

MEMORANDUM

TO: Water Right File No. 29-13672

FROM: Angie Grimm

DATE: January 20, 2021

RE: Permit Conditions Review and Licensing Recommendation

The Idaho Department of Water Resources ("IDWR") issued water right permit no. 29-13672 ("Permit") with two conditions requiring installation of measuring devices, recording of data, and submittal of data. This memo serves as a review of compliance with those conditions and summarizes recommendations for licensing conditions.

Timeline of Events

- 5/29/2008 Permit approved.
- 12/29/2010 Permit assigned to George William Katsilometes.
- 6/1/2012 Proof of beneficial use due.
- 5/12/2012 Proof of beneficial use received by IDWR.
- 5/15/2012 IDWR sent request for additional information related to monitoring and data-submittal permit conditions.
- 6/11/2012 Received a response to 5/15/2012 letter with some data. IDWR deemed data submittal insufficient.
- 7/6/2012 IDWR memo recommends cancelation of permit due to noncompliance with permit conditions.
- 8/15/2012 Show Cause Order issued with 21-day response deadline.
- 9/13/2012 Robert Wood (attorney for Mr. Katsilometes) submits data in response to Show Cause Order. IDWR deemed data submittal insufficient.
- 9/21/2012 IDWR requested data-logger readings and raw data collection sheets to support previous data submittal.
- 10/4/2012 Mr. Wood submits response without data-logger readings or data collection sheets.
- 11/9/2012 IDWR Eastern Region staff conducted beneficial use field examination.
- 4/10/2013 IDWR Eastern Region staff summarize beneficial use field examination in a memo to IDWR State Office staff.
- 6/25/2020 IDWR met with Mr. Katsilometes, Betty Katsilometes, Charlie Honsinger (attorney for Mr. Katsilometes) to discuss system, water use, and permit condition compliance concerns.
- 11/20/2020 IDWR sent email to Mr. Honsinger providing an opportunity to submit affidavits along with an explanation why the affidavits submitted sufficiently demonstrate development of the Permit has not reduced the amount of water available to senior water right holders.

- 12/4/2020 IDWR received response from Mr. Honsinger with four affidavits and explanation why this information addresses IDWR's concerns regarding reduction in water available to senior water right holders.

Permit Conditions

Permit no. 29-13672 included two conditions (condition no. 9 and 10) with various monitoring and reporting requirements. The following summarizes those condition requirements:

- Condition #9:
 - Install totalizing measuring device with data logging capabilities on the system diverting ground water for beneficial use.
 - Record date and total daily volume diverted from the well for each date water is used.
 - Maintain annual record sets for duration of the permit process. Records shall be available upon request and submitted with proof of beneficial use.
 - Proof of beneficial use submittal without acceptable data may result in permit cancellation.
- Condition #10:
 - Record weekly well(s) water level and water temperature reading.
 - Maintain records of water level and temperature.
 - Maintain annual record sets for duration of the permit process. Records shall be available upon request and submitted with proof of beneficial use.
 - Proof of beneficial use without submittal of acceptable data may result in permit cancellation.

Information Submitted and or Gathered by IDWR

Permit no. 29-13672 file contains the following data:

- 5/31/2012 Mr. Wood email: 1/1/2011 through 5/31/2012 well¹ diverts at rate of 90 gpm constantly every day. Water level constant at ground surface and temperature is constant 63°C (145°F) throughout the year since the well was completed² to 5/31/2012.
- 9/12/2012 Mr. Wood letter: 1/1/2010 through 12/31/2011 well diverts 129,600 gallons³ per day [90 gpm for 24 hours a day]. 1/1/2011 through 9/8/2012 one day a week water temperature of 62.78°C (145°F) and water level 4709.0 ft⁴ for every reported value.

¹ Well #3, last well drilled for the project. Permit no. 29-13672 only authorized a single point of diversion despite the fact that three wells existed and were connected to the system before IDWR approved the permit. Data provided by the permit holder and his attorney only pertains to Well #3.

² Well with tag D0014893 construction was complete on 5/3/2001 per well log.

³ Unit of measure not provided with data, assuming unit is gallons.

⁴ The land surface elevation of the project location is approximately 5000 ft per USGS Topo Quadrangle map.

- 10/4/2012 Mr. Wood email: 1/1/2008 through 12/31/2012 well diverts 129,600 gallons⁵ per day [90 gpm for 24 hours a day]. 2/8/2008 through 9/1/2012 one day a week water temperature of 62.78°C (145°F) and water level 4709.0 ft for every reported value.
- 6/25/2020 Katsilometes Licensing Meeting Notes: Well #1 temperature 98°F, Well #2 temperature 115°F, and Well #3 temperature 145°F.

Well Log Information:

- Well #2 is the only well driller's report, of the three wells used for this project, with temperature information. It states the driller completed construction of the well on 2/16/1995 with a bottom-hole temperature of 90°F.
- Well #3 driller's report states the static water level was one (1) foot below ground surface.

Meter Installation:

- During the 11/9/2012 beneficial use field examination, IDWR found a Tuf-2000 Ultrasonic Flow Meter installed on one of the three wells currently diverting water from the Permit system. IDWR noted Mr. Katsilometes stated the device measures diversion rate, totalizes volume, and measures water temperature. IDWR was unable to confirm what parameters the device measures, because the meter was not operational on 11/9/2012.

Affidavits and explanation supplied by Charlie Honsinger on behalf of George Katsilometes:

- Gail Palen affidavit, owner of Riverside Hot Springs Inn and Spa for 13 years.
I [Gail Palen] have observed no adverse impact caused by Mr. Katsilometes' use of geothermal water at his property to either the temperature or quality of water flowing from either the springs or the well that are the sources for geothermal water used in our property. *Affidavit of Gail Palen* at 2.
- Harry Christ affidavit, owner of Riverside Inn for a couple of years in the mid-2000s.
During my [Harry Christ's] ownership and operation of the Riverside Inn property, I [Harry Christ] never observed any adverse impact caused by Dr. Katsilometes' use of geothermal water at his property on our use of geothermal water in terms of either quantity or temperature. *Affidavit of Harry Christ* at 2.
- John Mehlhaff affidavit, property owner in Lava Hot Springs approximately three (3) years in the late 1990s. His mother owned the property for ten years prior to his ownership.
I [John Mehlhaff] observed no adverse impact caused by Dr. Katsilometes' use of geothermal water at his property to either the temperature or the quantity of water

⁵ Unit of measure not provided with data, assuming unit is gallons.
Permit Conditions Review and Licensing Recommendation

flowing from the well that is the source of geothermal water that we used on our property pursuant to water right no. 29-12887. *Affidavit of John Mehlhaff* at 2.

- Mark Wayne Campbell affidavit, owner of Home Hotel from July 1994 to December 2007.

During my [Mark Wayne Campbell] ownership and operation of the Home Hotel property, I [Mark Wayne Campbell] never observed any adverse impact caused by Dr. Katsilometes' use of geothermal water at his property. There were no adverse impacts caused by Dr. Katsilometes' use of geothermal water to either the temperature or the quantity of water flowing from the well that is the source of geothermal water that we used on our property pursuant to water right no. 29-4212. *Affidavit of Mark Wayne Campbell* at 2.

- Mr. Honsinger stated Mr. Katsilometes' contacted the geothermal users in the "immediate vicinity". In addition to those who provided affidavits, affidavits were requested from Devanee Morrison (Lava Hot Springs Foundation) and Evelee Hill (former owner of the Aura Soma Lava hotel), who declined to provide affidavits. Mr. Honsinger concluded that Lava Hot Springs Foundation and Evelee Hill did not sign the affidavits for reasons other than adverse impacts. Mr. Honsinger believes the affidavits and the fact that no water right holders have submitted complaints alleging adverse impacts should alleviate IDWR's concerns.

Analysis

Idaho Code § 42-203A(5) requires a water right permit applicant to demonstrate that the proposed use of water under a new water right permit will not reduce the quantity of water available under existing water rights. IDAPA 37.03.08.040.05.c.ii states IDWR may request information regarding the location of existing wells and springs within a one-half mile radius of a proposed ground water use. IDAPA 37.03.08.045.01.a outlines the criteria IDWR is to use when evaluating whether a proposed use will reduce the quantity of water available to existing users. IDAPA 37.03.08.045.01.a.iv states an application that would otherwise be denied because of injury may be approved upon conditions that will mitigate losses of water to existing water right holders. The complexity of the geothermal ground water resource in this area makes it exceedingly difficult to determine if additional diversion of ground water will reduce the quantity of water available to other water right holders. Therefore, while IDWR did not require formal mitigation in terms of replacement water for the Permit, IDWR did include permit conditions requiring collection of data that would assist with administration of water rights in the event Permit development reduced the amount of water available to other water right holders.

Mr. Katsilometes provided data from a one of the three wells he uses in his interconnected system. The information submitted by Mr. Katsilometes indicates the temperature and water level in Well #3 remained constant from 2/8/2008 through 9/1/2012 while Mr. Katsilometes diverted 126,900 gallons per day from 1/1/2008 through 12/31/2012 during development of the Permit. An identical numeric value for each parameter recorded (daily diversion volume, weekly water temperature, and weekly water level) for five straight years is extremely unlikely, especially if Mr. Katsilometes did not record the measurements at the exact same time every day.

IDWR requested additional raw data recordings to support the values reported by Mr. Katsilometes, but Mr. Katsilometes did not supply the raw data.

Mr. Katsilometes did not install a meter capable of reporting the total amount of water diverted from the system. He did not record weekly water levels and temperatures from all three wells in his system. He did not maintain daily records for the duration of the permit process, if you consider the permit process to be the time from the permit approval until IDWR issues a license. He did not record the volume data in the form of direct totalizer readings from the meter.

IDWR must now decide if the data Mr. Katsilometes has provided, along with the affidavits, is enough to fulfill the intent of the conditions. Others may use the data Mr. Katsilometes provided as water temperature and water level baseline data in one of Mr. Katsilometes' production wells. Mr. Katsilometes' was not required to monitor any neighboring wells. He provided affidavits from four users of three geothermal diversions in the surrounding area stating Permit development has not caused adverse impacts to the amount or temperature of geothermal water available for diversion.

Ashley Ritter of IDWR spoke with IDWR State Office and Eastern Regional staff while evaluating this permit for licensing. She concluded IDWR has not received any complaints from water users in the Lava Hot Springs area.

License Recommendations

Mr. Katsilometes developed the Permit and IDWR is obligated to consider issuance of a license. Data submitted by Mr. Katsilometes is incomplete given the current system configuration, i.e. the Permit included a single point of diversion (well), but three points of diversion (wells) were used during Permit development. IDWR must decide if the data submittals are adequate given the diversion system is different than permitted. IDWR will request Mr. Katsilometes submitted an application to amend the permit to include all three wells as points of diversion and correct the place of use location for this water right.

Mr. Katsilometes' provided affidavits indicating that no adverse impacts to nearby water users occurred since Permit development. If Mr. Katsilometes submits an application to amend the permit, IDWR will publish this application to provide the public an opportunity to protest the application should Mr. Katsilometes' diversion be causing any relevant concerns or adverse impacts. IDWR will then consider any protests filed along with the information summarized by this memo to determine if the license should include further monitoring and reporting requirements or if IDWR should require installation of a measuring device upon future request.

Mr. Katsilometes' may be diverting more water than his existing water right no. 29-7289 and the draft license for the Permit contemplates authorizing. Should Mr. Katsilometes' apply for any additional water right permits and/or IDWR create a water district to regulate Lava Hot Springs area ground water resources in the future, IDWR should also evaluate if monitoring and reporting requirements should apply at that time.