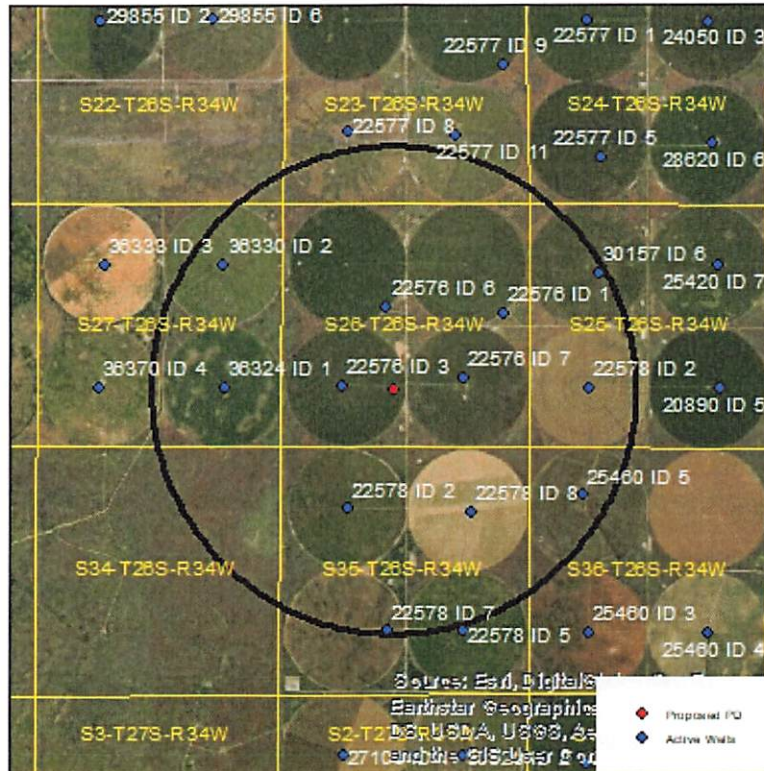


Evaluation of proposed move for Water Right No. 22576 D2

Proposed: Move water right no. 22576 D2 ID3 a distance of 1,141 ft to the east.



Wells within 1 mile: 22576 ID1, 22576 ID6, 22576 ID7, 36330, 36324, 30157, 22578 ID2 (sec 25), 22578 ID2 (sec 35), 22578 ID7, 22578 ID8, and 25460.

The saturated thickness at the proposed well location is estimated to be 218 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:

$S = 0.1218$, $T = 18,630 \text{ ft}^2/\text{day}$,

$tp_{\text{current}} = 186$ days (based on observed rate and average use), $Q_{\text{current}} = 276$ gpm (based on 2019 field inspection), $tp_{\text{proposed}} = 64$ days, $Q_{\text{proposed}} = 965$ gpm

Theis drawdowns were calculated as follows:

22576 ID1: Drawdown from current location = 0.83 ft
Drawdown from proposed location = 1.51 ft
Net drawdown = **0.7 ft**

22576 ID6: Drawdown from current location = 1.13 ft
Drawdown from proposed location = 2.20 ft
Net drawdown = **1.1 ft**

22576 ID7: Drawdown from current location = 0.99 ft
Drawdown from proposed location = 2.41 ft
Net drawdown = **1.4 ft**

36330: Drawdown from current location = 0.85 ft
Drawdown from proposed location = 1.07 ft
Net drawdown = **0.2 ft**

36324: Drawdown from current location = 1.01 ft
Drawdown from proposed location = 1.27 ft
Net drawdown = **0.2 ft**

30157: Drawdown from current location = 0.65 ft
Drawdown from proposed location = 0.96 ft
Net drawdown = **0.3 ft**

22578 ID2 sec 25: Drawdown from current location = 0.70 ft
Drawdown from proposed location = 1.13 ft
Net drawdown = **0.4 ft**

22578 ID2 sec 35: Drawdown from current location = 0.98 ft
Drawdown from proposed location = 1.58 ft
Net drawdown = **0.6 ft**

22578 ID7: Drawdown from current location = 0.70 ft
Drawdown from proposed location = 0.95 ft
Net drawdown = **0.2 ft**

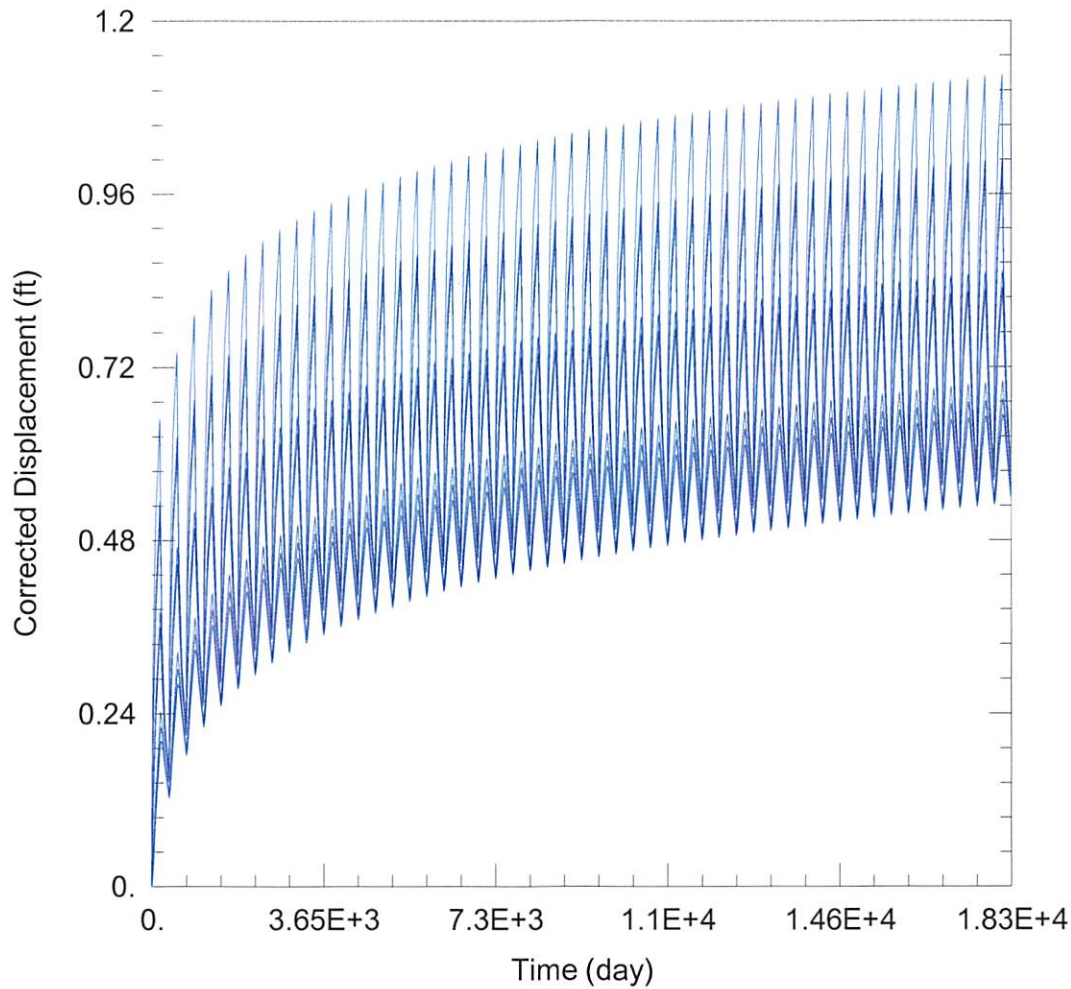
22578 ID8: Drawdown from current location = 0.82 ft
Drawdown from proposed location = 1.43 ft
Net drawdown = **0.6 ft**

25460: Drawdown from current location = 0.68 ft
Drawdown from proposed location = 1.04 ft
Net drawdown = **0.4 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\22576_D2\22576 Current.aqt

Date: 10/15/21

Time: 11:40:41

PROJECT INFORMATION

Company: GMD 3

Project: 22576 D2

Location: Finney County

WELL DATA

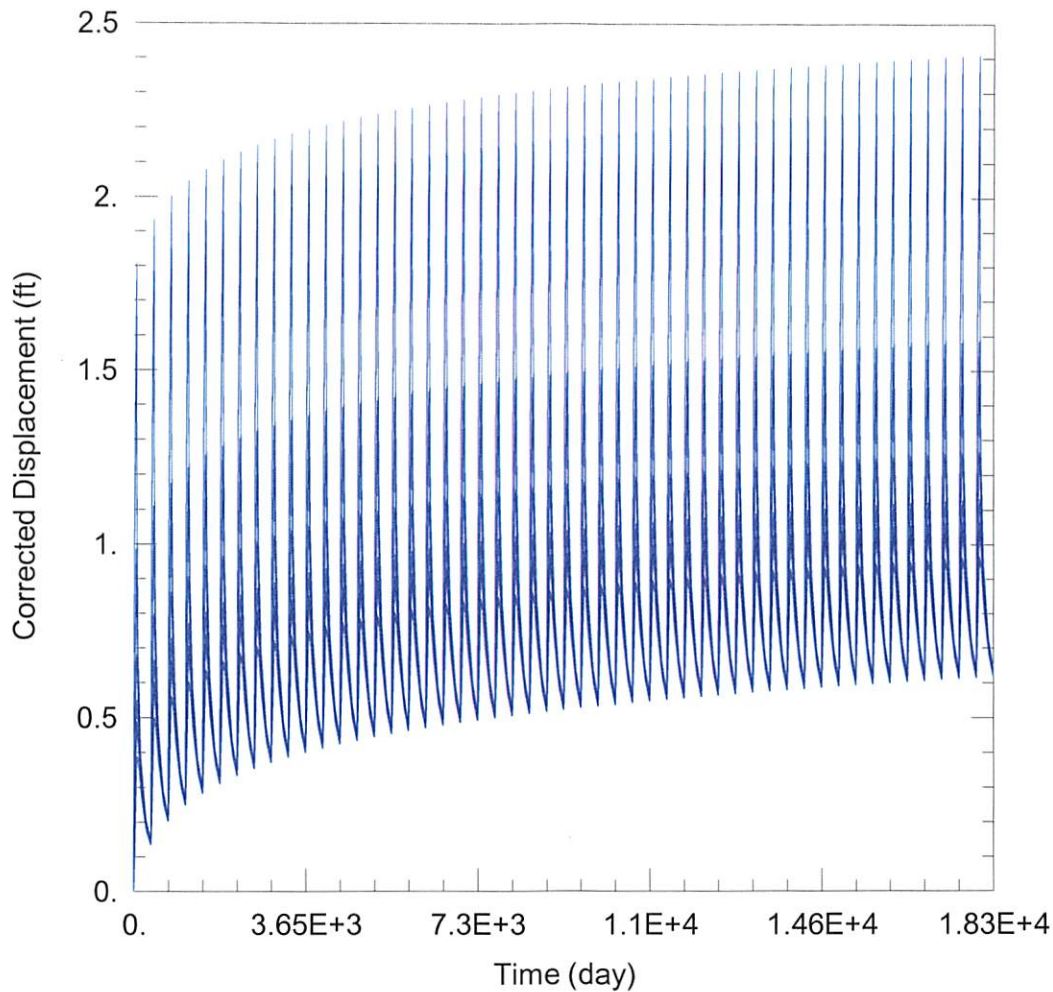
Pumping Wells

Well Name	X (ft)	Y (ft)
22576 ID3	-61569	320524

Observation Wells

Well Name	X (ft)	Y (ft)
□	-61569	320524
□ 22576 ID1	-58038	322093
□ 22576 ID6	-60582	322201
□ 22576 ID7	-58909	320693
□ 36330	-64136	323123
□ 36324	-64113	320475
□ 30157	-55955	322937
□ 22578 ID2 sec 25	-56162	320487
□ 22578 ID2 sec 35	-61430	317844
□ 22578 ID7	-60569	315205
□ 22578 ID8	-58741	317794
□ 25460	-56309	318149

SOLUTION



WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2021_Moves\22576_D2\22576 Proposed.aqt
 Date: 10/15/21 Time: 11:40:35

PROJECT INFORMATION

Company: GMD 3
 Project: 22576 D2
 Location: Finney County

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
22576 ID3	-60432	320423

Observation Wells

Well Name	X (ft)	Y (ft)
□	-60432	320423
□ 22576 ID1	-58038	322093
□ 22576 ID6	-60582	322201
□ 22576 ID7	-58909	320693
□ 36330	-64136	323123
□ 36324	-64113	320475
□ 30157	-55955	322937
□ 22578 ID2 sec 25	-56162	320487
□ 22578 ID2 sec 35	-61430	317844
□ 22578 ID7	-60569	315205
□ 22578 ID8	-58741	317794
□ 25460	-56309	318149

SOLUTION