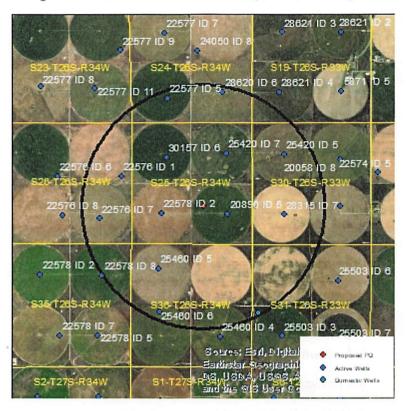
### Evaluation of proposed move for Water Right No. 20890

Proposed: Move water right no. 20890 to a new well location, a distance of 1,120 ft to the northwest.



Wells within 1 mile: 22577, 28620, 22576 ID1, 22576 ID7, 22578, 30157, 25420 ID7, 25420 ID5, 28315, 25460 ID5, 25460 ID6, and a domestic well in section 31-26-33.

The saturated thickness at the proposed well location is estimated to be 205 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 = 0.2234, T = 17,690 ft<sup>2</sup>/day,  $tp_{current} = 128$  days (based on average use and observed rate),  $Q_{current} = 358$  gpm (based on 2019 field inspection),  $tp_{proposed} = 65$  days,  $Q_{proposed} = 945$  gpm

Theis drawdowns were calculated as follows:

22577: Drawdown from current location = 0.54 ft

Drawdown from proposed location = 0.81 ft

Net drawdown = 0.3 ft

28620: Drawdown from current location = 0.57 ft

Drawdown from proposed location = 0.80 ft

Net drawdown = 0.2 ft

22576 ID1: Drawdown from current location = 0.60 ft

Drawdown from proposed location = 1.00 ft

Net drawdown = 0.4 ft

22576 ID7: Drawdown from current location = 0.55 ft

Drawdown from proposed location = 0.87 ft

Net drawdown = 0.3 ft

22578: Drawdown from current location = 0.83 ft

Drawdown from proposed location = 1.76 ft

Net drawdown = 0.9 ft

30157: Drawdown from current location = 0.72 ft

Drawdown from proposed location = 1.32 ft

Net drawdown = **0.6** ft

25420 ID7: Drawdown from current location = 0.87 ft

Drawdown from proposed location = 1.39 ft

Net drawdown = 0.5 ft

25420 ID5: Drawdown from current location = 0.73 ft

Drawdown from proposed location = 0.92 ft

Net drawdown = 0.2 ft

28315: Drawdown from current location = 0.91 ft

Drawdown from proposed location = 1.04 ft

Net drawdown = 0.1 ft

25460 ID5: Drawdown from current location = 0.69 ft

Drawdown from proposed location = 1.10 ft

Net drawdown = 0.4 ft

25460 ID6: Drawdown from current location = 0.58 ft

Drawdown from proposed location = 0.81 ft

Net drawdown = 0.2 ft

Domestic 31-26-33:

Drawdown from current location = 0.63 ft

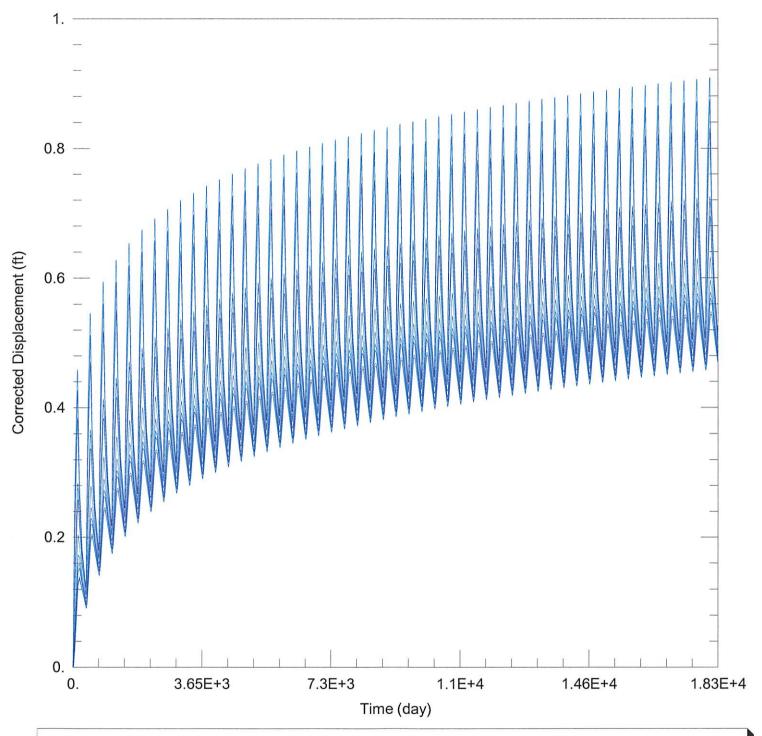
Drawdown from proposed location = 0.79 ft

Net drawdown = 0.2 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\20890\20890 Current.aqt

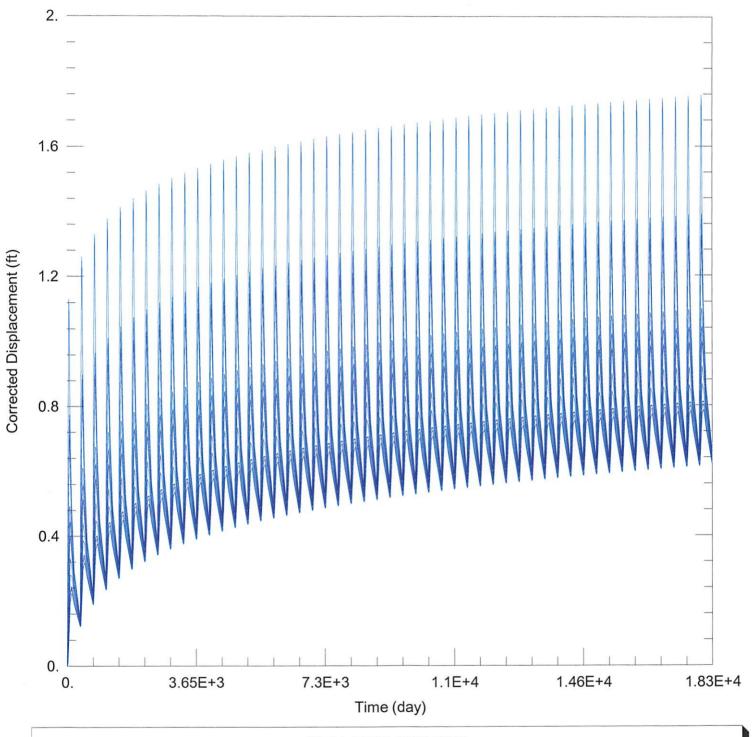
Date: 05/12/23 Time: 09:23:20

# PROJECT INFORMATION

Company: GMD 3 Project: 20890 Location: Finney County

### **WELL DATA**

Pumping Wells			Observation Wells		
Well Name	X (ft)	Y (ft)	Well Name	X (ft)	Y (ft)
20890	-53277	320463	0	-53277	320463



## WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2023\_moves\20890\20890 Proposed.aqt

Date: 05/12/23 Time: 09:23:14

## PROJECT INFORMATION

Company: GMD 3 Project: 20890

Location: Finney County

# WELL DATA

Pumping Wells			Observation Wells		
Well Name	X (ft)	Y (ft)	Well Name	X (ft)	Y (ft)
20890	-54348	320792		-54348	320792
				==000	