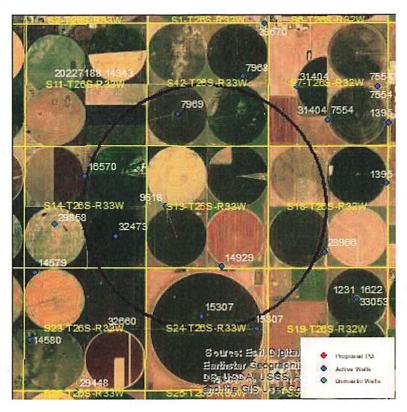
#### Evaluation of proposed move for Water Right No. 9518

Proposed: Create an additional well for water right no. 9518, 1,673 ft to the east. Authority on the old well will be reduced from 640 AF @ 1745 gpm to 256 AF @ 650 gpm. Authority at the new well will be 256 AF @ 650 gpm.



Wells within 1 mile: 7969, 32473, 14929, 15307, and a domestic well in section 14-26-33.

The saturated thickness at the proposed well location is estimated to be 254 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 = 0.1019, T = 5829 ft<sup>2</sup>/day, tp<sub>current</sub> = 120 days (assumed), Q<sub>current</sub> = 780 gpm (based on average use over 120 days)

Old well location: tp<sub>proposed</sub> = 89 days, Q<sub>proposed</sub> = 650 gpm

New well location: tp<sub>proposed</sub> = 89 days, Q<sub>proposed</sub> = 650 gpm

Theis drawdowns were calculated as follows:

7969: Drawdown from current location = 3.79 ft

Drawdown from proposed location = 4.68 ft

Net drawdown = 0.9 ft

32473: Drawdown from current location = 5.16 ft

Drawdown from proposed location = 5.64 ft

Net drawdown = 0.5 ft

14929: Drawdown from current location = 4.10 ft

Drawdown from proposed location = 5.69 ft

Net drawdown = 1.6 ft

15307: Drawdown from current location = 3.31 ft

Drawdown from proposed location = 4.20 ft

Net drawdown = 0.9 ft

Domestic 14-26-33: Drawdown from current location = 5.81 ft

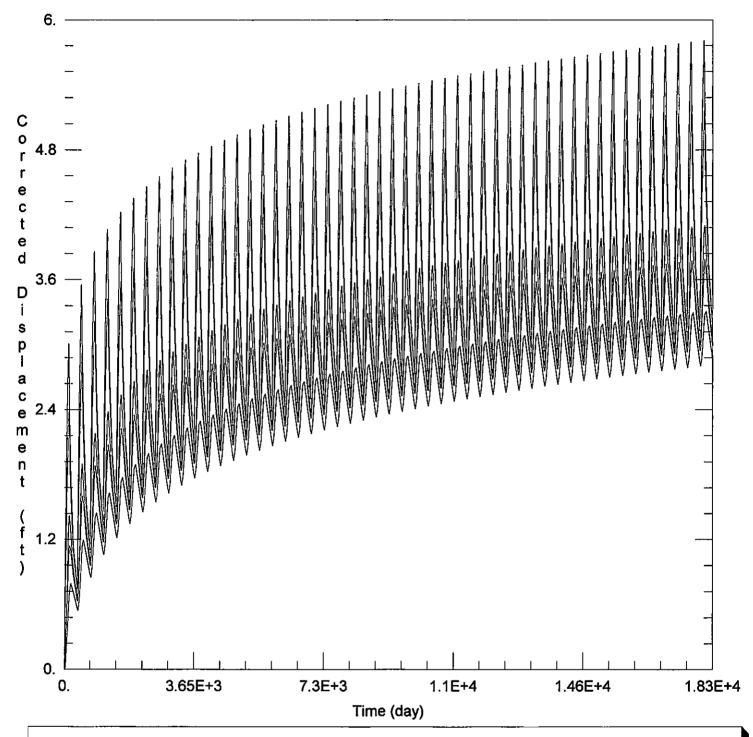
Drawdown from proposed location = 6.55 ft

Net drawdown = 0.7 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\9518\9518 Current.aqt

Date: <u>12/07/23</u> Time: <u>16:32:23</u>

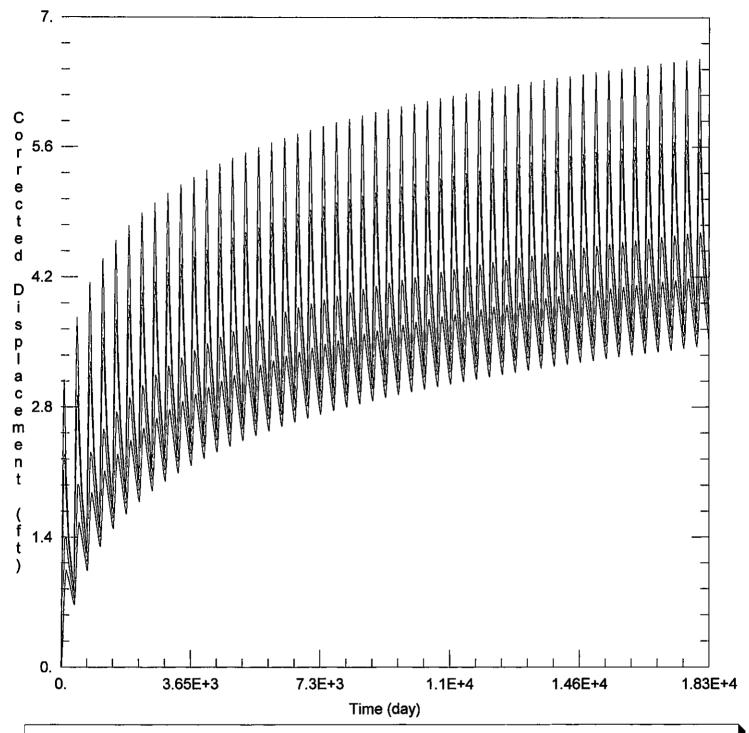
# **PROJECT INFORMATION**

Company: GMD 3 Project: 9518

Location: Finney County

# **WELL DATA**

	Pumping We	lls			Observation Wells	
Well Name	X	(ft)	Y (ft)	Well Name	X (ft)	Y (ft)
9518	-25	042	332366	0	-25042	33236
				7060	_2 <u>/</u> 2/510	୍ । ସସନସନ



#### **WELL TEST ANALYSIS**

Data Set: C:\Users\trevora\Documents\2023\_moves\9518\9518 Proposed.aqt

Date: 12/07/23 Time: 16:32:17

# **PROJECT INFORMATION**

Company: GMD 3 Project: 9518

Location: Finney County

# **WELL DATA**

Pt	umping Wells		Observation Wells		
Well Name	X (ft)	Y (ft)	Well Name	X (ft)	Y (ft)
9518	-25042	332366	0	-25042	332366
Proposed PD	22260	222252	5	22360	222252