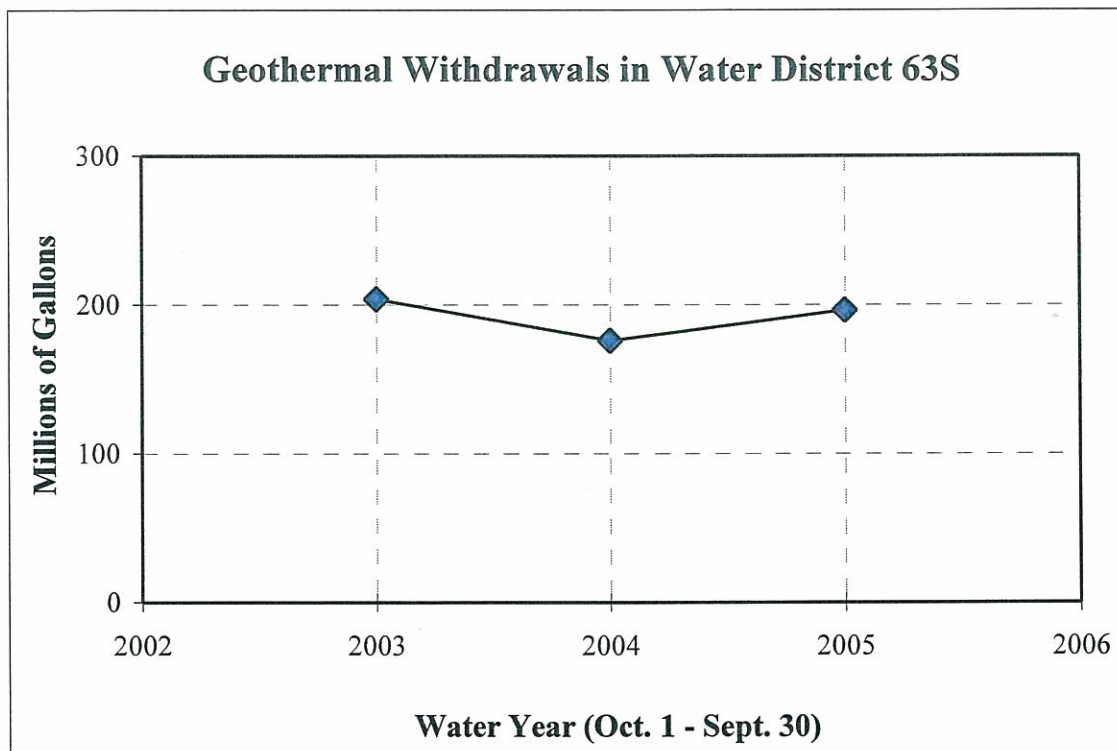


# Watermaster's Report Ground Water District 63-S (Stewart Gulch) March 10, 2005 to March 16, 2006

## Summary of Watermaster Activities

Total withdrawals from Ground Water District 63S wells for Water Year 2005 (October 1, 2004 through September 30, 2005) was 196.40 million gallons (Figure 1), which was 16.2 million gallons greater than in Water Year 2004 - a change of nine percent<sup>1</sup>. Four of the seven production wells in WD63S (excluding the Whitehead well) had increases in withdrawals (Table 1).



**Figure 1.** Geothermal withdrawals in Stewart Gulch Water District 63S for Water Years 2003-2005.

<sup>1</sup>This amount does not include data from the Whitehead well because production records for that well were partial in WY04.

**Table 1.** Withdrawals from Stewart Gulch Water District 63S geothermal wells for Water Year 2005 (October 1, 2004 through September 30, 2005).

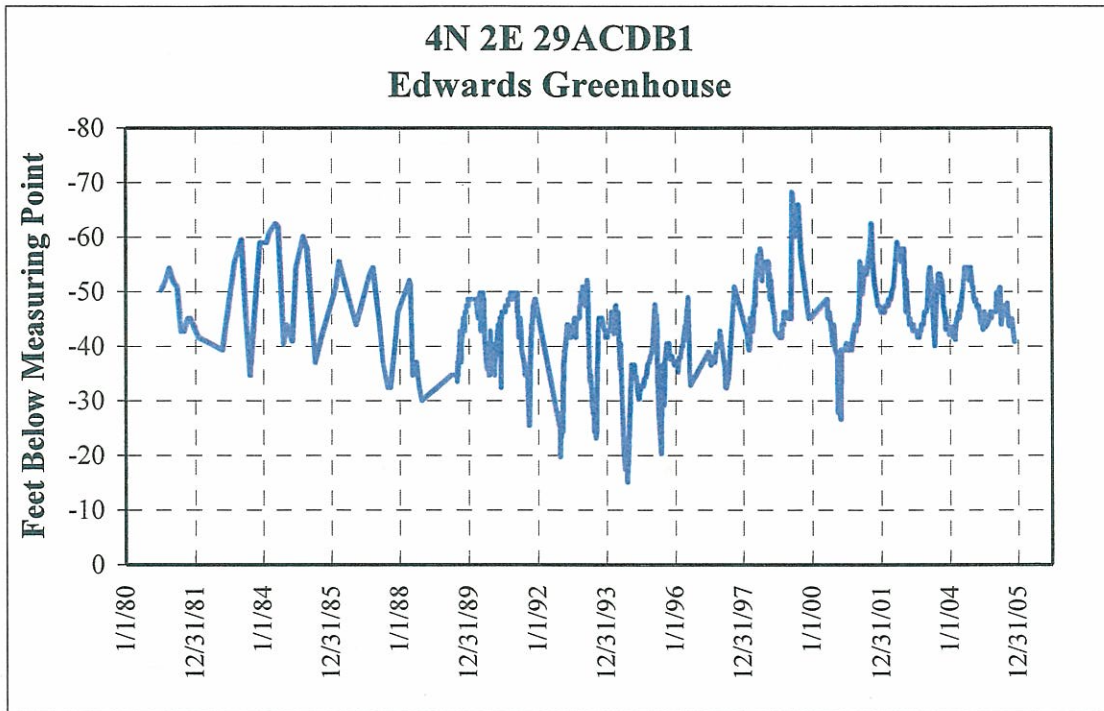
Well	Withdrawals in WY05 (gallons)	Change from WY04 (gallons)
Flora Company Tiegs (Triangle)	0	0
Flora Company Silkey (Shed)	33,770,048	-1,497,266
Flora Company House (Office)	5,728,467	-148,953
Edwards Greenhouse	35,677,800	-12,756,000
Terteling Ranch Windsock	85,363,052	+22,296,941
Terteling Ranch Pool	17,256,220	+1,866,809
Quail Hollow Golf Course Upper	13,286,400	+5,759,600
Quail Hollow Golf Course Lower	978,700	+722,000
Whitehead	4,339,274	NA <sup>1</sup>
<b>Total</b>	<b>196,399,961</b>	<b>+16,194,801<sup>2</sup></b>

<sup>1</sup>Only partial production data were available in WY04.

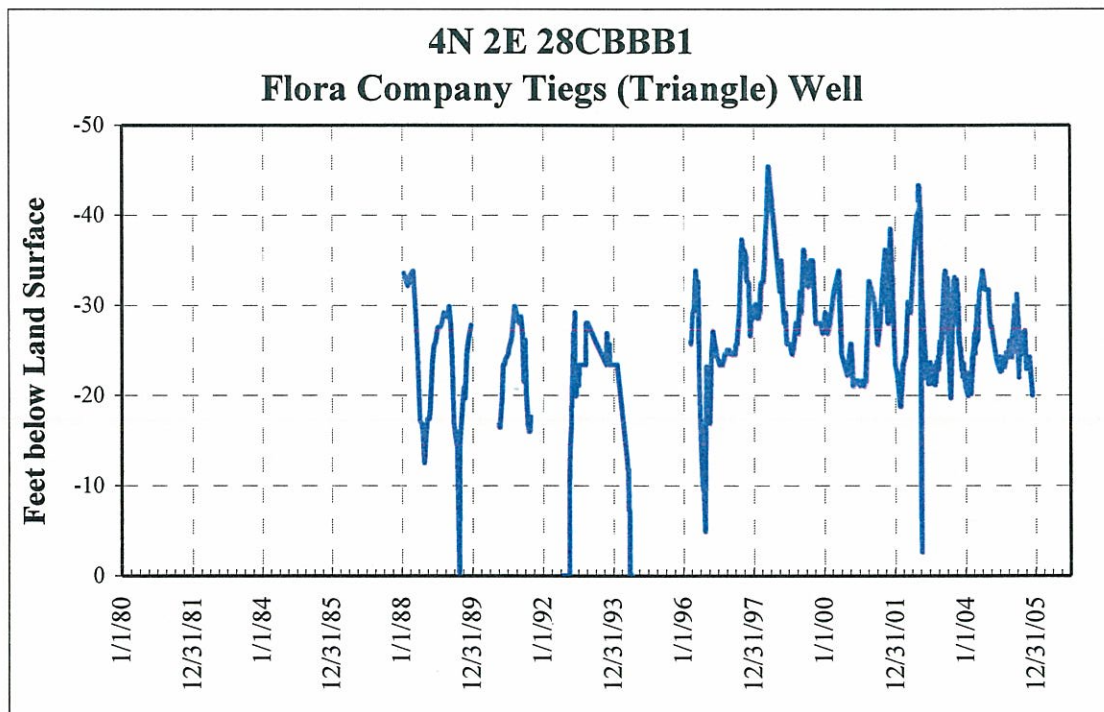
<sup>2</sup>Does not include data for Whitehead well.

Changes in ground water trends in WD63S were mixed in 2005. Typical of the observed water level patterns in the District, the Edwards Greenhouse well showed an increase in the minimum value from 2004 to 2005, but the latter part of 2005 was characterized by an overall decrease in water levels including a decrease in the maximum value of about 3.7 feet from 2004 to 2005 (Figure 2). The three nearby Flora Company wells exhibited the same pattern as the Edwards well (Figures 3-5). The Whitehead well, which is located between the Edwards and Flora Company wells has only been monitored since late 2004; however, it also showed a decline in water levels in 2005 (Figure 6).

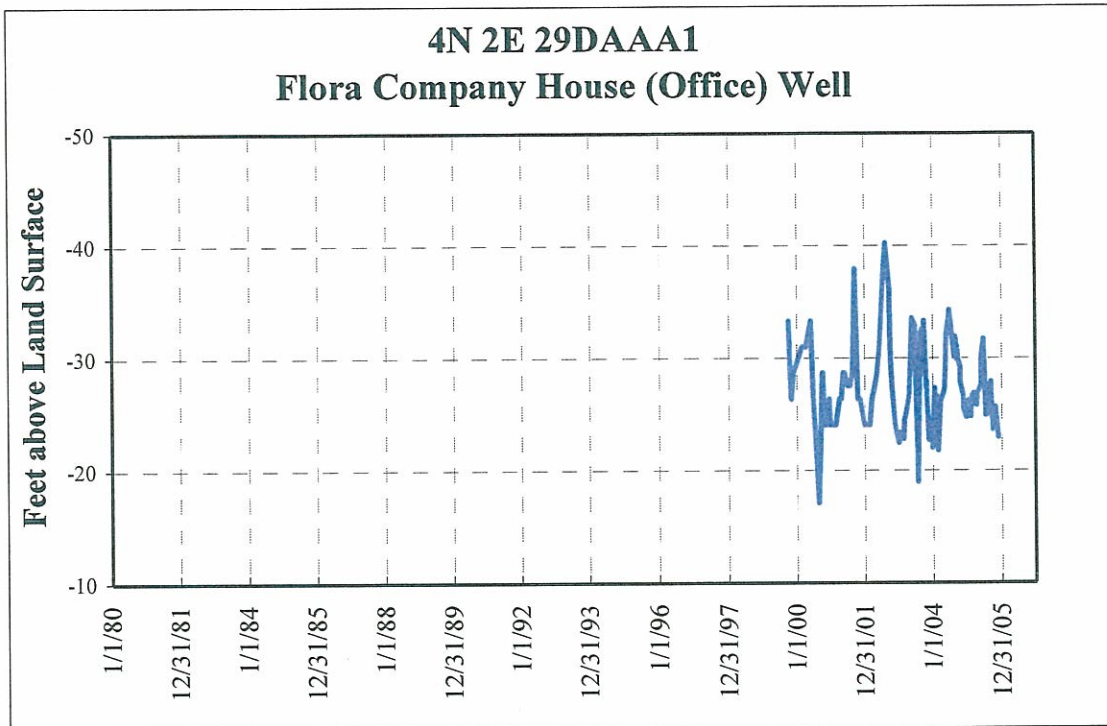
Moving up Stewart Gulch, the two geothermal wells at the Quail Hollow Golf Course also showed similar patterns as the Flora and Edwards well (Figures 7 and 8). At the Terteling Ranch, the Windsock well had the lowest pumping water levels on record in early 2005, and the maximum values dropped 5.8 feet from mid 2004 to mid 2005 (Figure 9). The pumping water levels for the Pool well showed a major increase in the minimum values of about 20 feet, and a slight decrease in the maximum values from 2004 to 2005 (Figure 10). The Motorcycle Club Hot well had minimum values that increased 5.2 feet from early 2004 to early 2005, and maximum values that decreased 5.2 feet from mid 2004 to mid 2005 (Figure 11).



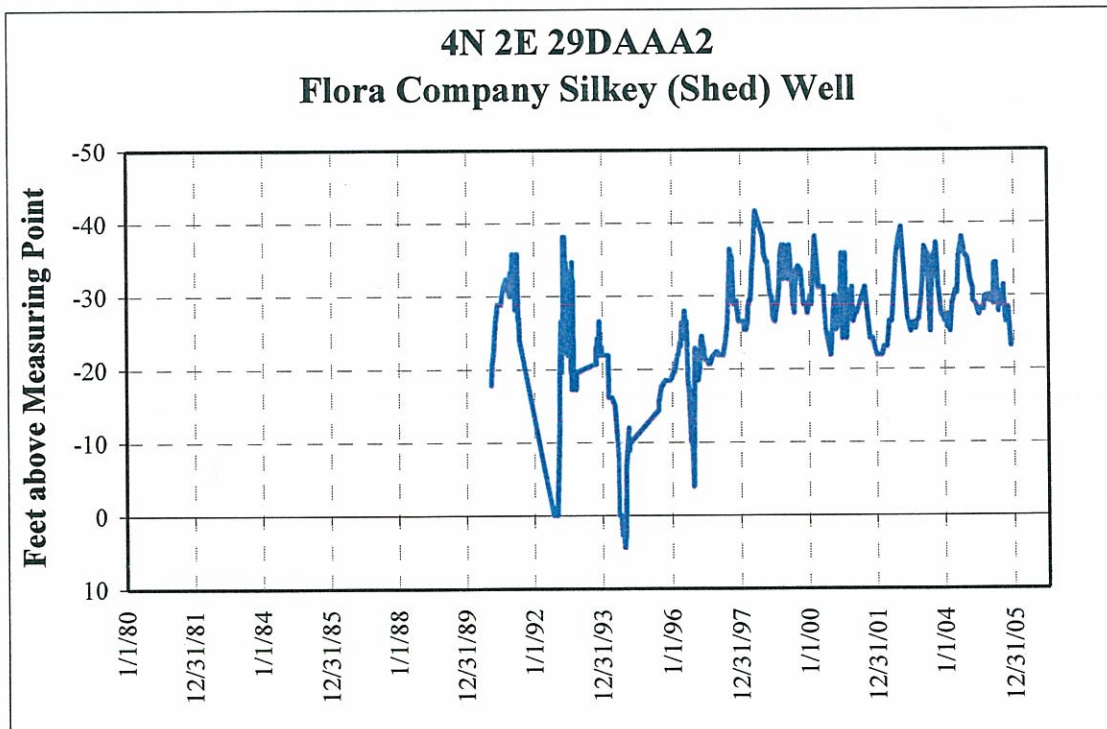
**Figure 2.** Water level hydrograph for the Edwards Greenhouse well.



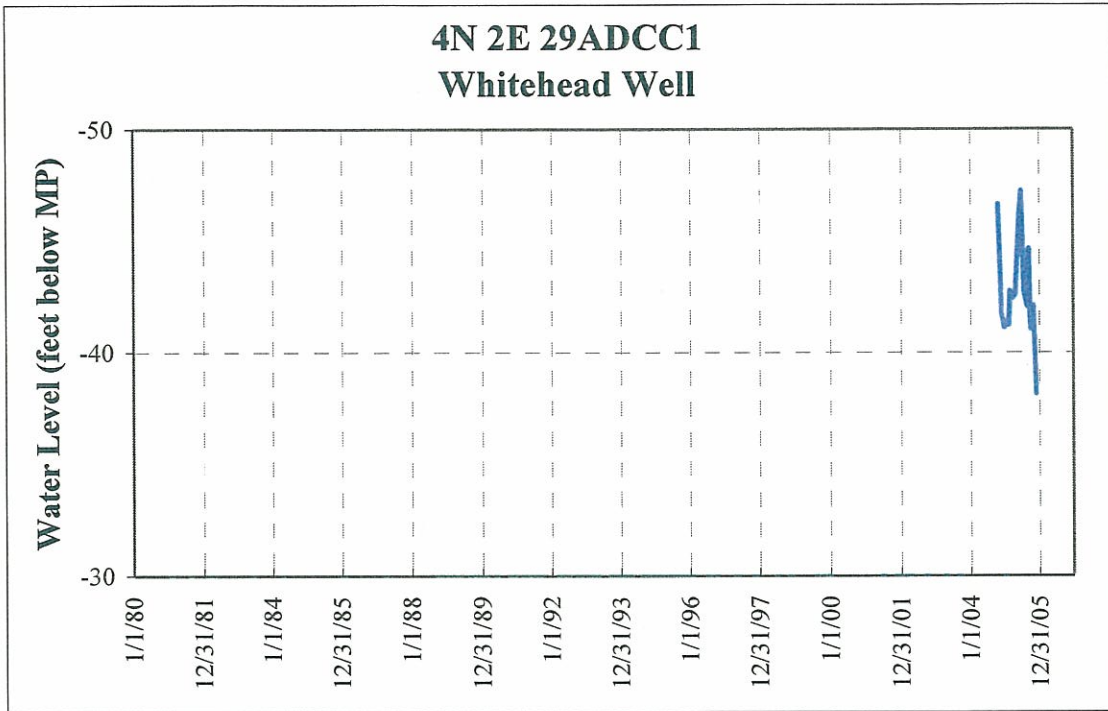
**Figure 3.** Water level hydrograph for the Flora Company Tieg (Triangle) well.



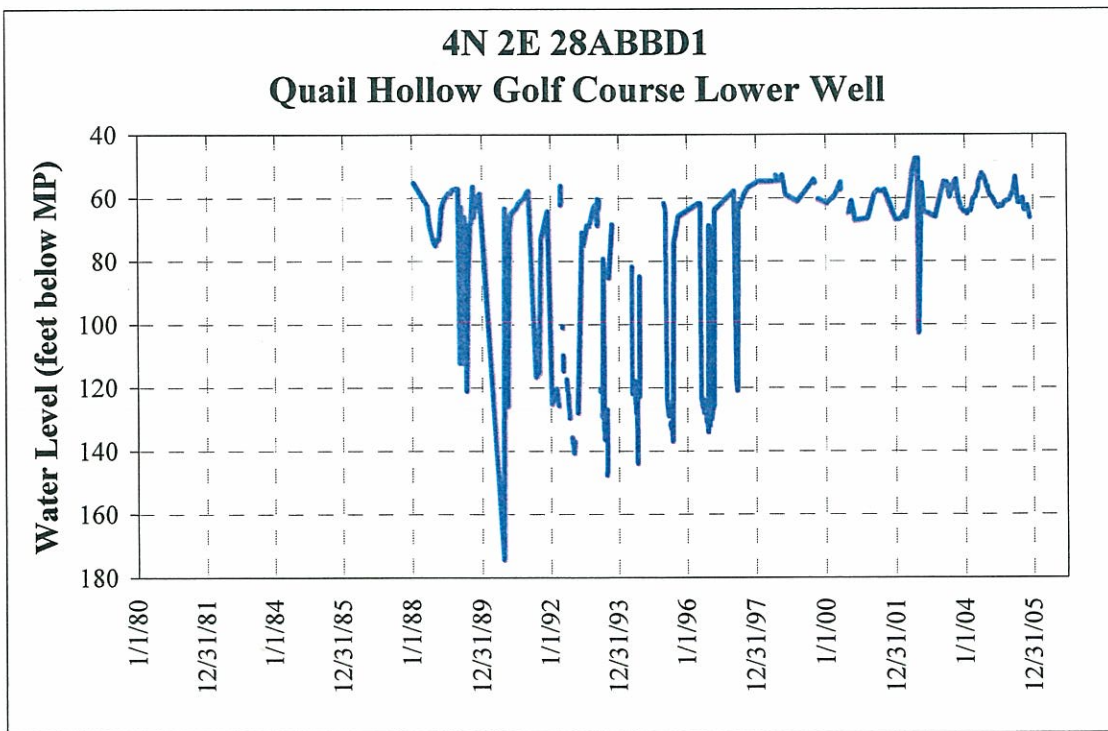
**Figure 4.** Water level hydrograph for the Flora Company House (Office) well.



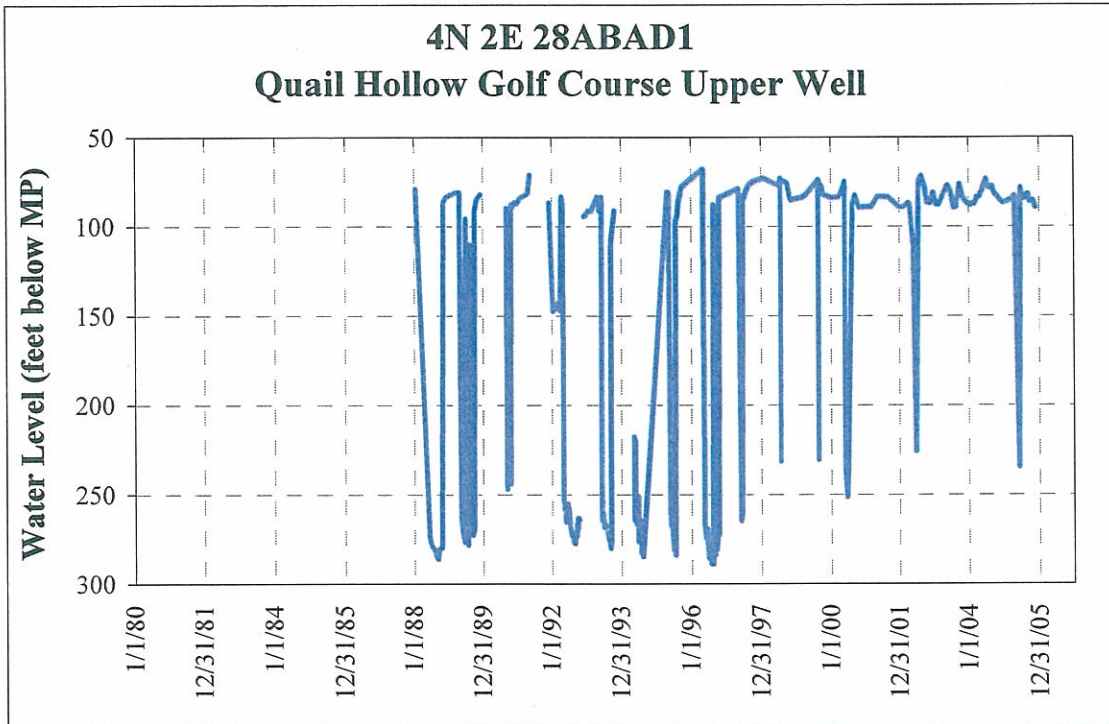
**Figure 5.** Water level hydrograph for the Flora Company Silkey (Shed) well.



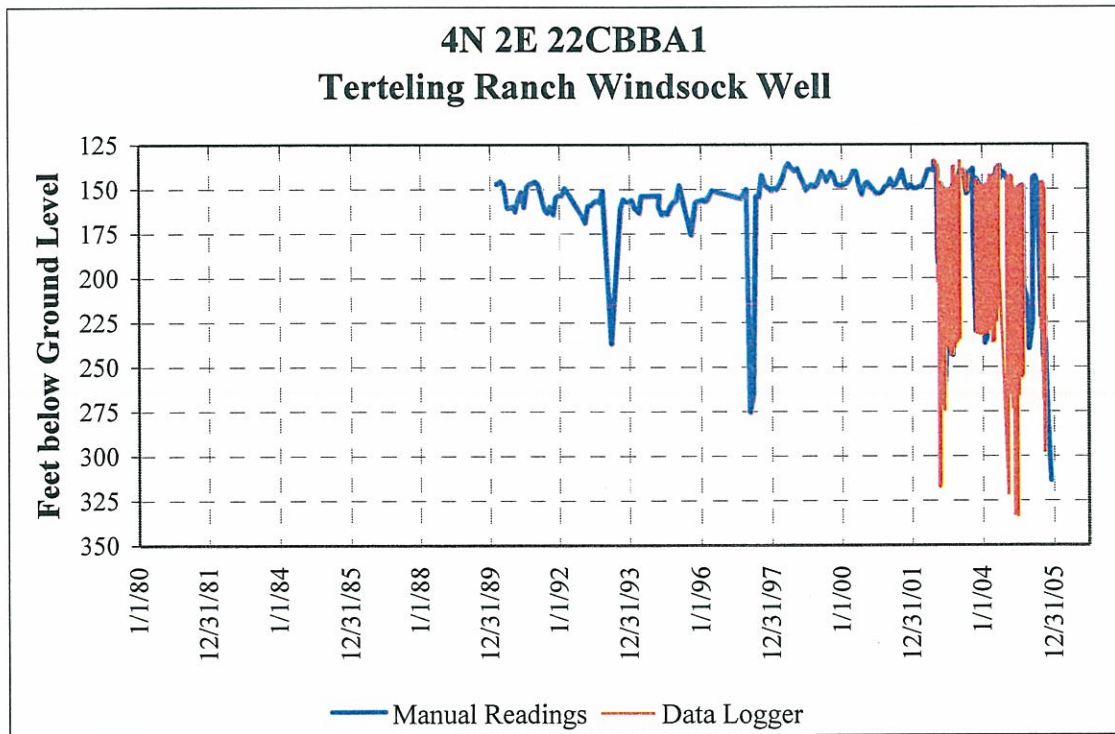
**Figure 6.** Water level hydrograph for the Whitehead well.



**Figure 7.** Water level hydrograph for the Quail Hollow Lower well.



**Figure 8.** Water level hydrograph for the Quail Hollow Upper well.



**Figure 9.** Water level hydrograph for the Terteling Ranch Windsock well.

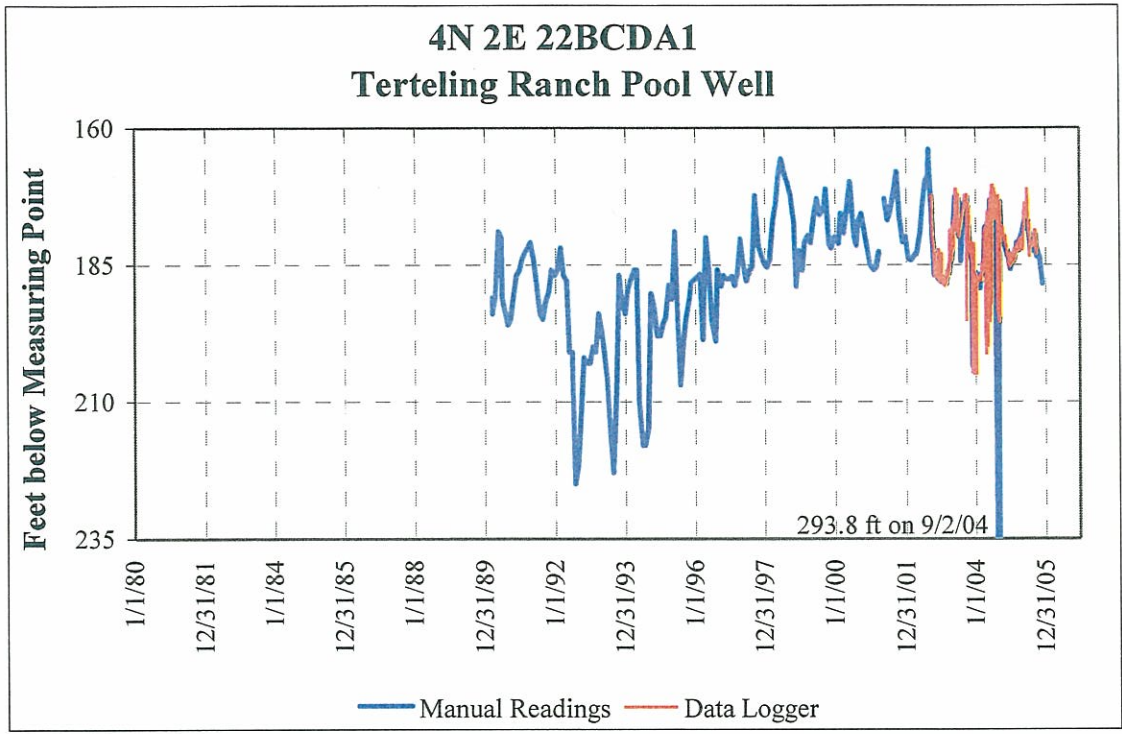


Figure 10. Water level hydrograph for the Terteling Ranch Pool well.

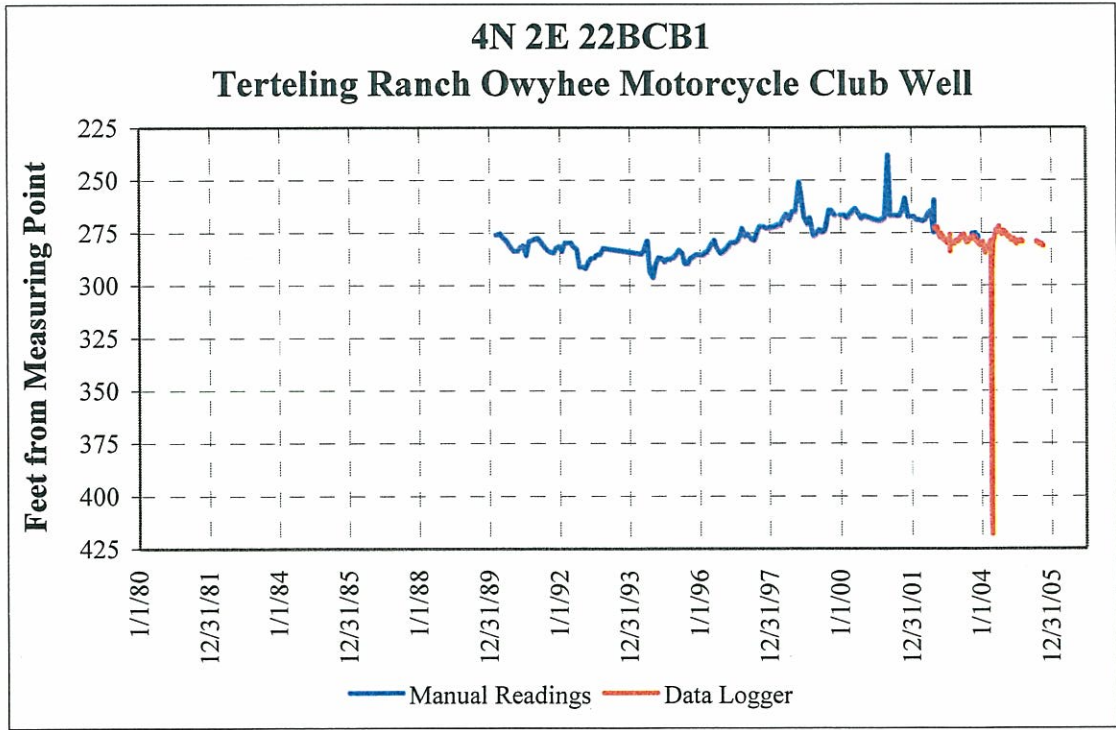


Figure 11. Water level hydrograph for the Terteling Ranch Motorcycle Club Hot well.

Table 2 shows the Watermaster hours for the reported time period. The total charges for Watermaster services from April 5, 2005 to February 21, 2006 was \$2,850.89. Table 3 shows that assessment based on the percentages determined at the 2004 Annual Meeting.

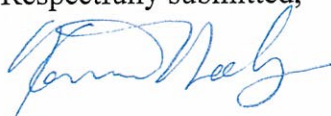
Table 1. Watermaster hours for Water District 63-S work, April 4, 2005 through ~~March~~ <sup>Feb</sup> 21, 2006.

Date	Hours	Comments
4/5/2005	4	Measurements
5/3/2005	3.5	Measurements
6/14/2005	5	Measurements & Data entry
7/5/2005	4	measurements
8/2/2005	4	Measurements & Data entry
9/6/2005	4	measurements
9/15/2005	4	measurements
9/21/2005	4	measurements
10/4/2005	4	measurements
10/11/2005	4	measurements
11/8/2005	4	measurements
12/6/2005	4	measurements
1/10/2006	3.5	measurements
1/11/2006	1.5	measurements
2/7/2006	4	measurements
2/14/2006	4	measurements
2/21/2006	4	measurements
2005-06	4	Data entries
<b>TOTAL</b>	<b>69.5</b>	

Table 3. Assessment for Water Master and measuring equipment expenses for Water District 63S for ~~June 2003~~ <sup>April 2005</sup> through the end of February 2004.

Name	Percent	<del>4/6/05 to 2/06</del> Amounts
Flora Tiegs	0.000	\$0.00
Flora Silkey	20.723	\$590.79
Flora House	1.566	\$44.64
Edwards	22.864	\$651.83
Terteling Ranch	36.147	\$1030.51
Terteling Pool	9.714	\$276.94
Quail Hollow Upper	6.562	\$186.51
Quail Hollow Lower	2.444	\$69.68
Ryan	-	\$10.00
<b>Total</b>	<b>100</b>	<b>\$2860.90</b>

Respectfully submitted,

 3/16/06

Kenneth Neely, Water Master