#### Evaluation of proposed move for Water Right No. 27123

Proposed: Move water right no. 27123 to a new well location, a distance of 769 ft to the north.



Wells within 1 mile: FI102, FI101 & 17232, 12808 ID3, 12808 ID4, 2415, 28333, 14198 ID9 S33, 965 & 11544, 14198 ID4, FI105, 14198 ID9 S34, 27351, 28331, FI114 & 9795, and two domestic wells in section 33-23-33, a domestic well in section 34-23-33, and a domestic well in section 3-24-33.

The saturated thickness at the proposed well location is estimated to be 140.9 ft, based upon the GMD3 model. For saturated thickness between 125-150 ft, the drawdown allowance is 3.0 ft.

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

S = 0.1297, T = 12,341.29 ft<sup>2</sup>/day,  $tp_{current} = 33$  days (based on average use and observed rate),  $Q_{current} = 700$  gpm (based on 2020 water use report),  $tp_{proposed} = 36$  days,  $Q_{proposed} = 1440$  gpm

Theis drawdowns were calculated as follows:

FI102: Drawdown from current location = 0.49 ft

Drawdown from proposed location = 1.13 ft

Net drawdown = 0.6 ft

FI101 & 17232: Drawdown from current location = 0.45 ft

Drawdown from proposed location = 1.09 ft

Net drawdown = 0.6 ft

12808 ID3:	Drawdown from current location = 0.45 ft
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Drawdown from proposed location = 1.07 ft

Net drawdown = 0.6 ft

12808 ID4: Drawdown from current location = 0.73 ft

Drawdown from proposed location = 1.82 ft

Net drawdown = 1.1 ft

2415: Drawdown from current location = 0.54 ft

Drawdown from proposed location = 1.24 ft

Net drawdown = 0.7 ft

28333: Drawdown from current location = 0.55 ft

Drawdown from proposed location = 1.22 ft

Net drawdown = **0.7** ft

14198 ID9 S33: Drawdown from current location = 1.16 ft

Drawdown from proposed location = 2.37 ft

Net drawdown = 0.7 ft

965 & 11544: Drawdown from current location = 1.12 ft

Drawdown from proposed location = 2.91 ft

Net drawdown = 1.8 ft

14198 ID4: Drawdown from current location = 3.20 ft

Drawdown from proposed location = 5.0 ft

Net drawdown = 1.8 ft

FI105: Drawdown from current location = 1.61 ft

Drawdown from proposed location = 3.43 ft

Net drawdown = 1.8 ft

14198 ID9 S34: Drawdown from current location = 1.29 ft

Drawdown from proposed location = 2.39 ft

Net drawdown = 1.1 ft

27351: Drawdown from current location = 0.52 ft

Drawdown from proposed location = 1.20 ft

Net drawdown = 0.7 ft

28331: Drawdown from current location = 0.60 ft

Drawdown from proposed location = 1.23 ft

Net drawdown = 0.6 ft

FI114 & 9795: Drawdown from current location = 0.57 ft

Drawdown from proposed location = 1.21 ft

Net drawdown = 0.6 ft

Domestic 1 33-23-33: Drawdown from current location = 1.15 ft

Drawdown from proposed location = 2.77 ft

Net drawdown = 1.6 ft

Domestic 2 33-23-33: Drawdown from current location = 1.41 ft

Drawdown from proposed location = 3.02 ft

Net drawdown = 1.6 ft

Domestic 34-23-33: Drawdown from current location = 0.53 ft

Drawdown from proposed location = 1.2 ft

Net drawdown = 0.6 ft

Domestic 3-24-33: Drawdown from current location = 0.49 ft

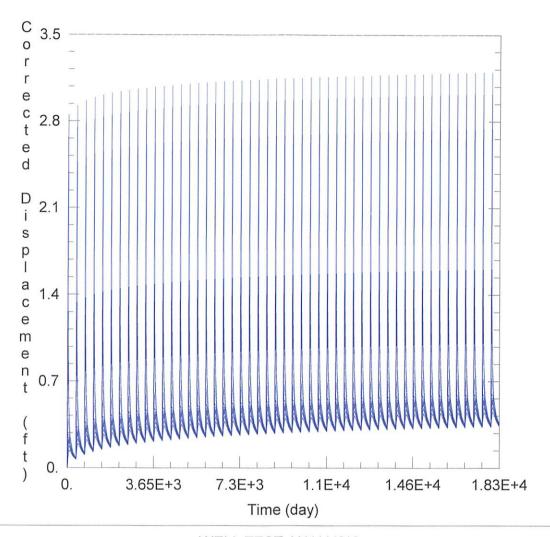
Drawdown from proposed location = 1.05 ft

Net drawdown = 0.6 ft

Net drawdown does not exceed the drawdown allowance of 3.0 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 appears unlikely to cause impairment. Any concerned neighbors should contact GMD3 at (620) 275-7147 or the Division of Water Resources at (620) 276-2901.



### WELL TEST ANALYSIS

Data Set: C:\Users\scanstation\Documents\move requests\27123\27123 current.aqt

Date: 05/23/24 Time: 16:38:05

### PROJECT INFORMATION

Project: 41295\_42758 Test Well: 27123

# WELL DATA

□ FI 114 & 9795

Pumping Wells

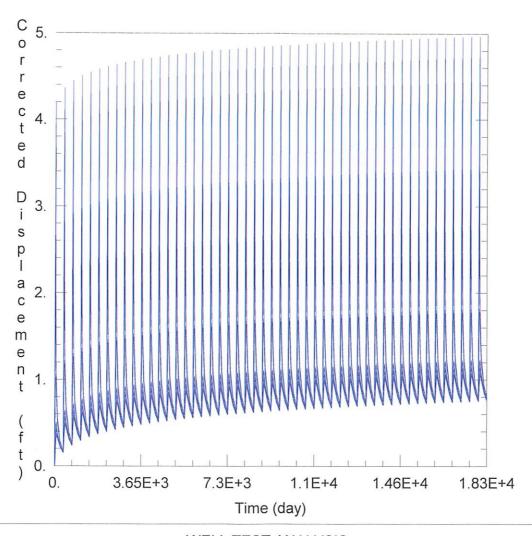
r arriping vvens			
Well Name	X (ft)	Y (ft)	
27123	-38797	413658	

Well Name	X (ft)	Y (ft)
	-38797	413658
□ FI 102	-42743	416410
□ FI 101 & 17232	-38845	418906
□ 12808 ID 3	-37407	418831
□ 12808 ID 4	-37411	416428
<b>2415</b>	-42766	414921
<b>28333</b>	-42832	413085
<b>14198</b>	-40642	413213
<ul><li>11544 &amp; 965</li></ul>	-37441	415066
□ 14198 ID4	-39086	413225
□ FI 105	-37414	413704
□ 14198 ID9	-37678	412353
<b>27351</b>	-34647	415091
<b>28331</b>	-39955	410139

**Observation Wells** 

-36179

410749



### WELL TEST ANALYSIS

Data Set: C:\Users\scanstation\Documents\move requests\27123\27123 proposed.aqt

Date: 05/23/24 Time: 16:36:53

### PROJECT INFORMATION

Project: 41295 42758 Test Well: 27123

27123

# WELL DATA

Pumping Wells Well Name X (ft) Y (ft) -38784 414054

ation from	
X (ft)	Y (ft)
-38784	414054
-42743	416410
-38845	418906
-37407	418831
-37411	416428
-42766	414921
-42832	413085
-40642	413213
-37441	415066
-39086	413225
-37414	413704
-37678	412353
-34647	415091
-39955	410139
-36179	410749
	-38784 -42743 -38845 -37407 -37411 -42766 -42832 -40642 -37441 -39086 -37414 -37678 -34647 -39955

**Observation Wells**