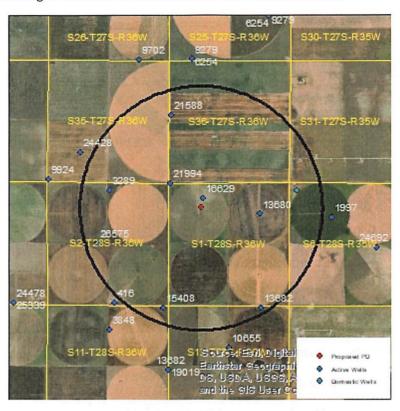
Evaluation of proposed move for Water Right No 16629

Proposed: Move water right no. 16629 a distance of 423 ft to the southwest.



Wells within 1 mile: 13680, 15408, 13682, 21994, 3289, 21588, 26575, and a domestic well in section 6-28-35.

The saturated thickness at the proposed well location is estimated to be 128 ft, based upon the GMD3 model. For saturated thickness between 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 = 0.2139, T = 14,757 ft²/day, tp_{current} = 122 days (based upon average use and observed rate), $Q_{current} = 400$ gpm (based upon reported use in 2017), tp_{proposed} = 126 days, $Q_{proposed} = 1150$ gpm

Theis drawdowns were calculated as follows:

13680: Drawdown from current location = 1.09 ft

Drawdown from proposed location = 3.20 ft

Net drawdown = 2.1 ft

15408: Drawdown from current location = 0.72 ft

Drawdown from proposed location = 2.25 ft

Net drawdown = 1.5 ft

13682: Drawdown from current location = 0.69 ft

Drawdown from proposed location = 2.13 ft

Net drawdown = 1.4 ft

21994: Drawdown from current location = 1.46 ft

Drawdown from proposed location = 4.12 ft

Net drawdown = 2.7 ft

3289: Drawdown from current location = 0.81 ft

Drawdown from proposed location = 2.43ft

Net drawdown = 1.6 ft

21588: Drawdown from current location = 0.85 ft

Drawdown from proposed location = 2.36 ft

Net drawdown = 1.5 ft

26575: Drawdown from current location = 0.73 ft

Drawdown from proposed location = 2.22 ft

Net drawdown = 1.5 ft

Domestic 6-28-35: Drawdown from current location = 0.82 ft

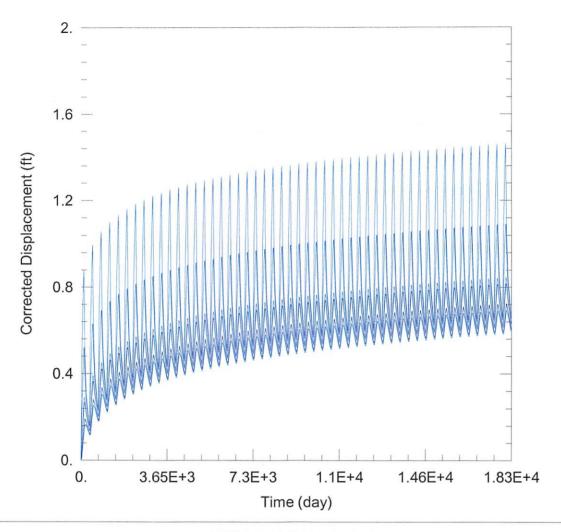
Drawdown from proposed location = 2.36 ft

Net drawdown = 1.5 ft

Net drawdown does not exceed the drawdown allowance of 3.0 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:\Users\trevora\Documents\2020_moves\16629\16629 Current.aqt

Date: 12/28/20

Time: 14:17:55

PROJECT INFORMATION

Company: GMD 3 Project: 16629

Location: Grant County Test Well: 16629

WELL DATA

Pumping Wells			
Well Name	X (ft)	Y (ft)	
16629	-119446	281392	

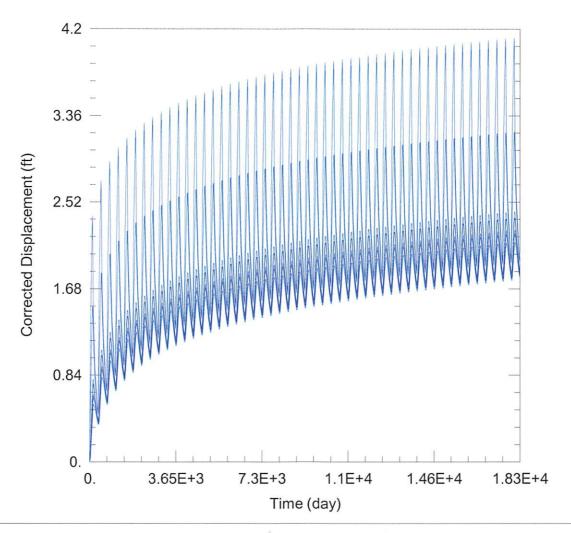
Well Name	X (ft)	Y (ft)
	-119446	281392
13680	-116962	280722
15408	-121184	276663
13682	-116944	276658
21994	-120870	282040
3289	-123541	281749
21588	-120854	285011
26575	-124035	279450
 Domestic 6-28-35 	-115368	281736

Observation Wells

SOLUTION

Aquifer Model: Unconfined

Solution Method: Theis



WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2020_moves\16629\16629 Proposed.aqt

Date: 12/28/20 Time: 14:17:48

PROJECT INFORMATION

Company: GMD 3 Project: 16629

Location: Grant County Test Well: 16629

WELL DATA

Pumping Wells			
Well Name	X (ft)	Y (ft)	
16629	-119547	280981	

Well Name	X (ft)	Y (ft)
	-119547	280981
13680	-116962	280722
15408	-121184	276663
- 13682	-116944	276658
21994	-120870	282040
□ 3289	-123541	281749
21588	-120854	285011
26575	-124035	279450
 Domestic 6-28-35 	-115368	281736

Observation Wells

SOLUTION

Aquifer Model: Unconfined Solution Method: Theis