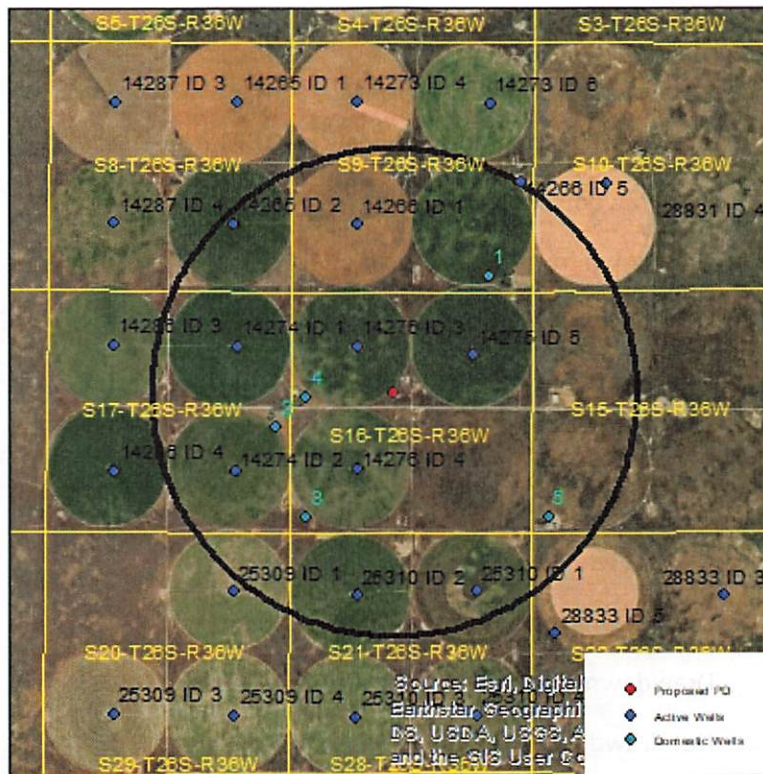


Evaluation of proposed move for Water Right No 14276

Proposed: Move water right no. 14276 ID 3 a distance of 1,277 ft to the southeast.



Wells within 1 mile: 14276 ID 4, 14275, 14266, 14265, 14274 ID 1, 14274 ID 2, 25310 ID 1, 25310 ID 2, and 5 domestic wells, numbered on the above map.

The saturated thickness at the proposed well location is estimated to be 273 ft, based upon the driller’s log and an observation well in section 21-26-36. 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:

$S = 0.2854$, $T = 17,926 \text{ ft}^2/\text{day}$, $tp_{\text{current}} = 102 \text{ days}$ (based upon average use and observed rate), $Q_{\text{current}} = 575 \text{ gpm}$ (based upon 2019 field inspection), $tp_{\text{proposed}} = 63 \text{ days}$, $Q_{\text{proposed}} = 990 \text{ gpm}$

Theis drawdowns were calculated as follows:

- 14276 ID 4:
 - Drawdown from current location = 1.07 ft
 - Drawdown from proposed location = 1.59 ft
 - Net drawdown = **0.5 ft**

- 14275:
 - Drawdown from current location = 1.10 ft
 - Drawdown from proposed location = 1.58 ft
 - Net drawdown = **0.5 ft**

14266: Drawdown from current location = 1.07 ft
Drawdown from proposed location = 0.93 ft
Net drawdown = **-0.1 ft**

14265: Drawdown from current location = 0.84 ft
Drawdown from proposed location = 0.74 ft
Net drawdown = **-0.1 ft**

14274 ID 1: Drawdown from current location = 1.09 ft
Drawdown from proposed location = 0.95 ft
Net drawdown = **-0.1 ft**

14274 ID 2: Drawdown from current location = 0.84 ft
Drawdown from proposed location = 0.90 ft
Net drawdown = **0.1 ft**

25310 ID 1: Drawdown from current location = 0.63 ft
Drawdown from proposed location = 0.78 ft
Net drawdown = **0.2 ft**

25310 ID 2: Drawdown from current location = 0.66 ft
Drawdown from proposed location = 0.81 ft
Net drawdown = **0.1 ft**

Domestic 1: Drawdown from current location = 0.93 ft
Drawdown from proposed location = 1.03 ft
Net drawdown = **0.1 ft**

Domestic 2: Drawdown from current location = 1.12 ft
Drawdown from proposed location = 1.21 ft
Net drawdown = **0.1 ft**

Domestic 3: Drawdown from current location = 0.82 ft
Drawdown from proposed location = 1.00 ft
Net drawdown = **0.2 ft**

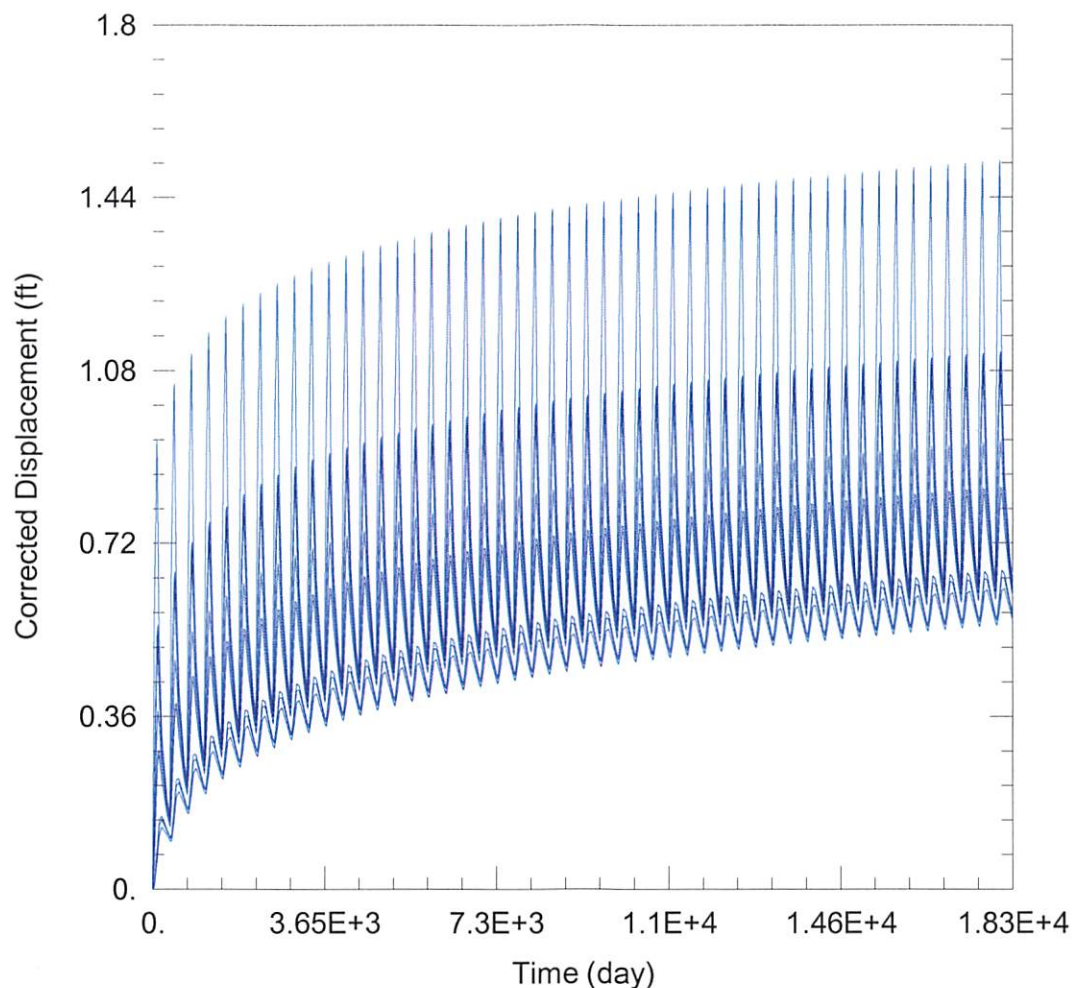
Domestic 4: Drawdown from current location = 1.52 ft
 Drawdown from proposed location = 1.56 ft
 Net drawdown = **0.0 ft**

Domestic 5: Drawdown from current location = 0.65 ft
 Drawdown from proposed location = 0.83 ft
 Net drawdown = **0.2 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 is unlikely to cause impairment. GMD3 staff recommends approval of this proposal.



WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2021_Moves\14276\14276 Current.aqt

Date: 01/27/21

Time: 15:34:12

PROJECT INFORMATION

Company: GMD 3

Project: 14276

Location: Kearny County

Test Well: 14276

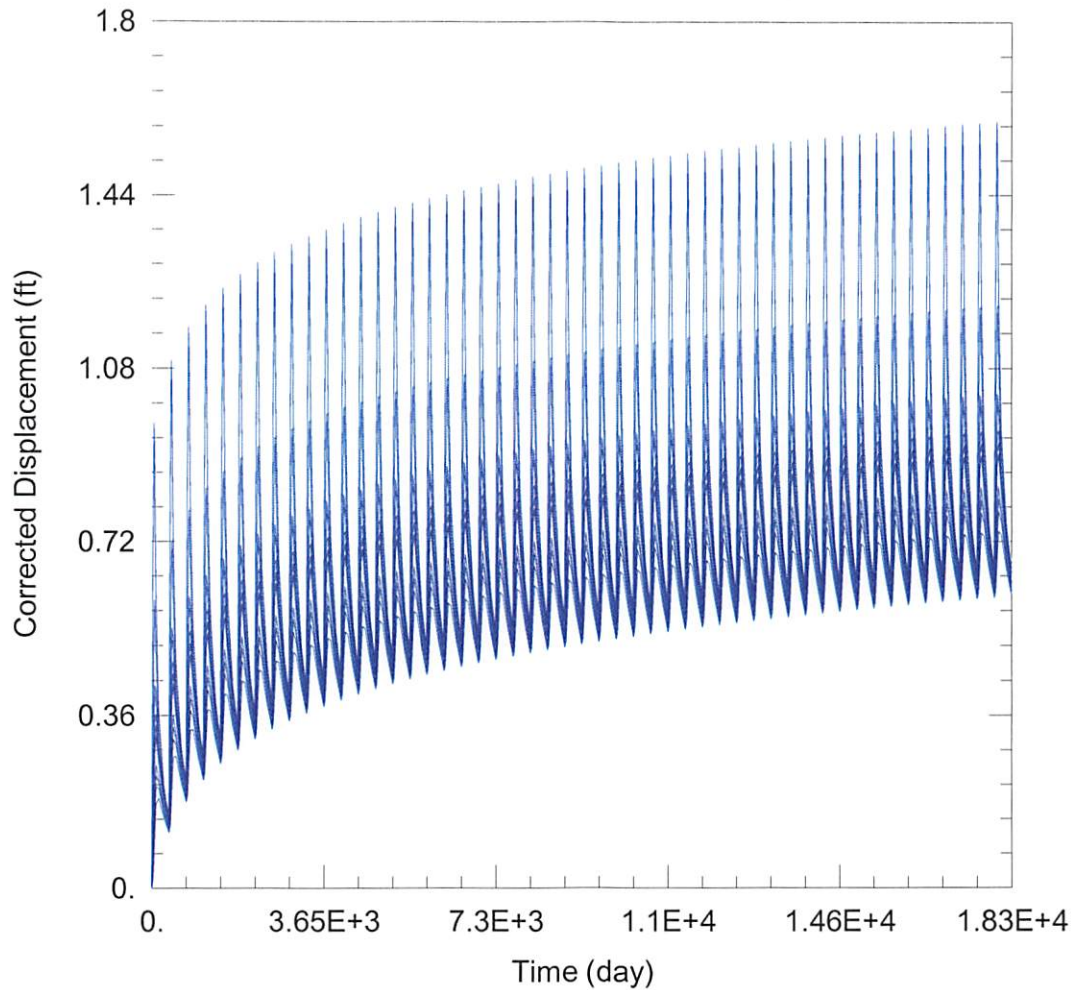
WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
14276 ID 3	-135078	333758

Observation Wells

Well Name	X (ft)	Y (ft)
□	-135078	333758
□ 14276 ID 4	-135077	331096
□ 14275	-132550	333571
□ 14266	-135065	336394
□ 14265	-137752	336408
□ 14274 ID 1	-137664	333771
□ 14274 ID 2	-137715	331073
□ 25310 ID 1	-132448	328450
□ 25310 ID 2	-135067	328361
□ Domestic 1	-132208	335287
□ Domestic 2	-136835	332032
□ Domestic 3	-136187	330073
□ Domestic 4	-136170	332681



WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2021_Moves\14276\14276 Proposed.aqt

Date: 01/27/21

Time: 15:34:03

PROJECT INFORMATION

Company: GMD 3

Project: 14276

Location: Kearny County

Test Well: 14276

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
14276 ID 3	-134258	332778

Observation Wells

Well Name	X (ft)	Y (ft)
□	-134258	332778
□ 14276 ID 4	-135077	331096
□ 14275	-132550	333571
□ 14266	-135065	336394
□ 14265	-137752	336408
□ 14274 ID 1	-137664	333771
□ 14274 ID 2	-137715	331073
□ 25310 ID 1	-132448	328450
□ 25310 ID 2	-135067	328361
□ Domestic 1	-132208	335287
□ Domestic 2	-136835	332032
□ Domestic 3	-136187	330073
□ Domestic 4	-136170	332681