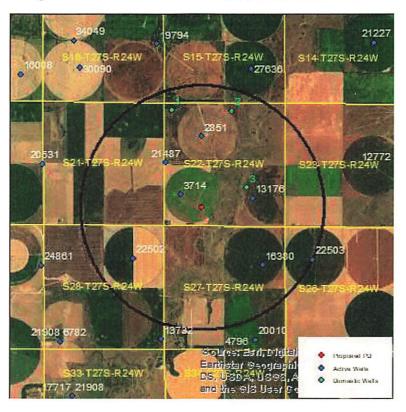
Evaluation of proposed move for Water Right No. 3714

Proposed: Move water right no. 3714 to a new well location, 1,065 ft to the southeast.



Wells within 1 mile: 21487, 2851, 13176, 22502, 16380, and three domestic wells, numbered on the above map.

The saturated thickness at the proposed well location is estimated to be 46 ft, based upon the driller's log and an observation well in section 26-27-24. 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 = 0.2293, T = 1274 ft²/day, $tp_{current} = 78$ days, $Q_{current} = 437$ gpm, $tp_{proposed} = 91$ days, $Q_{proposed} = 550$ gpm

Theis drawdowns were calculated as follows:

21487: Drawdown from current location = 5.66 ft

Drawdown from proposed location = 6.13 ft

Net drawdown = 0.5 ft

2851: Drawdown from current location = 3.97 ft

Drawdown from proposed location = 5.34 ft

Net drawdown = 1.4 ft

13176: Drawdown from current location = 3.58 ft

Drawdown from proposed location = 6.49 ft

Net drawdown = 2.9 ft

22502: Drawdown from current location = 3.38 ft

Drawdown from proposed location = 4.72 ft

Net drawdown = 1.3 ft

16380: Drawdown from current location = 2.71 ft

Drawdown from proposed location = 4.80 ft

Net drawdown = 2.1 ft

Domestic 1: Drawdown from current location = 3.23 ft

Drawdown from proposed location = 4.16 ft

Net drawdown = 0.9 ft

Domestic 2: Drawdown from current location = 2.91 ft

Drawdown from proposed location = 4.18 ft

Net drawdown = 1.3 ft

Domestic 3: Drawdown from current location = 3.78 ft

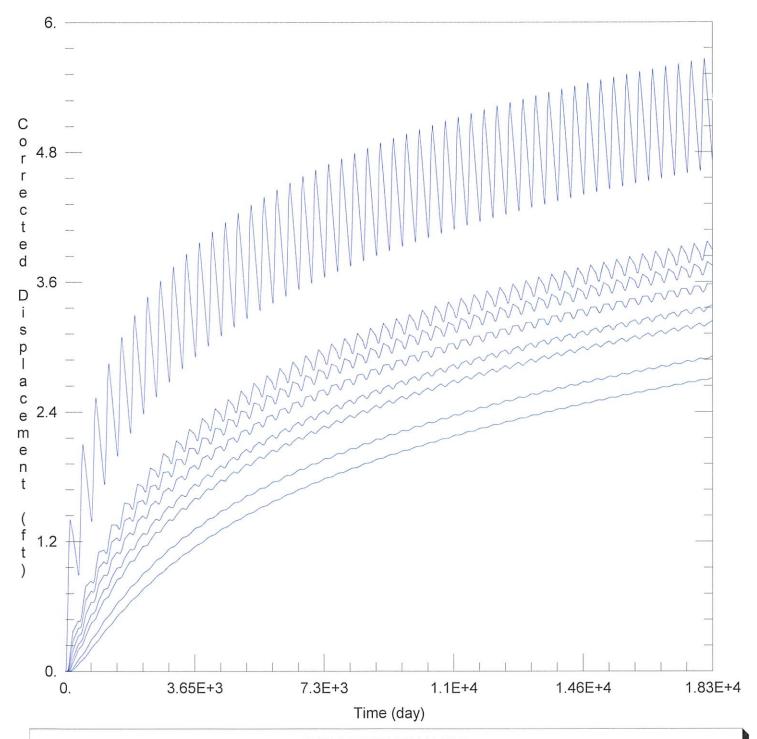
Drawdown from proposed location = 6.70 ft

Net drawdown = 2.9 ft

Net drawdown exceeds the drawdown allowance for water right numbers 2851, 13176, 22502, 16380, and domestic wells numbered 2 and 3 on the map. These wells are all critical because the remaining saturated thickness is only 46 ft, and the GMD3 hydrologic model projects a water table decline of an additional 15 ft over the next 25 years.

Conclusion:

The proposed move is in a depleted aquifer area with less than 50 ft of remaining saturated thickness. The analysis shows that if the proposed well is operated at its full rate and quantity, net well-to-well effects are likely to be noticeable, due to the limited amount of remaining aquifer. Concerned neighbors should contact GMD3 at (620) 275-7147 or the Division of Water Resources at (620) 276-2901.



WELL TEST ANALYSIS

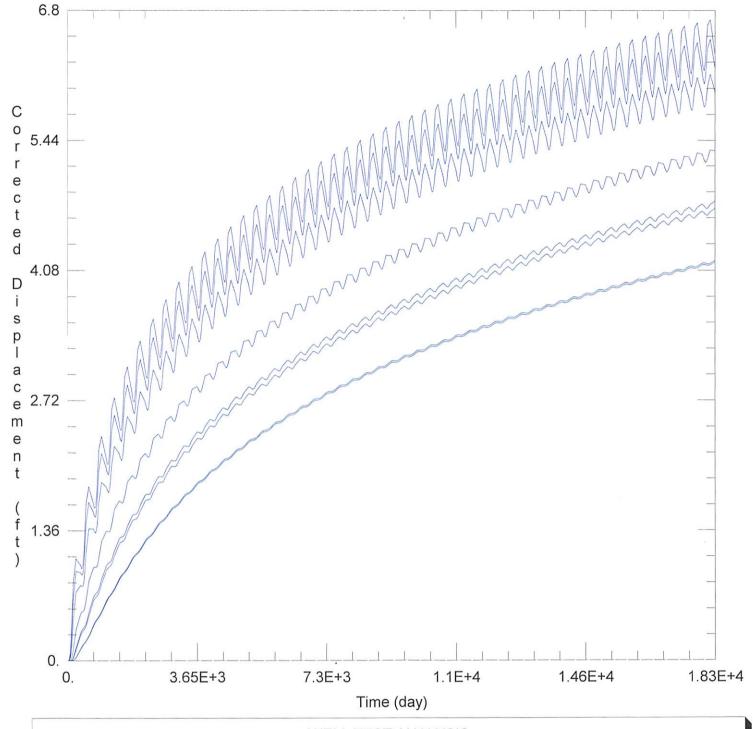
PROJECT INFORMATION

Company: GMD 3 Project: 3714

Location: Ford County

WELL DATA

Pumping Wells			Observation Wells		
Well Name	X (ft)	Y (ft)	Well Name	X (ft)	Y (ft)
3714	248610	294590		248610	294590
			n 21/187	2/17063	205072



WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2023_moves\3714\3714 Proposed.aqt

Date: 01/04/24 Time: 14:56:30

PROJECT INFORMATION

Company: GMD 3 Project: 3714

Location: Ford County

WELL DATA

Pumping Wells			Observation Wells		
Well Name	X (ft)	Y (ft)	Well Name	X (ft)	Y (ft)
3714	249525	294046		249525	294046
			n 21/187	2/7063	205072