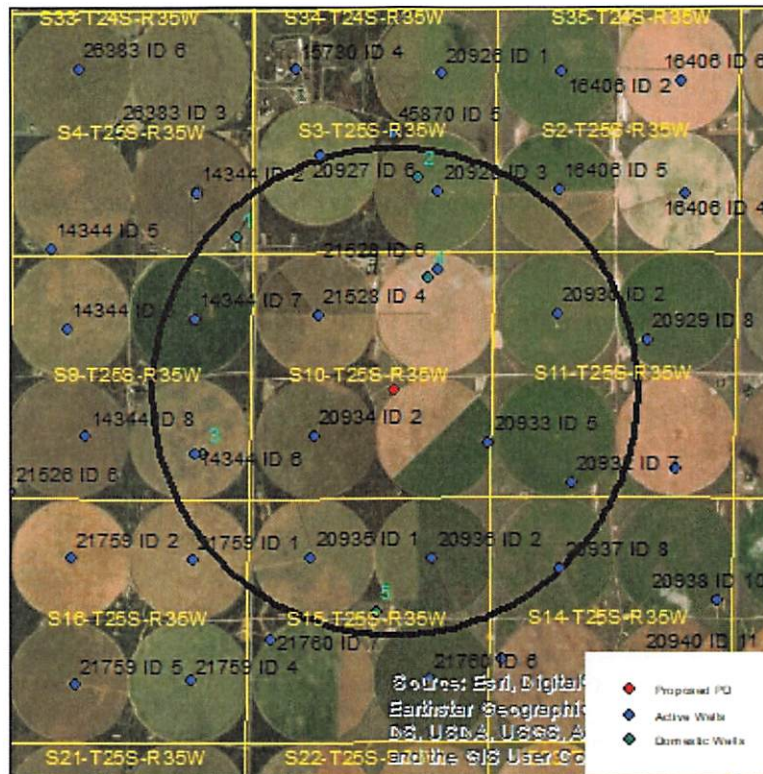


Evaluation of proposed move for Water Right No 20933

Proposed: Move water right no. 20933 a distance of 2,332 ft to the northwest.



Wells within 1 mile: 20934, 21528 ID4, 21528 ID6, 14344 ID6, 14344 ID7, 20928, 20930, 20932, 20937, 20935, 20936, and 5 domestic wells, numbered on the above map.

The saturated thickness at the proposed well location is estimated to be 245 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:

$S = 0.1685$, $T = 19,797 \text{ ft}^2/\text{day}$, $tp_{\text{current}} = 129 \text{ days}$ (based upon average use and observed rate),
 $Q_{\text{current}} = 444 \text{ gpm}$ (based upon 2014 field inspection), $tp_{\text{proposed}} = 73 \text{ days}$, $Q_{\text{proposed}} = 840 \text{ gpm}$

Theis drawdowns were calculated as follows:

- 20934: Drawdown from current location = 0.88 ft
 Drawdown from proposed location = 1.65 ft
 Net drawdown = **0.8 ft**
- 21528 ID4: Drawdown from current location = 0.78 ft
 Drawdown from proposed location = 1.47 ft
 Net drawdown = **0.7 ft**

21528 ID6: Drawdown from current location = 0.87 ft
Drawdown from proposed location = 1.28 ft
Net drawdown = **0.4 ft**

14344 ID6: Drawdown from current location = 0.64 ft
Drawdown from proposed location = 0.89 ft
Net drawdown = **0.2 ft**

14344 ID7: Drawdown from current location = 0.61 ft
Drawdown from proposed location = 0.88 ft
Net drawdown = **0.3 ft**

20928: Drawdown from current location = 0.69 ft
Drawdown from proposed location = 0.91 ft
Net drawdown = **0.2 ft**

20930: Drawdown from current location = 0.98 ft
Drawdown from proposed location = 1.00 ft
Net drawdown = **0.0 ft**

20932: Drawdown from current location = 1.26 ft
Drawdown from proposed location = 0.92 ft
Net drawdown = **-0.3 ft**

20937: Drawdown from current location = 0.98 ft
Drawdown from proposed location = 0.80 ft
Net drawdown = **-0.2 ft**

20935: Drawdown from current location = 0.78 ft
Drawdown from proposed location = 0.98 ft
Net drawdown = **0.2 ft**

20936: Drawdown from current location = 1.06 ft
Drawdown from proposed location = 1.05 ft
Net drawdown = **0.0 ft**

Domestic 1: Drawdown from current location = 0.60 ft
Drawdown from proposed location = 0.85 ft
Net drawdown = **0.3 ft**

Domestic 2: Drawdown from current location = 0.67 ft
Drawdown from proposed location = 0.87
Net drawdown = **0.2 ft**

Domestic 3: Drawdown from current location = 0.65 ft
Drawdown from proposed location = 0.92 ft
Net drawdown = **0.3 ft**

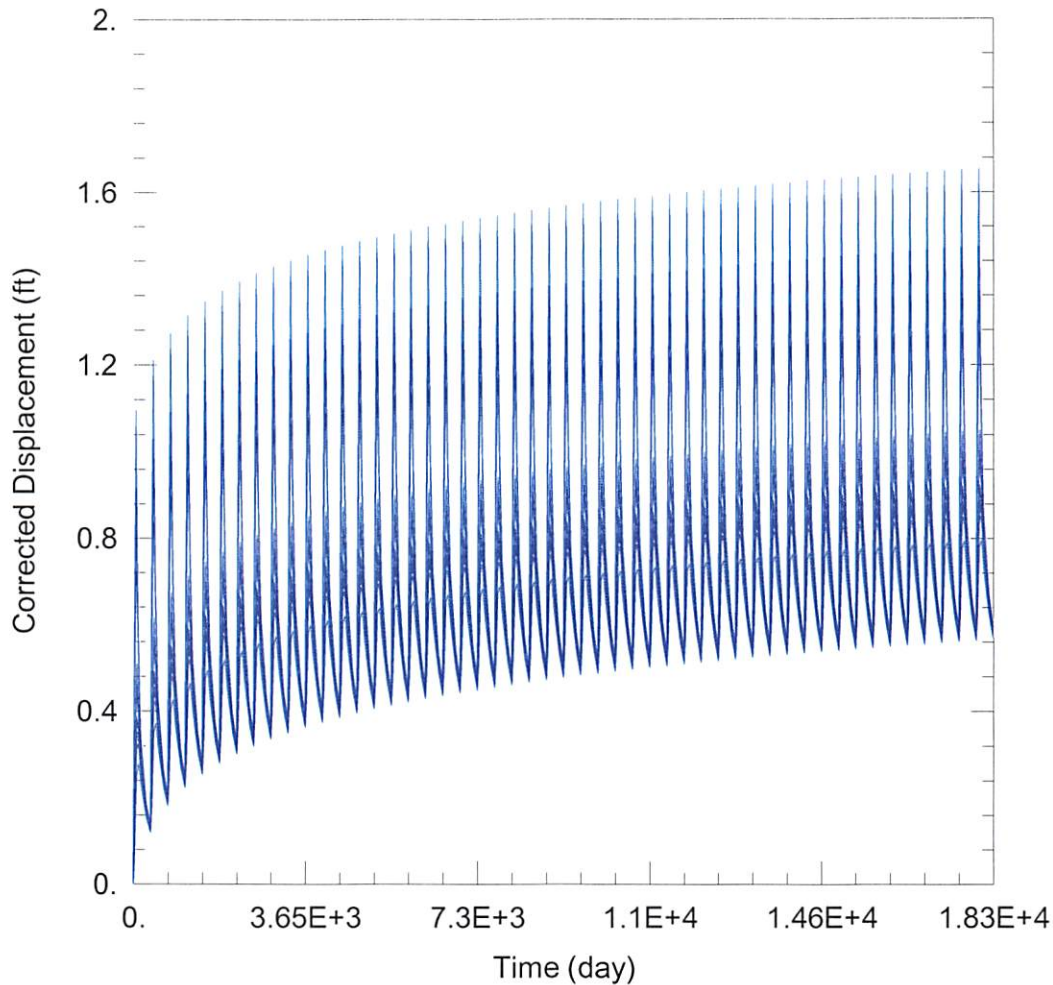
Domestic 4: Drawdown from current location = 0.88 ft
Drawdown from proposed location = 1.37 ft
Net drawdown = **0.5 ft**

Domestic 5: Drawdown from current location = 0.80 ft
Drawdown from proposed location = 0.85 ft
Net drawdown = **0.0 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:\Users\trevora\Documents\2020_moves\20933\20933 Proposed.aqt

Date: 10/09/20

Time: 17:10:29

PROJECT INFORMATION

Company: GMD 3

Project: 20933

Location: Kearny County

Test Well: 20933

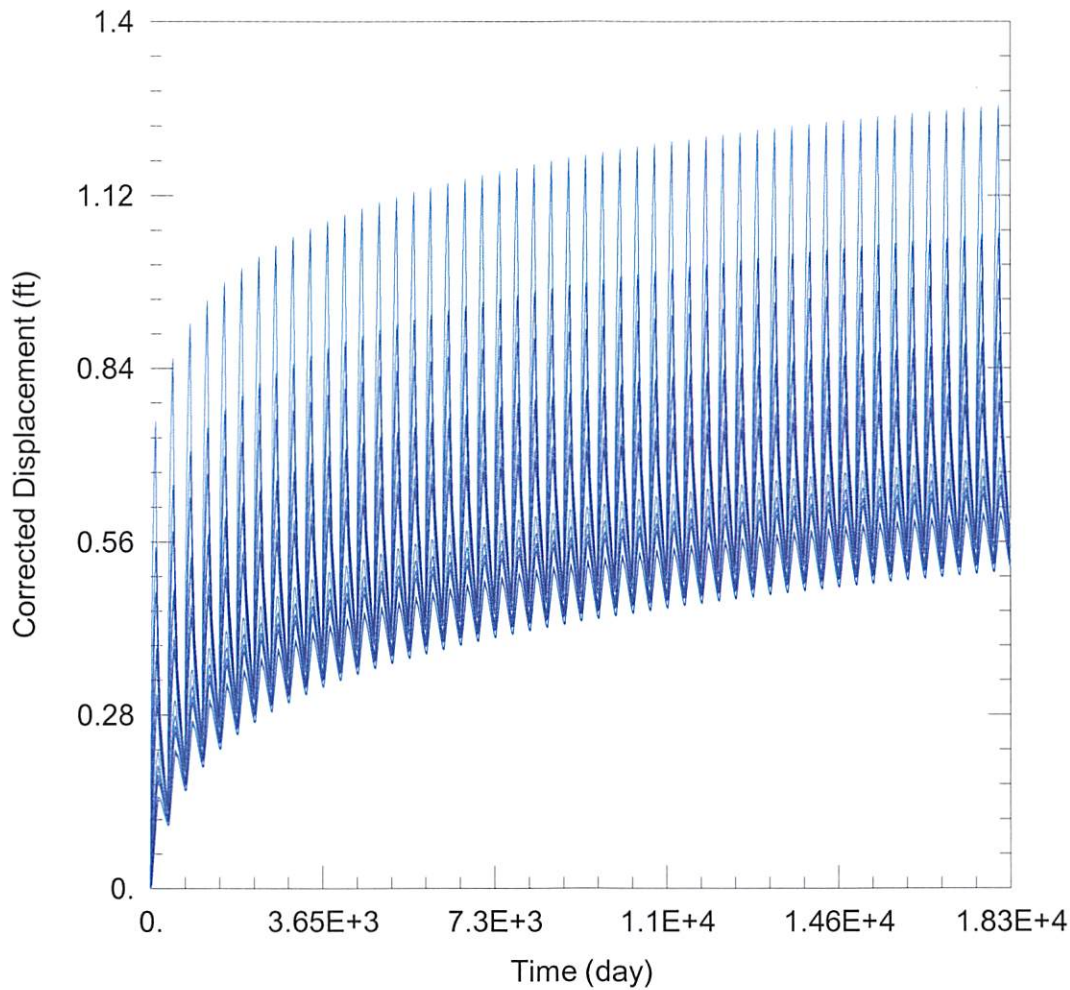
WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
20933	-100430	370923

Observation Wells

Well Name	X (ft)	Y (ft)
□	-100430	370923
□ 20934	-102184	369964
□ 21528 ID4	-102098	372571
□ 21528 ID6	-99477	373559
□ 14344 ID6	-104761	369555
□ 14344 ID7	-104776	372461
□ 20928	-99461	375238
□ 20930	-96872	372590
□ 20932	-96561	368953
□ 20937	-96811	367086
□ 20935	-102238	367309
□ 20936	-99594	367315
□ Domestic 1	-103855	374230



WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2020_moves\20933\20933 Current.aqt

Date: 10/09/20

Time: 17:10:35

PROJECT INFORMATION

Company: GMD 3

Project: 20933

Location: Kearny County

Test Well: 20933

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
20933	-98376	369819

Observation Wells

Well Name	X (ft)	Y (ft)
□	-98376	369819
□ 20934	-102184	369964
□ 21528 ID4	-102098	372571
□ 21528 ID6	-99477	373559
□ 14344 ID6	-104761	369555
□ 14344 ID7	-104776	372461
□ 20928	-99461	375238
□ 20930	-96872	372590
□ 20932	-96561	368953
□ 20937	-96811	367086
□ 20935	-102238	367309
□ 20936	-99594	367315
□ Domestic 1	-103855	374230