

Memo

To: John Westra and Steve Lester

From: Vicky Music

CC:

Date: 11/29/2007

Re: Stewart Gulch WD 63S

As you know, all of the geothermal rights in this water district are contested in the SRBA. We have had a settlement conference with the major players, Edwards, Tertelings and Quail Hollow Golf Course, and another is scheduled for January 11, 2008, here in the Western Conference Rm.

At the settlement conference earlier this year, Edwards and Tertelings submitted concepts for settlement of the Stewart Gulch issues and suggestions for administration of the rights within the district. We forwarded the concepts to watermaster, Ken Neely for comments, which he provided us recently.

Due to nature of this ongoing 80+ year conflict, Jan and I wanted you each of you to have these documents and comment and/or attend the January 11, 2008 conference. The concepts are attached here as the document entitled *SUBJECT TO RULE OF EVIDENCE 408 – FOR SETTLEMENT DISCUSSIONS ONLY GEOTHERMAL AQUIFER WATER USERS PRINCIPAL SETTLEMENT TERMS SHEET*. The document entitled, *COMMENTS ON THE “GEOTHERMAL AQUIFER WATER USERS PRICIPAL SETTLEMENT TERMS SHEET”* are Ken Neely's comments.

Subject to Rule of Evidence 408 - For Settlement Discussions Only
Geothermal Aquifer Water Users Principal Settlement Terms Sheet

(Please note that the concepts listed herein will certainly require much discussion and much more detail in any agreement entered into by the parties. The purpose of this Terms Sheet is to facilitate discussion of the issues in an effort to reach a better detailed final agreement - not to set forth an extremely detailed settlement proposal. Moreover, each of the parties certainly has to have the opportunity to think in more detail about the concepts proposed herein. Thus, the parties may wish to change certain aspects of the proposal after discussion with their experts and other parties.)

I. Administrative Water Levels - Administration under this concept will require two levels - a Warning Level at which more stringent monitoring and warnings will occur, and a Curtailment Level, at which actual curtailments will occur according to water right priority. It is essential to have two water level measuring points to ensure accuracy and to reduce the risk of data anomalies that may negatively impact water users. Suggested potential Warning and Curtailment water levels are listed below - these levels are subject to further analysis and discussion by the parties and their scientific/engineering and legal advisors.

A. Warning Level - Approximately 17 feet above measuring level in the Tiegs well and/or approximately 37 feet above measuring point in the Edwards well (subject to further scientific analysis and review).

1. Other wells can be used as measuring wells if Tiegs and/or Edwards wells are abandoned or compromised, through a process approved by the parties if also approved by the water master.
2. Above this level, no restrictions on use.
3. When water levels drop below Warning Level, water users are immediately warned of potential approaching curtailments to motivate conservation by all users.
4. It may be necessary to make Warning Levels changeable through some process.

B. Curtailment Level - Approximately 12 to 32 feet above measuring level in the Tiegs well and/or approximately 32 to 35 feet above measuring point in the Edwards well (subject to further scientific analysis and review).

1. Other wells can be used as measuring wells if Tiegs and/or Edwards wells are abandoned or compromised, through a process approved by the parties if also approved by the water master.
2. Below this level, curtailment of TTCL, Edwards and Quail Hollow water rights occur according to priority. TTCL and Edwards limited to 400 AF and 250 AF volumes respectively until aquifer pressures are again above Curtailment Levels.
3. It may be necessary to make Curtailment Levels changeable through some process.
4. Domestic water rights?

C. Timing - As the lowest water levels historically occur in February of each year, water users will be aware of the potential of approaching curtailments by the time of the annual Water District 63-S meeting held in early March. Parties will thus both be aware of potential curtailments, and be motivated to implement conservation use to avoid curtailments.

II. Monitoring:

A. All major users must continuously monitor aquifer pressure and geothermal production and report such data quarterly. All domestic users are subject to requirements that are stringent, but less demanding.

B. Failure to comply with monitoring requirements shall result in immediate curtailment until one year of monitoring data under the plan is available - after which diversion may resume.

III. Use of Geothermal Water Primarily for Heat Value

A. The parties agree that water diverted from the Stewart Gulch Geothermal Aquifer should be used primarily for its heat value, and that all users will strive towards this goal.

B. Quail Hollow must first use all other available cold water supplies to their full capacity before using geothermal water for irrigation, and all others must use geothermal water for its heat energy purposes prior to any other authorized beneficial use.

IV. Other Matters

1. Water District 63-S water users will work towards the designation of an area of drilling concern to prevent construction of new domestic geothermal wells.

2. Continuation of an active Water District 63-S to implement this agreement and water right administration.

Comments on the "Geothermal Aquifer Water Users Principal Settlement Terms Sheet".

Ken Neely, Water Master of Ground Water District 63S
Technical Hydrogeologist at the Idaho Department of Water Resources
November 26, 2007

Comments by Section

B. Curtailment Level. The proposed level in the Edwards well is 32-35 feet above measuring point. In 2000, the level dropped below this level during the interval from October 11 to November 7. The lowest level during that time was 26.6 ft above the measuring point. There were three shut-in pressure measurements during this interval. The reason for the drop is unknown. My questions are:

1. Is there any evidence that this low level resulted in a deficiency in water delivery to any of the users?
2. If there is no evidence of deficiency in water deliveries during this time, could we surmise that a future short-term interval of water levels as low as 26.6 feet below measuring point in the Edwards well will not cause a disruption in deliveries?
3. Could an allowance/exception be made for short-term water level drops so that curtailment would not commence unless this designated short-term time period is exceeded?
4. If the parties do not want an allowance/exception to short term water level drops, then what will constitute a curtailment? Will one measurement below the curtailment level instigate a curtailment? Or several consecutive measurements below the curtailment level over a designated time period?
5. If curtailment occurs, how frequent should the measurements be? And what will signal the end of the curtailment? For example, will one measurement above the curtailment level, or several consecutive measurements above the curtailment level signal the end of curtailment?

II. Monitoring. The phrase "must continuously monitor" must be defined. Does this mean that data loggers must be installed on all non-domestic wells? Currently, TTCI has data loggers. But Edwards and Quail Hollow do not. Neither does the Stralow (current owner is Niznik) well which produces a relatively small amount compared to the three major users in the district, but does service four homes.

If data loggers are required, then "continuously" will need to be defined, such as one instantaneous reading every two hours, or some other agreed amount interval. If data loggers are not required at Edwards and Quail Hollow, then "continuously" needs to be defined as some reasonable frequency of manual measurements. During "Unrestricted Use" times, this interval may be weekly measurements. During "Close monitoring and notification", the interval might be twice a week. And during curtailment, the interval should probably be daily, and recorded at the same time each day.

In this section, the requirement is to "report such data quarterly". Currently TICI and Edwards report data to IDWR on a quarterly basis. However, there are no current requirements for Quail Hollow or Stralow to submit data to IDWR. As the Water Master for Water District 63S, I collect data at Quail Hollow on a monthly basis for most of the year, and on a weekly basis during two 6-week intervals in the summer and winter. As for the Stralow well, I collect data at this well monthly or less frequently even though the well owner is not included in the Water District. Bottom line; will this settlement mean that Quail Hollow and Stralow be required to begin submitting data to IDWR on a quarterly basis?

The sentence in this section stating that "domestic users are subject to requirements that are stringent, but less demanding" will need to be clarified.

III. Use of Geothermal Water Primarily for Heat Value. Part B of this section addresses Quail Hollow's use of all available cold water prior to the use of geothermal water for irrigation purposes. Currently, there is no mechanism available to the Water Master for documenting the use of the cold water. Some method needs to be developed that records the cold water usage so that the Water Master can make a determination that the cold water resources have been used to their fullest extent before that geothermal water is utilized.