

The Lyman, very stony component makes up 37 percent of the map unit. The natural drainage class is somewhat excessively 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 10 to 20 inches.

The Knob Lock, very stony component makes up 36 percent of the map unit. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is low. This component is on hills, mountains. The parent material consists of organic material over loamy till. Depth to a root restrictive layer, bedrock, lithic, is 1 to 20 inches.

The Rock outcrop, very stony component makes up 16 percent of the map unit. Water movement in the most restrictive layer is low. This component is on mountains, hills. Depth to a root restrictive layer 0 inches, bedrock, lithic,.

Important farmland classification: NPSL	Land capability: 7 s	Vermont Agricultural Value Group: 11
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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
Lyman, very stony	0-1	SPM	---	3.5 - 5.5	0.6-6	35-100	---	---	1
	1-5	FSL	2-15	3.5 - 6.0	2-6	2.0-10	.37	.37	
	5-13	FSL	1-12	3.5 - 6.0	2-6	1.0-10	.37	.37	
	13-23	UWB	---	---	0.01-20	---	---	---	
Knob Lock, very stony	0-2	MPM	---	3.5 - 5.0	2-20	35-100	---	---	1
	2-4	HPM	---	3.5 - 5.0	2-6	35-100	---	---	
	4-5	FSL	2-15	3.5 - 5.0	0.6-6	1.0-10	.37	.37	
	5-15	UWB	---	---	0.01-20	0.0	---	---	
Rock outcrop, very stony	0-65	UWB	---	---	0.01-20	---	---	---	---

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		
Lyman, very stony	D	---	None		None		No	10-20
Knob Lock, very stony	D	---	None		None		No	1-20
Rock outcrop, very stony	---	---	None				Unranked	0

LAND USE LIMITATIONS				AGRICULTURAL YIELD DATA	
Soil name	Land use	Rating	Reason **	Crop name	Yield / acre
Lyman, very stony	Dwellings with basements:	Very limited	Slope		
Knob Lock, very stony	Dwellings with basements:	Very limited	Slope		
Lyman, very stony	Pond reservoir areas:	Very limited	Slope		
Knob Lock, very stony	Pond reservoir areas:	Very limited	Slope		

WOODLAND MANAGEMENT				
Soil name	Management concern	Rating	Reason	Vermont natural communities
Lyman	Harvest equip operability:	Poorly suited	Slope	Hemlock-Northern Hardwood Forest,

Soil Fact Sheet - Continued

Essex County, Vermont

Knob Lock	Harvest equip operability:	Poorly suited	Slope	Northern Hardwood Forest, Mesic Red Oak-Northern Hardwood Forest, Hemlock Forest, Red Pine Forest or Woodland
Lyman	Road suitability:	Poorly suited	Slope	
Knob Lock	Road suitability:	Poorly suited	Slope	
Lyman	Erosion hazard (off-road):	Very severe	Slope/erodibility	
Knob Lock	Erosion hazard (off-road):	Very severe	Slope/erodibility	