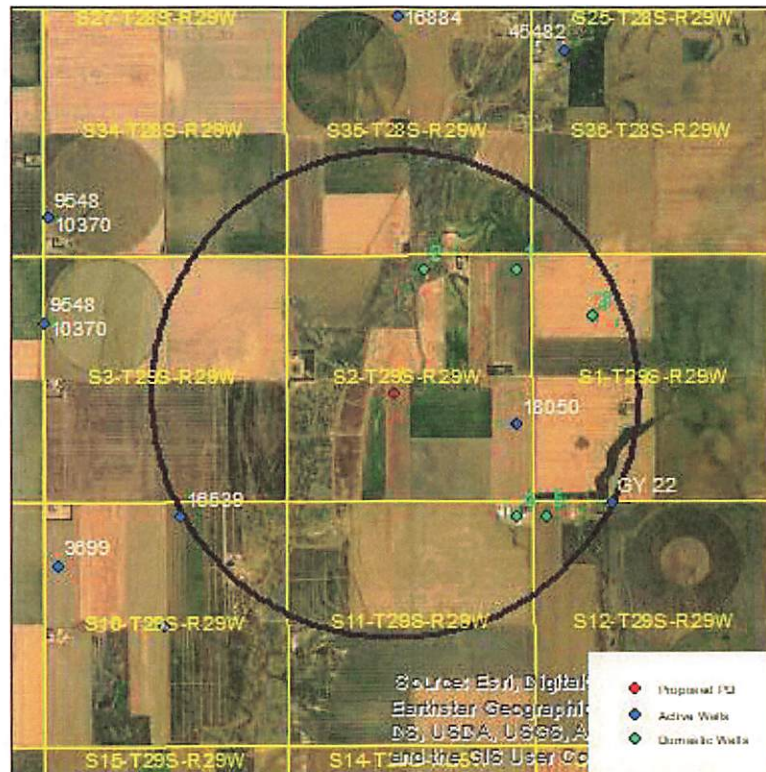


## Evaluation of proposed new water right no. 51064

Proposed: Create a new water right no. 51064 at the location indicated by the red dot on the below map. The water right will be appropriated 12.47 AF at a rate of 100 gpm.



Wells within 1 mile: 18050 and five domestic wells, numbered on the above map.

The saturated thickness at the proposed well location is estimated to be 18 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:

$$S = 0.03878, T = 1.71 \text{ ft}^2/\text{day}, t_{p\text{proposed}} = 28 \text{ days}, Q_{\text{proposed}} = 100 \text{ gpm}$$

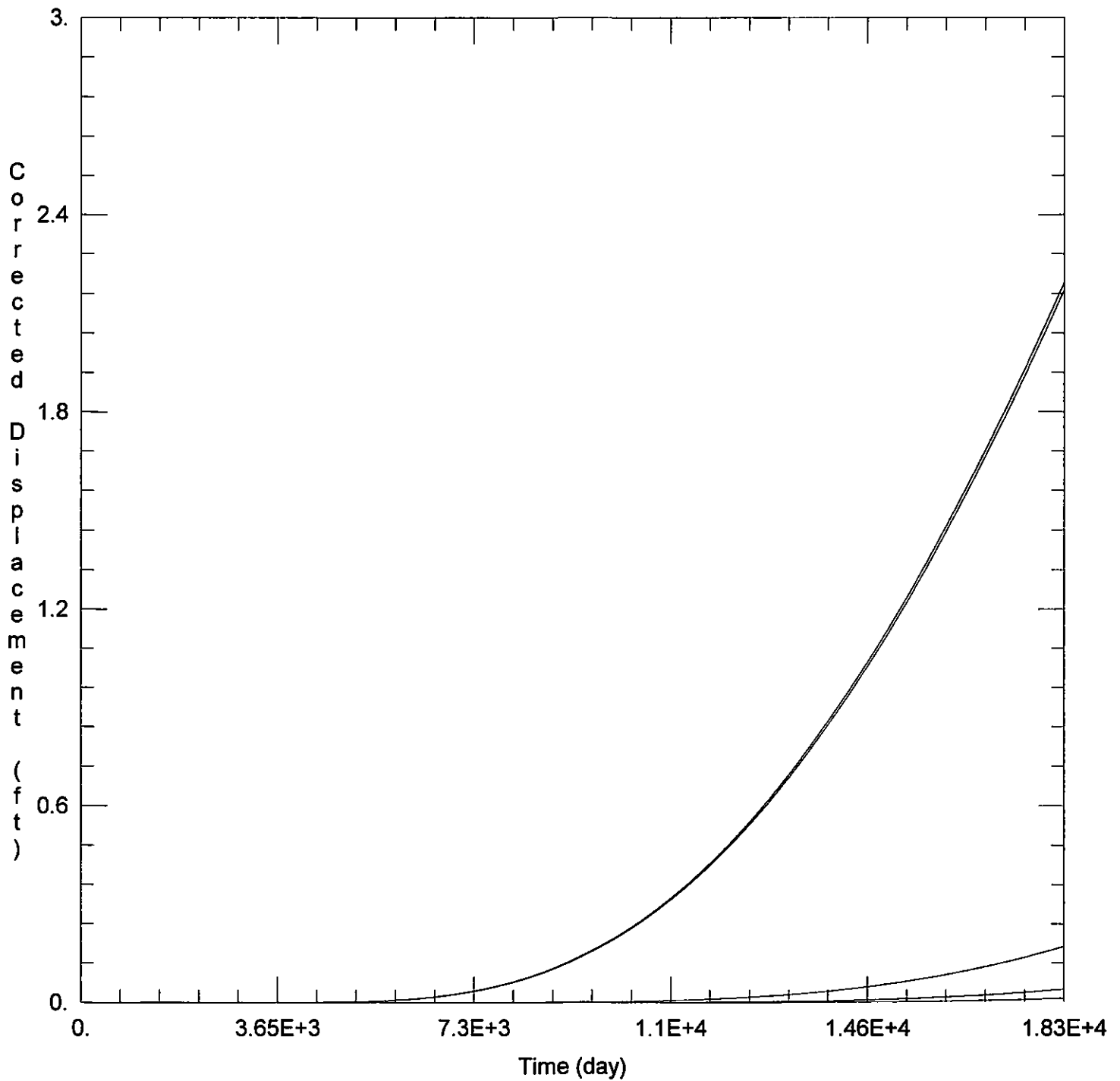
Theis drawdowns were calculated as follows:

18050:	Net drawdown = <b>2.2 ft</b>
Domestic 1:	Net drawdown = <b>0.2 ft</b>
Domestic 2:	Net drawdown = <b>2.2 ft</b>
Domestic 3:	Net drawdown = <b>0.0 ft</b>
Domestic 4:	Net drawdown = <b>0.2 ft</b>
Domestic 5:	Net drawdown = <b>0.0 ft</b>

Net drawdown exceeds the drawdown allowance of 1.0 ft for water right no. 18050 and the domestic well in the NW NE quarter of section 2-29-29. These wells are both critical because the saturated thickness in this section is less than 20 ft.

**Conclusion:**

The proposed water right is in an area that is almost completely out of water. Well to well effects on water right no. 18050 and the domestic well in the NW NE quarter of section 2-29-29 may be noticeable if those wells are still in operation. 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\_New\_Appropriations\51064\51064.aqt

Date: 09/07/23

Time: 15:42:28

### PROJECT INFORMATION

Company: GMD 3

Project: 51064

Location: Gray County

### WELL DATA

#### Pumping Wells

Well Name	X (ft)	Y (ft)
51064	97747	247387

#### Observation Wells

Well Name	X (ft)	Y (ft)
□ 18050	97747	247387
□ 18050	100406	246718