

MEMORANDUM

March 20, 2026

Water Right: 95-9427

Author: william.cresse

Subject: Field Report Narrative

Reference memo to file. Memo details IDWR recommended maximum diversion rate based on Beneficial Use Field Report (6/6/2025).

Per Beneficial Use Field Report, per Remington production data, largest flow measurement recorded was 1.48 cfs¹.

Per IDAPA 37 – Department of Water Resources – Water Allocation Bureau – 37.03.02 – Beneficial Use Examination Rules – Section 035, page 7 (35.01.n), the amount of water will be limited by the smaller of the permitted amount (5.9 cfs), the amount upon which the license examination fee is paid (2.36 cfs, \$150), the capacity of the diversion works (4.43 cfs, theoretical pump equations) or the amount beneficially used prior to submitting proof of beneficial use (1.48 cfs).

For 95-9427, since Remington put 1.48 cfs to beneficial use, there are no further concerns about water right overlap or municipal provider overlap within Remington's development period service area.

Therefore, IDWR's proposed maximum diversion for license is 1.48 cfs².

IDWR proposed water right condition of approval: X35: Rights 95-9427, 95-9457 and 95-9458 when combined shall not exceed a total diversion rate of 2.25 cfs.

¹ Permit Proof Due Date: 6/1/2023. Permit Proof Made Date: 5/31/2023. Remington production data January 2014 through December 2024.

² Remington claims to have easement to access Remington's Northern most well lot (parcel 07227002010A), but IDWR has yet to see said document.

MEMORANDUM

February 23, 2026

Water Right: 95-9427

Author: william.cresse

Subject: Field Report Narrative

Reference memo to file. Memo details changes to diversion rate recommendation and added volume (AF) limitation.

In Beneficial Use Field Report authenticated 6/6/2025 (page 3), maximum diversion rate recommended to license 95-9427 right was 4.43 cfs (via theoretical pump equations) – 2.25 cfs (prior rights 95-9457 & 95-9458, both active decreed water rights) = 2.18 cfs.

I ran the theoretical pump equations again, with the following assumptions ---

- 80% efficiency and 45 PSI are typical estimates/assumptions.
- Subtracted 15' from driller's report total depth to determine pumping lift in feet.
- I *believe/think* ---
 - Well #1 is D0088102*, 40 HP, 250 GPM, 572' total depth.
 - Well #2 is 96-96-N-02886, 125 HP, 750 GPM, 554' total depth.
 - Well #3 is 96-69-N-11*, 250 HP, 1,000-1,100 GPM, 540' total depth.

*Tammy's report had well #1/#3 tag/permit numbers flipped relative to mine...

Pump horsepower equation = $Q \text{ (cfs)} = \frac{HP * 8.8 * \text{Eff}}{\text{TDH}}$. TDH (ft.) = Total Dynamic Head. 1 atm = 14.7 psi

Well #1: $\text{TDH} = (572 - 15) + 45 \text{ PSI} * 34 / 14.7 = 661.1 \text{ ft.}$

Well #1: $Q = 40 \text{ HP} * 8.814 * 0.80 / 661.1 = 0.427 \text{ cfs}$

Well #2: $\text{TDH} = (554 - 15) + 45 \text{ PSI} * 34 / 14.7 = 643.1 \text{ ft.}$

Well #2: $Q = 125 \text{ HP} * 8.814 * 0.80 / 643.1 = 1.371 \text{ cfs}$

Well #3: $\text{TDH} = (540 - 15) + 45 \text{ PSI} * 34 / 14.7 = 629.1 \text{ ft.}$

Well #3: $Q = 250 \text{ HP} * 8.814 * 0.80 / 629.1 = 2.802 \text{ cfs}$

Total: 4.60 cfs (3.8% more than previous Beneficial Use Field Report)

Per Beneficial Use Field Report, Remington's flow data showed largest flow measurement on main water line was 1.48 cfs.

To calculate recommended diversion rate, we will use theoretical pump calculations and subtract existing water rights on same overlapping POU: $4.60 \text{ cfs} - 1.92 \text{ cfs (95-9458, 1996)} - 0.33 \text{ cfs (95-9457, 1996)} = 2.35 \text{ cfs}$

Total: 2.35 cfs Recommended Maximum Diversion Rate

Per the Peppersack memo dated 10/19/2009 (page 6), municipal providers that do not serve an incorporated city shall include an annual volume limitation on non-RAFN applications.

Per [N:\Northern Region Groundwater Levels\Pump Data\RPA\Pump Data](#), the largest pumped volume year for Remington between permit approved date and permit proof made date was 2021 at 403.2 AF. I believe this should be the licensed volume to go along with the recommended maximum diversion rate.

Total: 403.2 AF Recommended Annual Volume Limitation

Outstanding Topics:

1. Gem State Water's 95-9643 & 95-9644 appear to be a direct Municipal overlap.
2. The parcel (Northern most well lot that has Well #1) for one of the PODs does not appear to be owned by Remington.