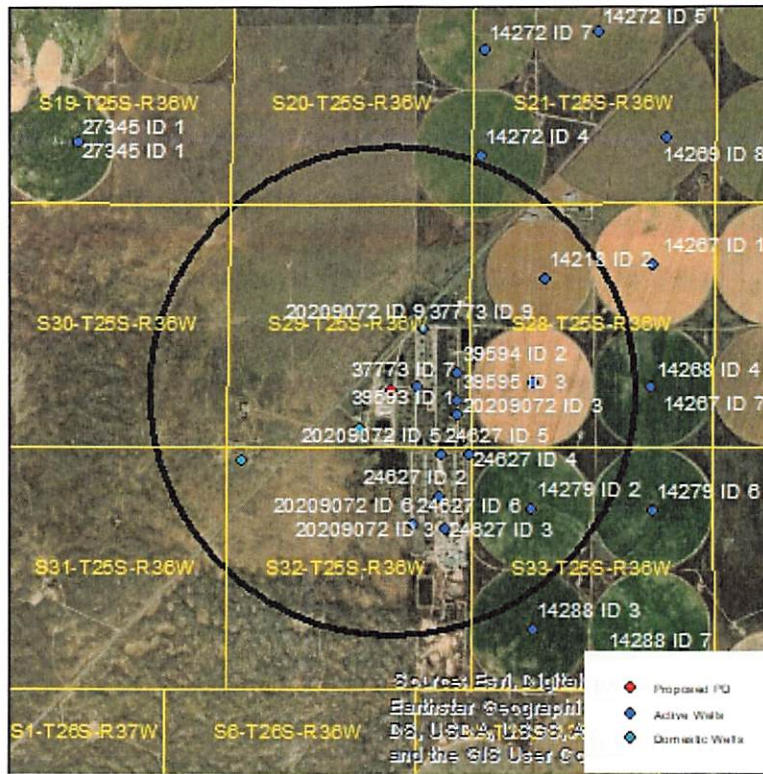


Evaluation of proposed move for Water Right Nos. 14298 & 37773

Proposed: Move water right nos. 14298 & 37773 to a new well location 541 ft to the southwest.



Wells within 1 mile: 37773, 39593, 39594, 39595, 24627 ID2, 24627 ID3, 24627 ID4, 24627 ID5, 24627 ID6, 14218, 14268, 14279, a domestic well in section 29-25-36, and a domestic well in section 32-25-36.

The saturated thickness at the proposed well location is estimated to be 187 ft, based upon 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:

$S = 0.1093, T = 7923.1 \text{ ft}^2/\text{day},$

$t_{p_{\text{current}}} = 63 \text{ days (based on average use and reported rate)}, Q_{\text{current}} = 100 \text{ gpm (last reported rate)},$

$t_{p_{\text{proposed}}} = 139 \text{ days}, Q_{\text{proposed}} = 106 \text{ gpm}$

Theis drawdowns were calculated as follows:

37773: Drawdown from current location = 0.52 ft
 Drawdown from proposed location = 0.81 ft
 Net drawdown = **0.3 ft**

39593: Drawdown from current location = 0.58 ft
 Drawdown from proposed location = 0.81 ft
 Net drawdown = **0.2 ft**

39594: Drawdown from current location = 0.62 ft
Drawdown from proposed location = 0.81 ft
Net drawdown = **0.2 ft**

39595: Drawdown from current location = 0.63 ft
Drawdown from proposed location = 0.83 ft
Net drawdown = **0.2 ft**

24627 ID2: Drawdown from current location = 0.31 ft
Drawdown from proposed location = 0.61 ft
Net drawdown = **0.3 ft**

24627 ID3: Drawdown from current location = 0.26 ft
Drawdown from proposed location = 0.54 ft
Net drawdown = **0.3 ft**

24627 ID4: Drawdown from current location = 0.39 ft
Drawdown from proposed location = 0.67 ft
Net drawdown = **0.3 ft**

24627 ID5: Drawdown from current location = 0.44 ft
Drawdown from proposed location = 0.75 ft
Net drawdown = **0.3 ft**

24627 ID6: Drawdown from current location = 0.27 ft
Drawdown from proposed location = 0.57 ft
Net drawdown = **0.3 ft**

14218: Drawdown from current location = 0.22 ft
Drawdown from proposed location = 0.46 ft
Net drawdown = **0.2 ft**

14268: Drawdown from current location = 0.30 ft
Drawdown from proposed location = 0.55 ft
Net drawdown = **0.2 ft**

14279: Drawdown from current location = 0.23 ft
Drawdown from proposed location = 0.47 ft
Net drawdown = **0.2 ft**

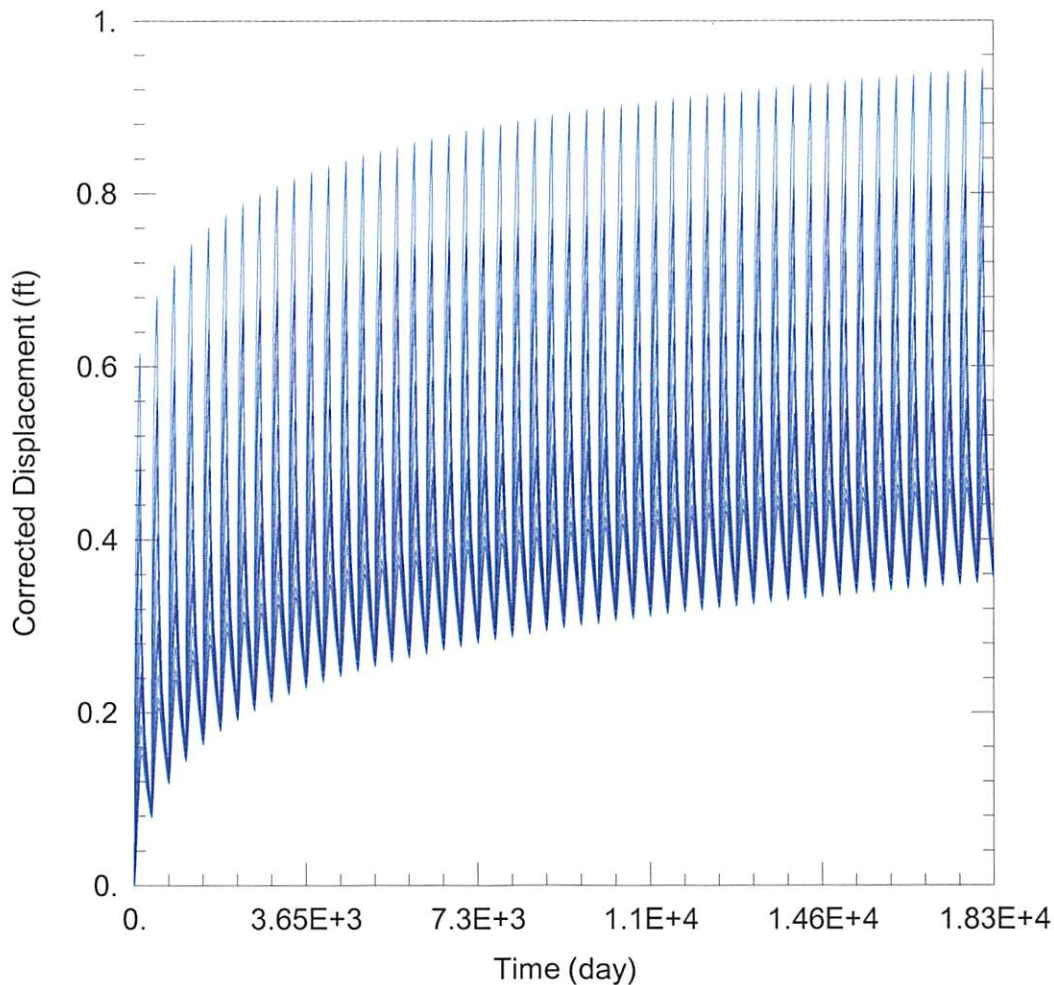
Domestic 29-25-36: Drawdown from current location = 0.45 ft
Drawdown from proposed location = 0.94 ft
Net drawdown = **0.5 ft**

Domestic 32-25-36: Drawdown from current location = 0.21 ft
Drawdown from proposed location = 0.50 ft
Net drawdown = **0.3 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\14298_37773\14298 & 37773 Proposed.aqt

Date: 10/29/21

Time: 14:51:29

PROJECT INFORMATION

Company: GMD 3

Project: 14298 & 37773

Location: Kearny County

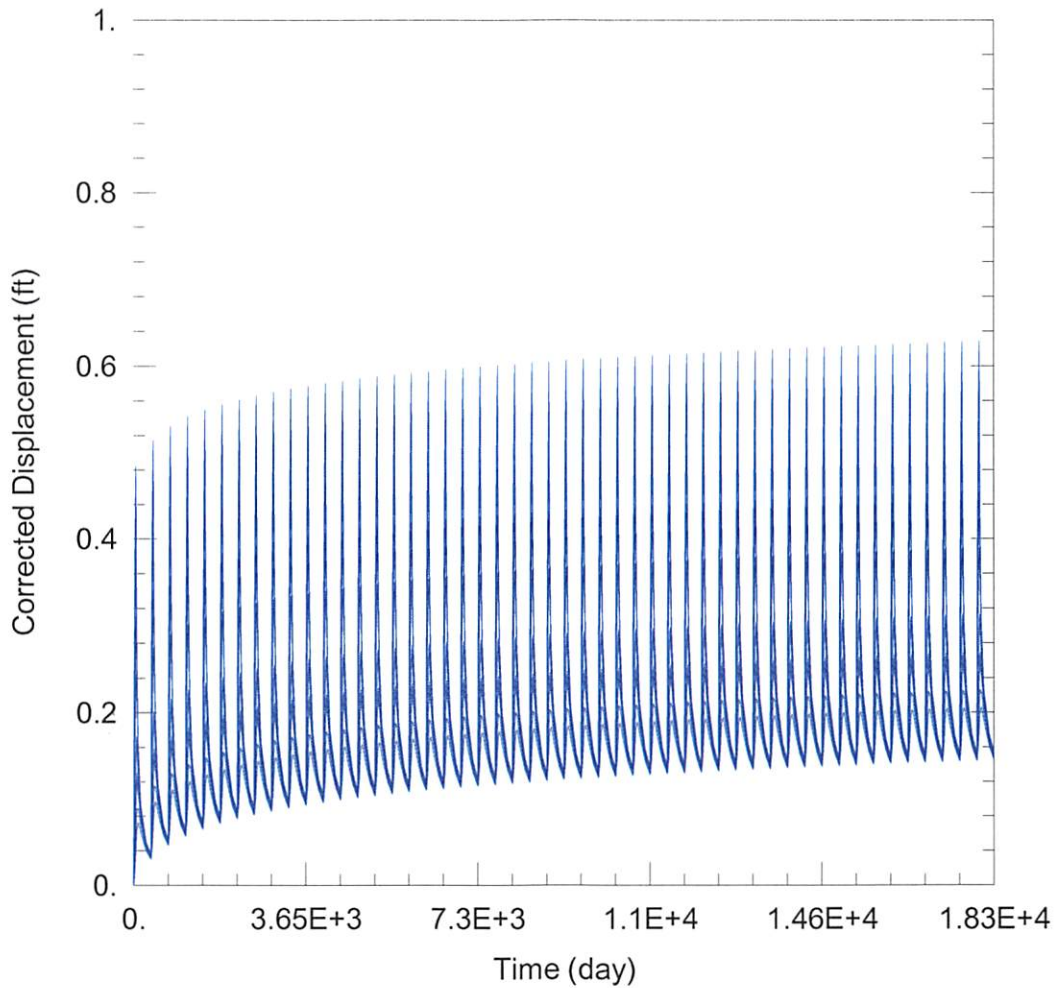
WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
14298 & 37773	-142217	353951

Observation Wells

Well Name	X (ft)	Y (ft)
□	-142217	353951
□ 37773	-141522	355283
□ 39593	-140790	353422
□ 39594	-140785	354358
□ 39595	-140788	353750
□ 24627 ID2	-141175	351655
□ 24627 ID3	-141063	350969
□ 24627 ID4	-140534	352565
□ 24627 ID5	-141141	352558
□ 24627 ID6	-141755	351057
□ 14218	-138898	356381
□ 14268	-139140	354128
□ 14279	-139183	351411
□ Domestic 29-25-36	-142925	353146



WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2021_Moves\14298_37773\14298 & 37773 Current.aqt
 Date: 10/29/21 Time: 14:51:36

PROJECT INFORMATION

Company: GMD 3
 Project: 14298 & 37773
 Location: Kearny County

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
14298 & 37773	-141682	354032

Observation Wells

Well Name	X (ft)	Y (ft)
□	-141682	354032
□ 37773	-141522	355283
□ 39593	-140790	353422
□ 39594	-140785	354358
□ 39595	-140788	353750
□ 24627 ID2	-141175	351655
□ 24627 ID3	-141063	350969
□ 24627 ID4	-140534	352565
□ 24627 ID5	-141141	352558
□ 24627 ID6	-141755	351057
□ 14218	-138898	356381
□ 14268	-139140	354128
□ 14279	-139183	351411
□ Domestic 29-25-36	-142925	353146