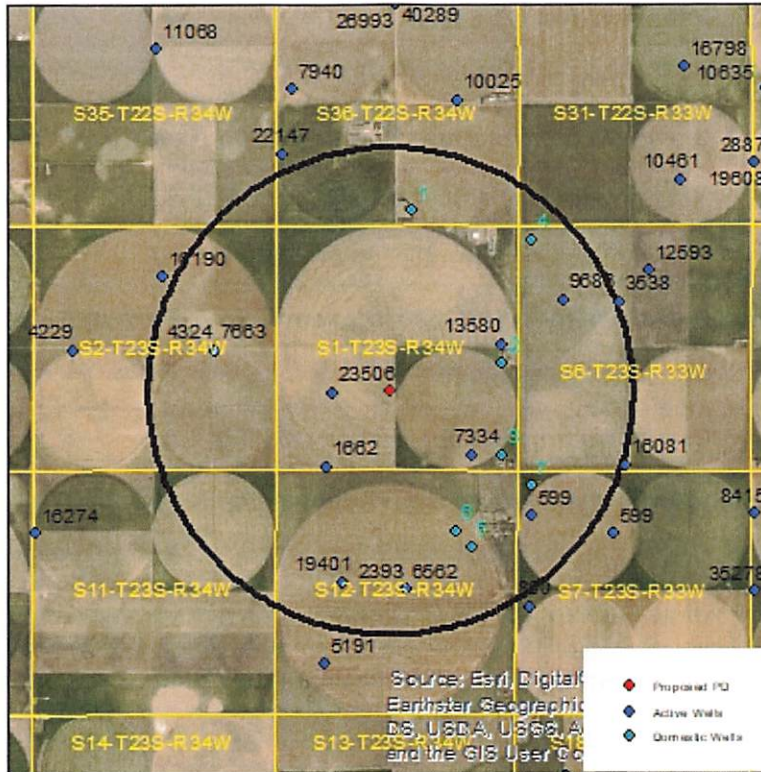


**Evaluation of proposed move for Water Right No. 23506**

Proposed: Move water right no. 23506 a distance of 1,253 ft to the east.



Wells within 1 mile: 1662, 7334, 13580, 4324 & 7663, 19401, 2393 & 6562, 19401, 2393 & 6562, 9686, 599, and 7 domestic wells, numbered on the above map.

The saturated thickness at the proposed well location is estimated to be 116 ft, based upon the GMD3 model. For saturated thickness between 100 ft and 125 ft, the drawdown allowance is 2.5 ft.

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

$S = 0.2197, T = 10,128 \text{ ft}^2/\text{day},$

$t_{p_{\text{current}}} = 107 \text{ days}$  (based upon average use and observed rate),  $Q_{\text{current}} = 340 \text{ gpm}$  (based upon 2019 reported rate),  $t_{p_{\text{proposed}}} = 60 \text{ days}, Q_{\text{proposed}} = 1310 \text{ gpm}$

Theis drawdowns were calculated as follows:

- 1662: Drawdown from current location = 1.45 ft  
 Drawdown from proposed location = 2.86 ft  
 Net drawdown = **1.4 ft**
- 7334: Drawdown from current location = 0.90 ft  
 Drawdown from proposed location = 2.75 ft  
 Net drawdown = **1.9 ft**

13580: Drawdown from current location = 0.82 ft  
Drawdown from proposed location = 2.41 ft  
Net drawdown = **1.6 ft**

4324 & 7663: Drawdown from current location = 1.03 ft  
Drawdown from proposed location = 1.77 ft  
Net drawdown = **0.7 ft**

19401: Drawdown from current location = 0.79 ft  
Drawdown from proposed location = 1.65 ft  
Net drawdown = **0.9 ft**

2393 & 6562: Drawdown from current location = 0.73 ft  
Drawdown from proposed location = 1.64 ft  
Net drawdown = **0.9 ft**

9686: Drawdown from current location = 0.66 ft  
Drawdown from proposed location = 1.67 ft  
Net drawdown = **1.0 ft**

599: Drawdown from current location = 0.69 ft  
Drawdown from proposed location = 1.72 ft  
Net drawdown = **1.0 ft**

Domestic 1: Drawdown from current location = 0.76 ft  
Drawdown from proposed location = 1.78 ft  
Net drawdown = **1.0 ft**

Domestic 2: Drawdown from current location = 0.83ft  
Drawdown from proposed location = 2.51 ft  
Net drawdown = **1.68 ft**

Domestic 3: Drawdown from current location = 0.81 ft  
Drawdown from proposed location = 2.27 ft  
Net drawdown = **1.5 ft**

Domestic 4: Drawdown from current location = 0.66 ft  
Drawdown from proposed location = 1.61 ft  
Net drawdown = **0.9 ft**

Domestic 5: Drawdown from current location = 0.74 ft  
Drawdown from proposed location = 1.82 ft  
Net drawdown = **1.1 ft**

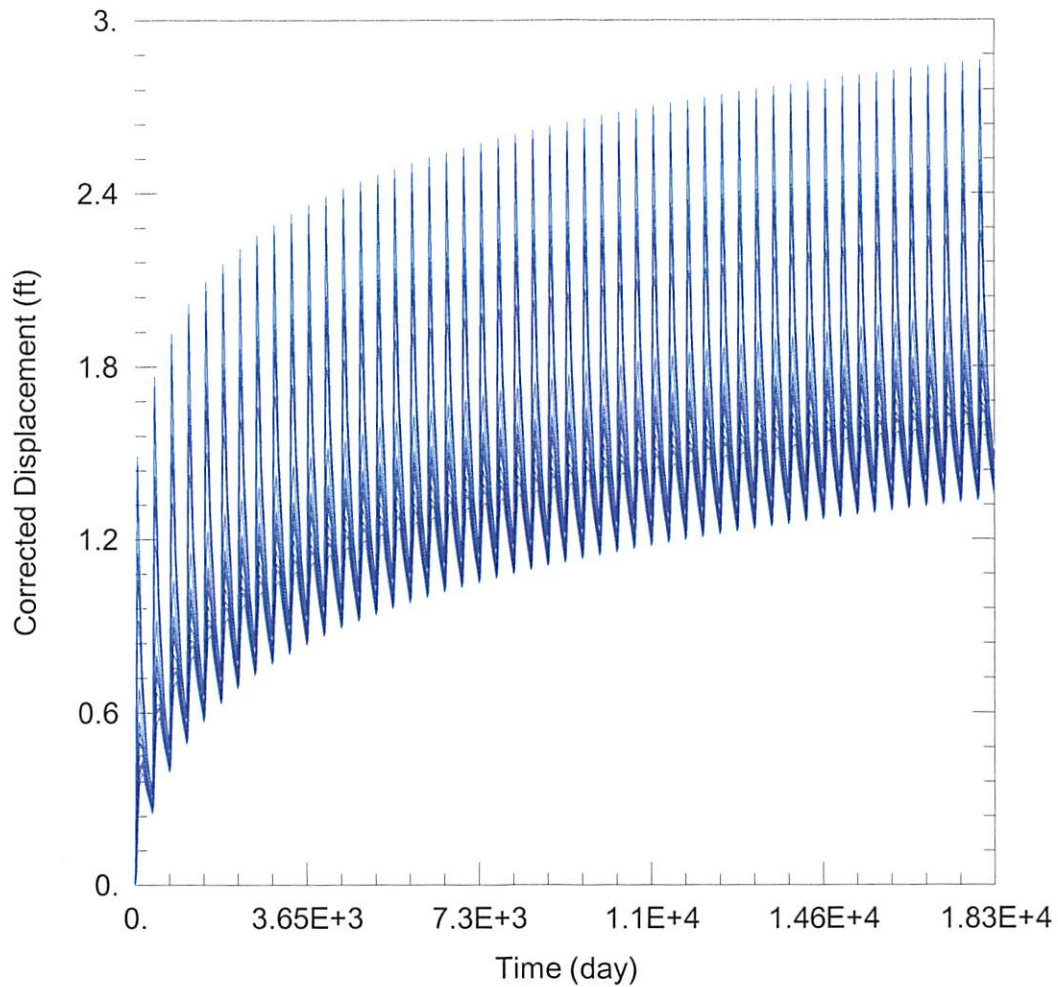
Domestic 6: Drawdown from current location = 0.80 ft  
Drawdown from proposed location = 1.99 ft  
Net drawdown = **1.2 ft**

Domestic 7: Drawdown from current location = 0.71 ft  
Drawdown from proposed location = 1.86 ft  
Net drawdown = **1.1 ft**

Net drawdown does not exceed the drawdown allowance of 2.5 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\23506\23506 Proposed.aqt

Date: 03/09/21

Time: 15:21:21

### PROJECT INFORMATION

Company: GMD 3

Project: 23506

Location: Finney County

Test Well: 23506

### WELL DATA

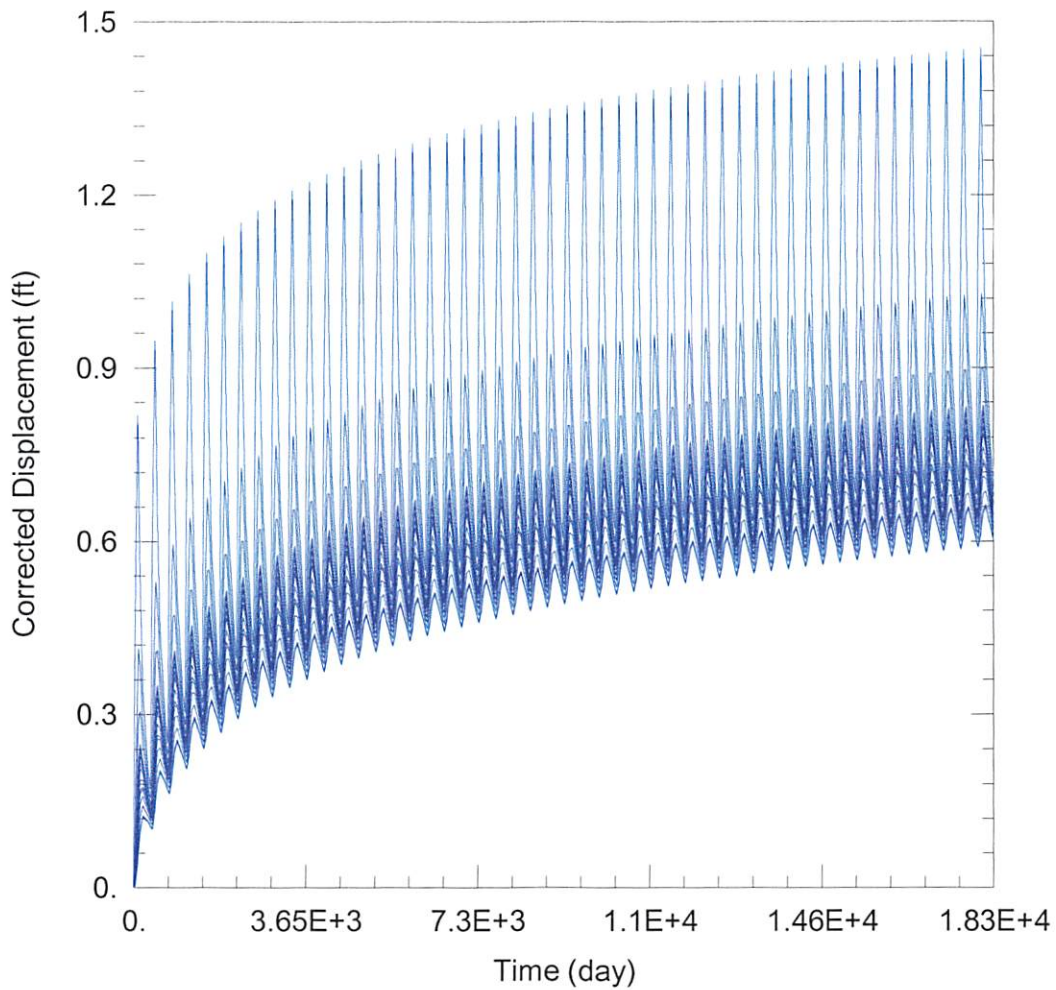
#### Pumping Wells

Well Name	X (ft)	Y (ft)
23506	-58436	439181

#### Observation Wells

Well Name	X (ft)	Y (ft)
□	-58436	439181
□ 1662	-59818	437535
□ 7334	-56668	437783
□ 13580	-56001	440163
□ 4324 & 7663	-62276	440057
□ 19401	-59495	435010
□ 2393 & 6562	-58085	434862
□ 9686	-54675	441133
□ 599	-55375	436462
□ Domestic 1	-57949	443070
□ Domestic 2	-55992	439768
□ Domestic 3	-56002	437781
□ Domestic 4	-55333	442420





### WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2021\_Moves\23506\23506 Current.aqt

Date: 03/09/21

Time: 15:21:29

### PROJECT INFORMATION

Company: GMD 3

Project: 23506

Location: Finney County

Test Well: 23506

### WELL DATA

#### Pumping Wells

Well Name	X (ft)	Y (ft)
23506	-59688	439129

#### Observation Wells

Well Name	X (ft)	Y (ft)
□	-59688	439129
□ 1662	-59818	437535
□ 7334	-56668	437783
□ 13580	-56001	440163
□ 4324 & 7663	-62276	440057
□ 19401	-59495	435010
□ 2393 & 6562	-58085	434862
□ 9686	-54675	441133
□ 599	-55375	436462
□ Domestic 1	-57949	443070
□ Domestic 2	-55992	439768
□ Domestic 3	-56002	437781
□ Domestic 4	-55333	442420