

Watermaster's Report

Ground Water District 63-S (Stewart Gulch)

June 1, 2003 to February 29, 2004

Summary of Watermaster Activities

I was elected as the Watermaster of Ground Water District 63-S at the Annual Meeting on April 30, 2003. Regular monthly measurements began on June 3, 2003. Most measurements were taken on the first Tuesday of each month. Weekly measurements were to be taken for a six-week period from September 1 to about mid October. However, I forgot about this, and the weekly measurements were missed. A second set of weekly measurements began successfully on February 3, 2004, and were completed on March 11, 2004. Table 1 shows the dates of the measurements taken from June 2003 through February 2004, and the time associated with the measurements and miscellaneous time.

Table 1. Watermaster hours for Water District 63-S work, June 2003 through February 2004.

Date	Hours	Comments
6/3/2003	5.5	Measurements with Brian Cavanagh
7/8/2003	2	Parts for measuring device
7/9/2003	4.5	Measurements
7/10/2003	2	Measurements
8/5/2003	5	Measurements
9/4/2003	5	Measurements
10/7/2003	2	Measurements
10/8/2003	3	Measurements
11/5/2003	5.5	Measurements
12/1/2003	5	Measurements
1/6/2004	5	Measurements
2/3/2004	5	Measurements
2/10/2004	5.5	Measurements
2/17/2004	5	Measurements
2/24/2004	5	Measurements
TOTAL	65	

Summary of Data Collections

Table 2 shows that withdrawals from the eight wells monitored in Water District 63-S for Water Year 2003 (October 1, 2002 to September 30, 2003). In addition to the total reported on Table 2, there is unknown amount of domestic withdrawal from three wells that each service a single residence, and from a well known historically as "Stralow" that provides water to four homes. The domestic wells are exempt from monitoring.

However, IDWR is currently reviewing a request by a water user within WD 63S to require the installation of measuring equipment on the Stralow well.

Table 2. Withdrawals from Stewart Gulch Water District 63S geothermal wells for Water Year 2003 (October 1, 2002 through September 30, 2003).

Well	Withdrawals (gallons)
Flora Company Tieg's (Triangle)	0
Flora Company Silkey (Shed)	42,548,250
Flora Company House (Office)	3,214,900
Edwards Greenhouse	45,514,890
Terteling Ranch Windsock	74,214,130
Terteling Ranch Pool	19,944,015
Quail Hollow Upper	13,431,300
Quail Hollow Lower	5,016,500
Total	203,883,985

Water level¹ changes varied considerably in the WD63S wells. Overall, water levels were lower in 2003 than in 2002. However, 2002 was an unusual year of high water levels in some of the wells. Therefore, water levels from 2003 were compared to 2001 to try to obtain a longer term picture of trends.

In the Edwards well, peak water levels dropped 8.1 feet from 2001 to 2003. In the nearby Flora Company Tieg's (Triangle) well, peak water levels dropped 5.8 feet for the same time period. Water levels increased 7 feet in the Flora Company Silkey (Shed) Well, but the September 2001 reading was missing which should have been the highest reading in the year. The Flora Company House well experienced a decline of 4.6 feet from 2001 to 2003. Water levels in the Quail Hollow Golf Course wells were higher in 2003 than in 2001; +3.7 feet in the Lower well and +6.7 feet in the Upper well. The Terteling Ranch Windsock well had an increase in peak values of 1 foot from 2001 to 2003. Both of the other two Terteling geothermal wells had decreases; -4.6 feet at the Pool well and -16.6 feet at the Windsock well (excluding the very high reading in May 2001). The reason for variations in water levels in WD63S is unknown, but it is suspected that local pumping conditions may be a primary influence.

Hydrographs can be viewed on the Idaho Department of Water Resources geothermal website (www.idahogeothermal.org) or obtained by contacting me (327-5455)

¹Shut in pressure readings were converted to the equivalent feet above reference points for flowing wells.

Budget

The Total Cost for the Water Master services and for the equipment purchased was \$2869.37 for the time period from June 2003 through the end of February, 2004. The cost for the Water Master's service is based on an hourly rate which includes overhead. The amount assigned to each well was determined as follows:

1. At the Annual meeting, it was determined that about \$1000 was needed in addition to the existing balance in the bank account to pay IDWR.
2. The Ryan well was assessed \$10.00
3. At the meeting, Tom Terteling calculated the individual percentage of the total withdrawals for the remaining wells. He used these values to calculate Column 2 of Table 3. Tom supplied the numbers in Column 2 to me.
4. I calculated the percentages in Column 3 of Table 3 by dividing each number in column 2 by 1006.03 and then multiplying by 100 (The divisor was reduced \$10 for the Ryan well).
5. I multiplied the percentages in Column 3 times \$2,859.37 (\$10 removed from the total assessment for the Ryan well) and divided by 100. The results are in Column 4 of Table 3.

A proposed budget is not needed for March 2004 through February 2005 because the Water District agreed to pay the Water Master according to the rate set by the Idaho Department of Water Resources. The next assessment is to be submitted by February 28, 2005, and payment in full will be due by April 1, 2005.

Table 3. Assessment for Water Master and measuring equipment expenses for Water District 63S for June 2003 through the end of February 2004.

Name	Received From T. Terteling	Percent	6/03 to 2/04 Amounts
Flora Tiegs	\$0	0.000	\$0.00
Flora Silkey	\$208.48	20.723	\$592.55
Flora House	\$15.75	1.566	\$44.77
Edwards	\$230.02	22.864	\$653.77
Terteling Ranch	\$363.65	36.147	\$1033.58
Terteling Pool	\$97.73	9.714	\$277.77
Quail Hollow Upper	\$65.81	6.542	\$187.05
Quail Hollow Lower	\$24.59	2.444	\$69.89
Ryan	\$10	-	\$10.00
Total	\$1016.03	100	\$2869.37

Respectfully submitted,

 3/19/04

Kenneth Neely, Water Master