



**SOIL AND ENVIRONMENTAL TECHNOLOGY, INC**  
**111 N. Franklin Street, Christiansburg, VA 24073**  
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### General Information

Date: 4/12/2018 Roanoke County Health Department  
 Applicant: Susan Delp Telephone #: (540) 556-5445  
 Address: 5445 Woodchuck Lane, Roanoke, VA 24018  
 Directions to the Property: US-220 S, Exit for VA-419 N/US-220 BUS/ Franklin Rd (0.8 mi), L on Starkey Rd (1.6 mi), R on Starkey Rd (0.5 mi), R on Merriman Rd (0.2 mi), L on Crystal Creek Dr. (1.1 mi), R on Willow Spring Rd. Property located at end of cul-de-sac up hill & to left of powerline  
 Tax Map ID: 086.20-02-07.00-0000 (portion of)

### Soil Information Summary

1. Position in landscape satisfactory Yes ☒ No ☐ Describe: Sideslope
2. Slope 28 %
3. Depth to rock/impervious strata: Max. >72" Min. >72" None
4. Depth to seasonal water table (gray mottling or gray color) No ☒ Yes ☐
5. Free water present No ☒ Yes ☐ range in inches
6. Soil percolation rate estimated Yes ☒ Texture group 2  
 No ☐ Estimated rate 45 Min/inch
7. Percolation test performed Yes ☐ Number of percolation test holes  
 No ☒ Depth of percolation test holes  
 Average percolation rate

Name and title of evaluator: Bill Evans PSS/COSE

Signature:

- X** Site Approved: Absorption trenches dispersing septic tank effluent to be placed at 48" depth at site designated. Site provides a total of 1080 square feet of absorption area for the drainfield. This site does not require a reserve area.

Site Disapproved:

Reason for rejection: (check all that apply)

- 1 Position in landscape subject to flooding or periodic saturation.
- 2 Insufficient depth of suitable soil over hard rock.
- 3 Insufficient depth of suitable soil to seasonal water table.
- 4 Rates of absorption too slow.
- 5 Insufficient area of acceptable soil for required drainfield, and/or reserve area
- 6 Proposed system too close to well
- 7 Other (Specify)

# **PROFILE DESCRIPTION SOIL EVALUATION REPORT**

Date of Evaluation: 1/24/2018

Roanoke County Health Department

x See application sketch

See construction permit

**Applicant:** Susan Delp **Tax Map ID:** 086.20-02-07.00-0000 (portion of 15.1 acres on Willow Spring Rd)

Hole #	Horizon	Depth	Description	Texture Group
Auger 1	A	0-3	Brown (7.5YR 4/4) sandy loam	2
	BA	3-18	Strong Brown (7.5YR 5/8) sandy loam	2
	Bt	18-36	Yellowish Red (5YR 5/8) sandy clay loam	2
	BC	36-60	Strong Brown (7.5YR 5/8) sandy clay loam/sandy loam	2
	C	60-72	Reddish Yellow (7.5YR 6/8) sandy loam	2
Auger 2	A	0-5	Brown (7.5YR 4/4) sandy loam	2
	BA	5-12	Brown (7.5YR 5/4) sandy loam	2
	Bt1	12-20	Strong Brown (7.5YR 5/8) sandy clay loam	2
	Bt2	20-36	Yellowish Red (5YR 5/8) clay loam	3
	BC	36-45	Yellowish Red (5YR 5/8) sandy clay loam	2
	C	45-72	Reddish Yellow (5YR 6/8) sandy loam	2
Auger 3	A	0-3	Brown (7.5YR 4/4) sandy loam	2
	BA	3-12	Brown (7.5YR 5/4) sandy loam	2
	Bt	12-45	Strong Brown (7.5YR 5/6) sandy clay loam	2
	C	45-72	Strong Brown (7.5YR 5/8) sandy loam	2
Auger 4	A	0-2	Dark Yellowish Brown (10YR 4/4) sandy loam	2
	BA	2-10	Yellowish Brown (10YR 5/4) sandy loam	2
	Bt	10-25	Strong Brown (7.5YR 5/6) sandy loam	2
	C	25-72	Yellowish Brown (10YR 5/8) sandy loam	2

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**DRAINFIELD RECOMMENDATIONS, DESIGN BASIS, & AREA CALCULATIONS  
AND WELL RECOMMENDATION & SPECIFICATIONS**

<b>Main DF</b>		<b>Reserve DF</b>	
Type of system	Gravity-Gravelless Trenches	Reserve Area Required	No
EPR	45	Type of Reserve	N/A
Slope %	28	EPR	N/A
# Bedrooms	4	Slope %	N/A
Gallons/Day	600	Gallons/Day	N/A
Width of Trench (ft.)	3	Width of Trench (ft.)	N/A
Total Square Ft. of Gravelless Trench Bottom Required per BR	258	Total Square Ft. of Trench Bottom Required	N/A
Total Square Ft. of Gravelless Trench Bottom per BR in Design	270	Total Square Ft. of Trench Bottom in Design	N/A
Total Square Ft. of Gravelless Trench Bottom Required	1032	# Lines of Reserve	N/A
Total Square Ft. of Gravelless Trench Bottom in Design	1080	Line Length (ft.)	N/A
# Lines Installed	4	Installed <24" from Rock or Other Impervious Strata	N/A
Length of Line Installed (ft.)	90	Centers (ft.)	N/A
Installed <24" from Rock or Other Impervious Strata	No	Width Required (ft.)	N/A
Centers (ft.)	10	Width in Design (ft.)	N/A
Width Required (ft.)	33	Installation Depth (inches into natural soil)	N/A
Installation Depth (inches into natural soil)	48	Amount of Backfill Required (inches)	N/A
Amount of Backfill Required (inches)	N/A	Type of Well Recommended	3B
		Amount of Casing and Grout (ft.)	50' min.



