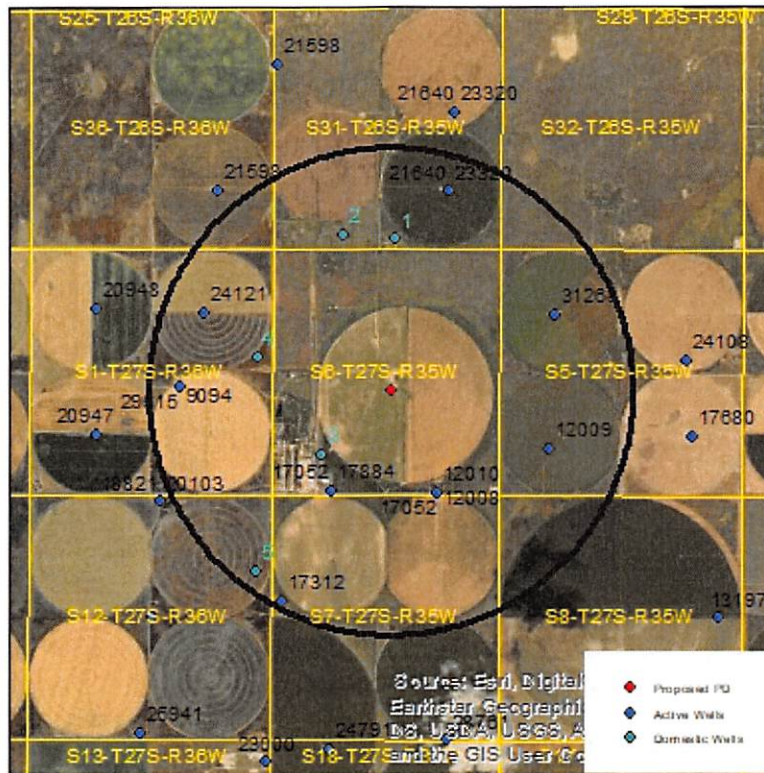


## Evaluation of proposed move for Water Right Nos 17052 & 17884

Proposed: Move water right nos. 17052 & 17884 a distance of 2,532 ft to the northeast.



Wells within 1 mile: 12008 & 12010 & 17052, 12009, 31268, 21640 & 23320, 24121, 9094 & 29615, 17312, and 5 domestic wells, numbered on the map above.

The saturated thickness at the proposed well location is estimated to be 159 ft, based upon an observation well in section 1-27-36 and the driller's log at the proposed well location. For saturated thickness between 150 ft and 200 ft, the drawdown allowance is 3.5 ft.

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

$S = 0.2308$ ,  $T = 13,011 \text{ ft}^2/\text{day}$ ,  $tp_{\text{current}} = 365$  days (based upon average use and minimum required rate),  
 $Q_{\text{current}} = 88$  gpm (based upon rate required to reach average use),  $tp_{\text{proposed}} = 117$  days,  
 $Q_{\text{proposed}} = 1160$  gpm

Theis drawdowns were calculated as follows:

12008 & 12010 & 17052: Drawdown from current location = 0.63 ft

Drawdown from proposed location = 3.39 ft

Net drawdown = **2.8 ft**

12009: Drawdown from current location = 0.48 ft  
Drawdown from proposed location = 2.59 ft  
Net drawdown = **2.1 ft**

31268: Drawdown from current location = 0.43 ft  
Drawdown from proposed location = 2.49 ft  
Net drawdown = **2.1 ft**

21640 & 23320: Drawdown from current location = 0.40 ft  
Drawdown from proposed location = 2.29 ft  
Net drawdown = **1.9 ft**

24121: Drawdown from current location = 0.48 ft  
Drawdown from proposed location = 2.33 ft  
Net drawdown = **1.8 ft**

9094 & 29615: Drawdown from current location = 0.52 ft  
Drawdown from proposed location = 2.27 ft  
Net drawdown = **1.8 ft**

17312: Drawdown from current location = 0.61 ft  
Drawdown from proposed location = 2.11 ft  
Net drawdown = **1.5 ft**

Domestic 1: Drawdown from current location = 0.44 ft  
Drawdown from proposed location = 2.80 ft  
Net drawdown = **2.4 ft**

Domestic 2: Drawdown from current location = 0.45 ft  
Drawdown from proposed location = 2.66 ft  
Net drawdown = **2.2 ft**

Domestic 3: Drawdown from current location = 0.84 ft  
Drawdown from proposed location = 3.80 ft  
Net drawdown = **3.0 ft**

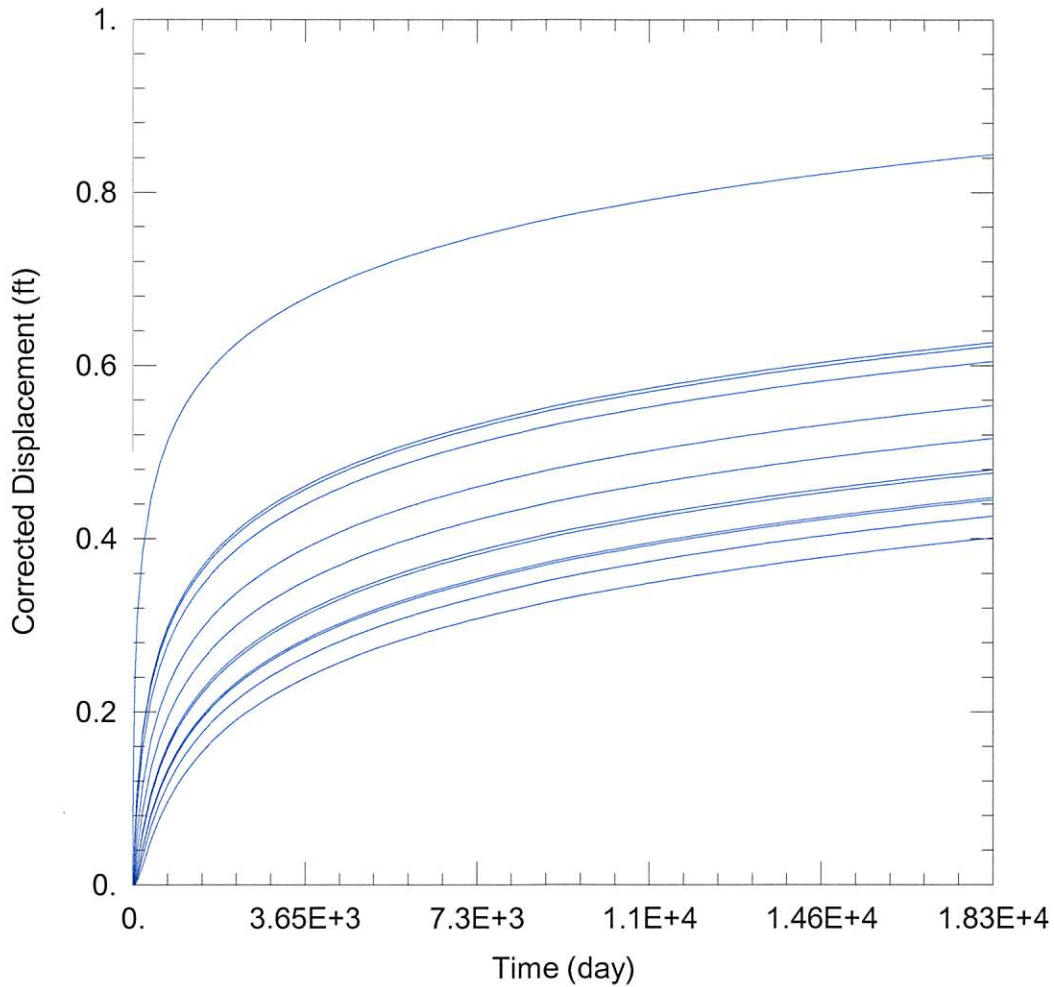
Domestic 4: Drawdown from current location = 0.55 ft  
Drawdown from proposed location = 2.99 ft  
Net drawdown = **2.4 ft**

Domestic 5: Drawdown from current location = 0.62 ft  
Drawdown from proposed location = 2.18 ft  
Net drawdown = **1.6 ft**

Net drawdown does not exceed the drawdown allowance of 3.5 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\17052\_17884\17052 & 17884 Current.aqt  
 Date: 06/15/20 Time: 15:52:37

PROJECT INFORMATION

Company: GMD 3  
 Project: 17052 & 17884  
 Location: Grant County  
 Test Well: 17052 & 17884

WELL DATA

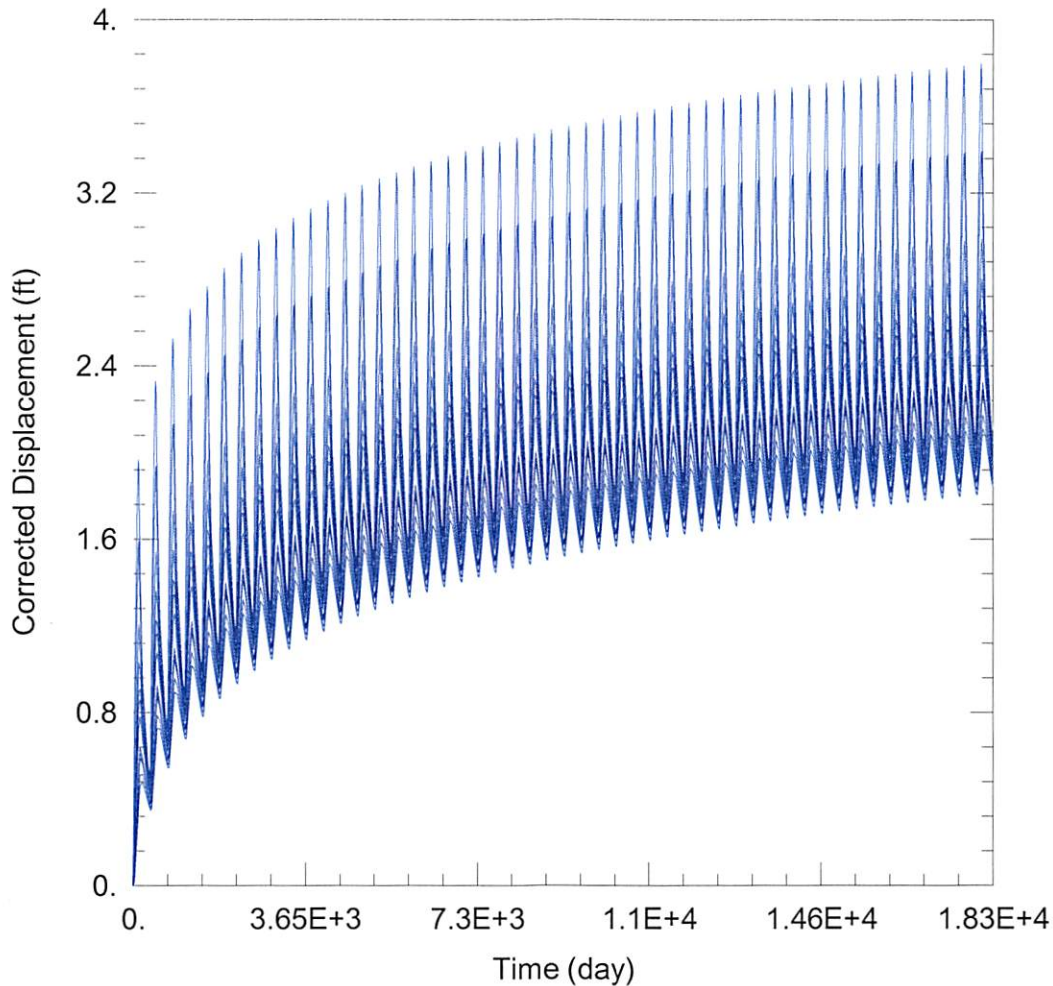
Pumping Wells

Well Name	X (ft)	Y (ft)
17052 & 17884	-114178	308608

Observation Wells

Well Name	X (ft)	Y (ft)
□	-114178	308608
□ 12008 & 12010 & 17052	-111843	308584
□ 12009	-109416	309528
□ 31268	-109309	312423
□ 21640 & 23320	-111614	315109
□ 24121	-116938	312487
□ 9094 & 29615	-117459	310887
□ 17312	-115241	306242
□ Domestic 1	-112755	314068
□ Domestic 2	-113887	314172
□ Domestic 3	-114356	309406
□ Domestic 4	-115775	311518
□ Domestic 5	-115806	306870





### WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2020\_moves\17052\_17884\17052 & 17884 Proposed.aqt  
 Date: 06/15/20 Time: 15:52:29

### PROJECT INFORMATION

Company: GMD 3  
 Project: 17052 & 17884  
 Location: Grant County  
 Test Well: 17052 & 17884

### WELL DATA

#### Pumping Wells

Well Name	X (ft)	Y (ft)
17052 & 17884	-112876	310780

#### Observation Wells

Well Name	X (ft)	Y (ft)
□	-112876	310780
□ 12008 & 12010 & 17052	-111843	308584
□ 12009	-109416	309528
□ 31268	-109309	312423
□ 21640 & 23320	-111614	315109
□ 24121	-116938	312487
□ 9094 & 29615	-117459	310887
□ 17312	-115241	306242
□ Domestic 1	-112755	314068
□ Domestic 2	-113887	314172
□ Domestic 3	-114356	309406
□ Domestic 4	-115775	311518
□ Domestic 5	-115806	306870