
Soils Report

Contact your local District Conservationist for site specific assistance

Septic Tank Absorption Fields - Dominant Condition

Septic tank absorption fields are areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. Only that part of the soil between depths of 24 and 72 inches is evaluated. The ratings are based on soil properties, site features, and observed performance of the soils. Permeability, a high water table, depth to bedrock or to a cemented pan, and flooding affect absorption of the effluent. Large stones and bedrock or a cemented pan interfere with installation.

Unsatisfactory performance of septic tank absorption fields, including excessively slow absorption of effluent, surfacing of effluent, and hillside seepage, can affect public health. Ground water can be polluted if highly permeable sand and gravel or fractured bedrock is less than 4 feet below the base of the absorption field, if slope is excessive, or if the water table is near the surface. There must be unsaturated soil material beneath the absorption field to filter the effluent effectively. Many local ordinances require that this material be of a certain thickness.

The limitations are considered not limiting if soil properties and site features are generally favorable for the indicated use and limitations are minor and easily overcome; somewhat limiting if soil properties or site features are not favorable for the indicated use and special planning, design, or maintenance is needed to overcome or minimize the limitations; and very limiting if soil properties or site features are so unfavorable or so difficult to overcome that special design, significant increases in construction costs, and possibly increased maintenance are required.

Soil Survey: Knott and Letcher Counties, Kentucky

Survey Status: -

Correlation Date: 03/01/1997

Distribution Date: 12/08/2004

Map

Symbol	Soil Name	Rating	Dominant Component(s) and Reason(s)
AIC	Allegheny loam, 2 to 15 percent slopes	Somewhat limited	Component - Allegheny (80%) <ul style="list-style-type: none"> • Restricted permeability • Slope
AtF	Alticrest-Ramsey-Wallen complex, 20 to 55 percent slopes, rocky	Very limited	Component - Alticrest (35%) <ul style="list-style-type: none"> • Depth to bedrock • Slope • Seepage Component - Ramsey (30%) <ul style="list-style-type: none"> • Depth to bedrock • Slope • Seepage Component - Wallen (20%) <ul style="list-style-type: none"> • Depth to bedrock • Slope • Seepage
BcG	Berks-Caneyville complex, 50 to 120 percent slopes, very rocky	Very limited	Component - Berks (50%) <ul style="list-style-type: none"> • Slope • Seepage

CbF	Caneyville-Renox-Bledsoe complex, 50 to 80 percent slope, extremely stony	Very limited	<ul style="list-style-type: none"> • Depth to bedrock Component - Caneyville (20%) • Depth to bedrock • Slope Component - Caneyville (30%) • Depth to bedrock • Slope • Restricted permeability Component - Renox (30%) • Slope • Restricted permeability Component - Bledsoe (25%) • Slope • Restricted permeability
CgF	Cloverlick-Guyandotte-Highsplint complex, 35 to 80 percent slopes, very stony	Very limited	<ul style="list-style-type: none"> Component - Cloverlick (45%) • Slope • Restricted permeability Component - Guyandotte (20%) • Slope • Restricted permeability Component - Highsplint (20%) • Slope • Restricted permeability
CkF	Cloverlick-Kimper-Highsplint complex, 30 to 65 percent slopes, very stony	Very limited	<ul style="list-style-type: none"> Component - Kimper (30%) • Slope • Restricted permeability Component - Cloverlick (30%) • Slope • Restricted permeability Component - Highsplint (20%) • Slope • Restricted permeability
CsF	Cloverlick-Shelocta-Kimper complex, 20 to 70 percent slopes, stony	Very limited	<ul style="list-style-type: none"> Component - Shelocta (30%) • Slope • Restricted permeability • Depth to bedrock Component - Cloverlick (30%) • Slope • Restricted permeability Component - Kimper (20%) • Slope • Restricted permeability
DAM	Dam, large earthen	Not rated	<ul style="list-style-type: none"> Component - Dam (100%) • Not rated; Slope • Not rated; Fragments > 75mm • Not rated
DgF	Dekalb-Gilpin-Marrowbone complex, 20 to 80 percent slopes, very rocky	Very limited	<ul style="list-style-type: none"> Component - Dekalb (35%) • Depth to bedrock • Slope • Seepage

DrF	Dekalb-Gilpin-Rayne complex, 25 to 65 percent slopes, very rocky	Very limited	<ul style="list-style-type: none"> Component - Gilpin (25%) <ul style="list-style-type: none"> • Depth to bedrock • Slope • Restricted permeability Component - Marrowbone (15%) <ul style="list-style-type: none"> • Depth to bedrock • Slope • Seepage Component - Dekalb (40%) <ul style="list-style-type: none"> • Depth to bedrock • Slope • Seepage Component - Rayne (20%) <ul style="list-style-type: none"> • Slope • Depth to bedrock • Restricted permeability Component - Gilpin (20%) <ul style="list-style-type: none"> • Depth to bedrock • Slope • Restricted permeability
FaF	Fedscreek-Shelocta-Handshoe complex, 30 to 80 percent slopes, very stony	Very limited	<ul style="list-style-type: none"> Component - Shelocta (30%) <ul style="list-style-type: none"> • Slope • Restricted permeability • Depth to bedrock Component - Fedscreek (30%) <ul style="list-style-type: none"> • Slope • Seepage • Depth to bedrock Component - Handshoe (25%) <ul style="list-style-type: none"> • Slope • Seepage
FkE	Fiveblock and Kaymine soils, 0 to 30 percent slopes, stony	Very limited	<ul style="list-style-type: none"> Component - Fiveblock (40%) <ul style="list-style-type: none"> • Seepage • Slope • Content of large stones Component - Kaymine (40%) <ul style="list-style-type: none"> • Slope • Seepage
GID	Gilpin-Shelocta complex, 12 to 25 percent slopes	Very limited	<ul style="list-style-type: none"> Component - Gilpin (40%) <ul style="list-style-type: none"> • Depth to bedrock • Slope • Restricted permeability Component - Shelocta (35%) <ul style="list-style-type: none"> • Slope • Restricted permeability
GmF	Gilpin-Summers-Kimper complex, 20 to 55 percent slopes, very stony	Very limited	<ul style="list-style-type: none"> Component - Gilpin (30%) <ul style="list-style-type: none"> • Depth to bedrock • Slope • Restricted permeability

Gr	Grigsby sandy loam, occasionally flooded	Very limited	<ul style="list-style-type: none"> Component - Summers (25%) <ul style="list-style-type: none"> • Depth to bedrock • Slope • Seepage • Content of large stones Component - Kimper (20%) <ul style="list-style-type: none"> • Slope • Restricted permeability Component - Grigsby (85%) <ul style="list-style-type: none"> • Flooding • Seepage • Depth to saturated zone
GuB	Grigsby-Urban land complex, 0 to 6 percent slopes, occasionally flooded	Very limited	<ul style="list-style-type: none"> Component - Grigsby (65%) <ul style="list-style-type: none"> • Flooding • Seepage • Depth to saturated zone
HaF	Handshoe-Feds creek-Marrowbone complex, 30 to 80 percent slopes, very stony	Very limited	<ul style="list-style-type: none"> Component - Handshoe (35%) <ul style="list-style-type: none"> • Slope • Seepage Component - Feds creek (25%) <ul style="list-style-type: none"> • Slope • Seepage • Depth to bedrock Component - Marrowbone (15%) <ul style="list-style-type: none"> • Depth to bedrock • Slope • Seepage
HeF	Helechawa-Varilla-Jefferson complex, 35 to 75 percent slopes, very rocky	Very limited	<ul style="list-style-type: none"> Component - Helechawa (27%) <ul style="list-style-type: none"> • Slope • Seepage • Depth to bedrock Component - Varilla (27%) <ul style="list-style-type: none"> • Slope • Seepage • Content of large stones Component - Jefferson (20%) <ul style="list-style-type: none"> • Slope • Seepage
HsF	Highsplint-Sheloceta-Dekalb complex, 35 to 80 percent slopes, very stony	Very limited	<ul style="list-style-type: none"> Component - Highsplint (35%) <ul style="list-style-type: none"> • Slope • Restricted permeability Component - Sheloceta (25%) <ul style="list-style-type: none"> • Slope • Seepage • Depth to bedrock Component - Dekalb (15%) <ul style="list-style-type: none"> • Restricted permeability • Depth to bedrock • Slope • Seepage

HtF	Highsplint-Shelocta-Muse complex, 30 to 80 percent slopes, extremely stony	Very limited	<p>Component - Highsplint (30%)</p> <ul style="list-style-type: none"> • Slope • Restricted permeability <p>Component - Shelocta (25%)</p> <ul style="list-style-type: none"> • Slope • Seepage • Depth to bedrock • Restricted permeability <p>Component - Muse (15%)</p> <ul style="list-style-type: none"> • Restricted permeability • Slope • Depth to bedrock
Hy	Holly loam, frequently flooded	Very limited	<p>Component - Holly (85%)</p> <ul style="list-style-type: none"> • Flooding • Depth to saturated zone • Seepage • Restricted permeability
ImF	Itmann very channery sandy loam, 4 to 80 percent slopes	Very limited	<p>Component - Itmann (90%)</p> <ul style="list-style-type: none"> • Slope • Seepage
KfF	Kaymine, Fairpoint, and Fiveblock soils, benched, 2 to 70 percent slopes, very stony	Very limited	<p>Component - Kaymine (40%)</p> <ul style="list-style-type: none"> • Slope • Seepage <p>Component - Fairpoint (20%)</p> <ul style="list-style-type: none"> • Restricted permeability • Slope <p>Component - Fiveblock (15%)</p> <ul style="list-style-type: none"> • Seepage • Slope • Content of large stones
KrF	Kimper-Cloverlick-Renox complex, 30 to 80 percent slopes, extremely stony	Very limited	<p>Component - Kimper (30%)</p> <ul style="list-style-type: none"> • Slope • Seepage <p>Component - Cloverlick (25%)</p> <ul style="list-style-type: none"> • Slope • Seepage <p>Component - Renox (20%)</p> <ul style="list-style-type: none"> • Slope • Restricted permeability
Pt	Pits, quarries	Not rated	<p>Component - Pits, quarries (100%)</p> <ul style="list-style-type: none"> • Not rated; Slope • Not rated; Fragments > 75mm • Not rated
RgB	Rowdy-Grigsby complex, 0 to 4 percent slopes, occasionally flooded	Very limited	<p>Component - Rowdy (45%)</p> <ul style="list-style-type: none"> • Flooding • Seepage • Restricted permeability <p>Component - Grigsby (35%)</p> <ul style="list-style-type: none"> • Flooding • Seepage

ShF	Shelocta-Highsprint complex, 30 to 65 percent slopes, very stony	Very limited	<ul style="list-style-type: none"> • Depth to saturated zone Component - Shelocta (55%) <ul style="list-style-type: none"> • Slope • Restricted permeability Component - Highsprint (25%) <ul style="list-style-type: none"> • Slope • Restricted permeability
SmF	Shelocta-Muse complex, 15 to 50 percent slopes, very stony	Very limited	Component - Shelocta (45%) <ul style="list-style-type: none"> • Slope • Seepage • Depth to bedrock • Restricted permeability Component - Muse (35%) <ul style="list-style-type: none"> • Restricted permeability • Slope • Depth to bedrock
UdE	Udorthents-Urban land complex, steep	Not rated	Component - Udorthents (60%) <ul style="list-style-type: none"> • Not rated; Fragments > 75mm • Slope Component - Urban land (25%) <ul style="list-style-type: none"> • Not rated; Fragments > 75mm • Not rated • Slope
UrC	Urban land-Udorthents complex, 0 to 15 percent slopes	Not rated	Component - Urban land (60%) <ul style="list-style-type: none"> • Not rated; Fragments > 75mm • Not rated Component - Udorthents (25%) <ul style="list-style-type: none"> • Not rated; Fragments > 75mm
UuB	Urban land-Udorthents-Grigsby complex, 0 to 6 percent slopes, rarely flooded	Not rated	Component - Urban land (40%) <ul style="list-style-type: none"> • Not rated; Fragments > 75mm • Not rated Component - Udorthents (30%) <ul style="list-style-type: none"> • Not rated; Fragments > 75mm
VaF	Varilla-Jefferson-Alticrest complex, 35 to 75 percent slopes, very rocky	Very limited	Component - Varilla (40%) <ul style="list-style-type: none"> • Slope • Seepage Component - Jefferson (25%) <ul style="list-style-type: none"> • Slope Component - Alticrest (15%) <ul style="list-style-type: none"> • Depth to bedrock • Slope • Seepage
W	Water	Not rated	Component - Water (100%) <ul style="list-style-type: none"> • Not rated; Slope • Not rated; Fragments > 75mm • Not rated