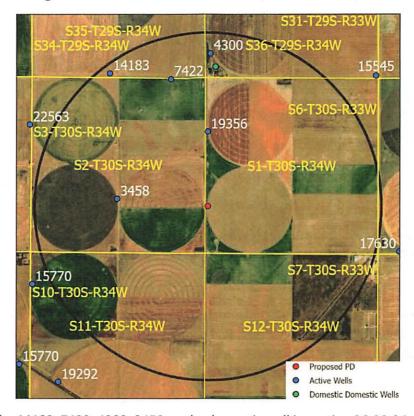
#### Evaluation of proposed move for Water Right No. 19356

Proposed: Move water right no. 19356 to a new well location, a distance of 2,271 ft to the south.



Wells within 1 mile: 14183, 7422, 4300, 3458, and a domestic well in section 36-29-34.

The saturated thickness at the proposed well location is estimated to be 207 ft, based upon the GMD3 model. For saturated thickness greater than 200 ft, the drawdown allowance is 4.0 ft.

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

S = 0.059, T = 47,966 ft<sup>2</sup>/day, tp<sub>current</sub> = 149 days (based on average use and observed rate),  $Q_{current} = 342$  gpm (based on 2019 field inspection), tp<sub>proposed</sub> = 77 days,  $Q_{proposed} = 945$  gpm

Theis drawdowns were calculated as follows:

14183: Drawdown from current location = 0.53 ft

Drawdown from proposed location = 0.82 ft

Net drawdown = **0.3** ft

7422: Drawdown from current location = 0.65 ft

Drawdown from proposed location = 0.94 ft

Net drawdown = 0.3 ft

4300: Drawdown from current location = 0.61 ft

Drawdown from proposed location = 0.86 ft

Net drawdown = 0.3 ft

3458: Drawdown from current location = 0.53 ft

Drawdown from proposed location = 1.16 ft

Net drawdown = 0.63 ft

Domestic 36-29-34: Drawdown from current location = 0.65 ft

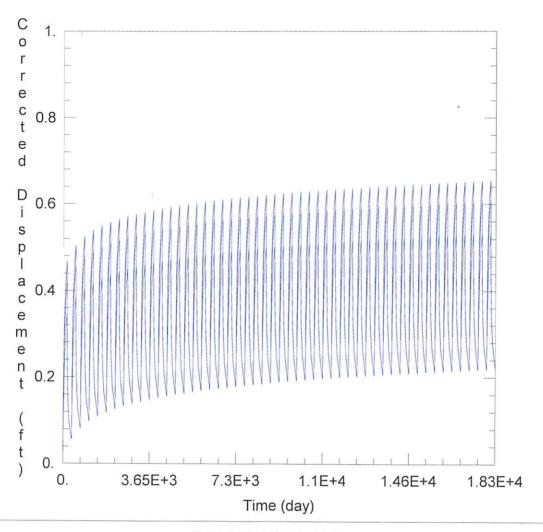
Drawdown from proposed location = 0.91 ft

Net drawdown = 0.3 ft

Net drawdown does not exceed the drawdown allowance of 4.0 ft for any well within 1 mile of the proposed location. Therefore, critical well analysis is not necessary.

### **Conclusion:**

The proposed move is likely to create minimal effects on neighboring wells and appears unlikely to cause impairment. Any concerned neighbors should contact GMD3 at (620) 275-7147 or the Division of Water Resources at (620) 276-2901.



### WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2024\_moves\19356\19356 Current.aqt

Date: 07/29/24

Time: 14:26:27

### PROJECT INFORMATION

Company: GMD 3 Project: 19356

Location: Haskell County

# **WELL DATA**

- amping vicio			
Well Name	X (ft)	Y (ft)	
19356	-57662	216899	

Pumping Wells

Well Name	X (ft)	Y (ft)
	-57662	216899
<b>14183</b>	-60639	218671
□ 7422	-58782	218496
<b>4300</b>	-57579	219276
<b>3458</b>	-60415	214854
<ul> <li>domestic 36-29-34</li> </ul>	-57422	218876

**Observation Wells** 

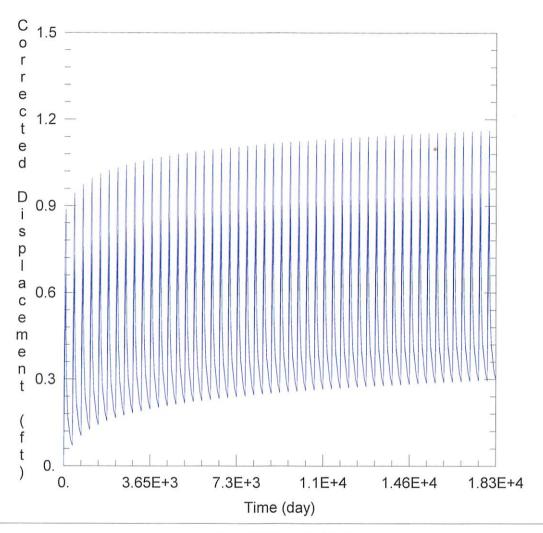
# SOLUTION

Aquifer Model: Unconfined

 $= 4.797E + 4 \text{ ft}^2/\text{day}$ T Kz/Kr = 1.

Solution Method: Theis

S = 0.059b = 207. ft



### WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2024\_moves\19356\19356 Proposed.aqt

Date: 07/29/24

Time: 14:26:21

# PROJECT INFORMATION

Company: GMD 3 Project: 19356

Location: Haskell County

### **WELL DATA**

 Pumping Wells

 Well Name
 X (ft)
 Y (ft)

 19356
 -57653
 214627

Well Name	X (ft)	Y (ft)
	-57653	214627
□ 14183	-60639	218671
□ 7422	-58782	218496
<b>4300</b>	-57579	219276
<b>3458</b>	-60415	214854
□ domestic 36-29-34	-57422	218876

Observation Wells

# SOLUTION

Aquifer Model: Unconfined

= 4.797E+4 ft<sup>2</sup>/day

Kz/Kr = 1.

Solution Method: Theis

S = 0.059b = 207. ft