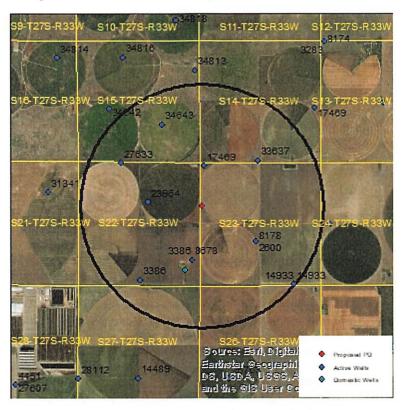
Evaluation of proposed move for Water Right No. 17469

Proposed: Move water right no. 17469 a distance of 1,717 ft to the south.



Wells within 1 mile: 2600 & 8178, 14933, 34643, 33637, 27633, 23954, 3386, 3386 & 8678, and a domestic well in section 22-27-33.

The saturated thickness at the proposed well location is estimated to be 194 ft, based upon the GMD3 model. For saturated thickness between 150 ft and 200 ft, the drawdown allowance is 3.5 ft.

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

S = 0.1675, T = 7236.3 ft²/day, $tp_{current} = 180$ days (based upon average use and observed rate), $Q_{current} = 185$ gpm (based upon 2020 field inspection), $tp_{proposed} = 35.7$ days, $Q_{proposed} = 2030$ gpm

Theis drawdowns were calculated as follows:

2600 & 8178:

Drawdown from current location = 0.98 ft

Drawdown from proposed location = 2.92 ft

Net drawdown = 1.9 ft

14933:

Drawdown from current location = 0.74 ft

Drawdown from proposed location = 1.85 ft

Net drawdown = 1.1 ft

34643: Drawdown from current location = 1.25 ft

Drawdown from proposed location = 2.22 ft

Net drawdown = 1.0 ft

33637: Drawdown from current location = 1.29 ft

Drawdown from proposed location = 2.68 ft

Net drawdown = 1.4 ft

27633: Drawdown from current location = 1.04 ft

Drawdown from proposed location = 2.20 ft

Net drawdown = 1.2 ft

23954: Drawdown from current location = 1.18 ft

Drawdown from proposed location = 3.45 ft

Net drawdown = 2.3 ft

3386: Drawdown from current location = 0.80 ft

Drawdown from proposed location = 2.14 ft

Net drawdown = 1.3 ft

3386 & 8678: Drawdown from current location = 0.97 ft

Drawdown from proposed location = 3.38 ft

Net drawdown = 2.4 ft

Domestic 22-27-33: Drawdown from current location = 0.91 ft

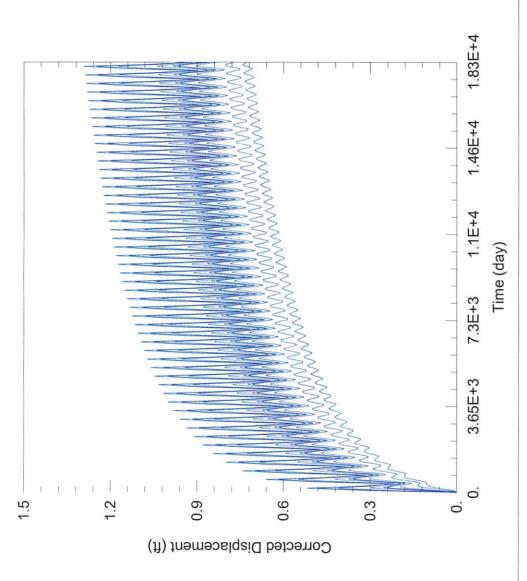
Drawdown from proposed location = 2.84 ft

Net drawdown = 1.9 ft

Net drawdown does not exceed the drawdown allowance of 3.5 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 is unlikely to cause impairment. GMD3 staff recommends approval of this proposal.



WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2021_Moves\17469\17469 Current.aqt Date: 05/25/21

PROJECT INFORMATION

Company: GMD 3 Project: 17469 Location: Haskell County

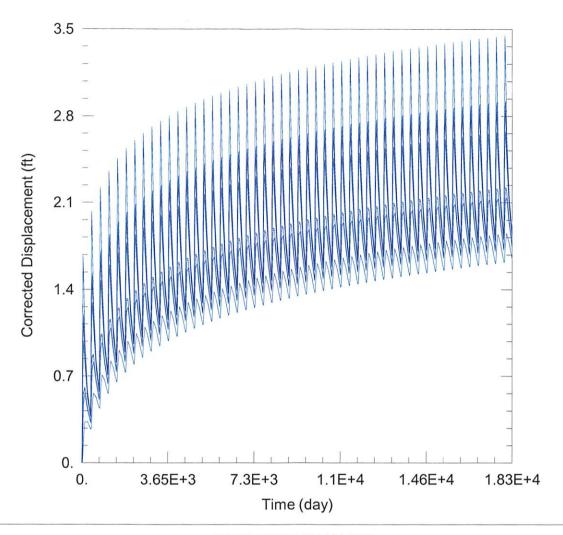
17469 -31035 297734 - 2600 & 847

WELL DATA

Well Name	(11) \	(11)
	-31035	297734
□ 2600 & 8178	-28782	294487
- 14933	-27096	292610
o 34643	-32856	299535
- 33637	-28662	297987
o 27633	-34612	297870
- 23954	-33439	296168
3386	-33789	292820
a 3386 & 8678	-31555	293682
 Domestic 22-27-33 	-31826	293215

Solution Method: Theis

Aquifer Model: Unconfined



WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2021_Moves\17469\17469 Proposed.aqt

Date: 05/25/21 Time: 15:26:29

PROJECT INFORMATION

Company: GMD 3 Project: 17469

Location: Haskell County

WELL DATA

Pumping wells			
Well Name	X (ft)	Y (ft)	
17469	-31107	296019	

Well Name	X (ft)	Y (ft)
	-31107	296019
2600 & 8178	-28782	294487
14933	-27096	292610
· 34643	-32856	299535
33637	-28662	297987
27633	-34612	297870
23954	-33439	296168
3386	-33789	292820
 3386 & 8678 	-31555	293682
 Domestic 22-27-33 	-31826	293215

Observation Wells

SOLUTION

Aquifer Model: Unconfined Solution Method: Theis