

Groundwater Transfer Review Summary Form

Transfer/PA # T- 14721 (RA)

GW Reviewer Aaron Orr Date Review Completed: 10/26/2025

Summary of Same Source Review:

☐ The proposed change in point of appropriation is not within the same aquifer as per OAR 690-380-2110(2).

Summary of Water Level Decline Condition Review:

☐ Water levels at the original point(s) of appropriation have exceeded the allowed decline threshold defined by conditions in the originating water right.

Summary of Injury Review:

☐ The proposed transfer will result in another, existing water right not receiving previously available water to which it is legally entitled or result in significant interference with a surface water source as per 690-380-0100(3).

Summary of GW-SW Transfer Similarity Review:

☐ The proposed SW-GW transfer doesn't meet the definition of "similarly" as per OAR 690-380-2130.

This is only a summary. Documentation is attached and should be read thoroughly to understand the basis for determinations.



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Ground Water Review Form:

- ☒ **Water Right Transfer**
☐ **Permit Amendment**
☐ **GR Modification**
☐ **Other**

Application: T-14721

Applicant Name: Robert W. Gabriel

Proposed Changes: ☐ POA ☒ APOA ☐ SW→GW ☒ RA
☐ USE ☐ POU ☐ OTHER

Reviewer(s): Aaron Orr

Date of Review: 10/26/2025

Date Returned to WRSD: 10/28/2025

The information provided in the application is insufficient to evaluate whether the proposed transfer may be approved because:

- ☐ The water well reports provided with the application do not correspond to the water rights affected by the transfer.
- ☐ The application does not include water well reports or a description of the well construction details sufficient to establish the ground water body developed or proposed to be developed.
- ☐ Other _____

1. Basic description of the changes proposed in this transfer: The applicant proposes to add Well 2 (MARI 67037) and Well 9 (CLAC 78289, 78927) to Certificate 80671 with Well 5 (CLAC 59086), and also proposes to add Well 9 to Certificate 98444 with Well 2, Well 5, and Well 7 (CLAC 77182). Wells 2 and 9 are also authorized POA under Permit G-18910 (not part of this transfer) for 149.81 acres of Primary Irrigation and 8.4 acres of Supplemental Irrigation at a maximum combined rate of 0.399 cfs.
2. Will the proposed POA develop the same aquifer (source) as the existing authorized POA?
☒ Yes ☐ No Comments: Well 2, Well 5, and Well 9 are all completed in, and produce from, the same confined alluvial sand and gravel aquifer. The wells are 160 to 280 feet deep and are all screened in sand and gravel water bearing zones beneath a >40-foot layer of lower permeability silts and clays (Gannett and Caldwell, 1998). There is an alluvial terrace northwest of Pudding River, resulting in a ~100-foot elevation between Well 7 and Wells 2, 5, and 9. However, Well 7 is drilled and sealed to a similar elevation as Well 5, underneath the same silt and clay confining unit. Therefore, all wells develop the same aquifer.
3. a) Is the existing authorized POA subject to a water level decline condition?
☒ Yes ☐ No Comments: Certificate 80671 has a water level decline condition; Certificate 98444 does not.
- b) If yes, for each POA identify the reference level, most recent spring-high water level, and whether an applicable permit decline condition has been exceeded:

Certificate 80671: 114.33 feet blsd (64.56 feet amsl) reference level, 25-foot decline condition (trigger level is 139.33 feet blsd or 39.56 feet amsl)

Well 5: 3/4/2025 msmt. = 112.55 feet blsd.

The 3/9/2007 measurement of 148.21 feet blsd reported for Well 5 exceeded the decline condition trigger level of 139.33 feet blsd. All other reported measurements for Well 5 were above the trigger level.

The measured water levels at Well 2 are between ~30 and ~50 feet higher than at Well 5. **Based on the hydraulic gradient reported in Woodward et al., 1998, and the difference in water level between Well 2 and Well 5 in March 2019 (29.24 feet), the reference level for Well 2 (MARI 67037) is 66.37 feet blsd (93.80 feet amsl)**

Based on the difference in water level between Well 2 and Well 9 in March 2025 (3.33 feet), the reference level for Well 5 is 73.44 feet blsd (90.47 feet amsl).

4. a) Is there more than one source developed under the right (e.g., basalt and alluvium)?
☐ Yes ☒ No Comments:
- b) If yes, estimate the portion of the right supplied by each of the sources and describe any limitations that will need to be placed on the proposed change (rate, duty, etc.): N/A
5. a) Will this proposed change, at its maximum allowed rate of use, likely result in an increase in interference with **another ground water right**?
☒ Yes ☐ No Comments:

The total interference at CLAC 8543 (Certificate 80410) from pumping the maximum proposed rate of 1.929 cfs at Well 2 is 25 to 33 feet of drawdown. This results in a net increase of 0.5 to 2 feet of interference at CLAC 8543. See **Theis Interference Drawdown Analysis**.

The proposed change is also not expected to result in an increase in interference with other groundwater rights if pumping at the maximum allowed rate at Well 9, as distances from Well 9 to other water right PODs are similar to Well 2.

b) If yes, would this proposed change, at its maximum allowed rate of use, likely result in another groundwater right not receiving the water to which it is legally entitled?

☐ Yes ☒ No If yes, explain: Certificate 80410 allows CLAC 8543 to pump at 0.07 cfs, resulting in <5 feet of modeled drawdown at CLAC 8543. Based on the 108 feet of water column at CLAC 8543, the total interference of 25-33 feet while pumping the maximum proposed rate at Well 2 still allows Certificate 80410 to receive the water to which it is legally entitled.

6. a) Will this proposed change, at its maximum allowed rate of use, likely result in an increase in interference with **another surface water source**?
☐ Yes ☒ No Comments: The proposed POAs are not closer to the Pudding River than the authorized POAs.
- b) If yes, at its maximum allowed rate of use, what is the expected change in degree of interference with any **surface water sources** resulting from the proposed change?

Stream: _____

☐ Minimal ☐ Significant

Stream: _____

☐ Minimal ☐ SignificantProvide context for minimal/significant impact: N/A

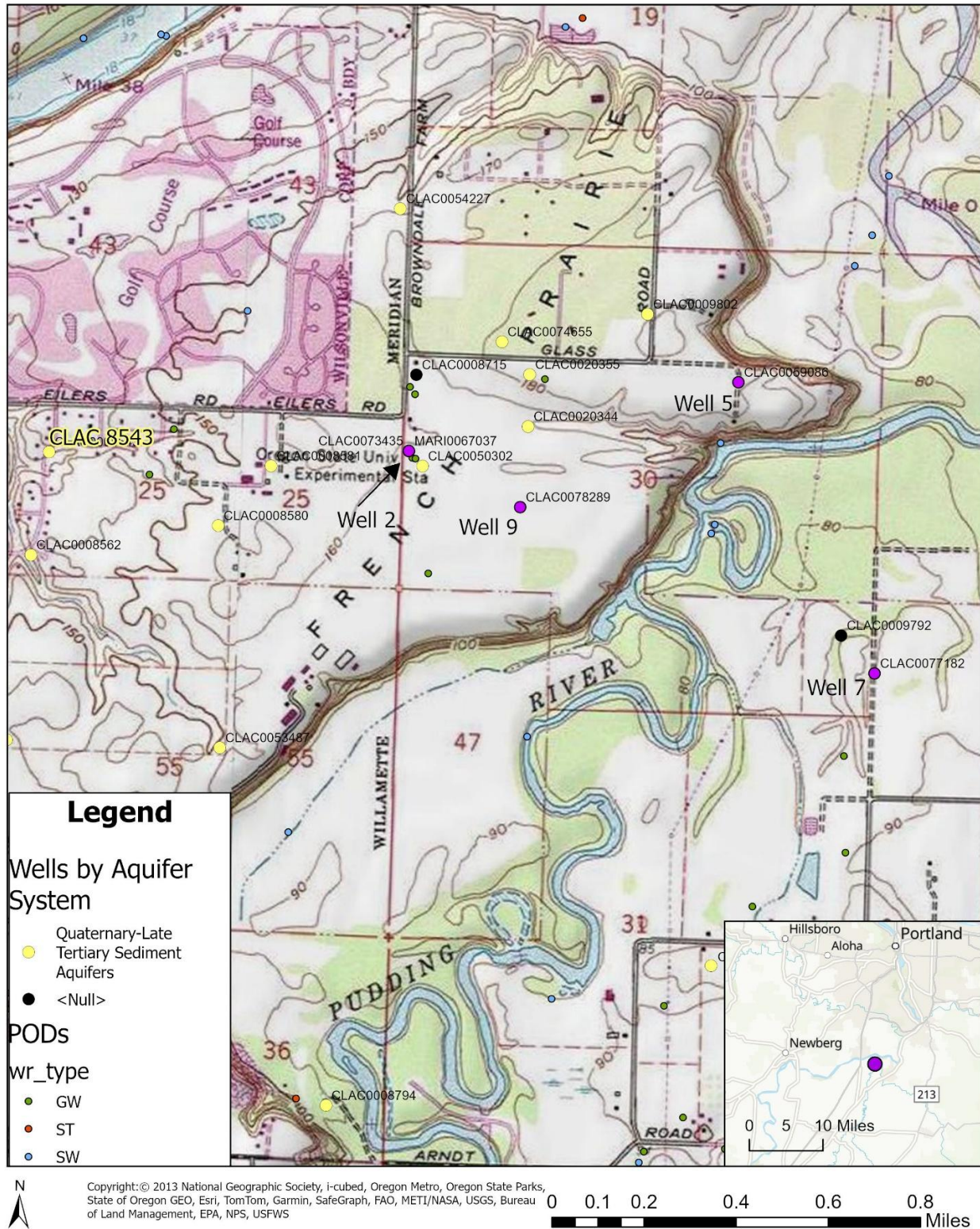
7. For SW-GW transfers, will the proposed change in point of diversion affect the surface water source similarly (as per OAR 690-380-2130) to the authorized point of diversion specified in the water use subject to transfer?
☐ Yes ☐ No Comments: N/A
8. What conditions or other changes in the application are necessary to address any potential issues identified above: _____
9. Any additional comments: _____

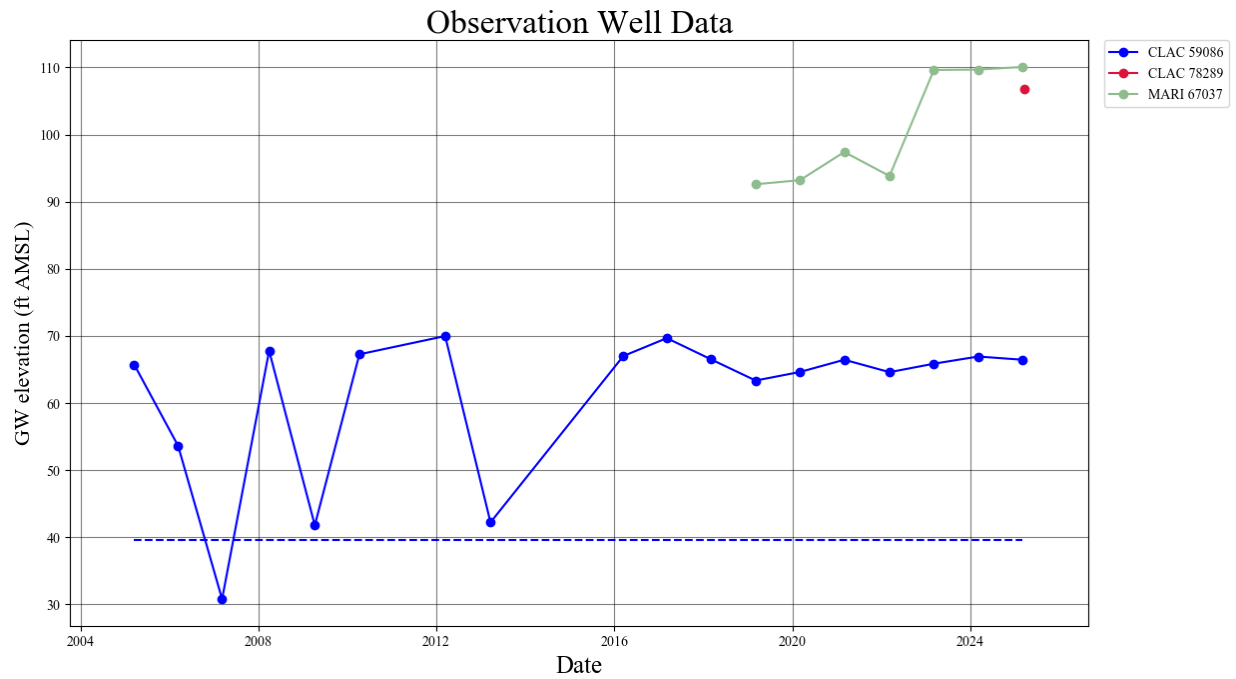
References

Conlon et al., 2005, Ground-Water Hydrology of the Willamette Basin, Oregon, Scientific Report 2005-5168, USGS.

Gannett and Caldwell, 1998, Geologic Framework of the Willamette Lowland Aquifer System, Oregon and Washington, USGS Professional Paper 1424-A.

Woodward et al., 1998, Hydrogeologic Framework of the Willamette Lowland Aquifer System, Oregon and Washington, USGS Professional Paper 1424-B.

Location Map**T-14721**

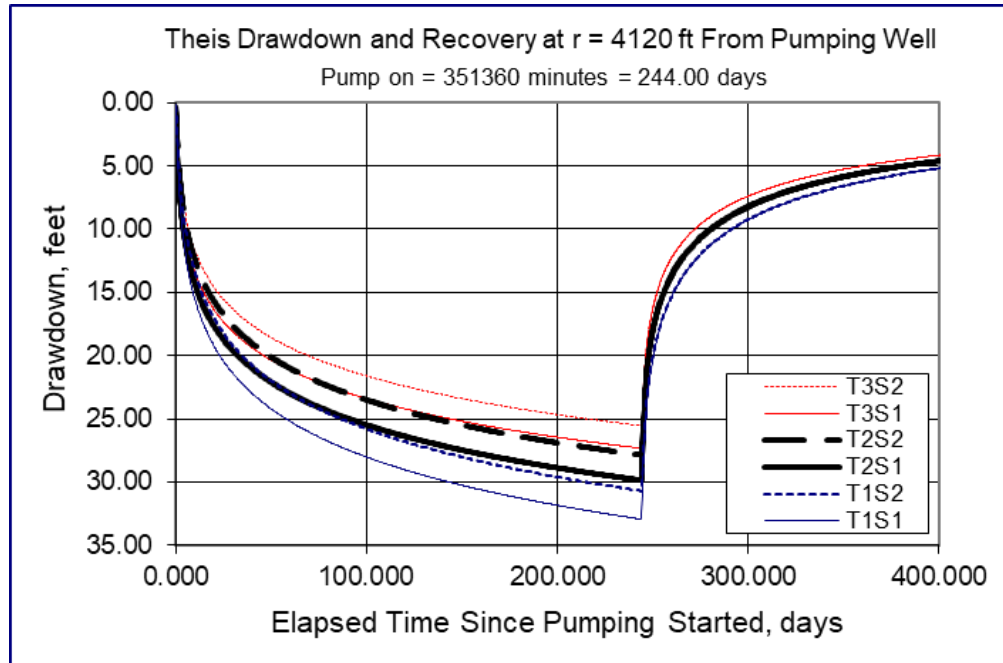
Static Water Levels

Dashed line is the trigger 25-foot decline condition. Plotted points are annual spring high water levels.

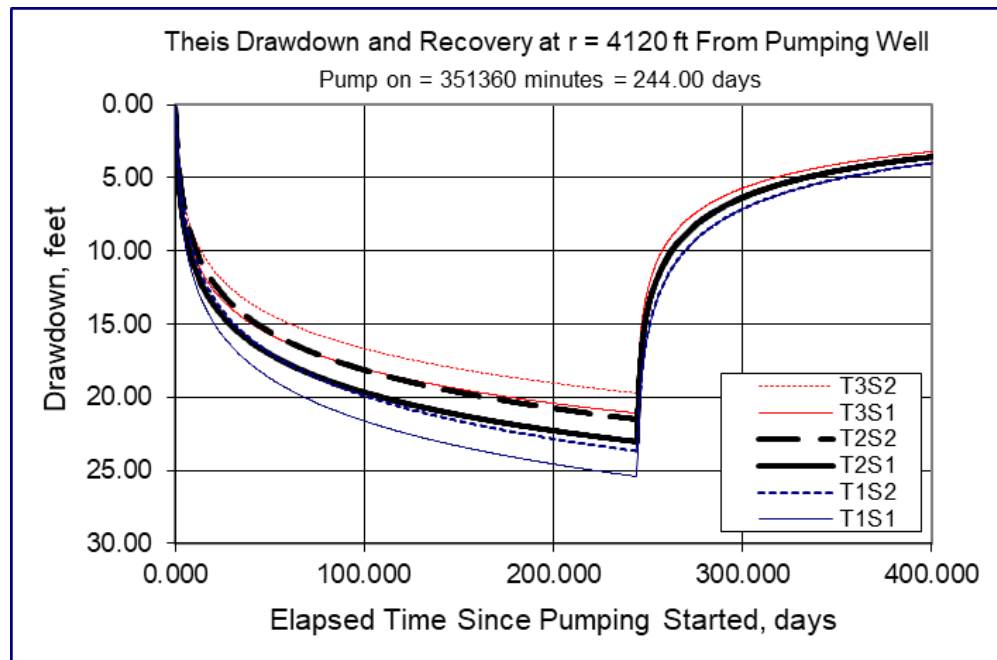
Theis Interference Drawdown Analysis

Transmissivity: 2,700 +/- 300 ft²/day at Well 2; similar ranges of T (2,000 to 3,000 ft²/day) were reported at nearby pump tests (CLAC 18450, CLAC 53487).

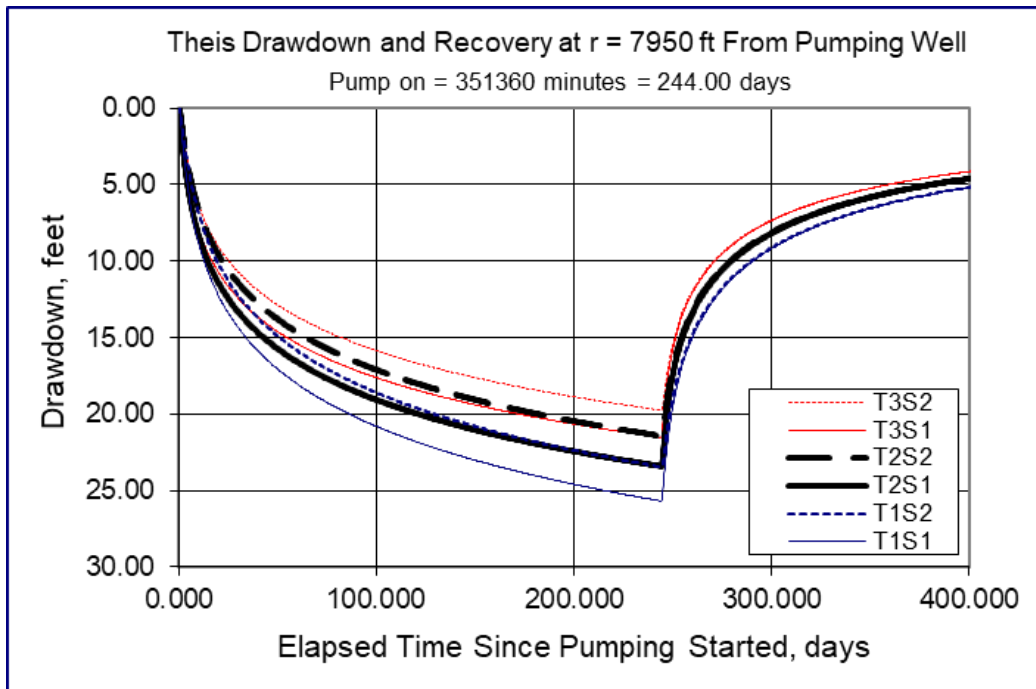
Storativity: 0.0002 to 0.0003 (Middle Sedimentary Unit, Conlon et al., 2005)



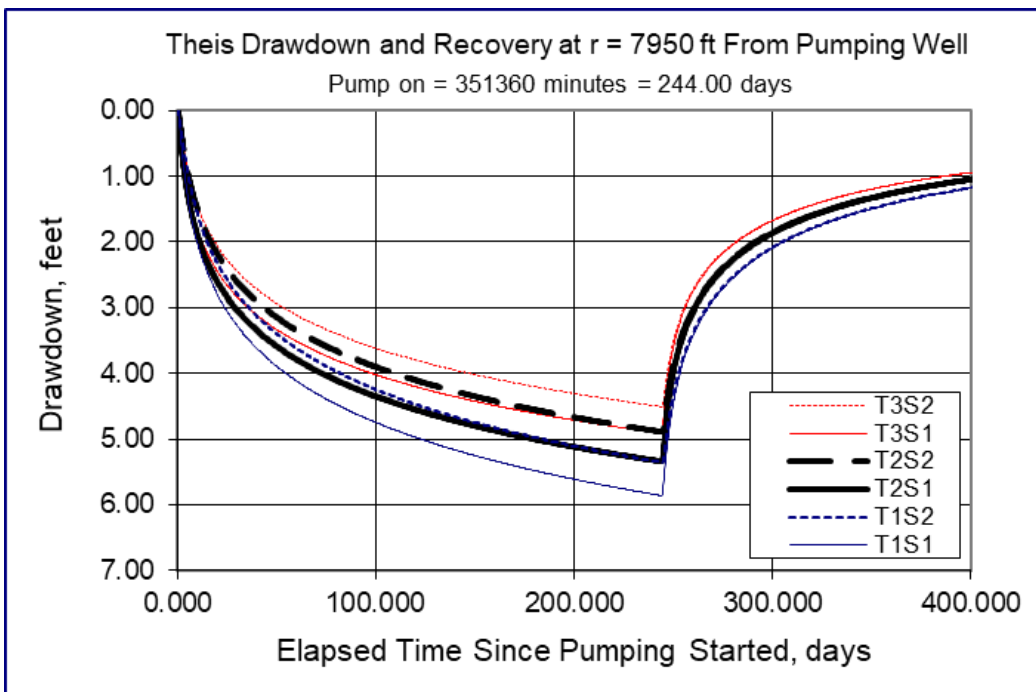
Interference at CLAC 8543 (Certificate 80410) while pumping the proposed max rate at Well 2 (1.929 cfs).



Interference at CLAC 8543 (Certificate 80410) while pumping the authorized max rate at Well 2 (1.489 cfs).



Interference at CLAC 8543 (Certificate 80410) while pumping the authorized rate at Well 5 (1.929 cfs).



Interference at CLAC 8543 (Certificate 80410) while pumping the difference in proposed and authorized max authorized rate of Well 2 at Well 5 (0.44 cfs).