

MEMORANDUM

To: City of American Falls Files
Fr: Bryce Cantor
Date: 8/17/01

Re: Combined ϕ Limitation,
POD

EWMD "dead"
#65" ID #63

The following relies on the East Water Measurement District files. Except for measurement of discharge at the FS location, copies are not included in the AF files.

1) Transfer-imposed limitation = 13.03 gfs from all POD combined.

2) WMD shows the following:

- 8531E 13 SW 3 wells @ Spring 307.1 GPM = 0.68 gfs
- 7531E 29 SE #5 1526.7 GPM = 3.40 gfs
- 7531E 29 SE #1 239.1 GPM = 0.53 gfs
- 7531E 29 NWSWSE #4 not meas. - see theoretical below

Assume PCC $\approx$ PCC from Well #1.

Well # PCC = 508.3 Kw# / acre foot

$$PCC = \frac{KW \times 5431}{GPM} \rightarrow GPM = \frac{KW \times 5431}{PCC}$$

Combined Q p2

8/17/01

Observed Kw on WMD records for #4 = not reported.

Assume NP ratio is $\approx$ Q ratio.

Well #1 = 40 hp well #4 = 125 hp

$$0.53 \text{ gfs} \times \frac{125}{40} \approx 1.66 \text{ gfs}$$

- 75 31E 21 NWSESW Well #6

no meas performed by WMD

assume proportional to well #1

$$0.53 \text{ gfs} \times \frac{150}{40} \approx 1.99 \text{ gfs}$$

Note that Well #5 has 3.4 gfs discharge
@ 125 hp, so #4 & #6 may be 3.4
and 4.1 gfs respectively.

~~Note also that City of American Fork letter
indicates six sources of water; WMD records
only show 5. Wells #2 & #3 seem to be
missing from the series~~

- 75 31E 29 NWNWSE pump #3

Combined Q p 3

8/17/01

Pump 3 not measured. 125 hp.
by methods above Q ranges fr.
1.66 - 3.4 gfs.

Summary.

Springs	0.68 - 0.68
# 5	3.40 - 3.40
# 1	0.53 - 0.53
# 4	1.66 - 3.40
# 6	1.99 - 4.10
# 3	1.66 - 3.40
Total	9.92 - 15.51

3) Summation of Transfer-approved rates:

29-2460	4.68
29-2510	2.42
29-4421	2.00*
29-7821	3.12
29-7822	0.81
	13.03

* evidence does not support this rate.

4) Additional Permits per AS Enterprise Query:

29-8171 3.21 gfs.

5) Conclusions

- a) 29-4421 should be recommended @ the measured 0.68 g/s
- b) At this recommendation, the $\pm$ recommendation will sum to $(13.03 - 2.00) + 0.68 = 11.71$ g/s
- c) Adding permit 29-8171 g/s brings total to $11.71 + 3.21 = 14.92$ g/s. This is very close to the optimistic high-end of actual Q.
- d) Because current recommendations will be less than 13.03 g/s there is no need for the combined Q limitation. Any need for combined limits associated w/ 29-8171 can be imposed by Allocations Bureau at time of licensing.

~~Depe G. Cutor 8/17/01~~

Combined R p 5 8/17/01

6) POD

There are 3 wells in the old spring at the 8 s. location. WMD records indicate 5 wells in the city. The transfer seems to indicate 6 wells plus the spring pole.

Likely the difference is "Well #2" which is missing from the WMD list and attached map (from WMD files, apparently, supplied by City of American Falls. Note numbering discrepancy; two #5 and no #4. This map seems to correspond to what I remember from field work w/ Lewis Rouns of EWRD in 1998).

Conclusion: Recommend 3 pod @ Spring, locate visually by GIS. Recommend 5 PD shown on attached map per visual GIS. Recommend "left over" POD from xfer by GIS "Make shape from PLS" routine.

Dwight A. Cantor 8/17/01

Note our purpose of xfer was to add PD; This appears to be the section 32 PD located on SDE by PLS. BAC 8/17/01

From East Water Measurement
District Records

American Falls Reservoir

537270

Post ID
537267

→ 537268

→ 537269

→ 537271

537266
542728
Springs 542729

American
Falls

9

10

11