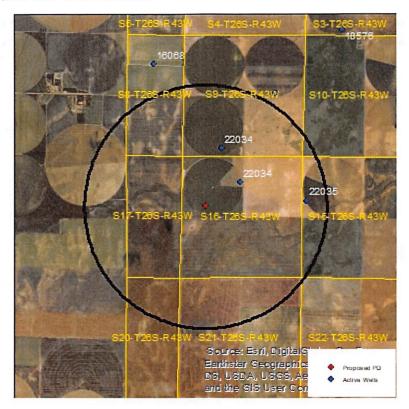
Evaluation of proposed move for Water Right No 22034

Proposed: Move the point of diversion authorized under water right no. 22034, located in section 16-26-43, a distance of 1,866 ft to the southwest.



Wells within 1 mile: 22034 (section 9) and 22035.

The saturated thickness at the proposed well location is estimated to be 145 ft, based upon the GMD3 model. For saturated thickness between 125 ft and 150 ft, the drawdown allowance is 3.0 ft.

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

S = 0.1441, $T = 5,620 \text{ ft}^2/\text{day}$, $tp_{current} = 207 \text{ days}$ (based upon average use and observed rate), $Q_{current} = 178 \text{ gpm}$ (based upon 2019 field inspection), $tp_{proposed} = 79 \text{ days}$, $Q_{proposed} = 780 \text{ gpm}$

Theis drawdowns were calculated as follows:

22034 (Section 9): Drawdown from current location = 2.05 ft

Drawdown from proposed location = 3.14 ft

Net drawdown = 1.1 ft

22035: Drawdown from current location = 1.57 ft

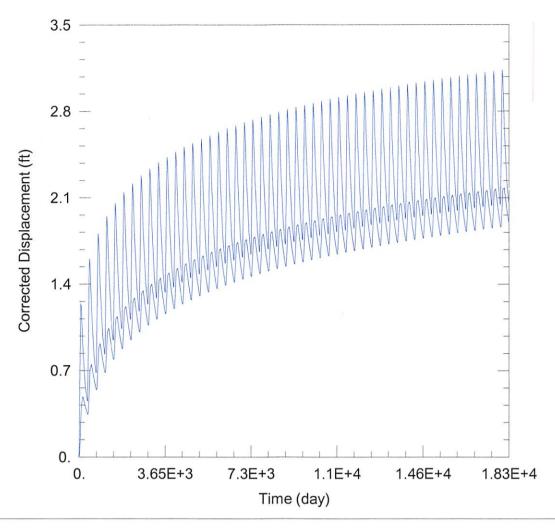
Drawdown from proposed location = 2.18 ft

Net drawdown = 0.6 ft

Net drawdown does not exceed the drawdown allowance of 3.0 ft for any wells within 1 mile of the proposed location. Therefore, critical well analysis is not necessary.

Conclusion:

Based upon information from the GMD3 model, this proposal will cause minimal effects on neighboring wells, and is unlikely to create an impairment. GMD3 staff recommends approval of the application.



WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2020_moves\22034\22034 Proposed.aqt

Time: 14:29:43 Date: 05/22/20

PROJECT INFORMATION

Company: GMD 3 Project: 22034

Location: Hamilton County
Test Well: 22034

WELL DATA

Pumping Wells		Observation Wells		
Well Name	X (ft)	Y (ft)	Well Name	X (ft)
22034 Section 16	-355834	335672	0	-35583
			□ 22034 Section 9	-35513

Well Name	X (ft)	Y (ft)
	-355834	335672
□ 22034 Section 9	-355139	338194
- 22035	-351446	335925

SOLUTION

Aquifer Model: Unconfined

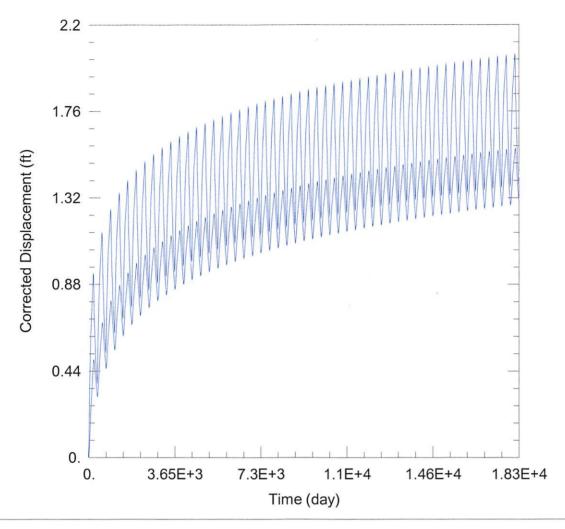
 $= 5620. \text{ ft}^2/\text{day}$

Kz/Kr = 1.

Solution Method: Theis

S = 0.1441

b = 145. ft



WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2020_moves\22034\22034 Current.aqt

Date: 05/22/20

Time: 14:29:52

PROJECT INFORMATION

Company: GMD 3 Project: 22034

Location: Hamilton County

Test Well: 22034

WELL DATA

ı uı	iping Wollo		
Well Name	X (ft)	Y (ft)	Well Name
22034 Section 16	-354294	336727	
			□ 22034 Sec

Pumping Wells

Observation Wells				
Well Name	X (ft)	Y (ft)		
0	-354294	336727		
 22034 Section 9 	-355139	338194		
- 22035	-351446	335925		

SOLUTION

Aquifer Model: Unconfined

= <u>5620</u>. ft²/day

Kz/Kr = 1.

Solution Method: Theis

S = 0.1441

b = 145. ft