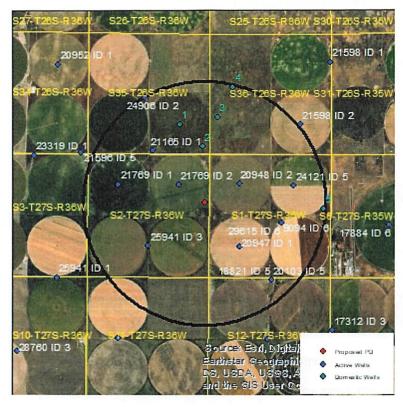
#### Evaluation of proposed move for Water Right No. 21769 ID2

Proposed: Move water right no. 21769 ID2 to a new well location, a distance of 1,369 ft to the southeast.



Wells within 1 mile: 21769 ID1, 24906, 21165, 25941, 20948, 24121, 20947, 9094 & 29615, 18821 & 20103, and five domestic wells, numbered on the above map.

The saturated thickness at the proposed well location is estimated to be 101 ft, based upon the GMD3 model. For saturated thickness between 100 ft and 125 ft, the drawdown allowance is 2.5 ft.

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

S = 0.2269, T = 16,391 ft<sup>2</sup>/day,  $tp_{current} = 120$  days (assumed),  $Q_{current} = 358$  gpm (based on average use and assumed pumping days),  $tp_{proposed} = 64$  days,  $Q_{proposed} = 900$  gpm

Theis drawdowns were calculated as follows:

21769 ID1: Drawdown from current location = 0.88 ft

Drawdown from proposed location = 0.97 ft

Net drawdown = 0.1 ft

24906: Drawdown from current location = 0.67 ft

Drawdown from proposed location = 0.77 ft

Net drawdown = 0.1 ft

Drawdown from proposed location = 1.11 ft

Net drawdown = 0.0 ft

25941: Drawdown from current location = 0.81 ft

Drawdown from proposed location = 1.14 ft

Net drawdown = 0.3 ft

20948: Drawdown from current location = 0.87 ft

Drawdown from proposed location = 1.80 ft

Net drawdown = 1.0 ft

24121: Drawdown from current location = 0.58 ft

Drawdown from proposed location = 0.94 ft

Net drawdown = **0.4 ft** 

20947: Drawdown from current location = 0.69 ft

Drawdown from proposed location = 1.39 ft

Net drawdown = **0.7 ft** 

9094 & 29615: Drawdown from current location = 0.60 ft

Drawdown from proposed location = 1.04 ft

Net drawdown = 0.4 ft

18821 & 20103: Drawdown from current location = 0.53 ft

Drawdown from proposed location = 0.86 ft

Net drawdown = 0.3 ft

Domestic 1: Drawdown from current location = 0.88 ft

Drawdown from proposed location = 1.02 ft

Net drawdown = 0.1 ft

Domestic 2: Drawdown from current location = 1.05 ft

Drawdown from proposed location = 1.40 ft

Net drawdown = 0.4 ft

Domestic 3: Drawdown from current location = 0.75 ft

Drawdown from proposed location = 0.98 ft

Net drawdown = 0.2 ft

Domestic 4: Drawdown from current location = 0.59 ft

Drawdown from proposed location = 0.78 ft

Net drawdown = 0.2 ft

Domestic 5: Drawdown from current location = 0.50 ft

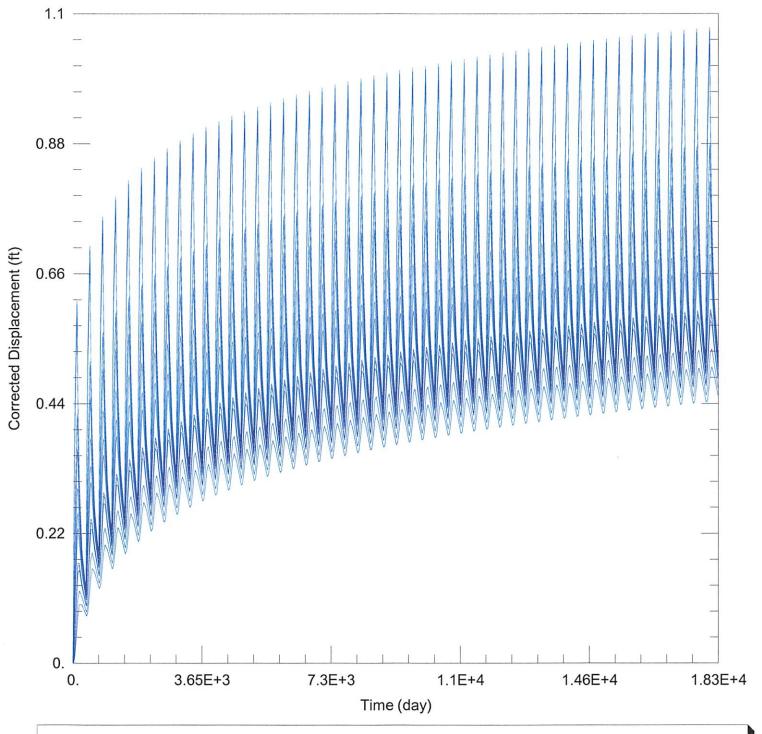
Drawdown from proposed location = 0.78 ft

Net drawdown = 0.3 ft

Net drawdown does not exceed the drawdown allowance of 2.5 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\21769\21769 Current.aqt

Date: 05/15/23 Time: 16:35:44

# PROJECT INFORMATION

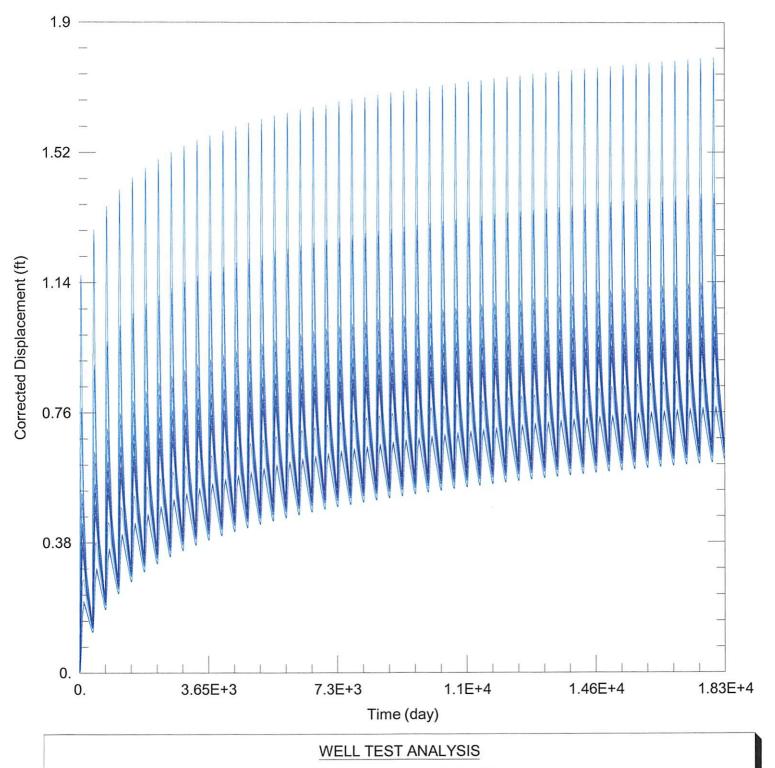
Company: GMD 3
Project: 21769
Location: Grant County

## **WELL DATA**

 Pumping Wells
 Observation Wells

 Well Name
 X (ft)
 Y (ft)
 Well Name
 X (ft)
 Y (ft)

 21769 ID2
 -122059
 312539
 -122059
 312539



Data Set: C:\Users\trevora\Documents\2023\_moves\21769\21769 Proposed.aqt

Date: 05/15/23 Time: 16:35:37

### PROJECT INFORMATION

Company: GMD 3 Project: 21769

Location: Grant County

# **WELL DATA**

Pumping Wells			Observation Wells		
Well Name	X (ft)	Y (ft)	Well Name	X (ft)	Y (ft)
21769 ID2	-120939	311753		-120939	311753