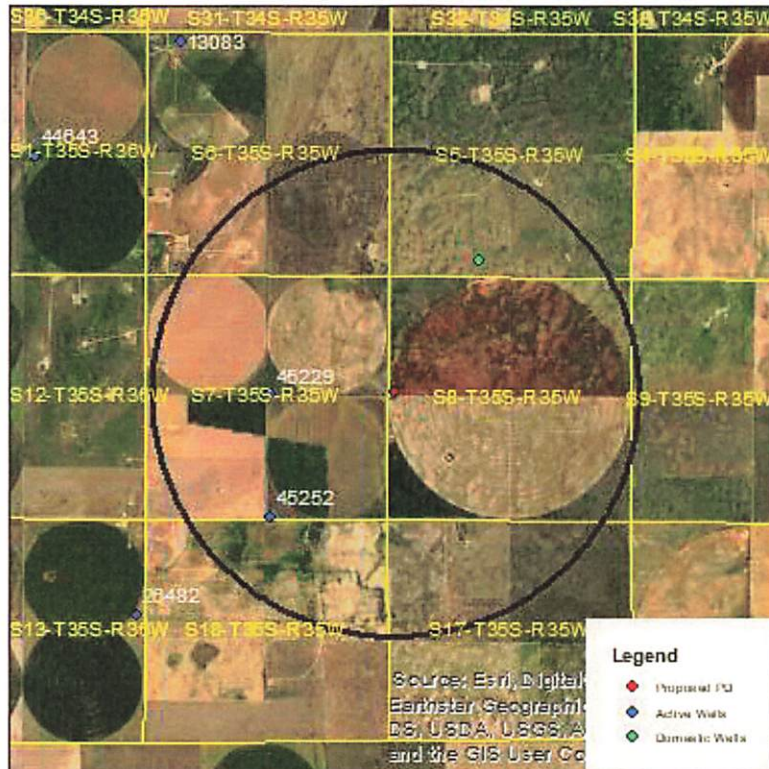


## Evaluation of proposed additional well for Water Right Nos. 45229 and 45252

Proposed: Create an additional well using existing authorities and pumping capacities on wells authorized under water right nos. 45229 and 45252. Authority on the well authorized by water right no. 45229 will be reduced from 700 AF @ 1665 gpm to 500 AF @ 1214 gpm. Authority on the well authorized under water right no. 45252 will be reduced from 755 AF @ 1556 gpm to 333 AF @ 759 gpm. The new well location, indicated by the red dot on the map below, will be authorized 500 AF @ 1210 gpm.



Wells within 1 mile: A domestic well in section 5-35-35.

The saturated thickness at the proposed well location is estimated to be 380 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:

$$S = 0.1346, T = 12,381 \text{ ft}^2/\text{day},$$

$$45229: t_{p_{\text{current}}} = 96 \text{ days}, Q_{\text{current}} = 1200 \text{ gpm}, t_{p_{\text{proposed}}} = 94 \text{ days}, Q_{\text{proposed}} = 1200 \text{ gpm}$$

$$45252: t_{p_{\text{current}}} = 92 \text{ days}, Q_{\text{current}} = 950 \text{ gpm}, t_{p_{\text{proposed}}} = 79 \text{ days}, Q_{\text{proposed}} = 950 \text{ gpm}$$

$$\text{Proposed PD: } t_{p_{\text{proposed}}} = 94 \text{ days}, Q_{\text{proposed}} = 1210 \text{ gpm}$$

This drawdowns were calculated as follows:

Domestic 5-35-35: Drawdown from current location = 3.39 ft

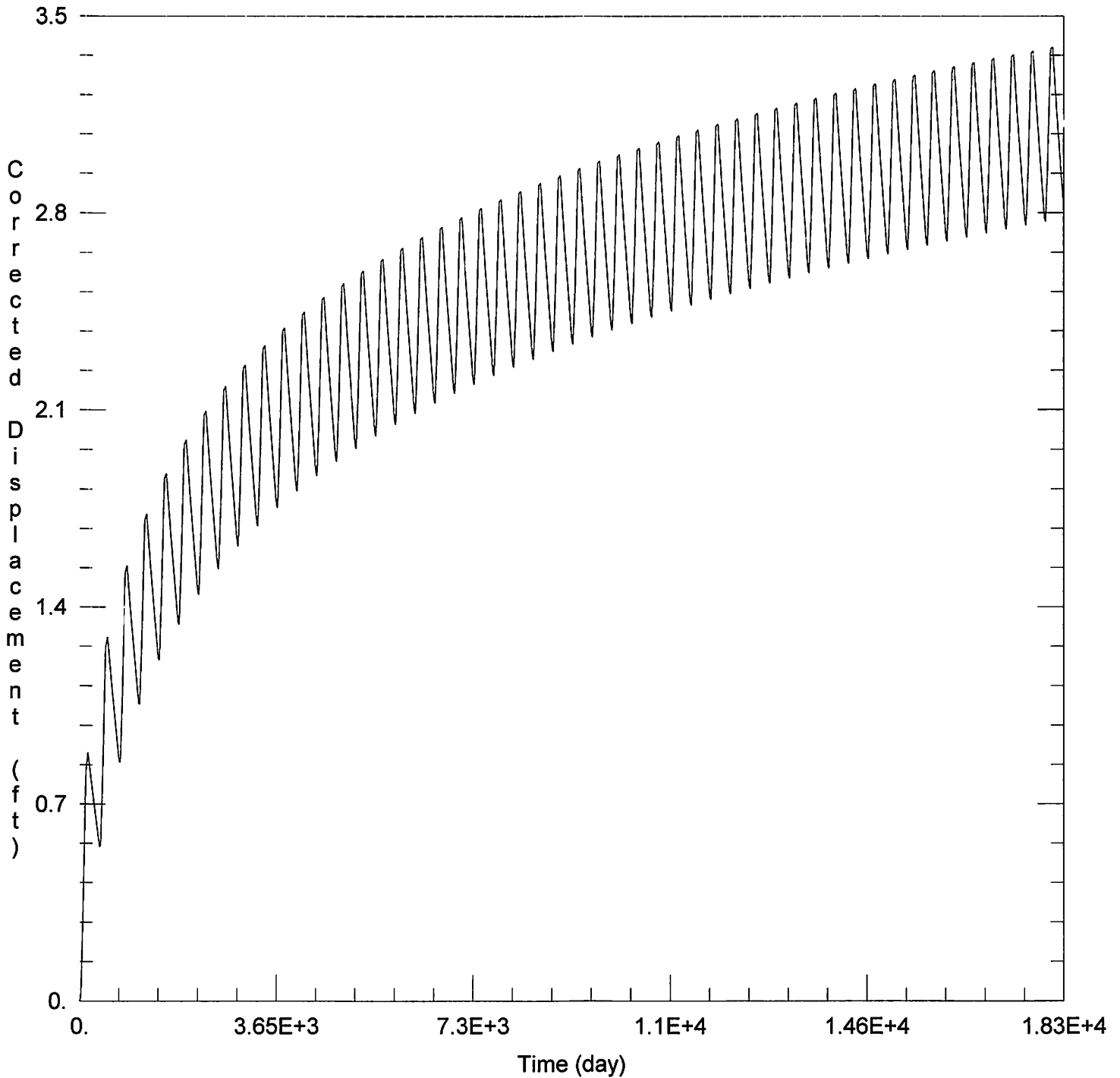
Drawdown from proposed location = 5.93 ft

Net drawdown = 2.5 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\45229\_45252\45229 & 45252 Current.aqt

Date: 08/17/23

Time: 14:43:49

PROJECT INFORMATION

Company: GMD 3

Project: 45229 & 45252

Location: Seward County

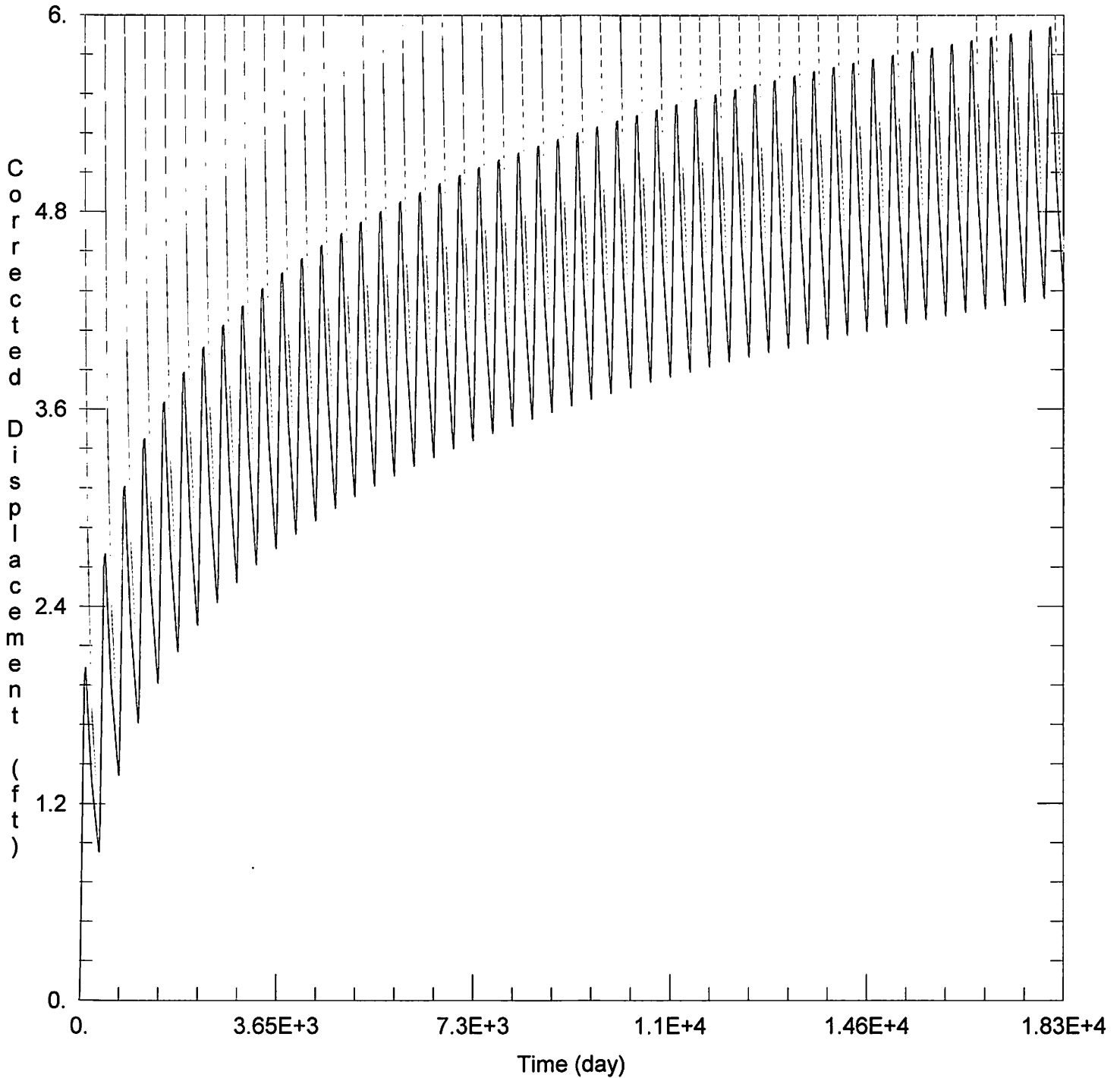
WELL DATA

Pumping Wells

Observation Wells

Well Name	X (ft)	Y (ft)
45229	-107077	52294
45252	-107064	49662

Well Name	X (ft)	Y (ft)
□	-107077	52294
□	-107064	49662



**WELL TEST ANALYSIS**

Data Set: C:\Users\trevora\Documents\2023\_moves\45229\_45252\45229 & 45252 Proposed.aqt  
 Date: 08/17/23 Time: 14:43:43

**PROJECT INFORMATION**

Company: GMD 3  
 Project: 45229 & 45252  
 Location: Seward County

**WELL DATA**

**Pumping Wells**

**Observation Wells**

Well Name	X (ft)	Y (ft)
Proposed PD	-104365	52342
45229	-107077	52294

Well Name	X (ft)	Y (ft)
Proposed PD	-104365	52342
	-107077	52294