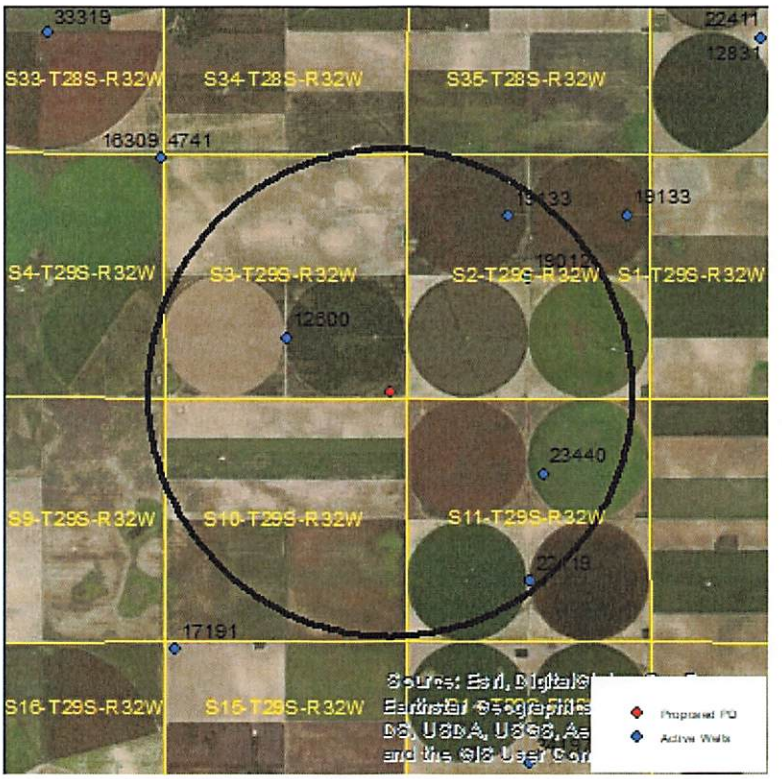
Evaluation of proposed move for Water Right No. 12600

Proposed: Move water right no. 12600 a distance of 2,532 ft to the southeast.



Wells within 1 mile: 19133, 19012, 23440, and 22119.

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 = 0.1852, T = 14,972 ft^2/day,

$tp_{current}$ = 132 days (based on average use and reported rate), $Q_{current}$ = 400 gpm (reported in 2012), $tp_{proposed}$ = 95 days, $Q_{proposed}$ = 1040 gpm

Theis drawdowns were calculated as follows:

19133: Drawdown from current location = 0.76 ft

Drawdown from proposed location = 1.62 ft

Net drawdown = **0.9 ft**

19012: Drawdown from current location = 0.77 ft

Drawdown from proposed location = 1.82 ft

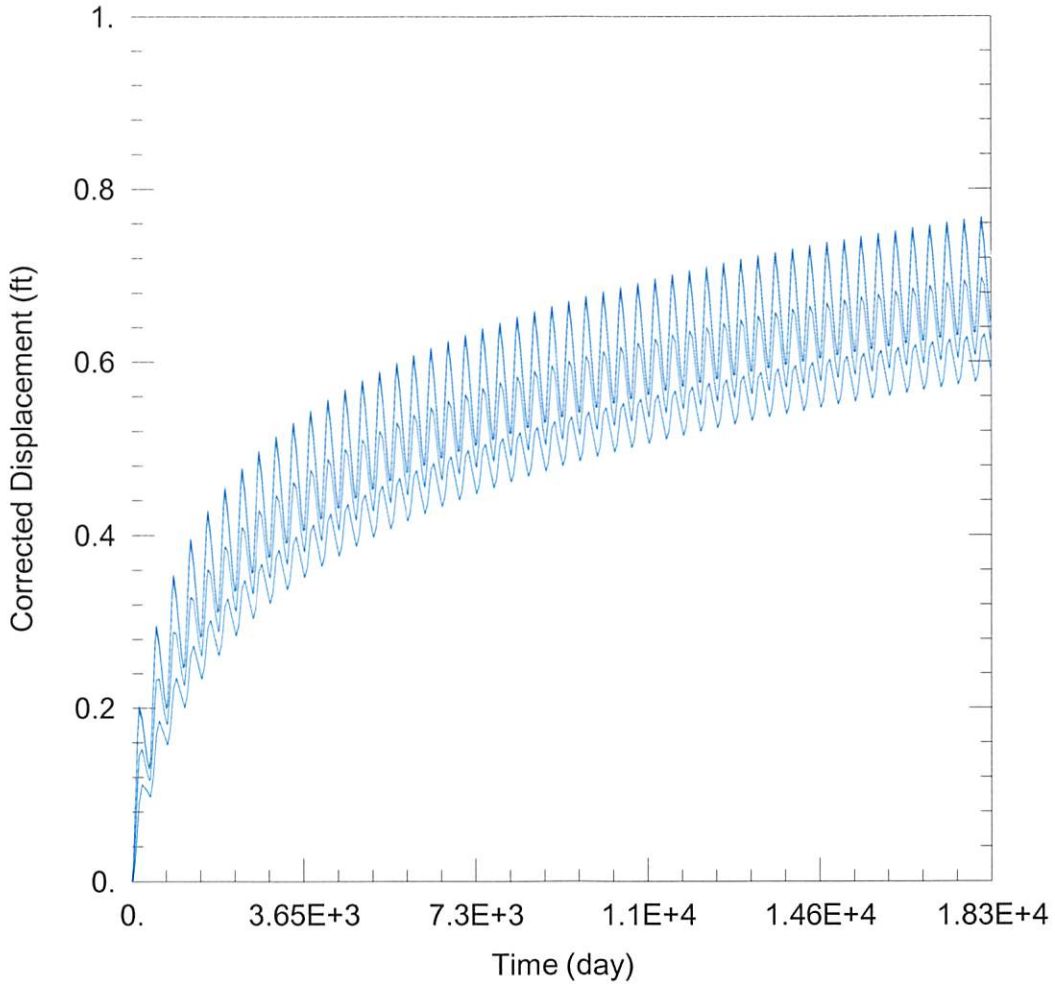
Net drawdown = **1.0 ft**

23440:	Drawdown from current location = 0.70 ft
	Drawdown from proposed location = 1.85 ft
	Net drawdown = **1.2 ft**
22119:	Drawdown from current location = 0.63 ft
	Drawdown from proposed location = 1.51 ft
	Net drawdown = **0.9 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\12600\12600 Current.aqt
Date: 12/10/21 Time: 16:23:48

PROJECT INFORMATION

Company: GMD 3
Project: 12600
Location: Haskell County

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
12600	-2306	246205

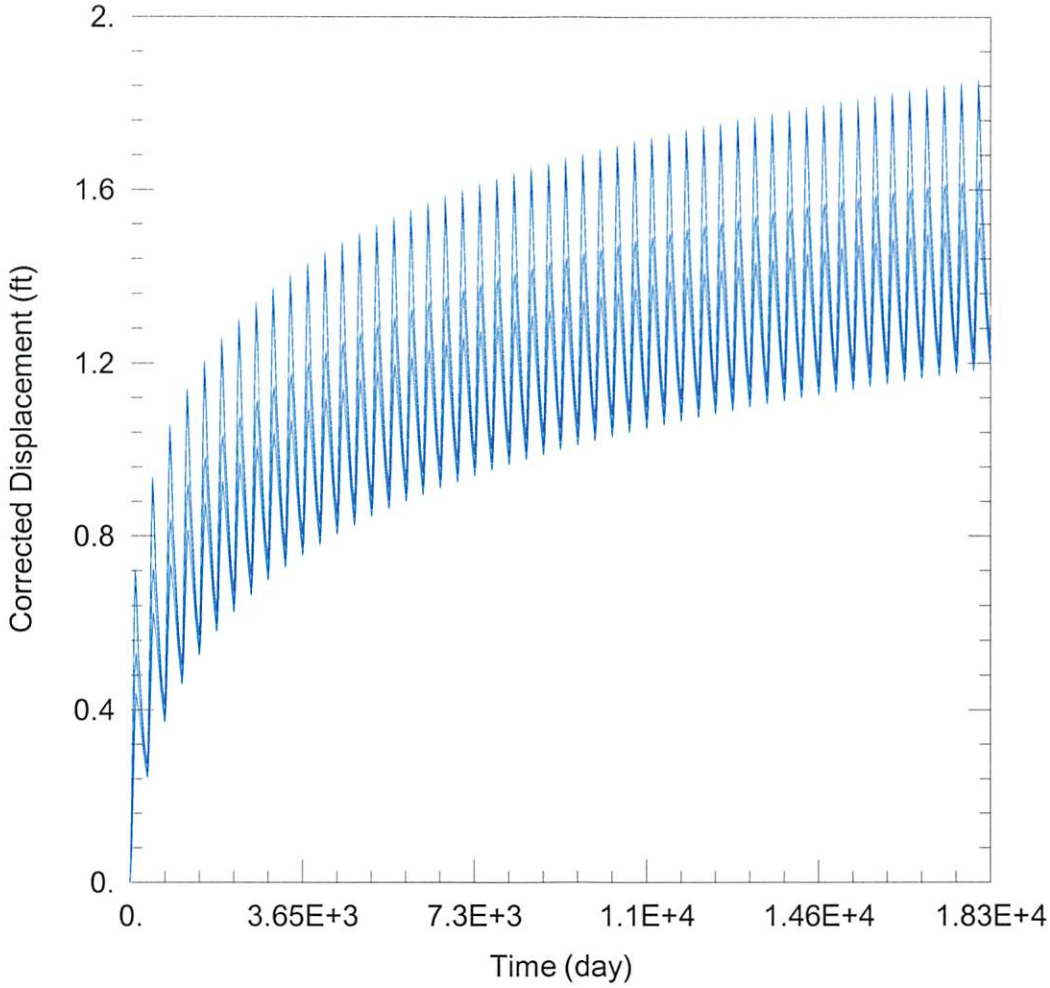
Observation Wells

Well Name	X (ft)	Y (ft)
▫	-2306	246205
▫ 19133	2506	248841
▫ 19012	2970	247494
▫ 23440	3289	243259
▫ 22119	2999	240943

SOLUTION

Aquifer Model: Unconfined
Solution Method: Theis

T = 1.497E+4 ft^2/day
S = 0.1852
Kz/Kr = 1.
b = 245. ft



WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2021_Moves\12600\12600 Proposed.aqt
Date: 12/10/21 Time: 16:23:42

PROJECT INFORMATION

Company: GMD 3
Project: 12600
Location: Haskell County

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
12600	-58	245040

Observation Wells

Well Name	X (ft)	Y (ft)
▫	-58	245040
▫ 19133	2506	248841
▫ 19012	2970	247494
▫ 23440	3289	243259
▫ 22119	2999	240943

SOLUTION

Aquifer Model: Unconfined
Solution Method: Theis

T = 1.497E+4 ft^2/day
S = 0.1852
Kz/Kr = 1.
b = 245. ft