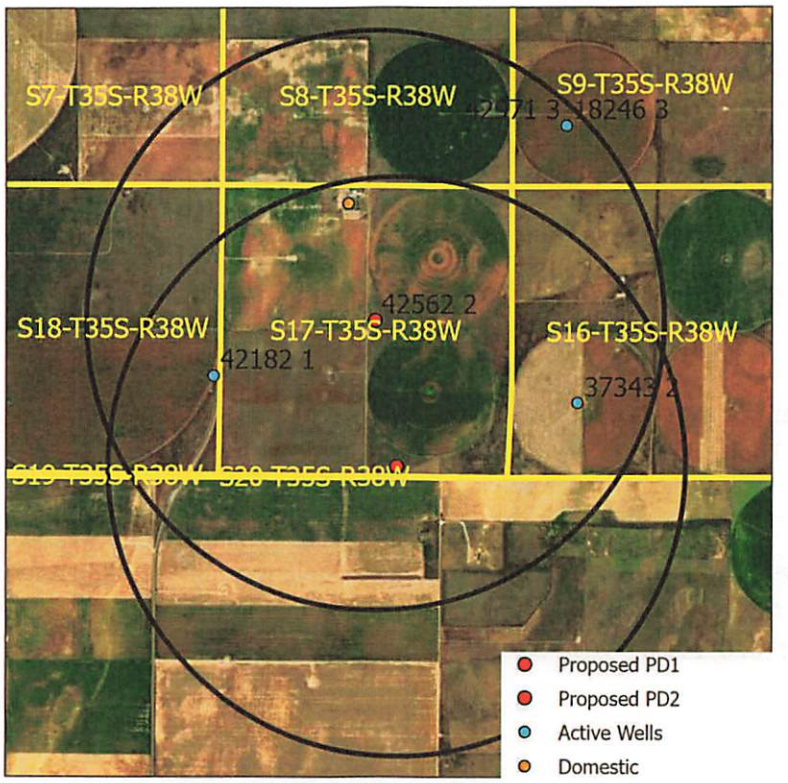
Evaluation of proposed move for Water Right No. 42562

Proposed: Create an additional well under water right no. 42562 a distance of 2693 ft south of the current location.



Wells within 1 mile: 42182, 18246, 37343, and one domestic well in S17-35-38.

The saturated thickness at the proposed well location is estimated to be 259 ft, based upon the GMD3 model. For saturated thickness over 200ft, the drawdown allowance is 4.0 ft.

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

S = 0.071, T = 24,643 ft^2/day, $tp_{current}$ = 95 days (based on average use and observed rate),

$Q_{current}$ = 950 gpm,

Existing: $tp_{proposed}$ = 97 days, $Q_{proposed}$ = 650 gpm

Additional: $tp_{proposed}$ = 99 days, $Q_{proposed}$ = 300 gpm

Theis drawdowns were calculated as follows:

42182: Drawdown from current location = 1.90 ft

Drawdown from proposed location = 1.86 ft

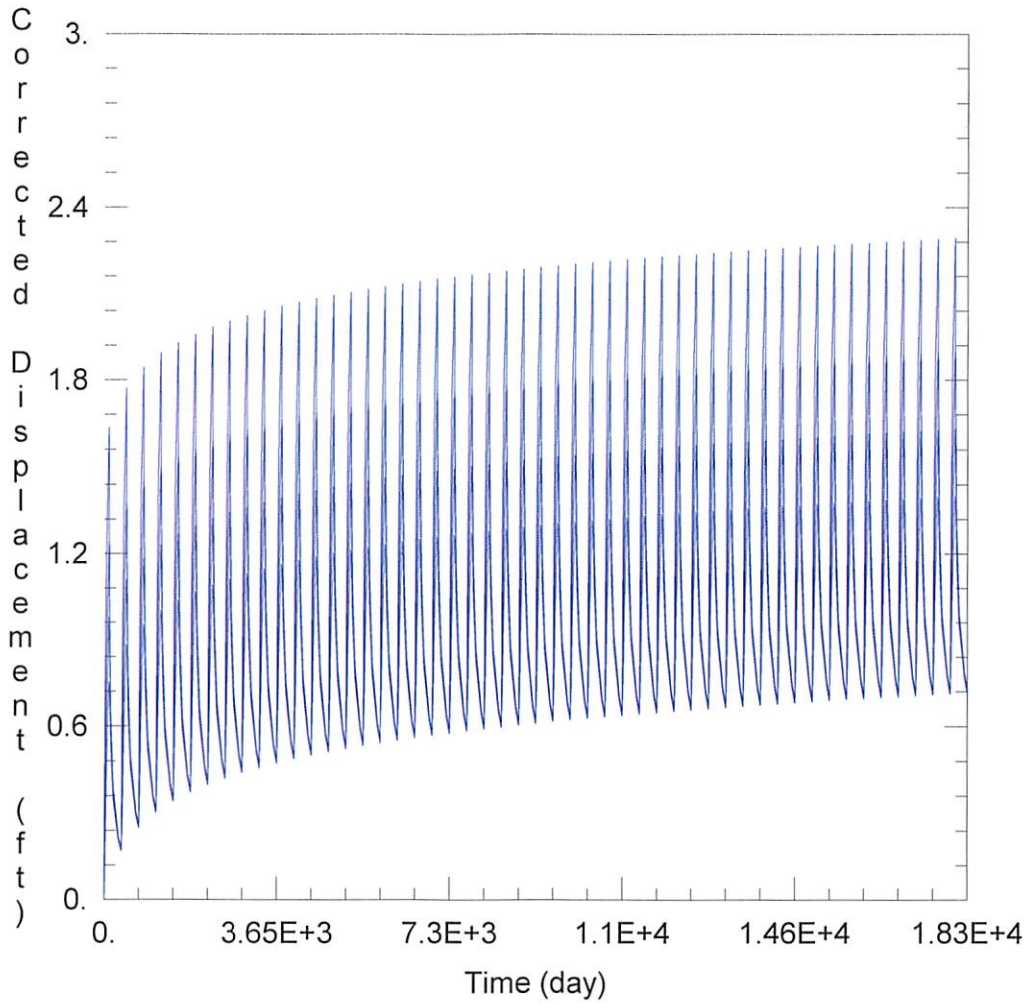
Net drawdown = **0.0 ft**

18246:	Drawdown from current location = 1.40 ft
	Drawdown from proposed location = 1.33 ft
	Net drawdown = **-0.1 ft**
37343:	Drawdown from current location = 1.63 ft
	Drawdown from proposed location = 1.70 ft
	Net drawdown = **0.1 ft**
Domestic:	Drawdown from current location = 2.29 ft
	Drawdown from proposed location = 2.05 ft
	Net drawdown = **-0.25 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\scanstation\Documents\move requests\42562\42562 current.aqt
Date: 02/26/25 Time: 14:16:18

PROJECT INFORMATION

Test Well: 42562

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
42562	-196844	47501

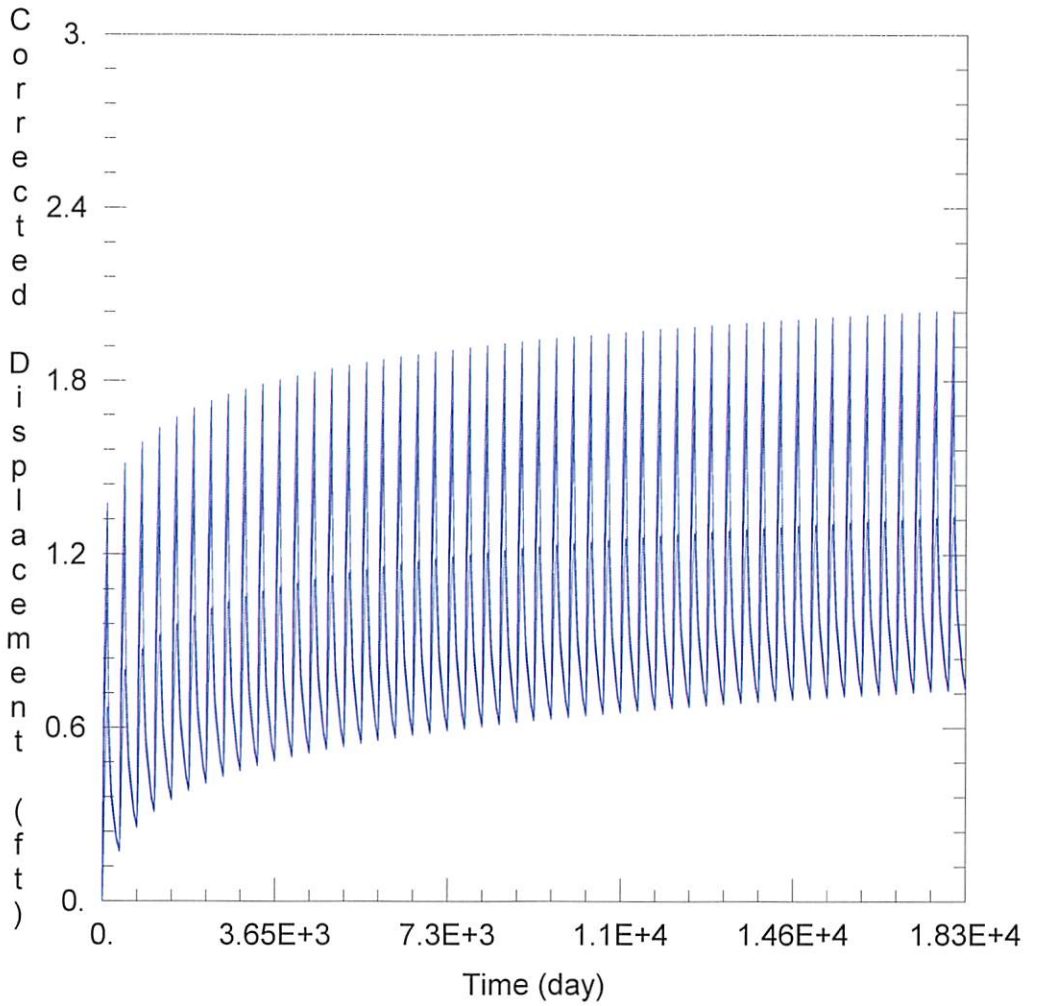
Observation Wells

Well Name	X (ft)	Y (ft)
▫	-196844	47501
▫ 42182	-199801	46496
▫ 18246 & 42971	-193344	51045
▫ 37343	-193146	45993
▫ Domestic	-197334	49640

SOLUTION

Aquifer Model: Unconfined
Solution Method: Theis

T = 2.464E+4 ft^2/day
S = 0.071
Kz/Kr = 1.
b = 259. ft



WELL TEST ANALYSIS

Data Set: C:\Users\scanstation\Documents\move requests\42562\42562 proposed.aqt
Date: 02/26/25 Time: 14:16:23

PROJECT INFORMATION

Test Well: 42562

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
42562	-196844	47501
ProposedPD2	-196449	44838

Observation Wells

Well Name	X (ft)	Y (ft)
▫	-196844	47501
▫	-196449	44838
▫ 42182	-199801	46496
▫ 18246 & 42971	-193344	51045
▫ 37343	-193146	45993
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