

Groundwater Transfer Review Summary Form

Transfer/PA # T- 14437 JH Enterprises (RA)

GW Reviewer Travis Brown Date Review Completed: 6/24/2024

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 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.



Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, Oregon 97301-1271
(503) 986-0900
www.wrd.state.or.us

Ground Water Review Form:

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

Application: T-14437

Applicant Name: JH Enterprises c/o Jan Hupp

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

Reviewer(s): Travis Brown

Date of Review: 6/24/2024

Date Returned to WRSD: 6/24/2024

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: Applicant proposes to add an APOA ("Well 3", not constructed) to Certificate 97605, which currently authorizes Nursery Use on 150.15 acres at a maximum rate of 0.27 cfs from one POA well ("Leo's West Well" / MARI 66235). "Leo's West Well" / MARI 66235 is also a proposed POA on Application G-19388. NOTE: Table 3 of the application identifies the log ID for "Leo's West Well" as "CLAC 66235"; however, the provided well log is for MARI 66235, which appears to be the correct well.
 2. Will the proposed POA develop the same aquifer (source) as the existing authorized POA?
☒ Yes ☐ No Comments: Both the authorized POA and proposed APOA would develop the Columbia River Basalt aquifer (Conlon et al., 2005).
 3. a) Is there more than one source developed under the right (e.g., basalt and alluvium)?
☐ Yes ☒ No Comments: The authorized POA is sealed into hard, dense basalt and produces groundwater exclusively from the Columbia River Basalt aquifer (Conlon et al., 2005).
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

4. 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 proposed APOA is closer than the authorized POA to neighboring well MARI 8430, which is in the same aquifer as the POA and APOA. The closer proximity will likely increase interference with MARI 8430, which is an authorized POA for Permit G-10602.
- 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: Potential interference with MARI 8430 was analyzed using the Theis (1935) solution for drawdown in a confined aquifer (see attached Well Interference Analysis). Results of the analysis indicate the proposed change is unlikely to deprive MARI 8430 or similar wells of water to which they are legally entitled.
5. 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 nearest hydraulically connected stream is an unnamed tributary of Silver Creek. The proposed APOA is further away from the unnamed tributary than the authorized POA and, given the nature of the Columbia River Basalt aquifer system, hydraulic stresses are expected to propagate rapidly to the aquifer boundaries. As such, no increase in interference is anticipated from the proposed change.
- 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
Provide context for minimal/significant impact: N/A
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

Application File: T-14437, G-19388

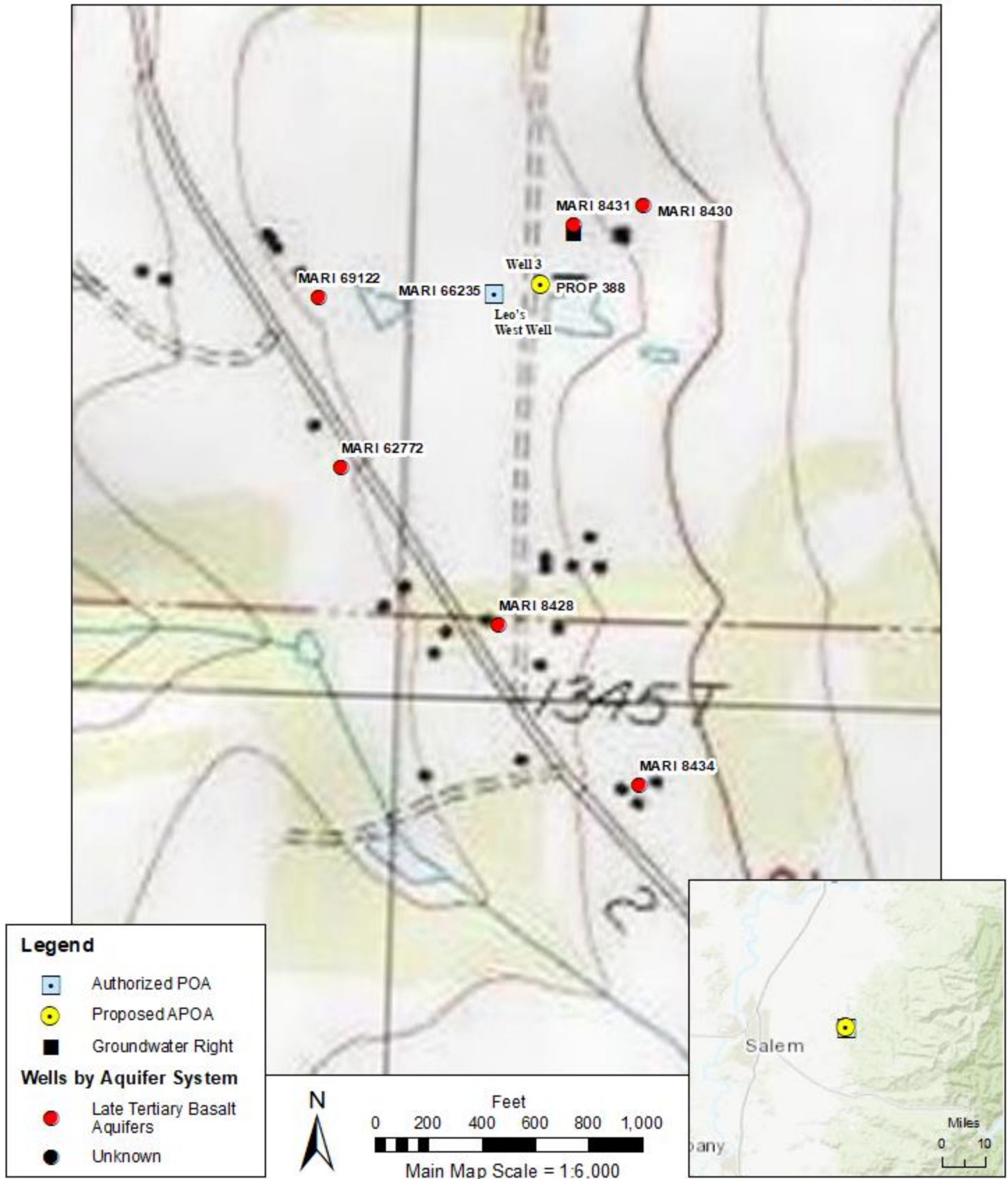
Pumping Test Reports: MARI 66235, MARI 54277

Conlon, T.D., Wozniak, K.C., Woodcock, D., Herrera, N.B., Fisher, B.J., Morgan, D.S., Lee, K.K., and Hinkle, S.R., 2005, Ground-water hydrology of the Willamette Basin, Oregon, Scientific Investigations Report 2005-5168: U. S. Geological Survey, Reston, VA.

Theis, C.V., 1935, The relation between the lowering of the piezometric surface and the rate and duration of discharge of a well using groundwater storage, American Geophysical Union Transactions, vol. 16, p. 519-524.

Well Location Map

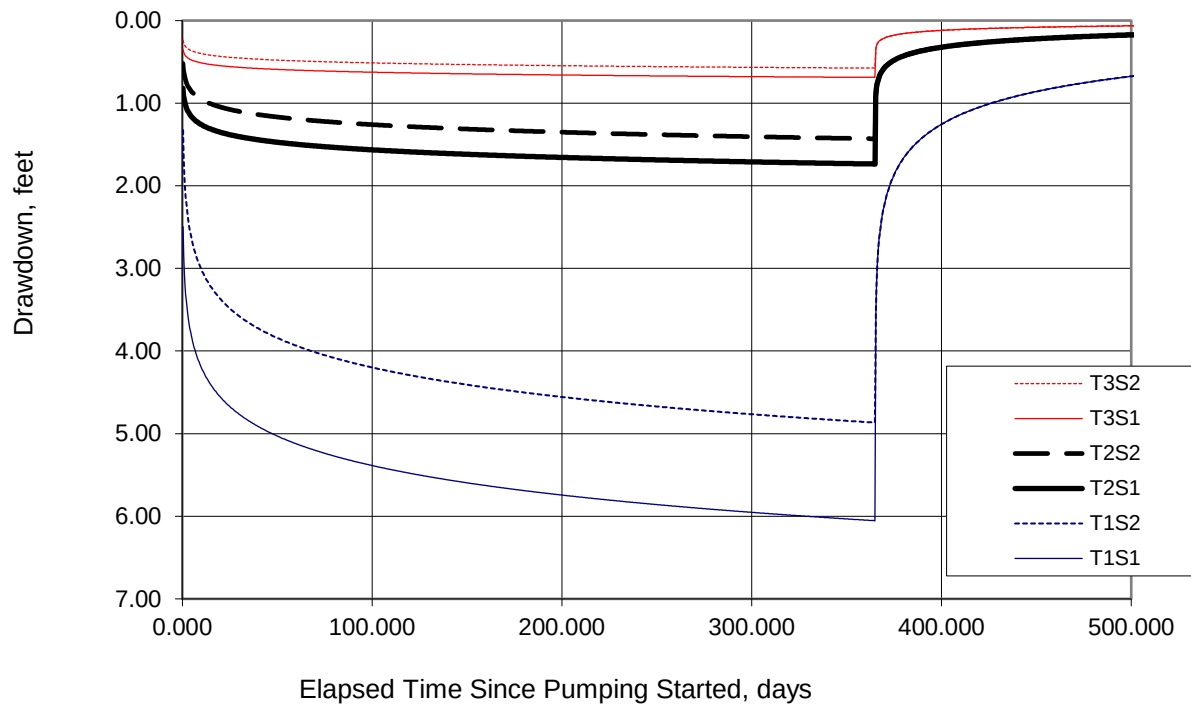
T-14437



Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community
Copyright © 2013 National Geographic Society, i-cubed

Well Interference Analysis – APOA “Well 3” to MARI 8430Theis Drawdown and Recovery at $r = 485$ ft From Pumping Well

Pump on = 525600 minutes = 365.00 days

**Theis (1935) solution for drawdown in a confined aquifer****Parameters:**Radial distance, $r = 485$ ft [approximate distance from APOA “Well 3” to MARI 8430]Pumping rate, $Q = 0.27$ cfs [full rate of Certificate 97605]Transmissivity: $T1 = 3,600$ ft²/day | $T2 = 14,000$ ft²/day | $T3 = 38,000$ ft²/day [Pumping Test Reports; Conlon et al., 2005]Storativity: $S1 = 0.0001$ | $S2 = 0.001$ [Conlon et al., 2005]