



RENDEZVOUS ENGINEERING, P.C.

Civil Engineers and Planners in Wyoming and Idaho

RECEIVED

OCT 24 2017

Department of Water Resources
Eastern Region

Rendezvous Project No: 17-030

October 19, 2017

Mr. Michael Holliday
Water Rights Supervisor
IDWR Eastern Region
900 N Skyline Dr, Suite A
Idaho Falls, ID 83402-1718

RE: Water Right 22-13178, Transfer Application for Change In Point of Diversion

Dear Mr. Holliday:

Attached for your review is a Transfer Application for a change in the point of diversion filed on behalf of Teton Water and Sewer Company, LLC, the current holder of Water Right 22-13178. This application is intended to provide a third point of diversion in the form of a new groundwater supply well to be constructed in the NE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 23 T3N R45E. A more accurate location will be provided once a site plan for the well connection and control building is finalized.

As you are aware, this water right serves the 774 acre Teton Springs Golf and Casting Club development located just south of Victor Idaho in Sections 13, 14, 23, 24 T3N, R45E. The first subdivision plat was filed in 2000 as the project was developed in phases. With amendments, the current project is entitled for approximately 656 residential units along with various mixed use visitor services. The domestic water system provides potable use to the development as irrigation is supplied through a separate raw water system associated with the Trail Creek Sprinkler Irrigation Company.

Although Water Right 22-13178 allows a diversion rate up to 1.1 cfs (~494 gpm), the two current wells are now only able to pump in total about 310 to 330 gpm. Well # 1, located in the northeast corner of the Teton Springs development, had to be throttled to a flow of about 250-260 gpm due to sediment entrainment issues that occur at higher flow rates. These sediment issues have persisted after several attempts to redevelop the well and nearly 15 years of consistent pumping. Therefore the system managers have been forced to reduce the well output of their primary water supply. Well # 1 is also a warm water source (~95F) which can at times create aesthetic concerns at the point of use.

Well # 2 was drilled in the southeast corner of the development, targeting groundwater associated with the underlying Madison Limestone. The well was drilled to a depth of nearly 1200 feet in search of fractures to generate an adequate yield. Initially tested at a

flow of 150 gpm in 2001, the current rate has dropped to about 60-70 gpm, with over 250 feet of drawdown. Well # 2 has always been less efficient in terms of yield per foot of drawdown, however, longer pump run times during the summer months has appeared to only exacerbate the drawdown and reduce output. This was apparent during the past summer when Well #1 was out of service for less than 12 hours and the system relied entirely on Well #2. Well #2 was unable to keep up with even "off-peak" demand causing dangerously low storage levels.

A third well is therefore being planned to make up this difference while improving the overall reliability and efficiency of the system. The proposed Well # 3 site is based upon the geologic log from Well # 2 which also targeted bedrock layers associated with the Madison Limestone. Unlike other highly productive wells developed in this formation, Well # 2 did not encounter the type of fracturing necessary generate yields necessary for this municipal system. In contrast, the current selected site, located about 1000 feet west of Well # 2, is between two existing springs which are believed to be associated with similar bedrock layers and indicators or more extensive fracturing.

Current preliminary projections from the project geologist suggest a target drilling depth of about 800 feet. The general target yield is 150 gpm however, as noted in the attached application, the full diversion rate of 1.1 cfs is requested with this transfer. This would allow full water right allocation to be pumped in the event that the well is shown to be capable of higher yields. This would also enable the operators to rotate all three wells and rest Wells # 1 and # 2, especially during the peak summer use period.

The attached map shows the proposed location of Well # 3 along with the key Teton Springs water system components which include the distribution mains, Well #1 and Well # 2 and the 500,000 gallon storage tank. The map also shows ¼ ¼ section lines for the entire development and platted lots representing the places of use for this water right. Also attached is Table 1 which is a summary by ¼ ¼ section of the areas of use for this new well along with the two existing wells. Please note that there are three ¼ ¼ sections, highlighted with red font, that were omitted from the places of use listed for Water Right 22-13178. We believe that this was a minor translation error that we would like to see corrected in the record.

We are also attaching with this application the following documents:

- 1) Additional information to accompany the standard transfer application.
- 2) Table 1 summarizing well locations and places of use by ¼ ¼ section.
- 3) Certificate of Organization, Amended Certificate of Organization and 2017 Annual report for Teton Water and Sewer Company LLC as demonstration that the signer of the application, Jon Pinardi, is an authorized representative of the company.



4) Acknowledgement Letter dated 6-20-2012 indicating that Teton Water and Sewer Company, LLC is the owner of Water Right 22-13178. This also provides information on the recorded water right as requested on the Transfer Application.

5) Grant of Easement for placement of utilities in Open Space lots 1 – 7. The well will be located in Open Space Lot 1.

6) Sheets 1 and 6 from instrument #195405 which is the recorded consolidated plat for Teton Springs Golf and Casting Club summarizing the various phases and amendments. This exhibit shows the proposed Well # 3 site relative to the existing platted lots.

7) Illustrative map of the Teton Springs water system showing the mains, wells, storage tank and platted lots with public land section breakdowns.

Thanks for your assistance and let us know if you need any additional information regarding this application.

Sincerely,



Robert T. Ablondi
Idaho PE 5994

Cc: Jon Pinardi, Teton Water and Sewer Company, LLC

