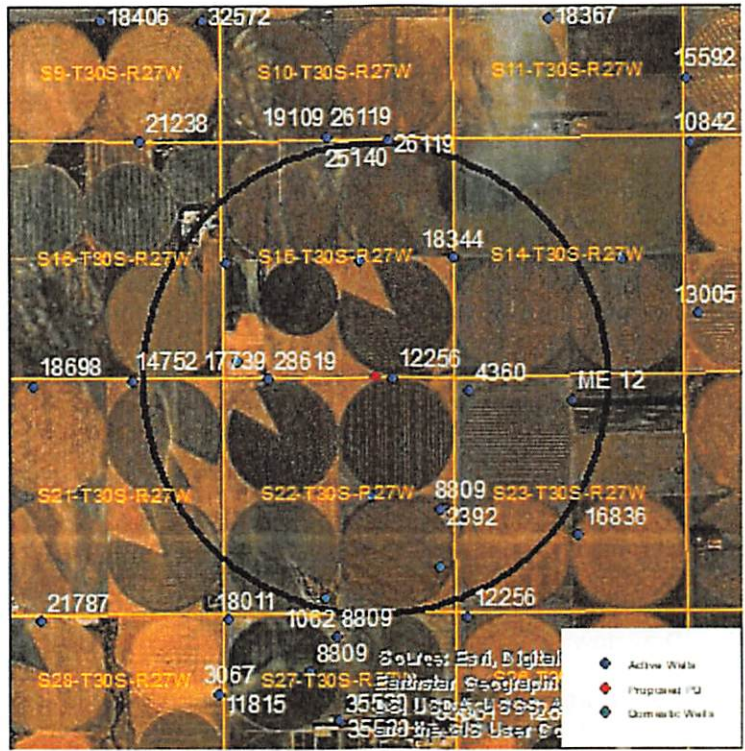


**Evaluation of proposed additional well for Water Right No 12256**

Proposed: Move Water Right No 27188 to a new well location 427 ft to the west.



Wells within 1 mile: 28402, 2392 & 8809, 4360, ME 12, 18344, 24769, 25715 & 28619, 17739 & 28619, a domestic well located in section 15-30-27, a domestic well located in the southwest ¼ of section 22-30-27, and a domestic well located in the southeast ¼ of section 22-30-27.

The saturated thickness at the proposed well location is estimated to be 261 ft, based upon observation well data from section 23-30-27 and local driller’s logs. For saturated thicknesses greater than 200 ft, the maximum allowable Theis drawdown to neighboring critical wells is 4.0 ft.

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

$S = 0.08965$ ,  $T = 11,272 \text{ ft}^2/\text{day}$ ,  $t_{p\text{current}} = 58 \text{ days}$  (based upon observed rate and reported quantity),  $Q_{\text{current}} = 965 \text{ gpm}$  (based upon 2011 field inspection),  $t_{p\text{proposed}} = 93 \text{ days}$ ,  $Q_{\text{proposed}} = 1415 \text{ gpm}$ . Proposed  $t$  and  $Q$  values were obtained by subtracting the current average use and observed rate from 12256 ID4 from the total authorized rate and quantity under water right no. 12256.

Theis drawdowns were calculated as follows:

- 28402: Drawdown from current location = 2.30 ft
- Drawdown from proposed location = 4.93 ft
- Net drawdown = 2.6 ft

**2392 & 8809:** Drawdown from current location = 2.02 ft  
Drawdown from proposed location = 4.19 ft  
Net drawdown = 2.2 ft

**4360:** Drawdown from current location = 3.24 ft  
Drawdown from proposed location = 5.57 ft  
Net drawdown = 2.3 ft

**ME 12:** Drawdown from current location = 1.63 ft  
Drawdown from proposed location = 3.40 ft  
Net drawdown = 1.8 ft

**18344:** Drawdown from current location = 2.06 ft  
Drawdown from proposed location = 4.23 ft  
Net drawdown = 2.2 ft

**24769:** Drawdown from current location = 2.24 ft  
Drawdown from proposed location = 4.90 ft  
Net drawdown = 2.7 ft

**25715 & 28619:** Drawdown from current location = 1.46 ft  
Drawdown from proposed location = 3.55 ft  
Net drawdown = 2.1 ft

**17739 & 28619:** Drawdown from current location = 2.17 ft  
Drawdown from proposed location = 5.22 ft  
Net drawdown = 3.1 ft

**Domestic 15-30-27:** Drawdown from current location = 1.83 ft  
Drawdown from proposed location = 4.34 ft  
Net drawdown = 2.5 ft

**Domestic SW 22-30-27:** Drawdown from current location = 1.34 ft  
Drawdown from proposed location = 3.12 ft  
Net drawdown = 1.8 ft

**Domestic SE 22-30-27: Drawdown from current location = 1.53 ft**

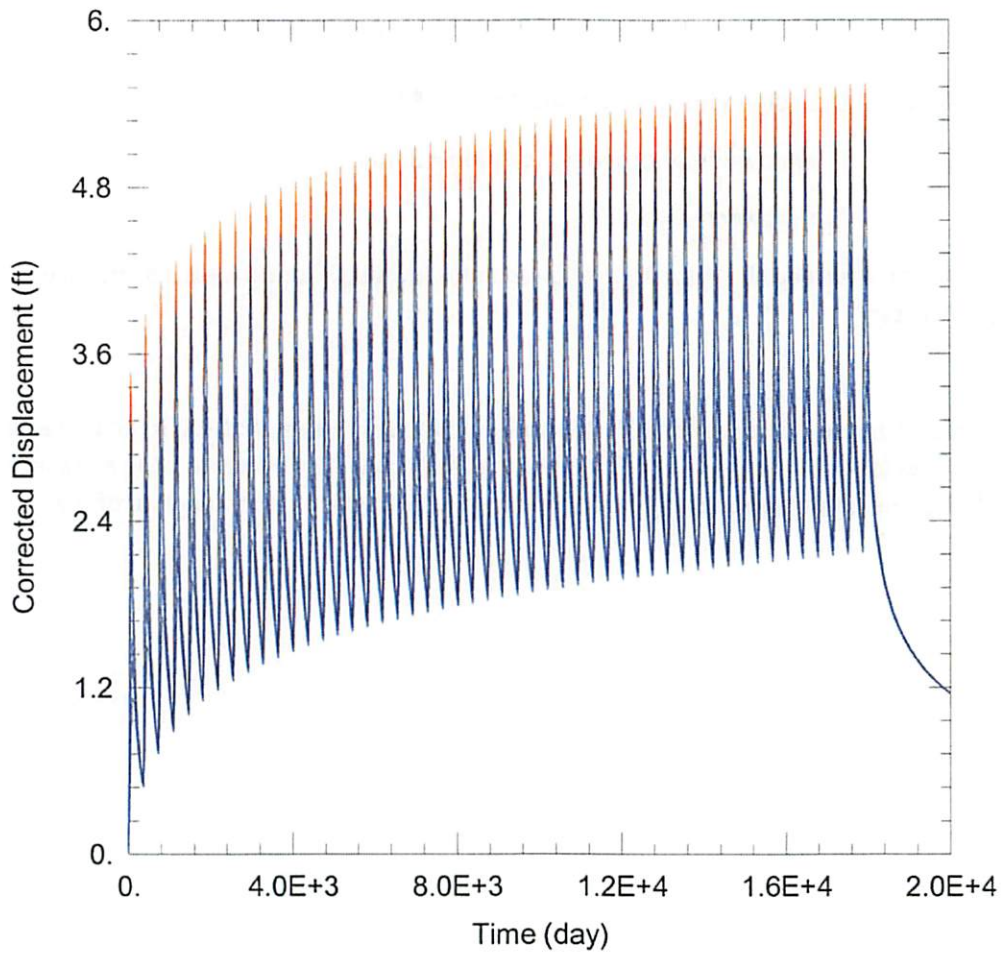
**Drawdown from proposed location = 3.40 ft**

**Net drawdown = 1.9 ft**

**Net drawdown does not exceed the drawdown allowance for any neighboring wells, so critical well analysis is not necessary.**

**Conclusion:**

**Given the current saturated thickness of the local aquifer being well in excess of 200 ft, and no well-to-well interaction effects being greater than 4.0 ft, the proposed change is unlikely to have any sort of noticeable effect on neighboring water rights. The staff of GMD 3 recommends approval of the application.**



WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2019\_moves\12256\12256 Proposed.aqt

Date: 06/26/19

Time: 15:54:09

PROJECT INFORMATION

Company: GMD 3

Project: 12256

Location: Meade County

Test Well: 12256

WELL DATA

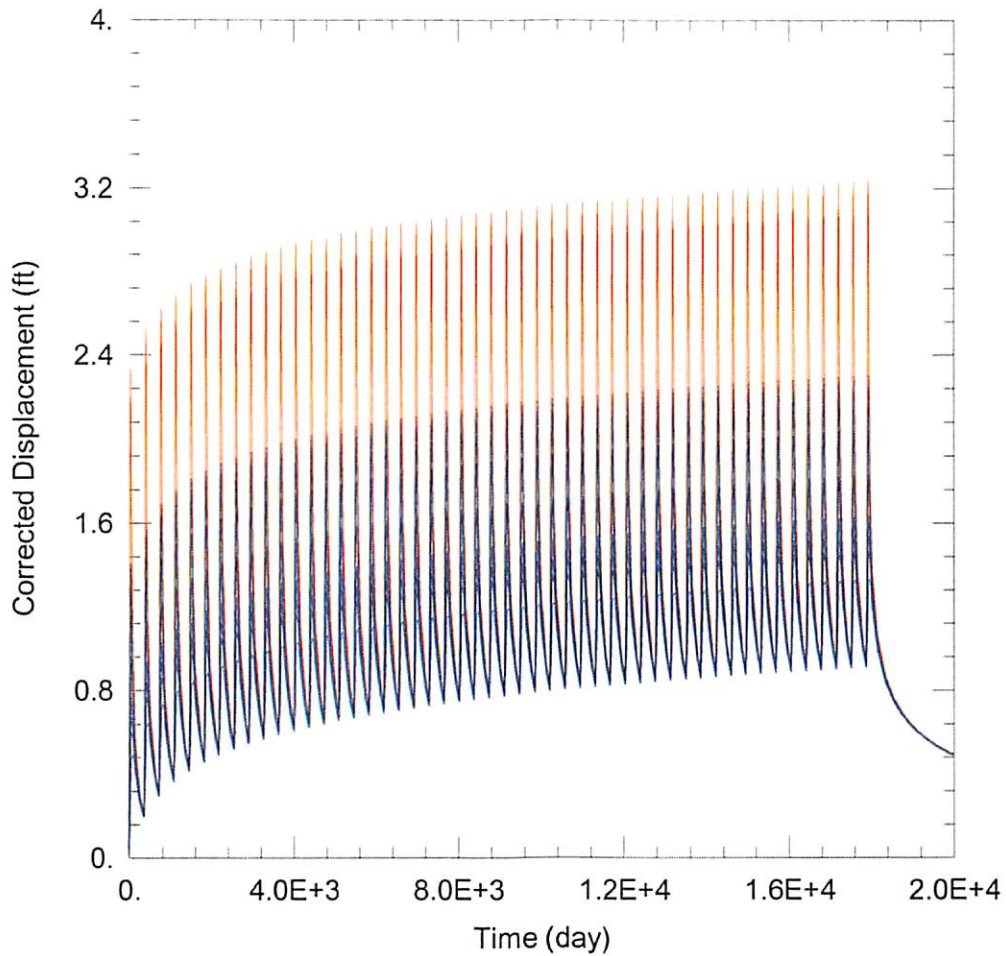
Pumping Wells

Well Name	X (ft)	Y (ft)
12256	156969	202900

Observation Wells

Well Name	X (ft)	Y (ft)
□	156969	202900
□ 28402	156936	200249
□ 2392 & 8809	158485	199934
□ 4360	159133	202571
□ ME 12	161472	202375
□ 18344	158793	205565
□ 24769	156650	205492
□ 25715 & 28619	153595	205450
□ 17739 & 28619	154576	202840
□ Domestic 15-30-27	153865	203221
□ Domestic SW 22-30-27	155857	197939
□ Domestic SE 22-30-27	158490	198617





WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2019\_moves\12256\12256 Current.aqt  
 Date: 06/26/19 Time: 15:54:01

PROJECT INFORMATION

Company: GMD 3  
 Project: 12256  
 Location: Meade County  
 Test Well: 12256

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
12256	157407	202860

Observation Wells

Well Name	X (ft)	Y (ft)
□	157407	202860
□ 28402	156936	200249
□ 2392 & 8809	158485	199934
□ 4360	159133	202571
□ ME 12	161472	202375
□ 18344	158793	205565
□ 24769	156650	205492
□ 25715 & 28619	153595	205450
□ 17739 & 28619	154576	202840
□ Domestic 15-30-27	153865	203221
□ Domestic SW 22-30-27	155857	197939
□ Domestic SE 22-30-27	158490	198617