#### Evaluation of New Well to be Authorized Under Water Right No. 50448

Proposed: Create a new well with an authorized quantity of 15 AF and rate of 99 gpm in the SW ¼ of section 6-26-25.



Wells within 1 mile: 16867 ID1, 16867 ID2, 19888 ID1, 19888 ID2, 26280 ID2, 26280 ID3, 26280 ID9, 26280 ID12, 43431, 28324 ID2, 28324 ID3, and five domestic wells, numbered on the above map.

The saturated thickness at the proposed well location is estimated to be 53 ft, based upon the GMD3 model. For saturated thickness between 50 ft and 75 ft, the drawdown allowance is 1.5 ft.

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

$$S = 0.1065$$
,  $T = 828.7$  ft<sup>2</sup>/day, tp<sub>proposed</sub> = 34 days, Q<sub>proposed</sub> = 99 gpm

Theis drawdowns were calculated as follows:

16867 ID1: Net drawdown = **0.8** ft

16867 ID2: Net drawdown = **0.8** ft

19888 ID1: Net drawdown = **0.9** ft

19888 ID2: Net drawdown = **0.4** ft

26280 ID2: Net drawdown = **0.6** ft

26280 ID3: Net drawdown = **0.5** ft

26280 ID9: Net drawdown = **0.6** ft

26280 ID12: Net drawdown = **0.5** ft

43431: Net drawdown = **0.6** ft

28324 ID2: Net drawdown = **0.5** ft

28324 ID3: Net drawdown = **0.5** ft

Domestic 1: Net drawdown = **0.6** ft

Domestic 2: Net drawdown = **0.5** ft

Domestic 3: Net drawdown = **0.5** ft

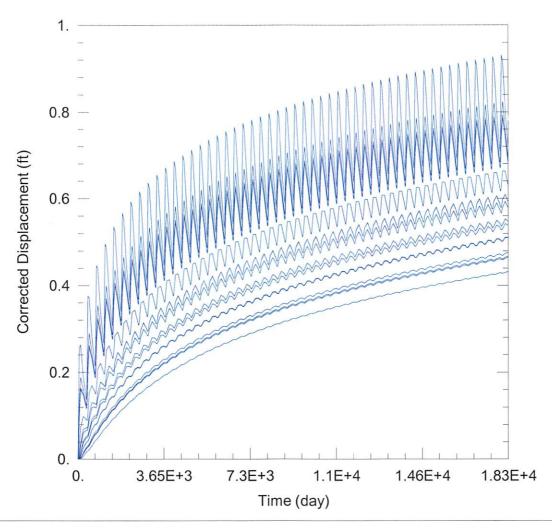
Domestic 4: Net drawdown = **0.8** ft

Domestic 5: Net drawdown = **0.7 ft** 

Net drawdown does not exceed the drawdown allowance of 1.5 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 is unlikely to cause impairment. GMD3 staff recommends approval of this proposal.



# WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2021 Moves\50448\50448 Proposed.aqt

Date: 05/07/21 Time: 09:50:59

### PROJECT INFORMATION

Company: GMD 3 Project: 50448

Location: Ford County

## WELL DATA

Pumping Wells		
Well Name	X (ft)	Y (ft)
50448	200681	341371

Well Name	X (ft)	Y (ft)
	200681	341371
□ 16867 ID1	202591	341035
□ 16867 ID2	202730	341776
□ 19888 ID1	200520	339775
□ 19888 ID2	200575	336184
□ 26280 ID2	199175	338050
□ 26280 ID3	199175	337929
□ 26280 ID9	200242	338276
□ 26280 ID12	198699	337777
<ul><li>43431</li></ul>	198474	338958
□ 28324 ID2	198197	345322
□ 28324 ID3	198259	344671
<ul><li>Domestic 1</li></ul>	200008	344422
<ul><li>Domestic 2</li></ul>	205178	340676

**Observation Wells**