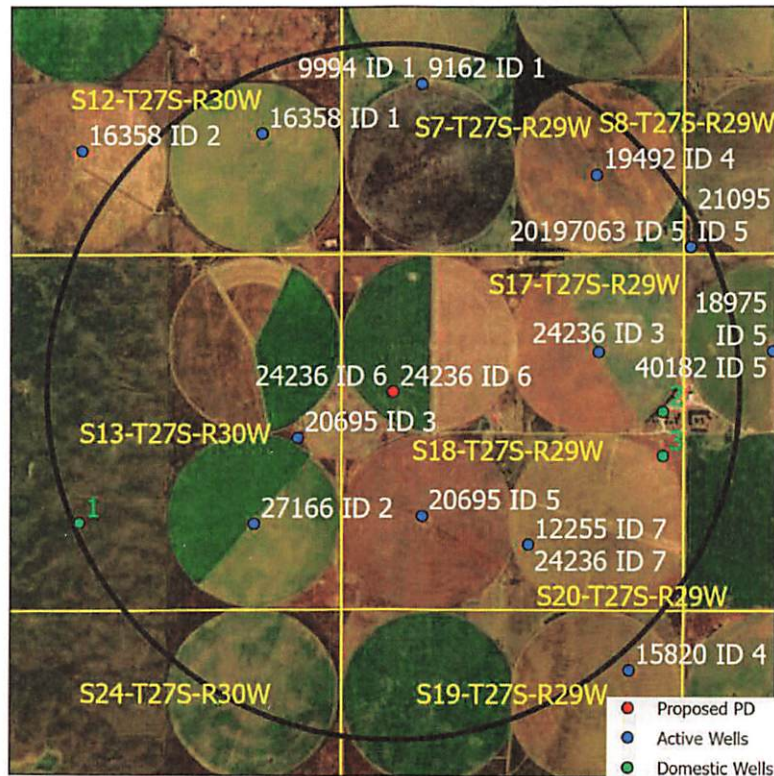


Evaluation of proposed move for Water Right No. 24236

Proposed: Move 72 AF of authority from the well authorized under water right nos. 12255 & 24236 to the well authorized under water right no. 24236 ID 6.



Wells within 1 mile: 24236 ID3, 12255 & 24236, 20695 ID3, 20695 ID5, 16358, 9162 & 9994, 19492, 21095, 27166, and three domestic wells, numbered on the above map.

The saturated thickness at the proposed well location is estimated to be 41 ft, based upon the GMD3 model. For saturated thickness less than 50 ft, the drawdown allowance is 1.0 ft.

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

$S = 0.052$, $T = 4100.8 \text{ ft}^2/\text{day}$, $tp_{\text{current}} = 120 \text{ days}$, $Q_{\text{current}} = 383 \text{ gpm}$, $tp_{\text{proposed}} = 177 \text{ days}$,
 $Q_{\text{proposed}} = 383 \text{ gpm}$

Theis drawdowns were calculated as follows:

| | |
|----------------|---|
| 24236 ID3: | Drawdown from current location = 3.42 ft |
| | Drawdown from proposed location = 4.71 ft |
| | Net drawdown = 1.3 ft |
| 12255 & 24236: | Drawdown from current location = 3.48 ft |
| | Drawdown from proposed location = 4.77 ft |
| | Net drawdown = 1.3 ft |

20695 ID3: Drawdown from current location = 5.10 ft
Drawdown from proposed location = 6.51 ft
Net drawdown = **1.4 ft**

20695 ID5: Drawdown from current location = 4.60 ft
Drawdown from proposed location = 5.99 ft
Net drawdown = **1.4 ft**

16358: Drawdown from current location = 2.78 ft
Drawdown from proposed location = 3.94 ft
Net drawdown = **1.2 ft**

9162 & 9994: Drawdown from current location = 2.67 ft
Drawdown from proposed location = 3.81 ft
Net drawdown = **1.1 ft**

19492: Drawdown from current location = 2.73 ft
Drawdown from proposed location = 3.89 ft
Net drawdown = **1.2 ft**

21095: Drawdown from current location = 2.55 ft
Drawdown from proposed location = 3.66 ft
Net drawdown = **1.1 ft**

27166: Drawdown from current location = 3.62 ft
Drawdown from proposed location = 4.92 ft
Net drawdown = **1.3 ft**

Domestic 1: Drawdown from current location = 2.49 ft
Drawdown from proposed location = 3.60 ft
Net drawdown = **1.1 ft**

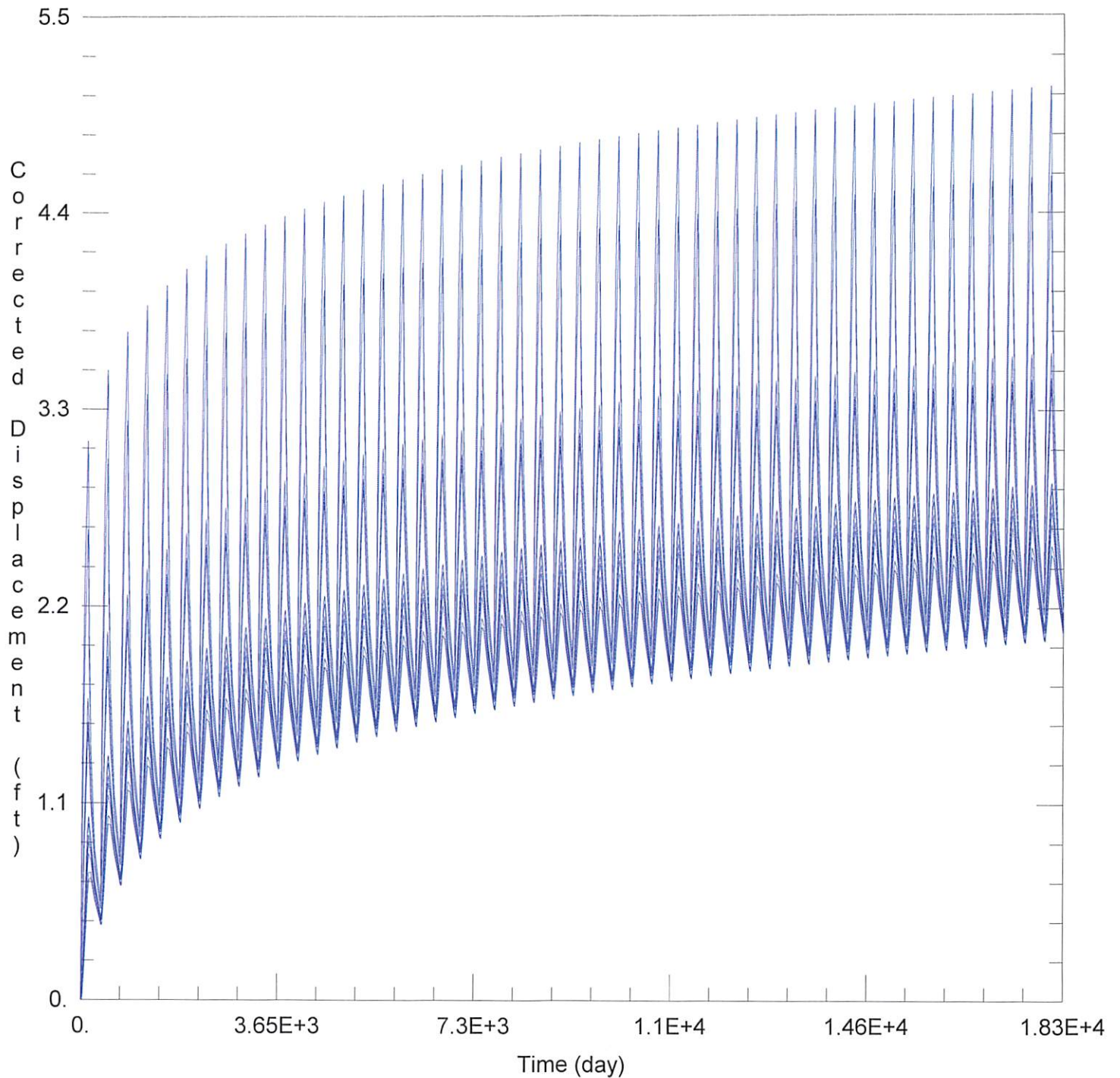
Domestic 2: Drawdown from current location = 2.89 ft
Drawdown from proposed location = 4.09 ft
Net drawdown = **1.2 ft**

Domestic 3: Drawdown from current location = 2.85 ft
 Drawdown from proposed location = 4.03 ft
 Net drawdown = **1.2 ft**

Net drawdown exceeds the drawdown allowance for all nearby wells. These wells are all critical because projected saturated thickness is less than 60 ft.

Conclusion:

The proposed move is in a depleted aquifer area with about 40 ft of remaining saturated thickness. The analysis shows that net well-to-well effects created by this proposal are likely to be just over 1 ft. This effect is small, but all nearby wells were flagged as critical because well effects were greater than 1 ft and current saturated thickness is less than 50 ft. The GMD3 model projects this area will have about 27 ft of saturated thickness remaining in 25 years, and that decline will significantly affect the ability of wells to produce water. 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\2025_moves\24236\242363 Current.aqt

Date: 02/21/25

Time: 15:49:06

PROJECT INFORMATION

Company: GMD 3

Project: 24236

Location: Gray County

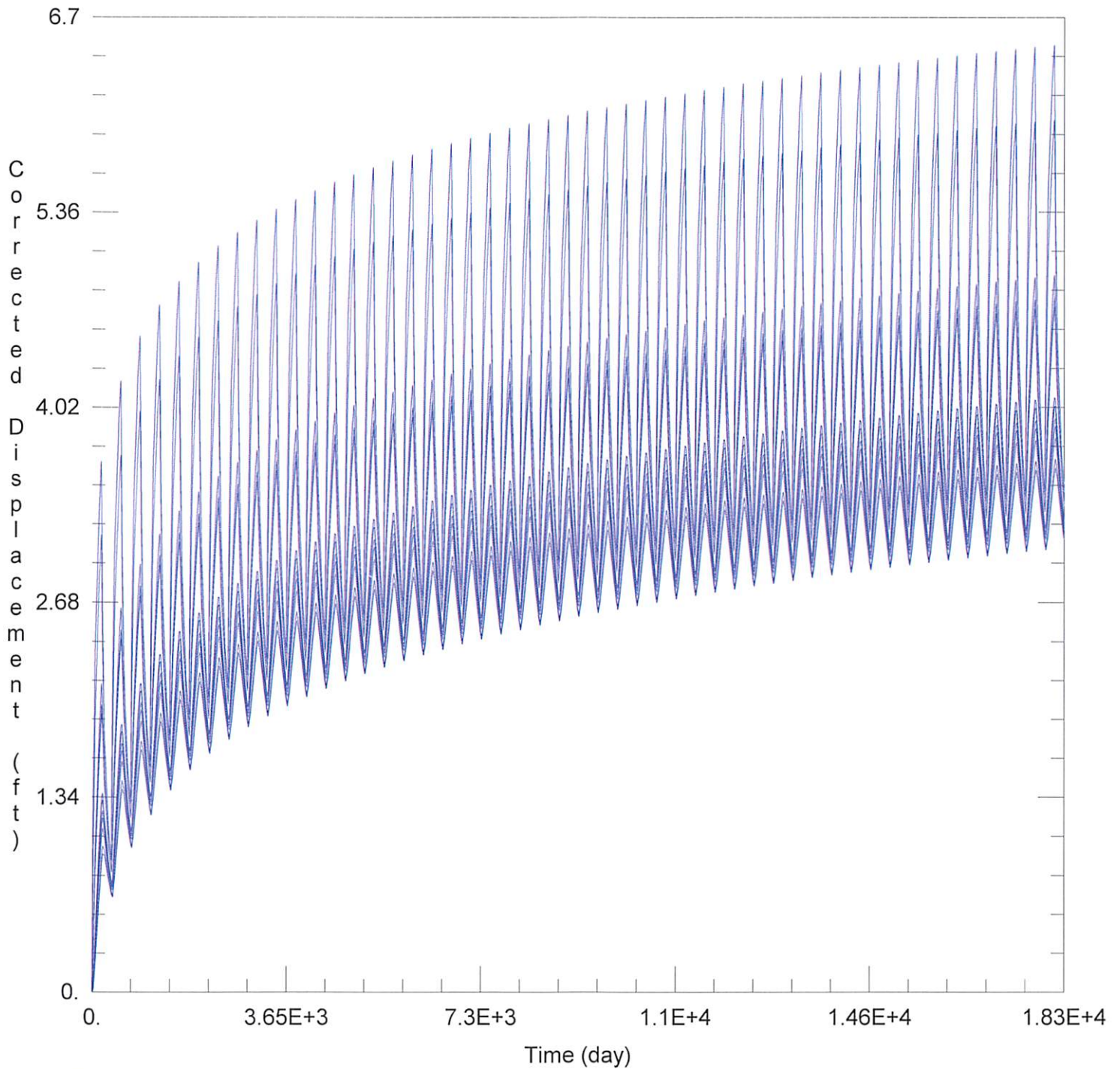
WELL DATA

Pumping Wells

Observation Wells

| Well Name | X (ft) | Y (ft) |
|-----------|--------|--------|
| 24236 ID6 | 75005 | 301331 |

| Well Name | X (ft) | Y (ft) |
|-------------|--------|--------|
| □ | 75005 | 301331 |
| □ 24236 ID3 | 78128 | 301011 |



WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2025_moves\24236\242363 Proposed.aqt

Date: 02/21/25

Time: 15:48:52

PROJECT INFORMATION

Company: GMD 3

Project: 24236

Location: Gray County

WELL DATA

Pumping Wells

| Well Name | X (ft) | Y (ft) |
|-----------|--------|--------|
| 24236 ID6 | 75005 | 301331 |

Observation Wells

| Well Name | X (ft) | Y (ft) |
|--------------------|--------|--------|
| □ | 75005 | 301331 |
| □ <u>24236 ID3</u> | 78128 | 301944 |