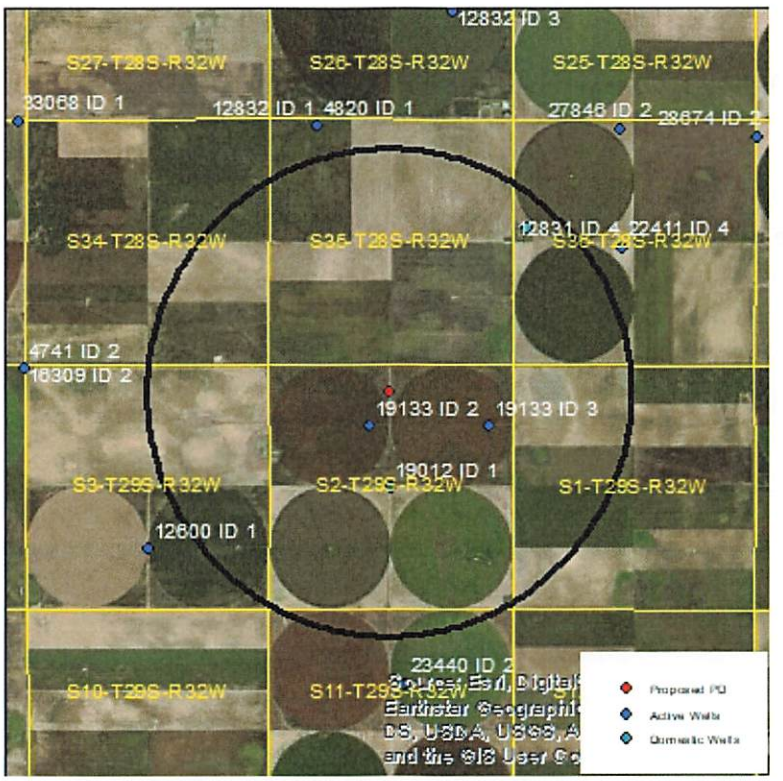
Evaluation of proposed move for Water Right No. 19133 ID2

Proposed: Move water right no. 19133 ID2 a distance of 862 ft to the northeast.



Wells within 1 mile: 19133 ID3, 19012, and a domestic well in section 36-28-32.

The saturated thickness at the proposed well location is estimated to be 243 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 = 0.1727, T = 15,619.5 ft^2/day,

$tp_{current}$ = 120 days (assumed), $Q_{current}$ = 319 gpm (based on average use and assumed time pumped), $tp_{proposed}$ = 72 days, $Q_{proposed}$ = 809 gpm

Theis drawdowns were calculated as follows:

19133 ID3:	Drawdown from current location = 0.88 ft
	Drawdown from proposed location = 1.62 ft
	Net drawdown = **0.7 ft**
19012:	Drawdown from current location = 1.23 ft
	Drawdown from proposed location = 1.75 ft
	Net drawdown = **0.5 ft**

Domestic 36-28-32: Drawdown from current location = 0.55 ft

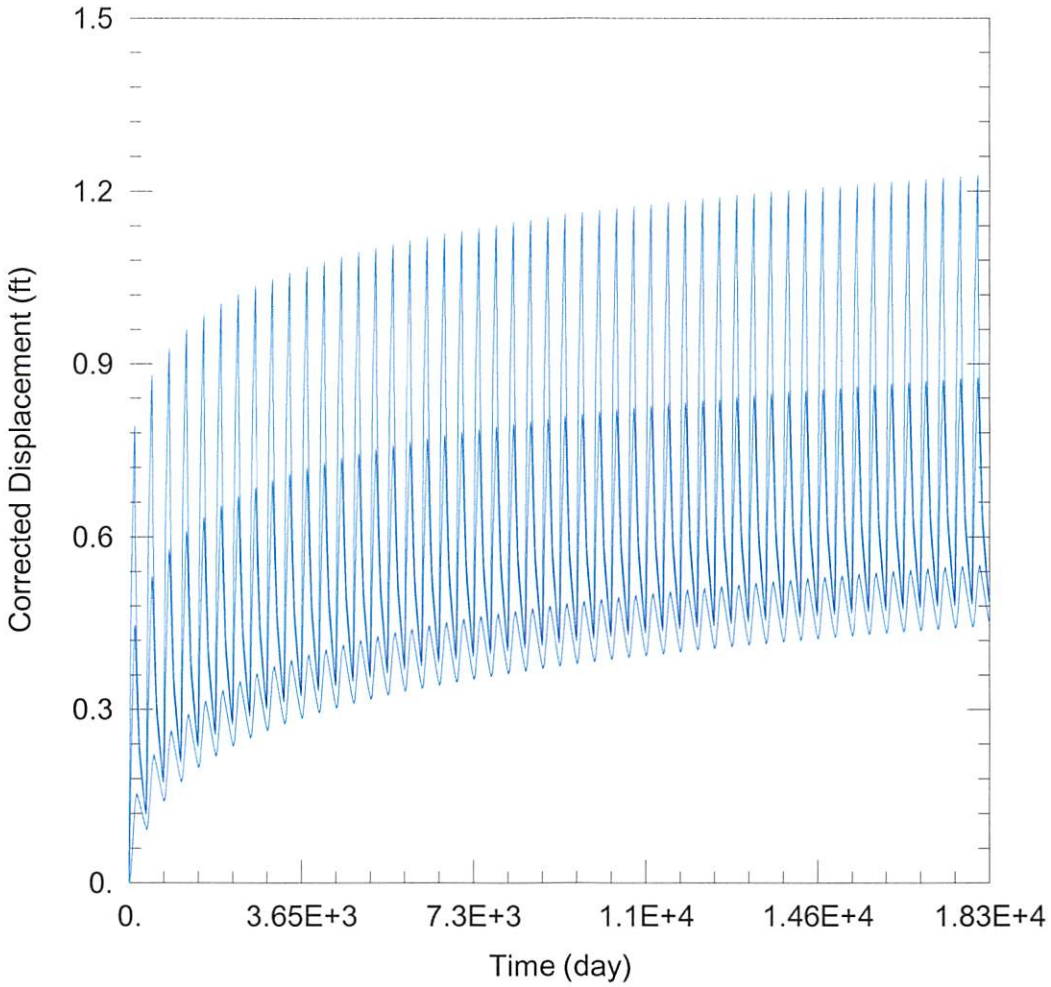
Drawdown from proposed location = 0.96 ft

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\19133\19133 Current.aqt
Date: 11/30/21 Time: 10:45:08

PROJECT INFORMATION

Company: GMD 3
Project: 19133
Location: Haskell County

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
19133 ID2	2506	248841

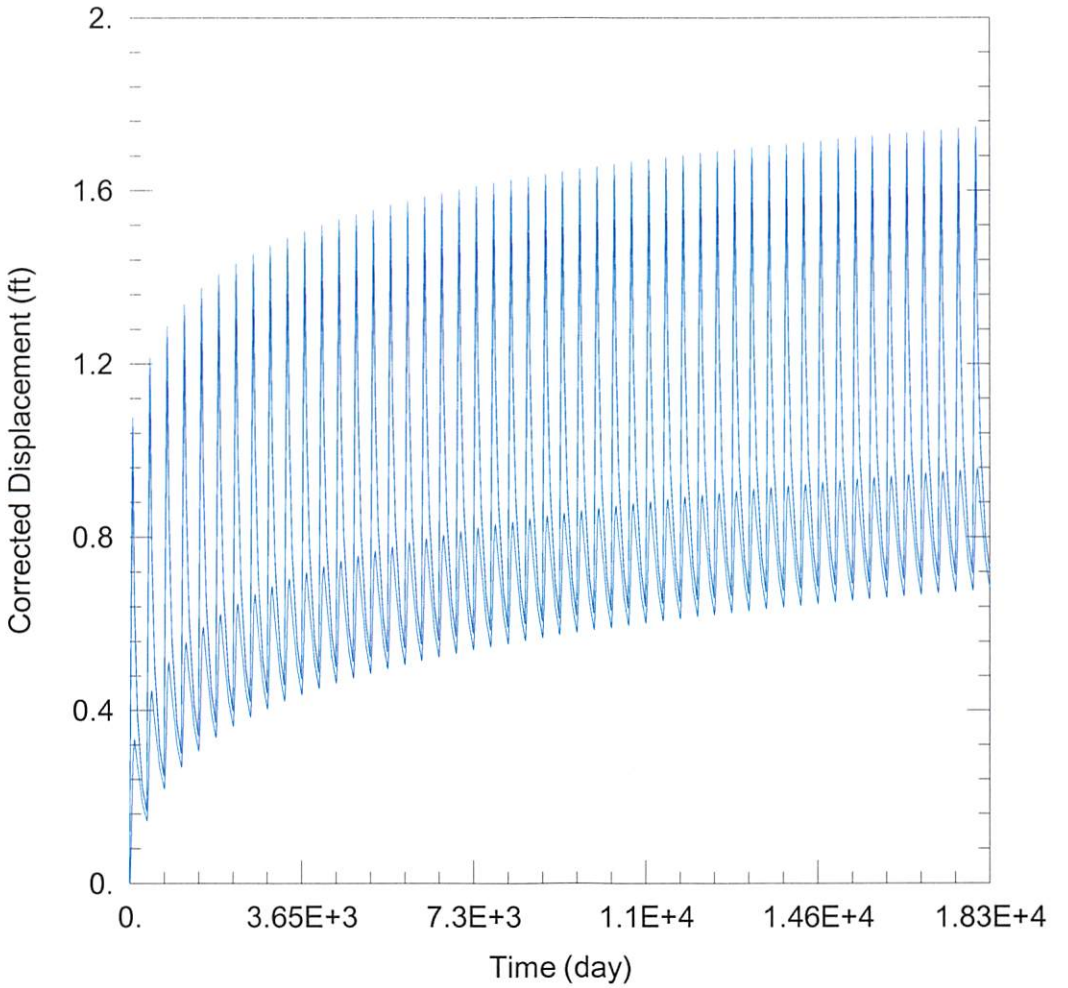
Observation Wells

Well Name	X (ft)	Y (ft)
▫	2506	248841
▫ 19133 ID3	5115	248849
▫ 19012	2970	247494
▫ Domestic 36-28-32	5902	253159

SOLUTION

Aquifer Model: Unconfined
Solution Method: Theis

T = 1.562E+4 ft^2/day
S = 0.1727
Kz/Kr = 1.
b = 243. ft



WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2021_Moves\19133\19133 Proposed.aqt
Date: 11/30/21 Time: 10:45:01

PROJECT INFORMATION

Company: GMD 3
Project: 19133
Location: Haskell County

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
19133 ID2	2919	249599

Observation Wells

Well Name	X (ft)	Y (ft)
▫	2919	249599
▫ 19133 ID3	5115	248849
▫ 19012	2970	247494
▫ Domestic 36-28-32	5902	253159

SOLUTION

Aquifer Model: Unconfined
Solution Method: Theis

T = 1.562E+4 ft^2/day
S = 0.1727
Kz/Kr = 1.
b = 243. ft