

**82C: Vergennes clay, 8 to 15 percent slopes**

The Vergennes component makes up 80 percent of the map unit. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is very low. This component is on hills on glacial lake plains, knolls on glacial lake plains, ridges on glacial lake plains. The parent material consists of clayey glaciolacustrine deposits. Depth to a root restrictive layer is greater than 60 inches.

Important farmland classification: Statewide

Land capability: 3 e

Vermont Agricultural Value Group: 7

Vermont Residential Onsite Waste Disposal Group and Subgroup: IIIId

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 is the major limitation. A detailed, site-specific analysis is generally required. On-site groundwater level monitoring and determination of induced groundwater mounding is often necessary to establish the suitability of this unit. Curtain drains may 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 |
| Vergennes                        | 0-8        | C               | 27-90      | 4.5 - 7.3          | 0.06-0.6             | 2.0-6.0              | .49             | .49 | 2 |
|                                  | 8-11       | C               | 60-90      | 4.5 - 7.3          | 0-0.2                | 0.5-2.0              | .49             | .49 |   |
|                                  | 11-18      | C               | 60-90      | 5.6 - 8.4          | 0-0.2                | 0.5-2.0              | .49             | .49 |   |
|                                  | 18-60      | C               | 60-90      | 7.9 - 8.4          | 0-0.06               | 0.0-0.5              | .49             | .49 |   |

| 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      |              |                                    |
| Vergennes      | D                | 1.0-3.0                                   | None      |          | None      |               | No           | ---                                |

| LAND USE LIMITATIONS |                           |              |                         | AGRICULTURAL YIELD DATA |              |
|----------------------|---------------------------|--------------|-------------------------|-------------------------|--------------|
| Soil name            | Land use                  | Rating       | Reason **               | Crop name               | Yield / acre |
| Vergennes            | Dwellings with basements: | Very limited | Depth to saturated zone | Grass-legume hay        | 3.5 Tons     |
| Vergennes            | Pond reservoir areas:     | Very limited | Slope                   | Grass-clover            | 5.6 AUM      |
|                      |                           |              |                         | Grass hay               | 4.5 Tons     |
|                      |                           |              |                         | Corn silage             | 13 Tons      |
|                      |                           |              |                         | Alfalfa hay             | 4.5 Tons     |

| WOODLAND MANAGEMENT |                            |                   |                                   |                             |
|---------------------|----------------------------|-------------------|-----------------------------------|-----------------------------|
| Soil name           | Management concern         | Rating            | Reason                            | Vermont natural communities |
| Vergennes           | Harvest equip operability: | Moderately suited | Stickiness; high plasticity index | Valley Clayplain Forest     |
| Vergennes           | Road suitability:          | Moderately suited | Slope                             |                             |
| Vergennes           | Erosion hazard (off-road): | Moderate          | Slope/erodibility                 |                             |