

Groundwater Transfer Review Summary Form

Transfer/PA # T- 14442

GW Reviewer Aaron Orr Date Review Completed: 9/10/2025

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-14442

Applicant Name: James Earl Weatherford Living Trust

- Proposed Changes: POA, APOA, SW to GW, RA, USE, POU, OTHER

Reviewer(s): Aaron Orr

Date of Review: 9/10/2025

Date Returned to WRSD: 11/18/2025

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:

- (A) The applicant proposes to add Well 1 ("Point Well;" GILL 59, GILL 50641) as an additional point of appropriation (APOA) to the full water right associated with Well 2 ("Big Well #2; GILL 60, GILL 50887) covered by Certificate 57271.
(B) Concurrently, the applicant proposes to add Well 2 as an APOA to the full water right associated with Well 1 covered by Certificate 91937. In addition, the applicant proposes to change the Place of Use (POU) for 39.1 acres and change 2.9 acres of type of use from primary to supplemental irrigation. Certificates 29965, 47505, and 57271 are associated with the "to" lands.
(C) The applicant requests a correction on Certificate 91937 to change 2.2 acres in the NWNE QQ of Section 4 to supplemental irrigation, as this same POU is listed as primary irrigation in Certificate 29965.

2. Will the proposed POA develop the same aquifer (source) as the existing authorized POA?
 Yes No Comments: Wells 1 and 2 (GILL 59 and GILL 60, respectively) collar into lava flows of The Frenchman Springs Member of the Wanapum Formation of Columbia River Basalt Group (Swanson et al., 1981). Columbia River Basalt Group (CRBG) flows consist of a permeable flow top, a dense low permeability flow interior, and a flow bottom of variable thickness (Reidel et al., 2002). Individual flows within the CRBG are often hydraulically isolated, with the dense flow interior separating water bearing interflow zones. The wells have similar elevations (887 ft and 890 ft amsl) and are completed to similar depths (555 ft and 528 ft bgs). Rising head with depth indicates that GILL 59 is open to multiple water bearing zones and develops from multiple sources within the CRBG aquifer system, which are likely from the Frenchman Springs Member and deeper members within the Grande Ronde Formation.
3. a) Is the existing authorized POA subject to a water level decline condition?
 Yes No Comments: _____
- 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: _____
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.): _____
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 groundwater rights nearest to the POAs are associated with GILL 277 and PROP 61821. PROP 61821 has not been drilled as of 2/19/2025, but has a proposed completion depth of 600 feet, similar to the POAs. The estimated increase in interference at GILL 277 based on pumping at the maximum combined rate at GILL 60 vs pumping at the current maximum authorized rate at both wells is approximately 1 foot. Similar modeling for pumping at the maximum combined rate at GILL 59 results in an increase of between 1 and 5 feet of interference at the proposed site for PROP 61821.
- 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: The resulting increase in interference at GILL 277 when pumping at the maximum allowable rate is negligible. The resulting increase in interference at PROP 61821 is greater, but not enough to dewater the well if pumping at the maximum allowed rate of 1.84 cfs (Permit G17332) over the course of the irrigation season.
- 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: GILL 59 and GILL 60 are both completed in the valley of Rock Creek, an intermittent stream. The nearest perennial surface water sources are greater than one mile away from both 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 Significant

Provide context for minimal/significant impact: _____

6. 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

7. What conditions or other changes in the application are necessary to address any potential issues identified above: _____

8. Any additional comments: _____

References:

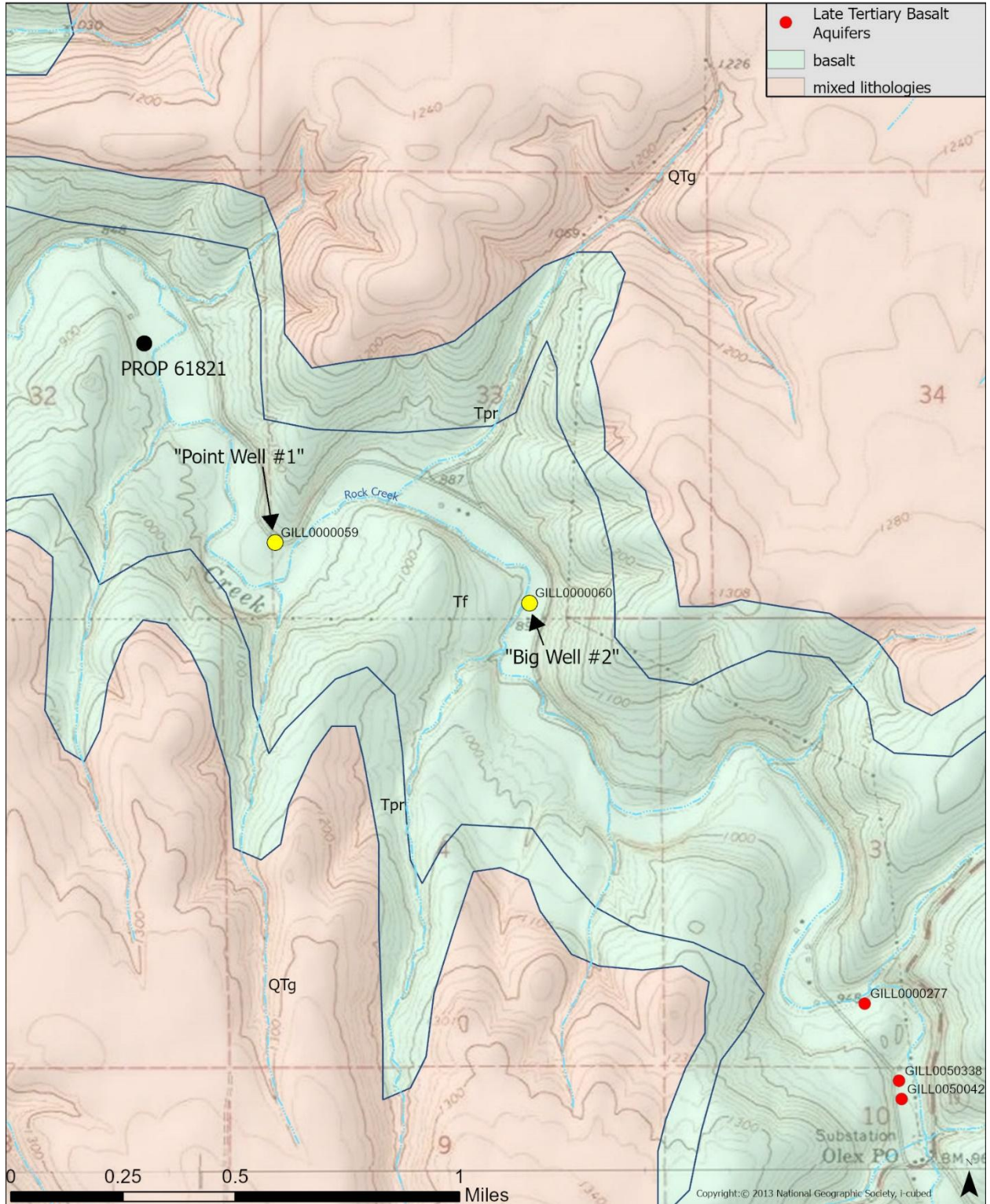
Reidel, S.P., Johnson, V.G., Spane, F.A., 2002, Natural Gas Storage in Basalt Aquifers of the Columbia Basin, Pacific Northwest USA: A Guide to Site Characterization; Pacific Northwest National Laboratory Report PNNL-13962, 277 p.

Swanson, D.A., Anderson, J. L., Camp, V.E., Hooper, P. R., Taubeneck, W. H., Wright, T. L., 1981, Reconnaissance Geologic Map of the Columbia River Basalt Group, Northern Oregon and Western Idaho, U.S. Geological Survey, Open-File Report 81-797

USDOE (U.S. Department of Energy), 1988, Site characterization plan, Reference Repository Location, Hanford Site, Washington - consultation draft: Washington, D.C., Office of Civilian Radioactive Waste Management, DOE/RW-0164, v. 1 – 9

Well Location Map

T-14442



Theis Interference Analysis

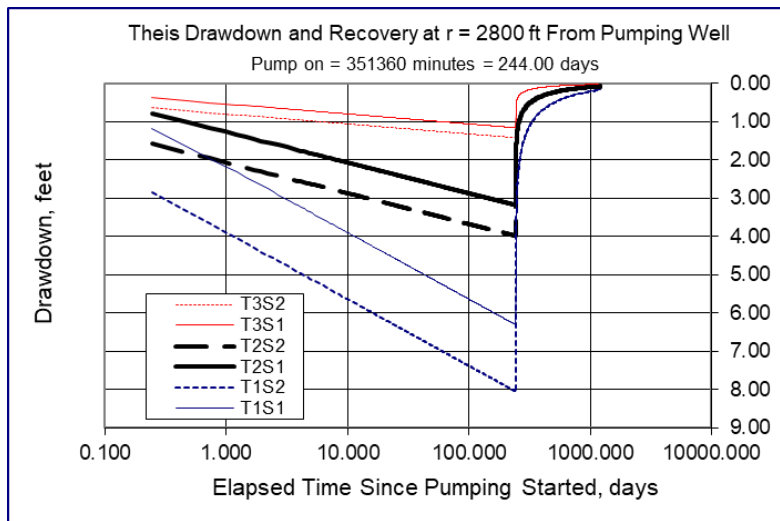
Transmissivity: 6,000 ft²/day (GILL 277), 13,000 ft²/day (GILL 50652), 40,000 ft²/day (GILL 17)

Storativity: 0.0001 to 0.00001 (USDOE, 1988)

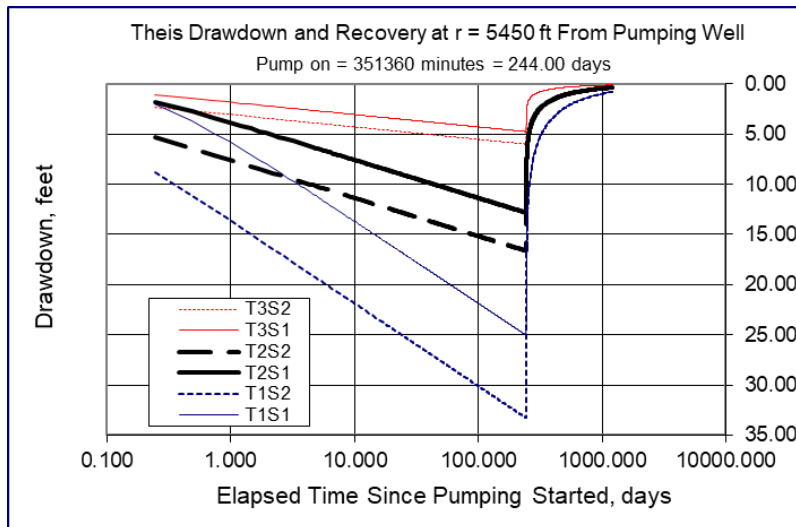
Time: 244 days (Irrigation Season).

Rates: (1) Proposed combined rate = 3.78 cfs, Authorized rate at GILL 59 = 0.66 cfs, Authorized rate at Gill 60 = 3.12 cfs

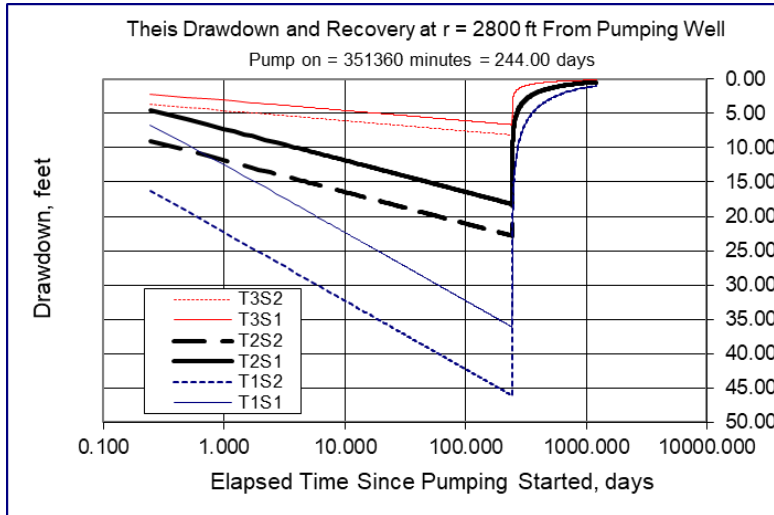
Distance: See plots below



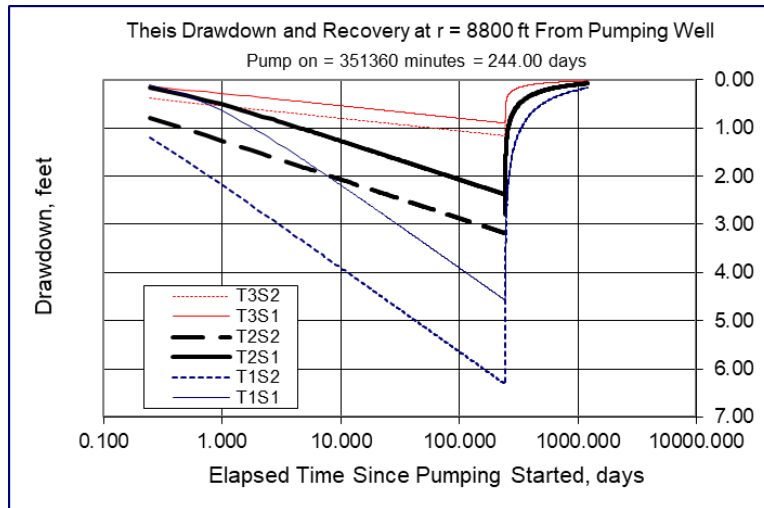
Drawdown at PROP 61821 pumping at the current authorized rate at GILL 59



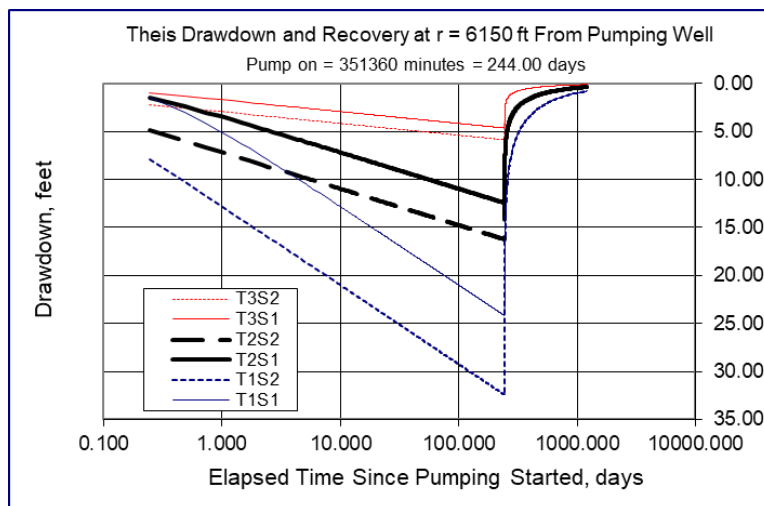
Drawdown at PROP 61821 pumping at the current authorized rate at GILL 60



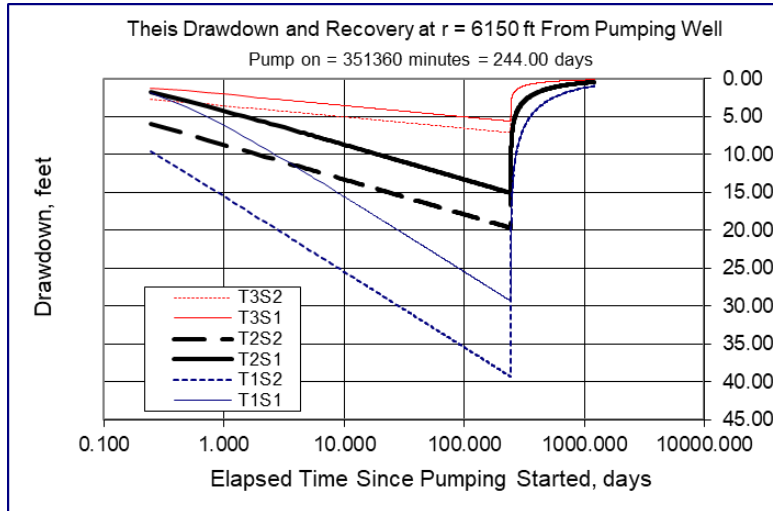
Drawdown at PROP 61821 pumping at the proposed combined rate at GILL 59



Drawdown at GILL 277 pumping at the current authorized rate at GILL 59



Drawdown at GILL 277 pumping at the current authorized rate at GILL 60



Drawdown at GILL 277 pumping at the proposed combined rate at GILL 60