

FLOW CALCULATIONS

PUMP EQUATIONS		WELL#1		(96-88-67)	
WATER RIGHT No.		96-8667			
	HP	H in feet	Efficiency as a decimal	Pumping lift in feet	System pressure in PSI
$Q = \frac{HP \cdot 8.8 \cdot \text{Eff}}{H}$	5	193.6463	0.7	78	50
Q = 0.159 cfs 71.5 gpm					

PUMP EQUATIONS		WELL # 2		(96-93-N-006-000)	
WATER RIGHT No.		96-8667			
	HP	H in feet	Efficiency as a decimal	Pumping lift in feet	System pressure in PSI
$Q = \frac{HP \cdot 8.8 \cdot \text{Eff}}{H}$	7.5	196.6463	0.7	81	50
Q = 0.235 cfs 105.6 gpm					

PUMP EQUATIONS		WELL #3 (DOO10076)		96-94-N-229	
WATER RIGHT No.		94-7367			
	HP	H in feet	Efficiency as a decimal	Pumping lift in feet	System pressure in PSI
$Q = \frac{HP \cdot 8.8 \cdot \text{Eff}}{H}$	40	177.6463	0.7	62	50
Q = 1.389 cfs 623.5 gpm					

Method of Determination:

3. ☒ Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.
- ☒ Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.
- ☒ Aerial Photo Attached (required for irrigation of 10+ acres).
- ☒ Photo of Diversion and System Attached

4.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
Well # 1		5	40950-15	Grundfos	
Well # 2		7.5	21750 T-18	A.Y. McDonald	
Well # 3		40	4755	Grundfos	

*Code to correspond with No. on map and aerial photo

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date

2. Measurements:

E. FLOW CALCULATIONS

☒ Additional Computation Sheets Attached

Measured Method:

Reservoir 78,000 gal with gravity Flow to System.

F. VOLUME CALCULATIONS**1. Volume Calculations for Irrigation:**

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 70 \text{ ac} \times 3 \text{ AF} = 210 \text{ AF}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.67 \text{ cfs} \times 246 \times 1.9835 = 326 \text{ AF}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 210 \text{ AF}$$

2. Volume Calculations for Other Uses: Irrigation is 1 ac per home that = 70 ac X 3 AF = 210 AF, Domestic 70 homes X 0.6 AF = 42 AF

G. NARRATIVE/REMARKS/COMMENTS: The permit was assigned to Mountain Springs Water Corporation from Gerald Lewis in 1995. This water right needs to be amended to Municipal use.

Have conditions of permit approval been met? ☒ Yes ☐ No

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
MUNICIPAL	01/01 to 12/31	0.670 CFS	252.00 AF
<u>Totals:</u>		0.670 CFS	252.00 AF

2. Recommended Amendments

☐ Change P.D. as reflected above ☒ Add P.D. as reflected above ☐ None

☒ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

I. AUTHENTICATION

Field Examiner's Name

Date

Reviewer

Date

Eric Adams
Eric Adams

1-13-2008

1-14-2008



WELL # 3.JPG



SAMPLE HOME.JPG



WELL # 1.JPG



WELL # 2.JPG

96-8667



09/25/2008

96-8667



09/25/2008



96-8667





96-8667 Reservoir 78,000 gal