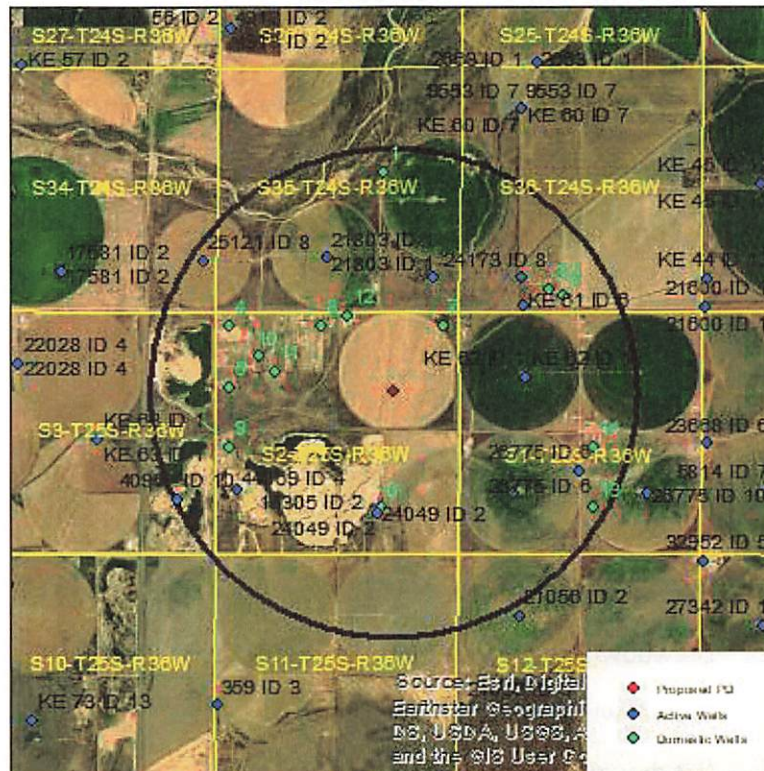


Evaluation of proposed move for Water Right No. 15305

Proposed: Move water right no. 15305 to a new well location, a distance of 2,640 ft to the northeast.
Water right no. 24049 will remain at the current well location.



Wells within 1 mile: 25121, 21803, 12473, 24173, KE 61 & 23439, KE 62, 26775 ID6, 26775 ID11, 44869, 40967, and 14 domestic wells, numbered on the above map.

The saturated thickness at the proposed well location is estimated to be 250 ft, based upon the GMD3 model. For saturated thickness greater than 200 ft, the drawdown allowance is 4.0 ft.

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

$S = 0.1792$, $T = 8766 \text{ ft}^2/\text{day}$, $t_{p\text{current}} = 116 \text{ days}$ (based on average use and observed rate),

$Q_{\text{current}} = 577 \text{ gpm}$ (based on 2022 field inspection),

24049: $t_{p\text{proposed}} = 47 \text{ days}$, $Q_{\text{proposed}} = 577 \text{ gpm}$

15305: $t_{p\text{proposed}} = 36 \text{ days}$, $Q_{\text{proposed}} = 1750 \text{ gpm}$

Theis drawdowns were calculated as follows:

25121: Drawdown from current location = 1.26 ft

Drawdown from proposed location = 1.92 ft

Net drawdown = **0.7 ft**

21803: Drawdown from current location = 1.40 ft
Drawdown from proposed location = 2.47 ft
Net drawdown = **1.1 ft**

12473: Drawdown from current location = 1.46 ft
Drawdown from proposed location = 2.88 ft
Net drawdown = **1.4 ft**

24173: Drawdown from current location = 1.34 ft
Drawdown from proposed location = 2.28ft
Net drawdown = **0.9 ft**

KE 61 & 23439: Drawdown from current location = 1.42 ft
Drawdown from proposed location = 2.42 ft
Net drawdown = **1.0 ft**

KE 62: Drawdown from current location = 1.62 ft
Drawdown from proposed location = 2.77 ft
Net drawdown = **1.1 ft**

26775 ID6: Drawdown from current location = 1.60 ft
Drawdown from proposed location = 2.22 ft
Net drawdown = **0.6 ft**

26775 ID11: Drawdown from current location = 2.07 ft
Drawdown from proposed location = 2.75 ft
Net drawdown = **0.7 ft**

44869: Drawdown from current location = 2.04 ft
Drawdown from proposed location = 2.52 ft
Net drawdown = **0.5 ft**

40967: Drawdown from current location = 1.63 ft
Drawdown from proposed location = 2.05 ft
Net drawdown = **0.4 ft**

Domestic 1: Drawdown from current location = 1.19 ft
Drawdown from proposed location = 1.94 ft
Net drawdown = **0.7 ft**

Domestic 2: Drawdown from current location = 1.31 ft
Drawdown from proposed location = 2.11 ft
Net drawdown = **0.8 ft**

Domestic 3: Drawdown from current location = 1.32 ft
Drawdown from proposed location = 2.18 ft
Net drawdown = **0.9 ft**

Domestic 4: Drawdown from current location = 1.48 ft
Drawdown from proposed location = 2.31 ft
Net drawdown = **0.8 ft**

Domestic 5: Drawdown from current location = 1.67 ft
Drawdown from proposed location = 2.49 ft
Net drawdown = **0.8 ft**

Domestic 6: Drawdown from current location = 7.91 ft
Drawdown from proposed location = 8.53 ft
Net drawdown = **0.6 ft**

Domestic 7: Drawdown from current location = 1.64 ft
Drawdown from proposed location = 4.00 ft
Net drawdown = **2.4 ft**

Domestic 8: Drawdown from current location = 1.66 ft
Drawdown from proposed location = 3.46 ft
Net drawdown = **1.8 ft**

Domestic 9: Drawdown from current location = 1.89 ft
Drawdown from proposed location = 2.53 ft
Net drawdown = **0.6 ft**

Domestic 10: Drawdown from current location = 1.66 ft
Drawdown from proposed location = 2.74 ft
Net drawdown = **1.1 ft**

Domestic 11: Drawdown from current location = 1.80 ft
Drawdown from proposed location = 3.07 ft
Net drawdown = **1.3 ft**

Domestic 12: Drawdown from current location = 1.63 ft
Drawdown from proposed location = 3.73 ft
Net drawdown = **2.1 ft**

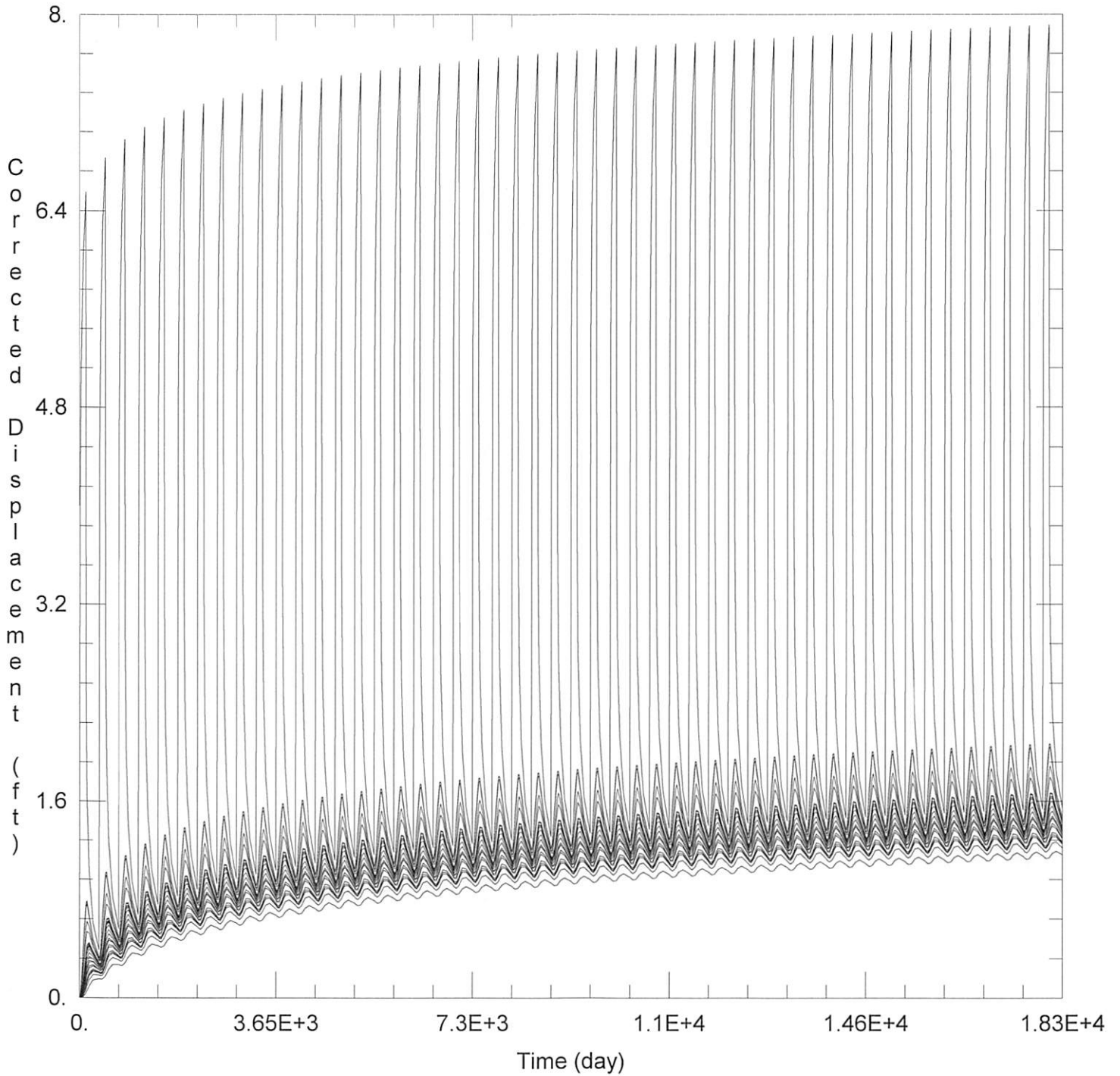
Domestic 13: Drawdown from current location = 1.56 ft
Drawdown from proposed location = 2.05 ft
Net drawdown = **0.5 ft**

Domestic 14: Drawdown from current location = 1.52 ft
Drawdown from proposed location = 2.15 ft
Net drawdown = **0.6 ft**

Net drawdown does not exceed the drawdown allowance of 4.0 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 appears unlikely to cause impairment. Any concerned neighbors should contact GMD3 at (620) 275-7147 or the Division of Water Resources at (620) 276-2901.



WELL TEST ANALYSIS

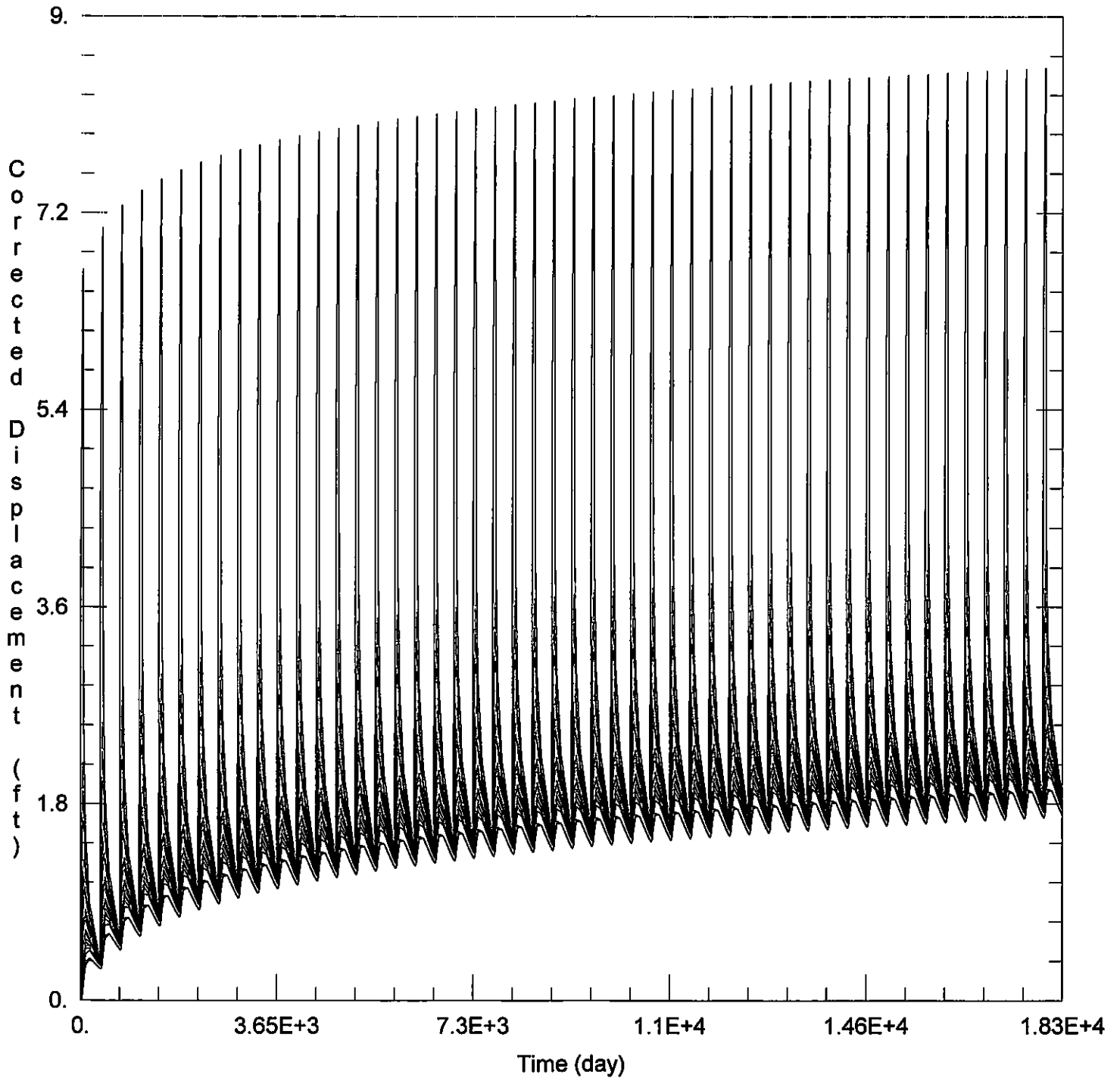
Data Set: C:\Users\trevora\Documents\2023_moves\15305\15305 Current.aqt
 Date: 11/28/23 Time: 14:56:33

PROJECT INFORMATION

Company: GMD 3
 Project: 15305
 Location: Kearny County

WELL DATA

Pumping Wells			Observation Wells		
Well Name	X (ft)	Y (ft)	Well Name	X (ft)	Y (ft)
24049	-126367	374742	□	-126367	374742
			□ 25121	-130121	380107



WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2023_moves\15305\15305 Proposed.aqt

Date: 11/28/23

Time: 14:56:26

PROJECT INFORMATION

Company: GMD 3

Project: 15305

Location: Kearny County

WELL DATA

Pumping Wells

Observation Wells

Well Name	X (ft)	Y (ft)
15305	-126007	377351
21010	-126367	374742

Well Name	X (ft)	Y (ft)
□	-126007	377351
□	-126367	374742