

Philo Ridge Farm Well Analysis

Sheep Barn Well

Storage Requirements

Instantaneous Peak Yield

10 GPM - Well Driller's Blow Yield estimate

No Is this a qualified Test conforming to 11.8.2.2 of the WSR?

5 GPM - Instantaneous Peak Yield (Long Term yield)

0 Number of Residential Units

38 GPM - Estimated Instantaneous Peak Demand

1,295 GPD - Average Day Demand (Design Flow)

1.80 GPM - Maximum Day Demand (ADD/720)

No Is 2/3's of the Maximum Day Demand greater than the Long Term Yield?

NA If Yes, then Storage (S) is equal to the Average Day Demand = S (Gallons)

Yes Does the Long Term Yield exceed the Maximum Day Demand?

712 If, yes, then Storage = lessor of 55% of Average Day Demand = S (Gallons)

or

Yes Does Long Term Yield Exceed the Maximum Day Demand

If, yes, then Storage = The following equation $S = D(1-Y/P)$

1295 = D (Project Average Day Demand (gallons))

38 = P (Project Instantaneous Peak Demand, GPM)

5 = Y (Water Source Yield, GPM)

1125 = S (Gallons)

712 Min. Required Storage (Gallons)

Casing Storage

625 Depth of Well (FT)

35 Static Water Level (FT)

DD = Predicted Draw-down (FT)

247.2 DD = SE + (TAH ((MDD/Y))

35 SE = Depth to Static water Level (FT)

590 TAH = Total Available Head (well Depth - Minus Static level)

1.80 MDD = Maximum Day Demand (GPM)

5 Y = Long Term Yield (GPM)

20 Depth of Well above bottom of Well (FT)

605 Lowest Pump Installation Depth (FT)

357.8 Available Storage (Pump Elev - DD)(VLF)

6 Diameter of Well (Inches)

0.196 Volume of water per VLF (CF)

1.47 Volume of water per VLF (gal)

526 Available Storage Volume (Gal)

No Is well Casing Storage > Storage Requirement?

187 Gallons of Supplemental Pressure Storage to be Provided