

MEMORANDUM

Date: January 12, 2011
To: Water Right File 72-7536
From: medl
Re: pivot design rate

On 1/7/2011, the IDWR received a letter from Mr. Santee with an attachment documenting his pivot design parameters. The department considers the letter as a petition for reconsideration.

The pivot for George Santee s irrigation right 72-7536 was designed for 5.00 gpm per acre on 32.55 acres or a rate of 160 gpm. I consulted with distribution section personnel for additional information about the quality of the measurement and about pivot design. According to Corbin Knowles, this design is for light irrigation. Most systems he has seen are designed for 6 or 6.5 gpm per acre. The Santee right is for pasture not for a crop with heavy irrigation demand such as corn or sugar beets so 5 gpm is reasonable.

Unfortunately, the field examiner does not provide the Fugi meter diagnostics for her setup. She appears to position the meter correctly; on an adequate length of pipe at the pivot rather than at each of the wells. The measurement appears credible. Although it is less than the 1998 system design, it accurately describes the actual beneficial irrigation use.

The examiner does not mention the stockwater use from groundwater that is documented by the field exam photos. A stock tank is pictured adjacent to one of the two wells supplying the pivot. It may have been filling at the time the measurement took place, diminishing the rate which was measured at the pivot. However, without stronger evidence, the department is unwilling to consider the impact of that use on the licensed rate.

On 1/10/2011, I called Mr. Santee s phone number and left a voice message. I explained that I had received his letter, that the department considered it a petition for reconsideration and that I had discussed his licensed rate with my supervisor, Mr. Shelley Keen. I also explained that the department places a lot of credibility on a field examiner s measurement and that without more information from within the time frame that the permit was active, the IDWR cannot justify changing the rate.

I received a phone call from Mr. Santee on 1/11/2011. He does not have a measurement with comparable authority, which shows a higher rate in use. He mentioned the power records that the Morgan Creek watermaster routinely collects as a possible option. I promised to follow up on his request for a review of his power records and to phone him back.

I spoke with Nick Miller and Corbin Knowles. A permanent measuring device is required on this system and Nick Miller agreed to make another measurement at the next available opportunity. But that could not happen in the limited time frame for addressing the petition for reconsideration. Back calculating a volume based on a single measurement and a calculated power factor is also problematic. Multiple errors are introduced with that method. Power records are found not comparable to the field examiners measurement.

The licensed rate will not change. I updated watermaster, Nick Miller.