

Brontrager Residence, 32100 Routt County Road #5, Routt County, Colorado, OWTS  
Calculations

Facility to be Served:

Residence with 2 bedrooms: 4 persons @ 75 Gal./day each = 300 Gal./day design flow

Minimum tank size = 750 Gallons, plus a 300 gallon dosing tank with an automatic siphon.

Absorption Field Sizing : Using 'Infiltrator' Quick 4 Plus Chambers.

Long Term Acceptance Rate (LTAR) = 0.30 Gal./ sq. ft. / day (per C. Peters of Routt County)

$(300 \text{ Gal./day}) * (.7 \text{ Chamber factor}) * (.9 \text{ dosing factor}) / (0.30 \text{ Gal./day/ sq. ft.}) =$   
630 sq. ft. (required absorption area)

System design using Infiltrator Quick 4 chambers:

$630 \text{ sq. ft.} / 11.33 \text{ sq. ft./chamber} =$  56 chambers required (2 rows of 19 , & 1 rows of 18)

A circular red ink seal for a Professional Engineer in the State of Colorado. The seal contains the text "COLORADO LICENSE", "GREGORY H. THOMPSON", "17222", and "PROFESSIONAL ENGINEER". A handwritten signature, "Gregory H. Thompson", is written across the seal, and the date "11/25" is written below it.