

5/3/02. recommending 29-13315 for disallowal
and recommending the ground water
under (0.005 cfs) 29-4431.

The system is connected and both
source flow into the pond and used
for flood irrigation, stockwater and
domestic.

The domestic use is only occasional,
so am going to recommend irrigation of
2 acres under this right.

Recommending 0.050 cfs from ground water
well (artesian well) and spring).

5/20/02. Domestic & Stock. - make it additive: round
the diversion rate to 0.05 add the stock,
No irrigation - discussion with Allen
Bentley.

A29-13315 / 4431

Beneficial Use claim for Aradna Hansen-Shipley.

Source: Ground water.

Measurement done 4/25/02 1:50 pm. weather was warm, (upper 60's), no wind.

The well gravity feeds through a 3/4" pipe to the spring south of the house.

did a bucket/stopwatch method.

4 trials because the time differed.

1. 5 gal 2 min 4 sec.

2. 5 gal 2 min 10 sec.

3. 5 gal 2 min 32 sec.

4. 5 gal 2 min 41 sec.

Am not going to use the last measurement because I think that as the hose was lifted to get it into the bucket it began to slow the flow.

5/3/02

Conversion to minutes.

1. $2 \text{ min} + 4 \text{ sec} + \frac{1 \text{ min}}{60 \text{ sec}} = 2.0667 \text{ min}$

2. $2 \text{ min} + 10 \text{ sec} + \frac{1 \text{ min}}{60 \text{ sec}} = 2.1667 \text{ min}$

3. $2 \text{ min} + 32 \text{ sec} + \frac{1 \text{ min}}{60 \text{ sec}} = 2.533 \text{ min}$

Average time:

$$\frac{2.0667 + 2.1667 + 2.533}{3} = 2.26 \text{ min.}$$

flow rate:

$$\frac{5 \text{ gal}}{2.26 \text{ min}} = 2.21 \text{ gpm.}$$

Conversion to cfs:

$$2.212389 \text{ gpm} * 0.00223 = 0.0049 \text{ cfs.}$$

Recommended diversion rate:

1/25/62 Arvidna Hansen.

Spring water - one pipe. 2" pipe.

Bucket & stopwatch method.

1. 5 gal 3 min 10 sec. (3.17 min) 1.58 gpm.

2. 5 gal 3 min 10 sec.

1:50 pm

G.W. Well Measured through garden hose, artesian well runs into the pond.

When I tried to measure the pressure from the pipe: ϕ

1. 5 gal. 2 min 5 sec 2.07

2. 5 gal. 2 min 10 sec. 2.17

3. 5 gal 2 min 30 sec 2.53.

4. 5 gal 2 min 41 sec. 2.68

$$\frac{9.45}{4} = 2.36 = 2 \text{ min. } 22 \text{ sec.}$$

$$5 \text{ gal} / 2.36 \text{ min} = 2.12 \text{ gal/min}$$

A29-4431.

5/2/02 4:30 pm.

Allen Rubenry & Cindy Bird did a bucket velocity on the 4" pipe from the Spring. The 4" pipe discharges into a ditch and runs south of the house, campers and Cowboy stover.

Allen brought down a 4" pipe from I.F. that we were able to put into the ditch and divert all the water through.

2 trials were done.

1. 5 gals ; 19 sec.

2. 5 gal 19 sec.

CONVERSIONS:

$$19 \text{ sec} \frac{1 \text{ MIN}}{60 \text{ sec}} = 0.31667 \text{ min.}$$

$$\frac{5 \text{ gals}}{0.31667 \text{ min}} = 15.789 \text{ gpm.}$$

$$16 \text{ gal/min} * 0.00223 = 0.035 \text{ cfs.}$$

4/25/02 Spring measurement from the 2" pipe to the 2nd pond.

Bucket & stopwatch method.

2 trials.

1. 5 gal 3 min 10 sec.

2. 5 gal 3 min 10 sec.

CONVERSION:

$$3 \text{ min} + 10 \text{ sec} * \frac{1 \text{ min}}{60 \text{ sec.}} = 0.16667 \text{ min.}$$

$$3.167 \text{ min.}$$

Diversion rate:

$$\frac{5 \text{ gal}}{3.167 \text{ min}} = 1.58 \text{ gpm}$$

CONVERSION to cfs:

$$1.58 \text{ gpm} * 0.00223 = 0.0035 \text{ cfs.}$$

Total flow from the spring:

$$4'' \text{ pipe} = 0.035 \text{ cfs.}$$

$$2'' \text{ pipe} = 0.0035 \text{ cfs.}$$

$$\frac{0.0385 \text{ cfs}}{\quad} \rightarrow \underline{\underline{0.04 \text{ cfs.}}}$$

Recommend 0.04 cfs. for the spring

3/27/02. file 29-4431.

Contractor information: The contractor has assumed a 1.5 hp pump to calculate the flow rate. This system doesn't have a pump. It's all gravity fed. This claim had the GPS tag on the culvert next to the main road.

Groundwater well claim has been filed. Waiting for claim from Idaho Falls. This system is connected with the groundwater well.

Need to see if we can uncover the pipe to determine if the groundwater can be measured.

The spring comes up in the pond and gravity feeds the system, flood irrigates.

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