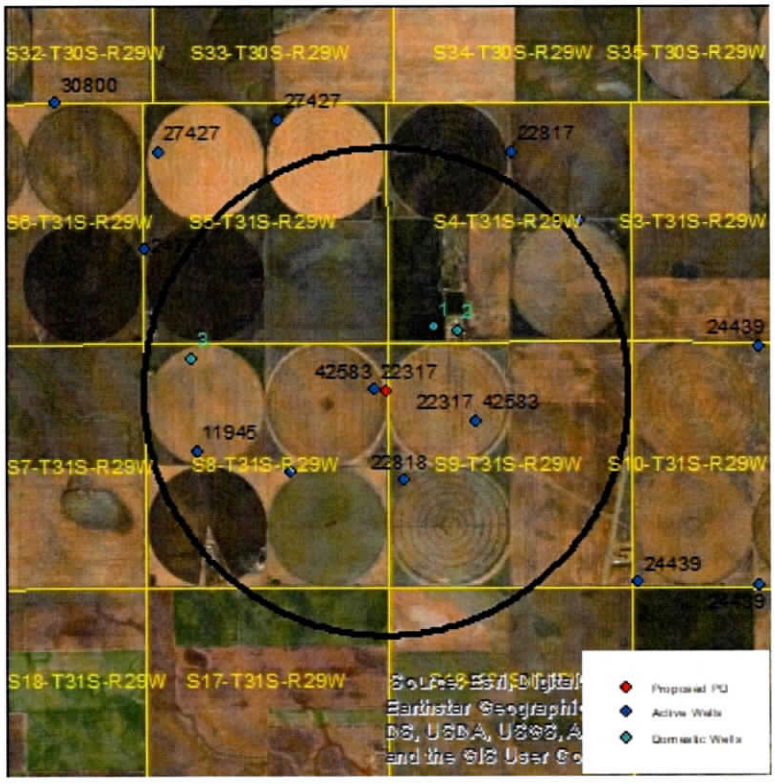
Evaluation of proposed move for Water Right Nos 22317 & 42583

Proposed: Move water right nos. 22317 & 42583 (section 8) a distance of 374 ft to the east.



Wells within 1 mile: 22317 & 42583 (section 9), 22818, 24615, 11945, and 3 domestic wells, numbered on the above map.

The saturated thickness at the proposed well location is estimated to be 216 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 = 0.3005, T = 59,700 ft^2/day, $tp_{current}$ = 76 days (based upon average use and reported rate), $Q_{current}$ = 600 gpm (based upon 2015 reported rate), $tp_{proposed}$ = 76 days, $Q_{proposed}$ = 750 gpm

Theis drawdowns were calculated as follows:

22317 & 42583 (sec 9): Drawdown from current location = 0.44 ft

Drawdown from proposed location = 0.59 ft

Net drawdown = **0.1 ft**

22818: Drawdown from current location = 0.47 ft

Drawdown from proposed location = 0.60 ft

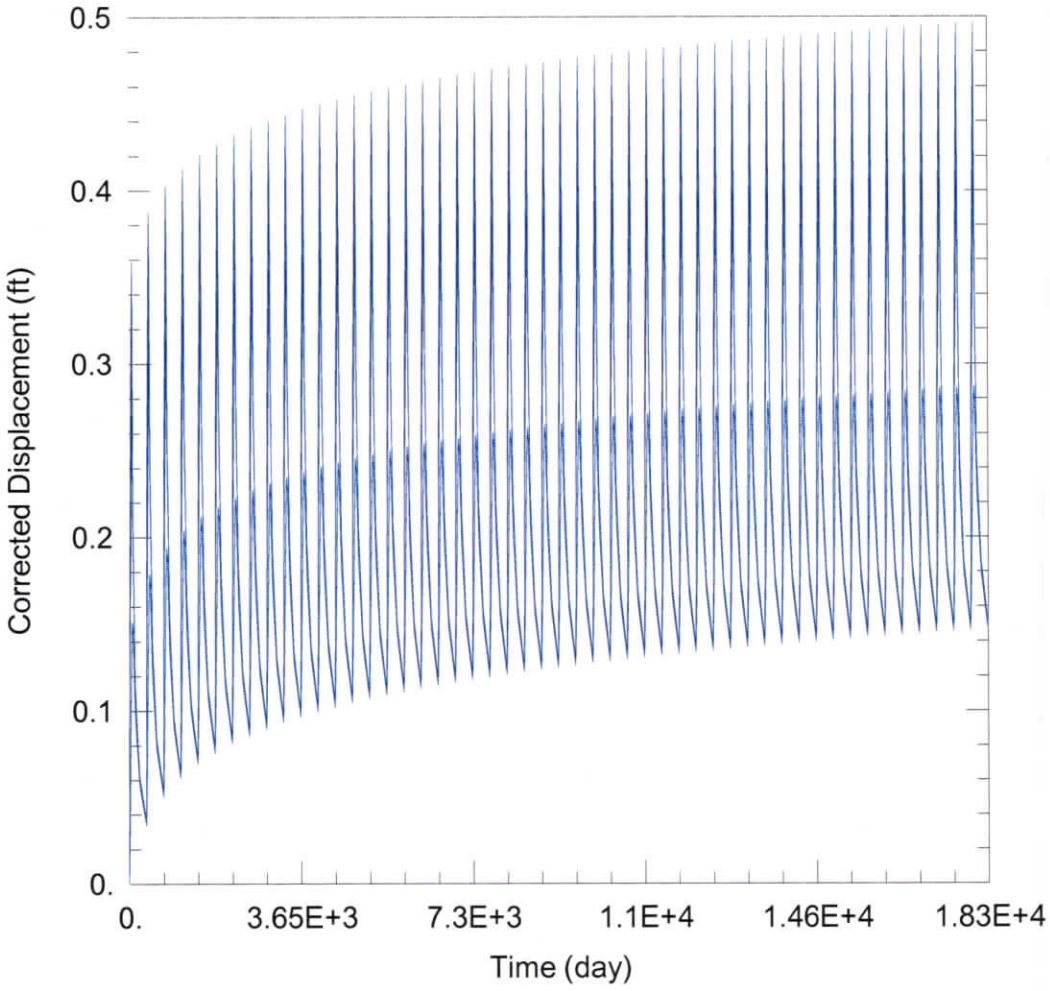
Net drawdown = **0.1 ft**

24615:	Drawdown from current location = 0.41 ft
	Drawdown from proposed location = 0.49 ft
	Net drawdown = **0.1 ft**
11945:	Drawdown from current location = 0.29 ft
	Drawdown from proposed location = 0.34 ft
	Net drawdown = **0.1 ft**
Domestic 1:	Drawdown from current location = 0.50 ft
	Drawdown from proposed location = 0.65 ft
	Net drawdown = **0.2 ft**
Domestic 2:	Drawdown from current location = 0.45 ft
	Drawdown from proposed location = 0.59 ft
	Net drawdown = **0.1 ft**
Domestic 3:	Drawdown from current location = 0.29 ft
	Drawdown from proposed location = 0.34 ft
	Net drawdown = **0.1 ft**

Net drawdown does not exceed the drawdown allowance of 4.0 ft for any wells within 1 mile of the proposed location. Therefore, critical well analysis is not necessary.

Conclusion:

Based upon information from the GMD3 model, this proposal will cause minimal effects on neighboring wells, and is unlikely to create an impairment. GMD3 staff recommends approval of the application.



WELL TEST ANALYSIS

Data Set: C:\...\22317 42583 Current.aqt
Date: 12/17/20 Time: 07:55:08

PROJECT INFORMATION

Company: GMD 3
Project: 22317 & 42583
Location: Meade County
Test Well: 22317 & 42583

WELL DATA

Pumping Wells

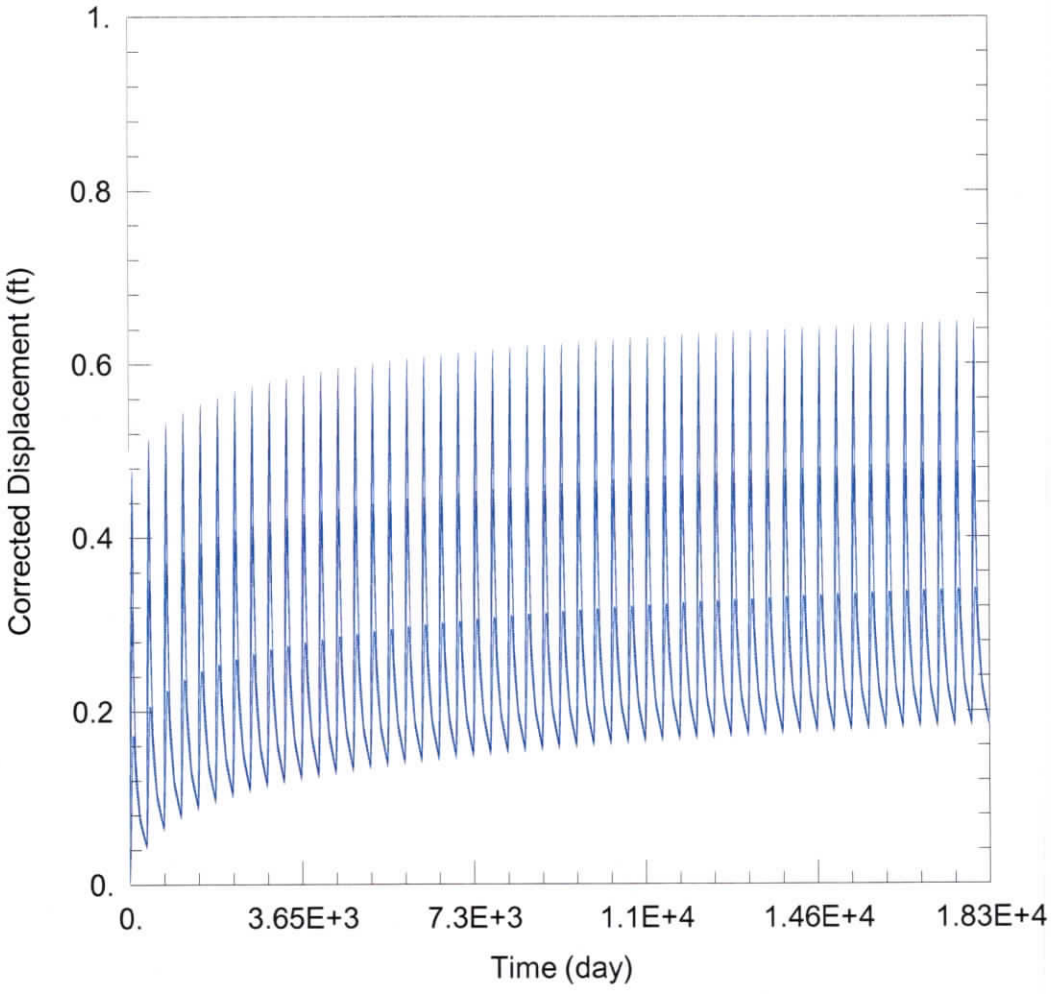
Well Name	X (ft)	Y (ft)
22317 & 42583 (sec 8)	89789	180464

Observation Wells

Well Name	X (ft)	Y (ft)
▫	89789	180464
▫ 22317 & 42583 (sec 9)	91993	179801
▫ 22818	90442	178516
▫ 24615	87956	178689
▫ 11945	85926	179151
▫ Domestic 1	91080	181817
▫ Domestic 2	91607	181743
▫ Domestic 3	85796	181141

SOLUTION

Aquifer Model: Unconfined
Solution Method: Theis
T = 5.97E+4 ft^2/day
S = 0.3005



WELL TEST ANALYSIS

Data Set: C:\...\22317 42583 Proposed.aqt
Date: 12/17/20 Time: 07:55:22

PROJECT INFORMATION

Company: GMD 3
Project: 22317 & 42583
Location: Meade County
Test Well: 22317 & 42583

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
22317 & 42583 (sec 8)	90038	180439

Observation Wells

Well Name	X (ft)	Y (ft)
▫	90038	180439
▫ 22317 & 42583 (sec 9)	91993	179801
▫ 22818	90442	178516
▫ 24615	87956	178689
▫ 11945	85926	179151
▫ Domestic 1	91080	181817
▫ Domestic 2	91607	181743
▫ Domestic 3	85796	181141

SOLUTION

Aquifer Model: Unconfined
Solution Method: Theis

T = 5.97E+4 ft^2/day
S = 0.3005