

Swary Residence, 32755 Routt County Road #5, Routt County, Colorado, OWTS
Calculations

Facility to be Served:

Residence with 5 bedrooms: 8 persons @ 75 Gal./day each = 600 Gal./day design flow

Minimum tank size = 1,500 Gallons, with 2 chambers and an approved effluent filter or 3 chambers.

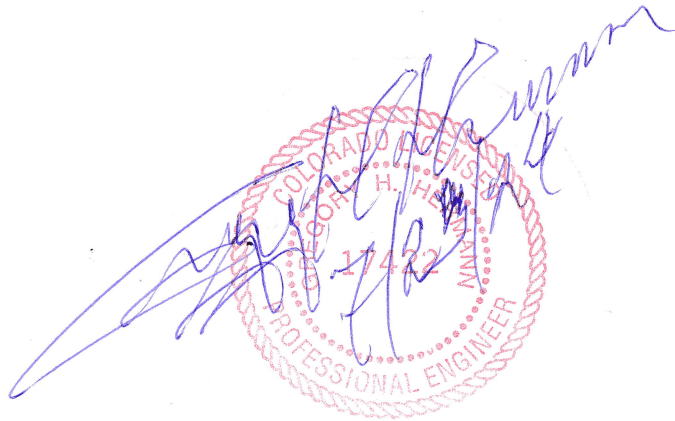
Absorption Field Sizing : Using conventional gravel bedded absorption trenches.

Long Term Acceptance Rate (LTAR) = 0.80 Gal./ sq. ft. / day (per Bear Valley Design, Ltd., letter, dated 4/27/24)

600 Gal./day) (.7 Chamber factor) / (0.80 Gal./day/ sq. ft) = 525 sq. ft. (required absorption area)

System design using Infiltrator Quick 4 chambers:

394 sq. ft. / 11.33 sq. ft./chamber = 47 chambers required (2 rows of 16 and 1 row of 15, center fed)

A red circular professional engineer seal for the State of Colorado. The seal contains the text "COLORADO BOARD OF PROFESSIONAL ENGINEERS" around the perimeter and "17422" in the center. A blue ink signature is written over the seal.