

Memo

TO: C.Yenter, Double C NOV and Water District Files
FROM: C. Knowles
DATE: 12/7/2009

RE: Consent order follow-up and field verification of flow meter installation

On August 11, September 18, and December 2 of 2009, IDWR staff completed inventory of all fourteen wells owned by Double C farms associated with the Notice of Violation issued by IDWR July of 2005. The consent order executed by both IDWR and Double C farms included installation of Magnetic type flow meters on all 14 wells by August 1, 2009. Staff visited the site(s) to confirm the installation of flow meters and also provided some help in clarifying how and where the flow meters should be installed.

August 11, 2009-

On this visit I met with Cory King to take a tour of the wells and look at the meters that had been installed. We looked at 6 of the 14 wells of which only one had a meter installed. A0006742 called the lower well has a Seametrics AG 2000 model flanged magnetic meter with serial number 06090960. This visit was to also provide some help with respect to installation and what would be needed for IDWR to complete the calibration work. Staff also looked at several wells that would require plumbing modifications to accommodate the flow meter. At that time Cory indicated he would keep IDWR apprised of the progress in getting all flow meters installed. Other items discussed at the time of this visit included Well number 1 and 21 of which would require the system to be completely drained to install the flow meters. Staff indicated at that time that these two wells would be the last two installed due to the timing of crops and Double C not being able to shut the system completely off during the peak part of the season. Well A0006746 called the Olive Tree well was disassembled and being prepped to have a meter installed.

September 18, 2009-

Prior to this visit Cory King called me and gave me an update on the progress of getting all 14 wells complete. On this return visit 7 more wells had meters installed and most had water use recorded on the display. Those 7 wells were:

- A0006701 called the Anderson #3 well had a 10 inch AG 2000 installed with serial number 06090958 and a volume reading of 53.96 acre feet.
- A0006705 called the Anderson #2 well was also complete with a 10 inch AG 2000 with serial number 06090961 and a volume reading of 65.15 acre feet.
- A0006702 called the Anderson #1 well was completed with a 10 inch AG 2000 with serial number 06090959 and a volume reading of 65.89 acre feet. This well was also calibrated at the time of inventory. The meter had an empty pipe signal with the booster pumping more water than the well could produce. I slightly closed the butterfly valve below the booster and created a full pipe in the section where the flow meter was installed and calibrated the meter. The well was running at 1860 gallons per minute at the time of calibration.

- A0006746 called the Olive Tree well has an eight inch AG 2000 installed and had a volume reading of 42.02 acre feet. The well was running but due to time constraints I was unable to calibrate the flow meter. The rate of flow during this visit was noted at 645 gallons per minute.
- A0006745 called the Orange pump well had a 10 inch AG 2000 installed with serial number 06090951 and a volume reading of 0.02 acre feet. Well was off at the time of inventory
- A0017712 called the Goat ranch well had a 10 inch AG 2000 installed with serial number 06090956 and a volume reading of 333.51 acre feet. Well was off at the time of inventory.
- A0012046 called well 22 is an open discharge well that has a 10 inch AG 2000 installed with serial number 06090955 and a volume reading of 271.65 acre feet. This well was also calibrated at the time of inventory and an average rate of flow of 1350.89 gallons per minute.

December 2, 2009-

Prior to this visit, Cory King called me on November 14, 2009 and told me that 13 of the 14 wells were complete. The fourteenth well is the well at the feedlot in which Cory wanted to see if we could work something out due to the little to no use on that well based on the well going dry quickly once the well is turned on. I told him we would discuss some possible solutions, but follow up this coming summer is needed to determine just how much the well is used. All wells on the visit were visited and GPS'd. Two of the 14 wells did not have site tags and were tagged during this visit. Volume data was collected on all wells with flow meters. See table 1.

IDWR Metal Tag	Site Name	Volume in AF
A0006739	Willow Crk Well	10.77
A0006747	Well 1	0.02
A0012045	Well 13	0.04
A0006703	Well 21	0.02
A0006748	Anderson Well 4	61.30
A0006701	Anderson Well 3	82.75
A0006705	Anderson Well 2	114.53
A0006702	Anderson Well 1	152.2
A0006746	Olive Tree Well	53.39
A0006745	Orange Pump Well	14.78
A0006742	Lower Well	66.87
A0012046	Well 22 (pond well)	271.65
A0017712	Goat Ranch Well	357.87
A0009654	Feedlot well	No meter

Table 1: IDWR 2009 end of year readings on Double C wells.

Conclusions-

In all three of my visits to Double C farms Cory King has been very responsive to telephone messages and very accommodating. IDWR will plan to follow up with Mr. King in the spring of 2010 and calibrate the remaining flow meters not yet calibrated.

During that visit further investigation of the Feedlot well will be conducted to make a better determination of how to best implement the measuring device requirement.

Data entry into the WMIS data base of completed work to date and volume data collected during my visits has been completed. Correlation of WMIS points and water rights needs to be completed. Some water right clean up on these rights will need to be conducted through the transfer process which will slow the correlation process down.

Map overview of all 14 wells-

