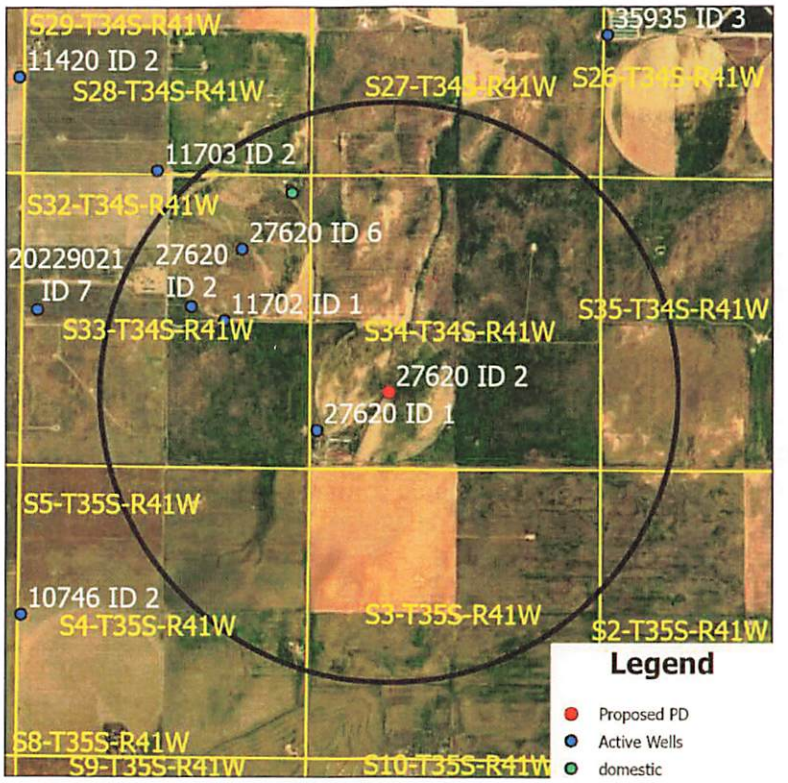
Evaluation of proposed move for Water Right No. 27620

Proposed: Move water right no. 27620 ID1 a distance of 1,480 ft to the northeast onto another well, 27620 ID2, both wells are in section 34.



Wells within 1 mile: 11702, S33 27620 ID2, S33 27620 ID6, and one domestic well in S33-34-41.

The saturated thickness at the proposed well location is estimated to be 132.7ft, based upon the GMD3 model. For saturated thickness between 125 ft and 150ft, the drawdown allowance is 3.0 ft.

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

S = 0.046, T = 15,220.6 ft^2/day, $tp_{current}$ = 49 days (based on average use and observed rate),

$Q_{current}$ = 263 gpm (based on 2015 field inspection), $tp_{proposed}$ = 181 days, $Q_{proposed}$ = 420 gpm

Theis drawdowns were calculated as follows:

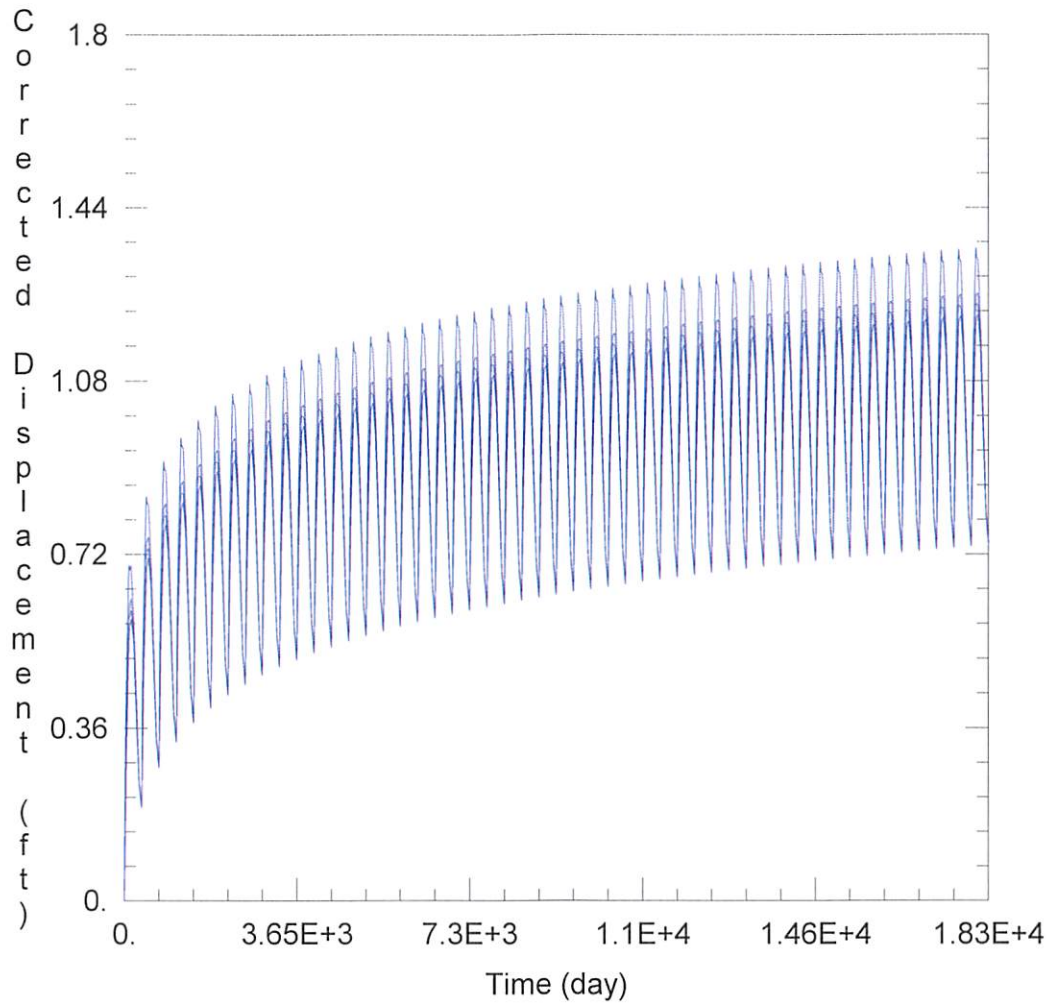
11702:	Drawdown from current location = 1.36 ft
	Drawdown from proposed location = 1.24 ft
	Net drawdown = **0.6 ft**
S33 27620 ID2:	Drawdown from current location = 1.24 ft
	Drawdown from proposed location = 1.80 ft
	Net drawdown = **0.6 ft**

S33 27620 ID6:	Drawdown from current location = 1.26 ft
	Drawdown from proposed location = 1.84 ft
	Net drawdown = 0.6
Domestic 33-34-41:	Drawdown from current location = 1.22 ft
	Drawdown from proposed location = 1.78 ft
	Net drawdown = **0.6 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\scanstation\Documents\move requests\27620\27620 current.aqt
Date: 10/03/24 Time: 12:15:12

PROJECT INFORMATION

Test Well: 27620

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
27620 ID 1	-283923	62160
27620 ID 2	-282612	62845

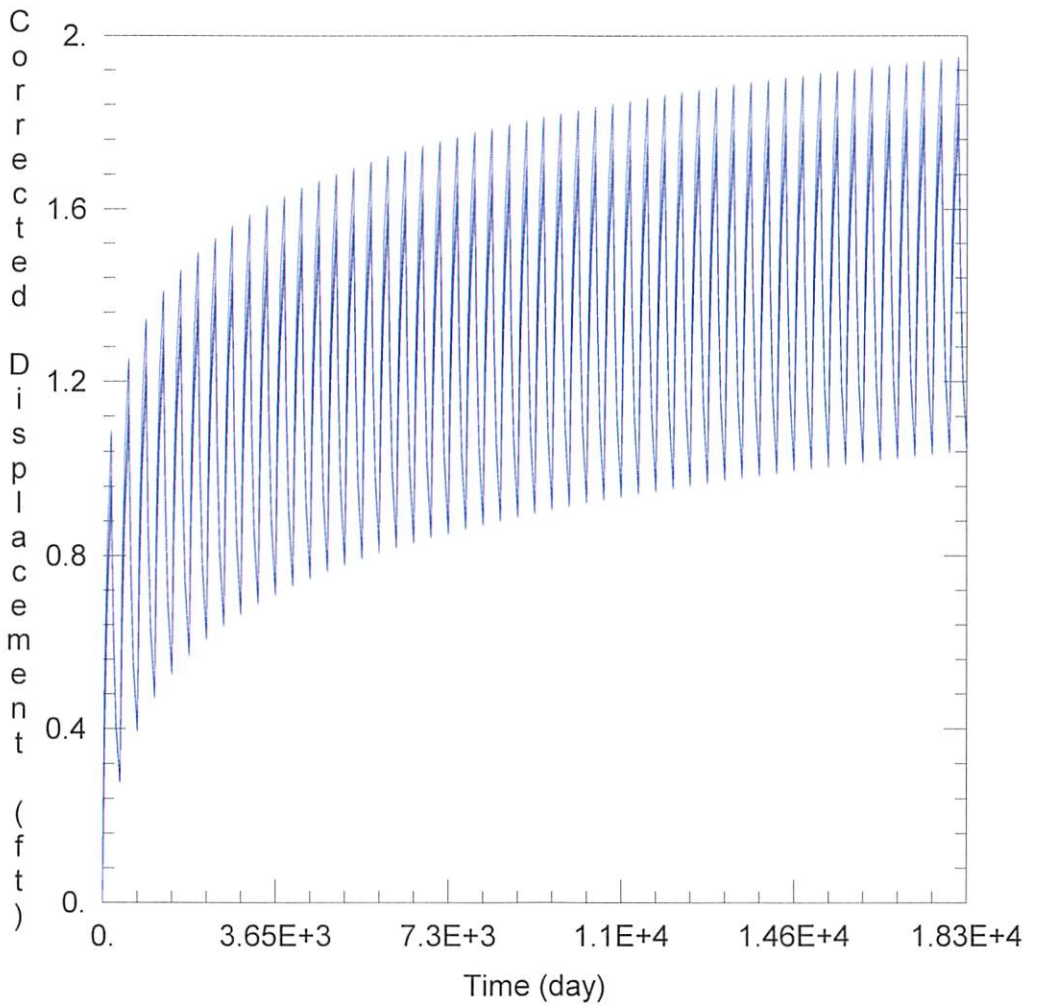
Observation Wells

Well Name	X (ft)	Y (ft)
▫	-283923	62160
▫	-282612	62845
▫ 11702	-285628	64147
▫ 27620 S33 ID2	-286229	64408
▫ 27620 S33 ID6	-285290	65451
▫ domestic	-284387	66477

SOLUTION

Aquifer Model: Unconfined
Solution Method: Theis

T = 1.522E+4 ft^2/day
S = 0.046
Kz/Kr = 1.
b = 1.522E+4 ft



WELL TEST ANALYSIS

Data Set: C:\Users\scanstation\Documents\move requests\27620\27620 proposed.aqt
Date: 10/03/24 Time: 12:15:16

PROJECT INFORMATION

Test Well: 27620

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
27620 ID 2	-282612	62845

Observation Wells

Well Name	X (ft)	Y (ft)
▫	-282612	62845
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