

Evaluation of proposed move for Water Right No 25312

Proposed: Move water right no. 25312 a distance of 1346 ft to the northwest.



Wells within 1 mile: 25310 ID1, 25310 ID2, 25310 ID3, 25310 ID4, 25309 ID4, 25314 ID4, 25314 ID1, 21597 ID1, 28833 ID5, a domestic well in section 28-26-36, and a domestic well in section 21-26-36.

The saturated thickness at the proposed well location is estimated to be 253 ft, based upon an observation well in section 21-26-36 and the driller’s log at the proposed well location. For saturated thicknesses greater than 200 ft, the maximum allowable drawdown is 4.0 ft.

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

$S = 0.1823$, $T = 4159 \text{ ft}^2/\text{day}$, $tp_{\text{current}} = 143 \text{ days}$, $Q_{\text{current}} = 345 \text{ gpm}$, $tp_{\text{proposed}} = 66 \text{ days}$, $Q_{\text{proposed}} = 930 \text{ gpm}$

Theis drawdowns were calculated as follows:

- 25310 ID1:
 - Drawdown from current location = 1.78 ft
 - Drawdown from proposed location = 2.58 ft
 - Net drawdown = **0.8 ft**

- 25310 ID2:
 - Drawdown from current location = 1.68 ft
 - Drawdown from proposed location = 2.47 ft
 - Net drawdown = **0.8 ft**

25310 ID3: Drawdown from current location = 2.18 ft
Drawdown from proposed location = 3.63 ft
Net drawdown = **1.5 ft**

25310 ID4: Drawdown from current location = 2.65 ft
Drawdown from proposed location = 4.88 ft
Net drawdown = **2.2 ft**

25309 ID4: Drawdown from current location = 1.67 ft
Drawdown from proposed location = 2.35 ft
Net drawdown = **0.7 ft**

25314 ID4: Drawdown from current location = 2.69 ft
Drawdown from proposed location = 2.87 ft
Net drawdown = **0.2 ft**

25314 ID1: Drawdown from current location = 2.19 ft
Drawdown from proposed location = 2.81 ft
Net drawdown = **0.6 ft**

21597 ID1: Drawdown from current location = 2.16 ft
Drawdown from proposed location = 2.26 ft
Net drawdown = **0.1 ft**

28833 ID5: Drawdown from current location = 1.92 ft
Drawdown from proposed location = 2.66 ft
Net drawdown = **0.7 ft**

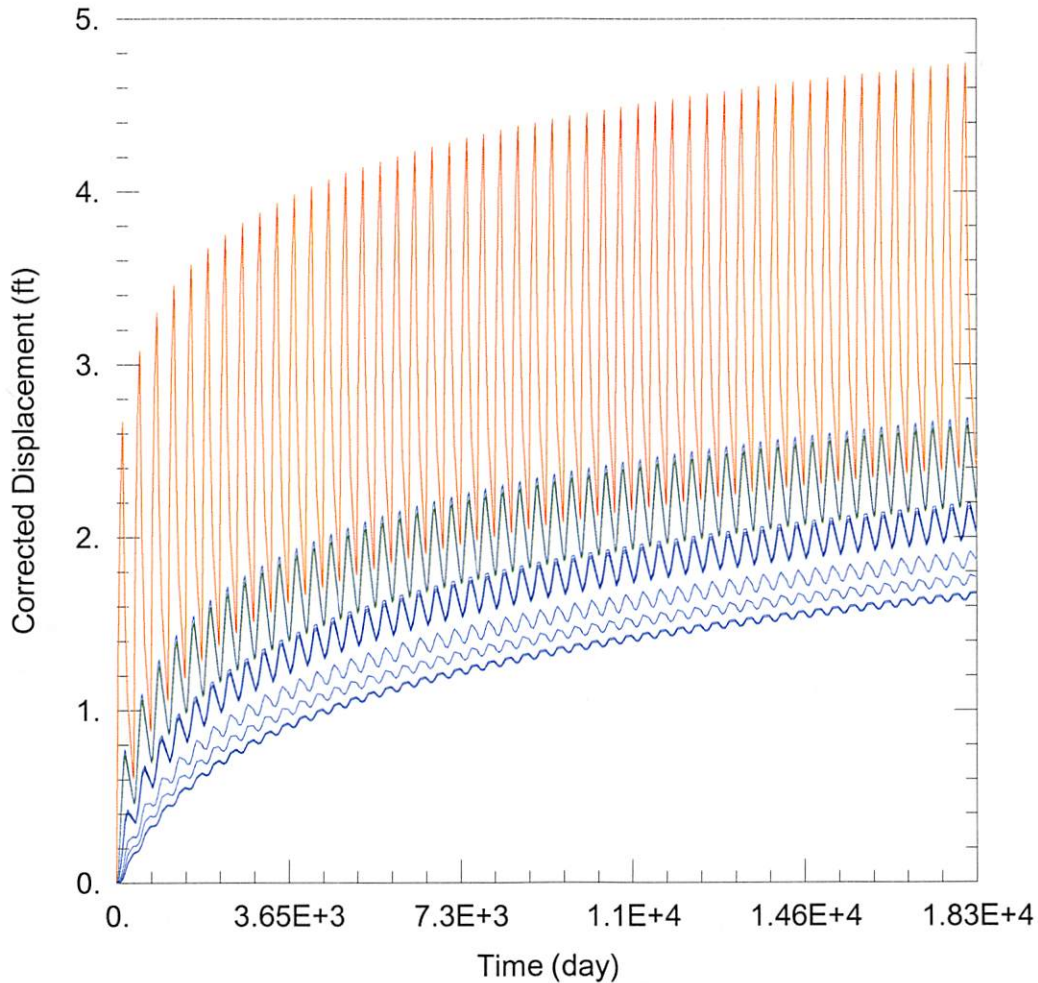
Domestic 28-26-36: Drawdown from current location = 4.75 ft
Drawdown from proposed location = 3.81
Net drawdown = **-0.9 ft**

Domestic 21-26-36: Drawdown from current location = 2.16 ft
Drawdown from proposed location = 3.16 ft
Net drawdown = **1.0 ft**

Net drawdown does not exceed the drawdown allowance on any neighboring wells, so critical well analysis is not necessary.

Conclusion:

This proposal will likely have a negligible effect on neighboring water rights. GMD3 staff recommends approval of the application.



WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2019_moves\25312\25312 Current.aqt

Date: 09/12/19

Time: 15:18:39

PROJECT INFORMATION

Company: GMD 3

Project: 25312

Location: Kearny County

Test Well: 25312

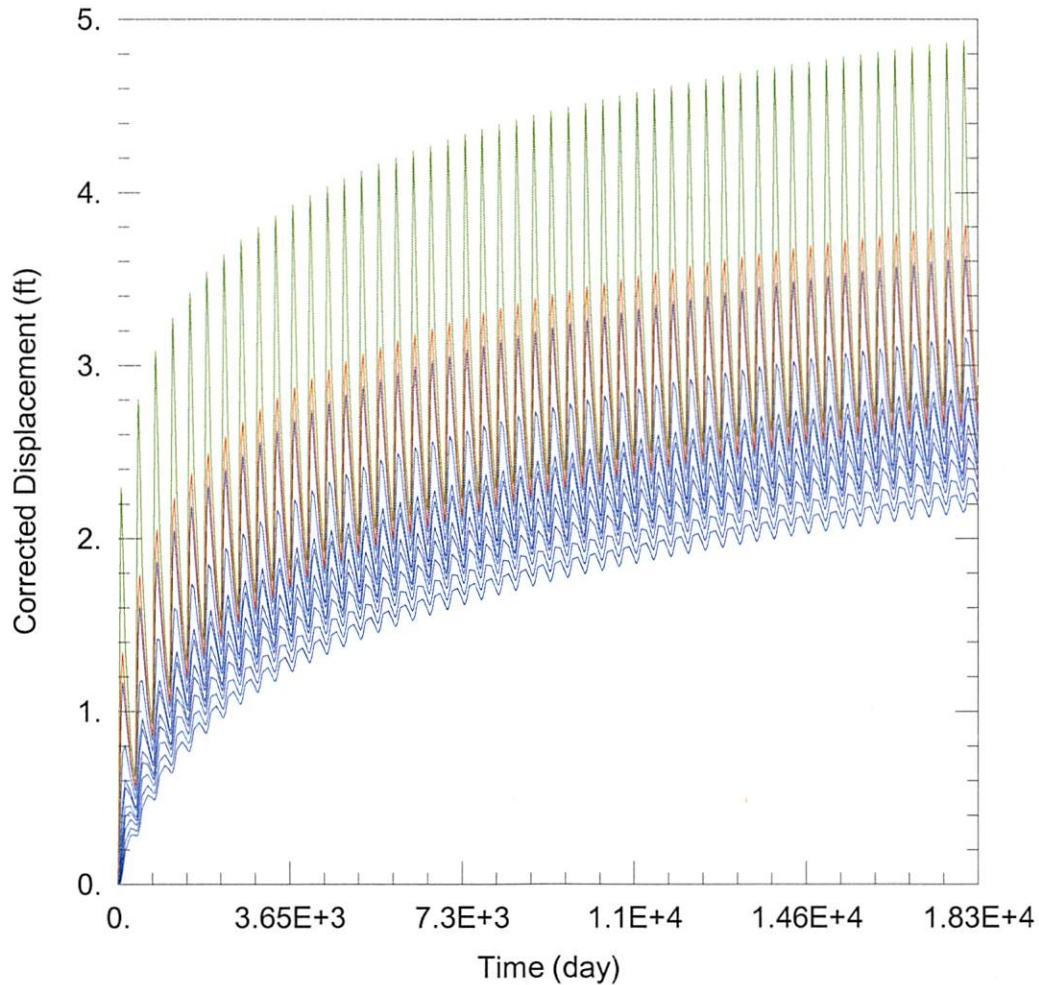
WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
25312	-132627	323152

Observation Wells

Well Name	X (ft)	Y (ft)
□	-132627	323152
□ 25310 ID1	-132578	328457
□ 25310 ID2	-135197	328368
□ 25310 ID3	-135215	325910
□ 25310 ID4	-132570	325894
□ 25309 ID4	-137861	325796
□ 25314 ID4	-129962	323146
□ 25314 ID1	-129870	325657
□ 21597 ID1	-129885	320488
□ 28833 ID5	-130880	327535
□ Domestic 28-26-36	-132274	322235
□ Domestic 21-26-36	-131582	326830



WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2019_moves\25312\25312 Proposed.aqt

Date: 09/12/19

Time: 15:18:49

PROJECT INFORMATION

Company: GMD 3

Project: 25312

Location: Kearny County

Test Well: 25312

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
25312	-133269	324335

Observation Wells

Well Name	X (ft)	Y (ft)
□	-133269	324335
□ 25310 ID1	-132578	328457
□ 25310 ID2	-135197	328368
□ 25310 ID3	-135215	325910
□ 25310 ID4	-132570	325894
□ 25309 ID4	-137861	325796
□ 25314 ID4	-129962	323146
□ 25314 ID1	-129870	325657
□ 21597 ID1	-129885	320488
□ 28833 ID5	-130880	327535
□ Domestic 28-26-36	-132274	322235
□ Domestic 21-26-36	-131582	326830