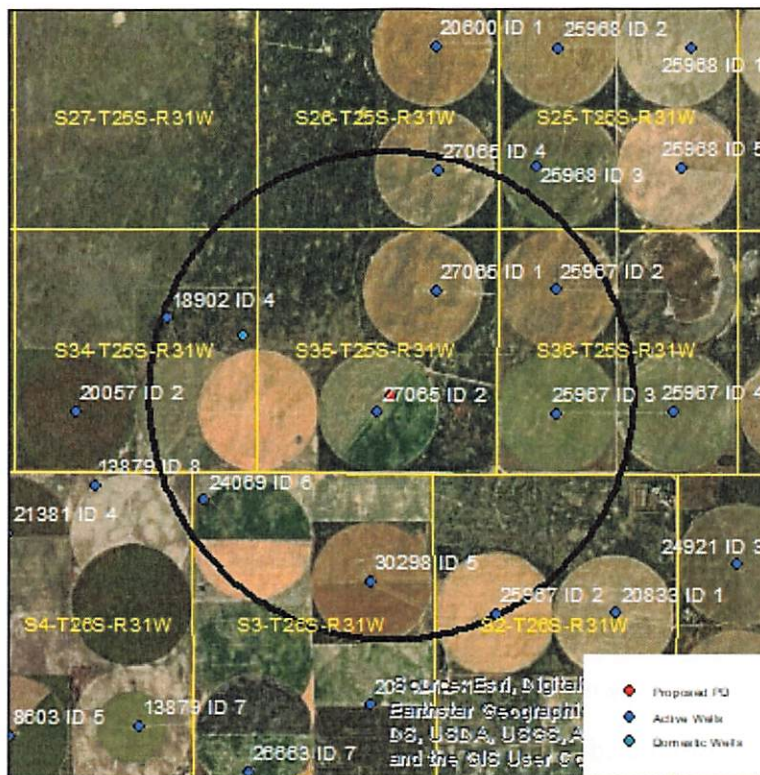


Evaluation of proposed move for Water Right No. 27065

Proposed: Move water right no. 27065 ID2 a distance of 475 ft to the northeast.



Wells within 1 mile: 27065 ID1, 27065 ID4, 18902, 25967 sec 36 ID2, 25967 sec 2 ID2, 25967 ID3, 24069, 30298, and a domestic well in section 34-25-31.

The saturated thickness at the proposed well location is estimated to be 106 ft, based upon the GMD3 model. For saturated thickness between 100 ft and 125 ft, the drawdown allowance is 2.5 ft.

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

$S = 0.2419$, $T = 6759.3 \text{ ft}^2/\text{day}$, $tp_{\text{current}} = 147 \text{ days}$ (based on average use and reported rate), $Q_{\text{current}} = 300 \text{ gpm}$ (last reported rate), $tp_{\text{proposed}} = 67 \text{ days}$, $Q_{\text{proposed}} = 875 \text{ gpm}$

Theis drawdowns were calculated as follows:

27065 ID1:	Drawdown from current location = 1.48 ft
	Drawdown from proposed location = 2.30 ft
	Net drawdown = 0.8 ft
27065 ID4:	Drawdown from current location = 1.03 ft
	Drawdown from proposed location = 1.44 ft
	Net drawdown = 0.4 ft

18902: Drawdown from current location = 1.08 ft
Drawdown from proposed location = 1.42 ft
Net drawdown = **0.3 ft**

25967 sec 36 ID2: Drawdown from current location = 1.12 ft
Drawdown from proposed location = 1.60 ft
Net drawdown = **0.5 ft**

25967 sec 2 ID2: Drawdown from current location = 1.07 ft
Drawdown from proposed location = 1.39 ft
Net drawdown = **0.3 ft**

25967 ID3: Drawdown from current location = 1.25 ft
Drawdown from proposed location = 1.75 ft
Net drawdown = **0.5 ft**

24069: Drawdown from current location = 1.19 ft
Drawdown from proposed location = 1.51 ft
Net drawdown = **0.3 ft**

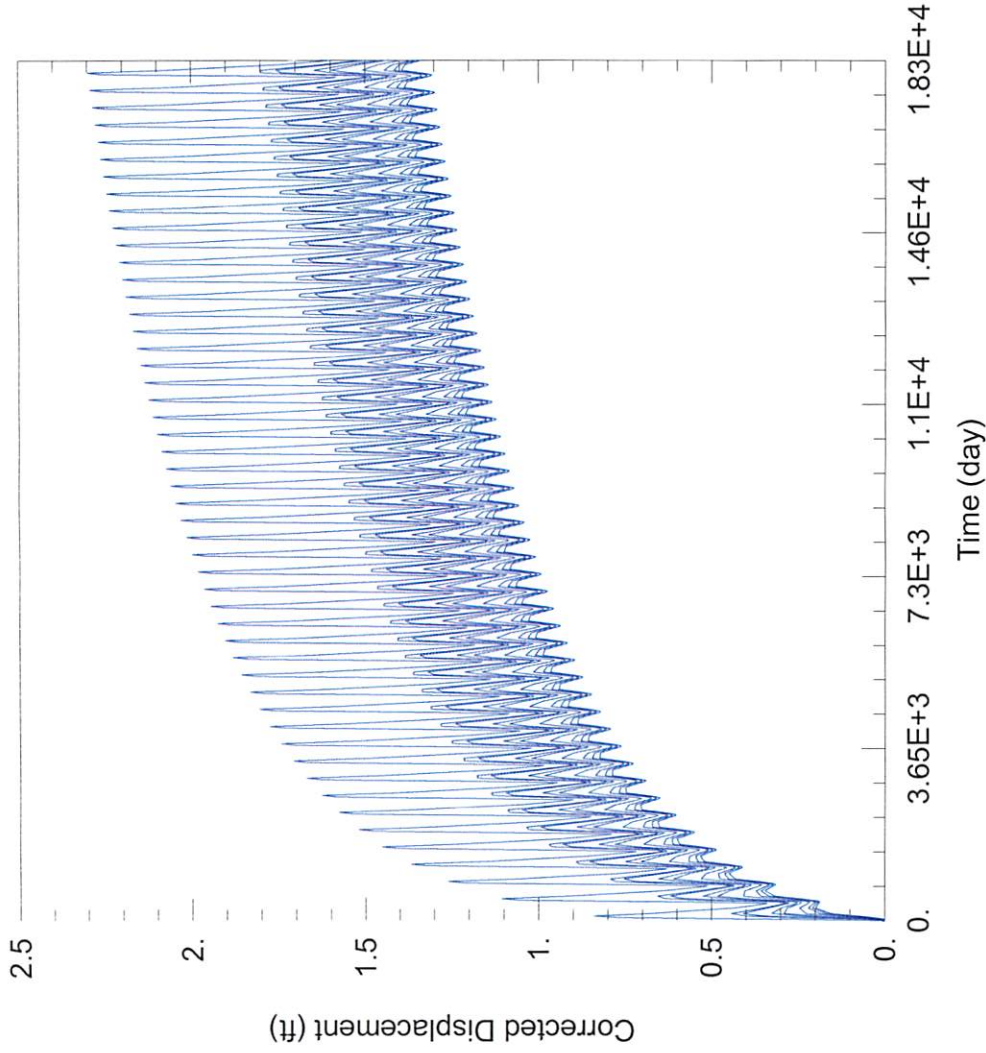
30298: Drawdown from current location = 1.30 ft
Drawdown from proposed location = 1.65 ft
Net drawdown = **0.3 ft**

Domestic 34-25-31: Drawdown from current location = 1.37 ft
Drawdown from proposed location = 1.80 ft
Net drawdown = **0.4 ft**

Net drawdown does not exceed the drawdown allowance of 2.5 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\27065\27065 Proposed.aqt
 Date: 11/09/21 Time: 16:18:43

PROJECT INFORMATION

Company: GMD 3
 Project: 27065
 Location: Finney County

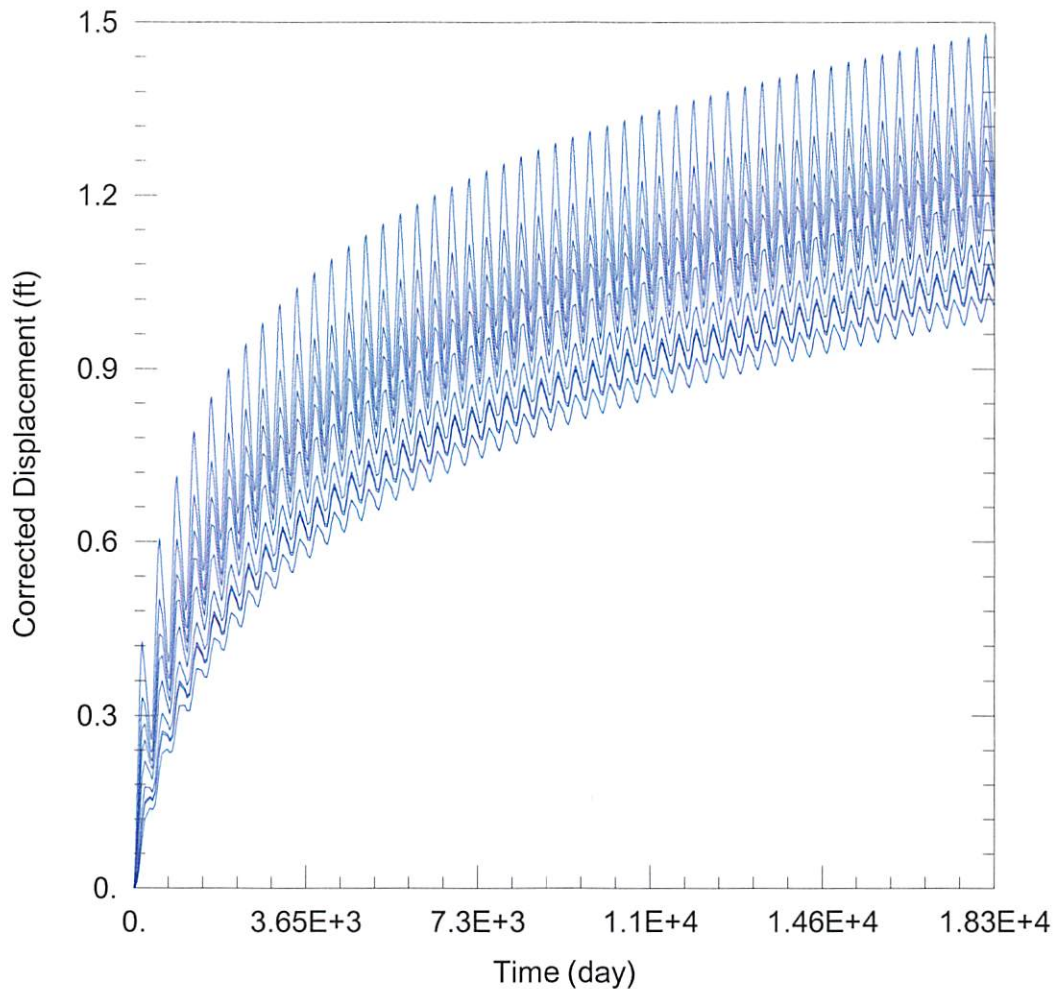
WELL DATA

Pumping Wells		
Well Name	X (ft)	Y (ft)
27065 ID2	31231	349051

Observation Wells		
Well Name	X (ft)	Y (ft)
<input type="checkbox"/> 27065 ID1	32213	351317
<input type="checkbox"/> 27065 ID4	32267	353921
<input type="checkbox"/> 18902	26380	350721
<input type="checkbox"/> 25967 ID2	34841	351324
<input type="checkbox"/> 25967 ID3	34844	348662
<input type="checkbox"/> 24069	27163	346763
<input type="checkbox"/> 30298	30805	345012
<input type="checkbox"/> 25967	33521	344323
<input type="checkbox"/> Domestic 34-25-31	27999	350328

SOLUTION

Aquifer Model: Unconfined Solution Method: Theis



WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2021_Moves\27065\27065 Current.aqt

Date: 11/09/21

Time: 16:18:52

PROJECT INFORMATION

Company: GMD 3

Project: 27065

Location: Finney County

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
27065 ID2	30945	348672

Observation Wells

Well Name	X (ft)	Y (ft)
□	30945	348672
□ 27065 ID1	32213	351317
□ 27065 ID4	32267	353921
□ 18902	26380	350721
□ 25967 ID2	34841	351324
□ 25967 ID3	34844	348662
□ 24069	27163	346763
□ 30298	30805	345012
□ 25967	33521	344323
□ Domestic 34-25-31	27999	350328

SOLUTION

Aquifer Model: Unconfined

Solution Method: Theis