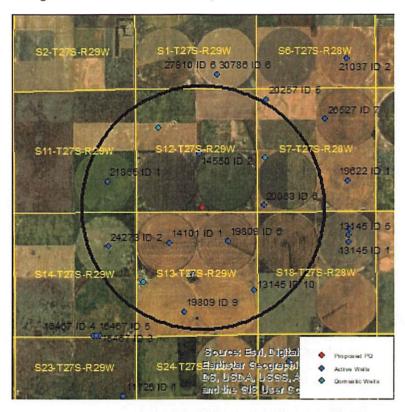
#### Evaluation of proposed move for Water Right No 20063

Proposed: Move water right no. 20063 a distance of 2,640 ft to the west.



Wells within 1 mile: 14550, 21865, 24273, 14101, 19809 ID 6, 19809 ID 9, 13145, a domestic well in section 12-27-29, a domestic well in section 7-27-28, and a domestic well in section 13-27-29.

The saturated thickness at the proposed well location is estimated to be 96 ft, based upon the GMD3 model. For saturated thickness between 75 ft and 100 ft, the drawdown allowance is 2.0 ft.

50 year Theis Analysis: The following values were used to run the analysis:

S = 0.1986, T = 4,619.4 ft<sup>2</sup>/day,  $tp_{current} = 83$  days (based upon average use and reported rate),  $Q_{current} = 350$  gpm (based last reported rate),  $tp_{proposed} = 49$  days,  $tp_{proposed} = 915$  gpm

Theis drawdowns were calculated as follows:

14550: Drawdown from current location = 1.21 ft

Drawdown from proposed location = 2.55 ft

Net drawdown = 1.3 ft

21865: Drawdown from current location = 0.81 ft

Drawdown from proposed location = 1.68 ft

Net drawdown = 0.9 ft

24273: Drawdown from current location = 0.80 ft

Drawdown from proposed location = 1.64 ft

Net drawdown = 0.8 ft

14101: Drawdown from current location = 1.07 ft

Drawdown from proposed location = 2.71 ft

Net drawdown = 1.6 ft

19809 ID 6: Drawdown from current location = 1.68 ft

Drawdown from proposed location = 3.12 ft

Net drawdown = 1.4 ft

19809 ID 9: Drawdown from current location = 0.90 ft

Drawdown from proposed location = 1.60 ft

Net drawdown = **0.7** ft

13145: Drawdown from current location = 1.19 ft

Drawdown from proposed location = 1.69 ft

Net drawdown = 0.5 ft

Domestic 12-27-29: Drawdown from current location = 0.91 ft

Drawdown from proposed location = 1.77 ft

Net drawdown = **0.9** ft

Domestic 7-27-28: Drawdown from current location = 1.76 ft

Drawdown from proposed location = 1.93 ft

Net drawdown = 0.2 ft

Domestic 13-27-29: Drawdown from current location = 0.87 ft

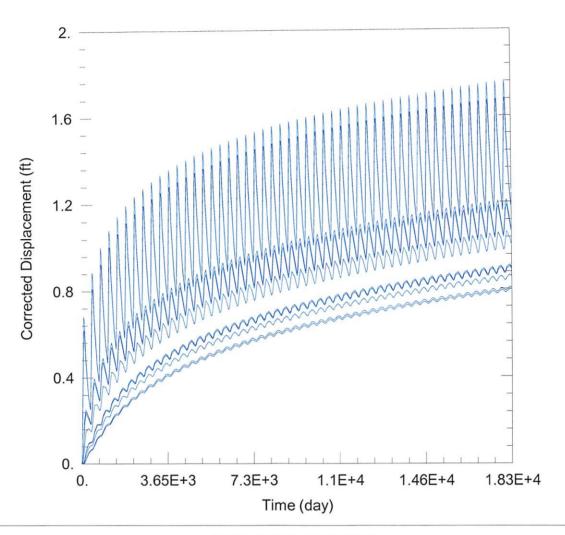
Drawdown from proposed location = 1.72 ft

Net drawdown = **0.9** ft

Net drawdown does not exceed the drawdown allowance of 2.0 ft for any wells within 1 mile of the proposed location. Therefore, critical well analysis is not necessary.

#### Conclusion:

Based upon information from the GMD3 model, this proposal will cause minimal effects on neighboring wells, and is unlikely to create an impairment. GMD3 staff recommends approval of the application.



## WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2020\_moves\20063\20063 Current.aqt

Date: 07/01/20 Time: 10:46:08

## PROJECT INFORMATION

Company: GMD 3 Project: 20063

Location: Gray County Test Well: 20063

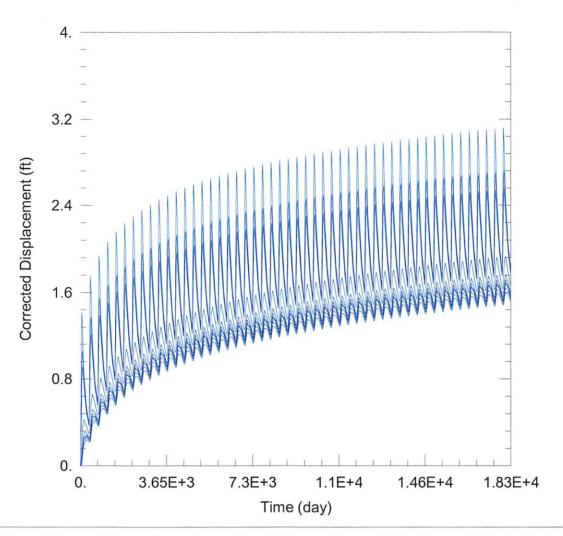
## **WELL DATA**

Pumping Wells			
Well Name	X (ft)	Y (ft)	
20063	106147	303804	

Well Name	X (ft)	Y (ft)
	106147	303804
<b>14550</b>	103332	306036
<b>21865</b>	99353	304828
<b>24273</b>	99390	302025
<b>- 14101</b>	102033	302169
□ 19809 ID6	104596	302270
□ 19809 ID9	102695	299182
<b>13145</b>	105750	300118
<ul> <li>Domestic 12-27-29</li> </ul>	101556	307181
<ul> <li>Domestic 7-27-28</li> </ul>	106187	305867
<ul> <li>Domestic 13-27-29</li> </ul>	100928	300464

**Observation Wells** 

#### SOLUTION



# WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2020\_moves\20063\20063 Proposed.aqt

Date: 07/01/20 Time: 10:46:01

#### PROJECT INFORMATION

Company: GMD 3 Project: 20063

Location: Gray County Test Well: 20063

# WELL DATA

Pumping Wells			
Well Name	X (ft)	Y (ft)	
20063	103494	303715	

Well Name	X (ft)	Y (ft)
0	103494	303715
□ 14550	103332	306036
<b>21865</b>	99353	304828
<b>24273</b>	99390	302025
<b>- 14101</b>	102033	302169
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□ 13145	105750	300118
<ul> <li>Domestic 12-27-29</li> </ul>	101556	307181
□ Domestic 7-27-28	106187	305867
<ul> <li>Domestic 13-27-29</li> </ul>	100928	300464

**Observation Wells** 

# SOLUTION