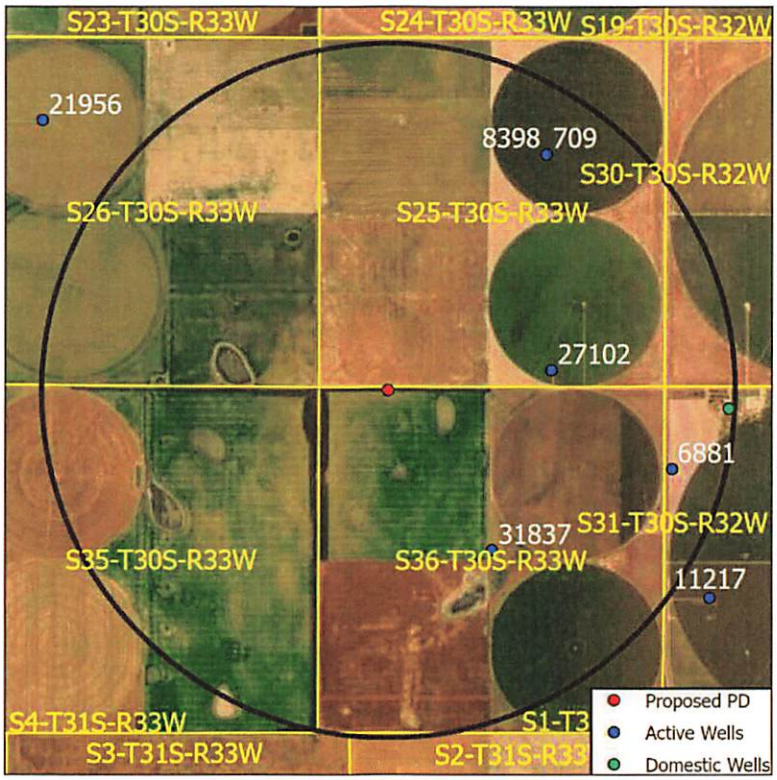
Evaluation of proposed move for Water Right No. 27102

Proposed: Move water right no. 27102 to a new well location, a distance of 2,501 ft to the southwest.



Wells within 1 mile: 709 & 8398, 31837, 6881, and a domestic well in section 31-30-32.

The saturated thickness at the proposed well location is estimated to be 147 ft, based upon the GMD3 model. For saturated thickness between than 125 ft and 150 ft, the drawdown allowance is 3.0 ft.

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

S = 0.095, T = 53,670 ft^2/day, $tp_{current}$ = 104 days (based on average use and observed rate), $Q_{current}$ = 552 gpm (based on 2019 field inspection), $tp_{proposed}$ = 100 days, $Q_{proposed}$ = 1275 gpm

Theis drawdowns were calculated as follows:

709 & 8398: Drawdown from current location = 0.59 ft

Drawdown from proposed location = 1.15 ft

Net drawdown = **0.6 ft**

31837: Drawdown from current location = 0.63 ft

Drawdown from proposed location = 1.43 ft

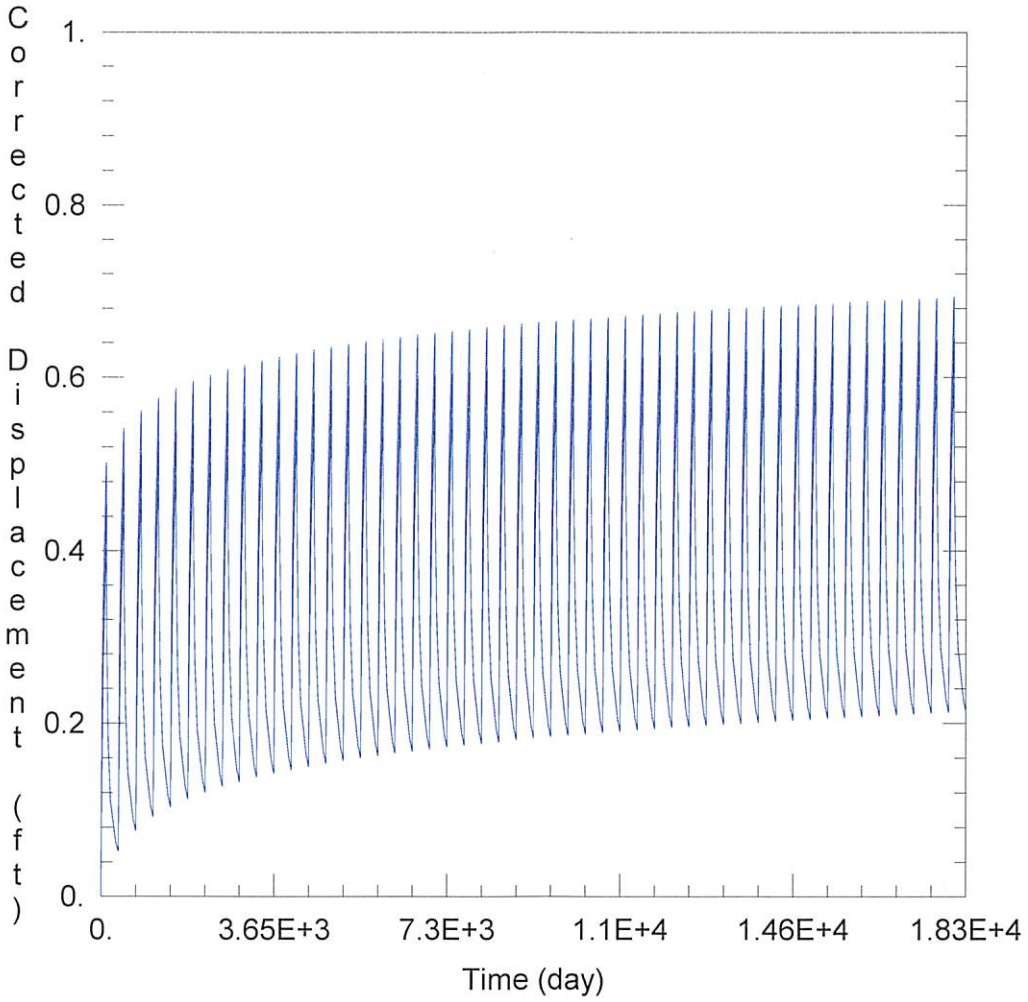
Net drawdown = **0.8 ft**

6881:	Drawdown from current location = 0.69 ft
	Drawdown from proposed location = 1.13 ft
	Net drawdown = **0.4 ft**
Domestic 31-30-32:	Drawdown from current location = 0.65 ft
	Drawdown from proposed location = 1.03 ft
	Net drawdown = **0.4 ft**

Net drawdown does not exceed the drawdown allowance of 3.0 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\2024_moves\27102\27102 Current.aqt
Date: 07/30/24 Time: 14:19:00

PROJECT INFORMATION

Company: GMD 3
Project: 27102
Location: Haskell County

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
27102	-22529	192239

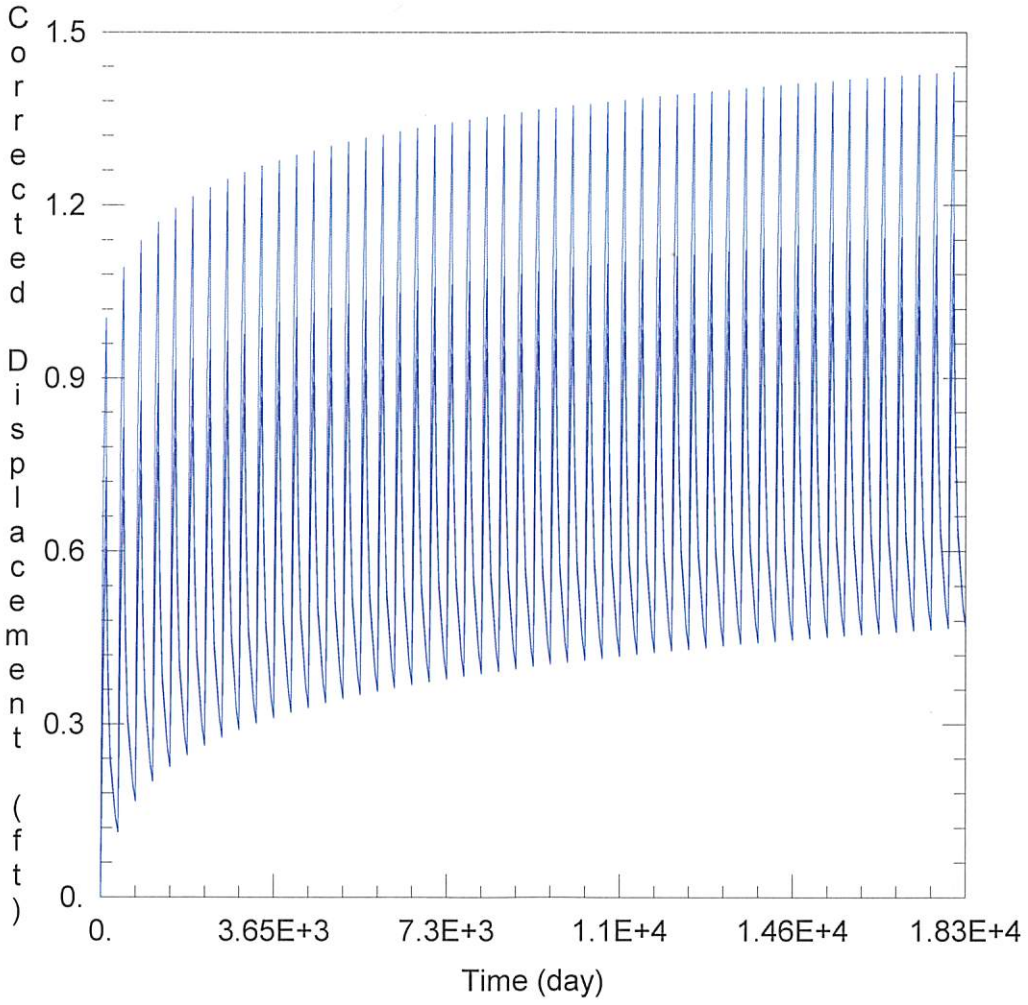
Observation Wells

Well Name	X (ft)	Y (ft)
▫	-22529	192239
▫ 709 & 8398	-22607	195520
▫ 31837	-23431	189509
▫ 6881	-20700	190737
▫ Domestic 31-30-32	-19830	191659

SOLUTION

Aquifer Model: Unconfined
Solution Method: Theis

T = 5.367E+4 ft^2/day
S = 0.095
Kz/Kr = 1.
b = 147. ft



WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2024_moves\27102\27102 Proposed.aqt
Date: 07/30/24 Time: 14:18:54

PROJECT INFORMATION

Company: GMD 3
Project: 27102
Location: Haskell County

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
27102	-25010	191924

Observation Wells

Well Name	X (ft)	Y (ft)
▫	-25010	191924
▫ 709 & 8398	-22607	195520
▫ 31837	-23431	189509
▫ 6881	-20700	190737
▫ Domestic 31-30-32	-19830	191659

SOLUTION

Aquifer Model: Unconfined
Solution Method: Theis

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