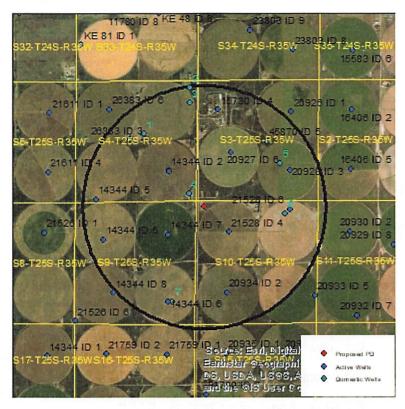
Evaluation of proposed move for Water Right No 21528 ID4

Proposed: Move water right no. 21528 ID4 a distance of 1,542 ft to the northwest.



Wells within 1 mile: 21528 ID6, 20934 ID2, 20928 ID3, 20927 ID6, 15730 ID4, 45870 ID5, 26383 ID3, 14344 Section 4 ID2, 14344 Section 4 ID5, 14344 Section 9 ID5, 14344 Section 9 ID6, 14344 Section 9 ID 7, and 7 domestic wells, numbered on the above map.

The saturated thickness at the proposed well location is estimated to be 238 ft, based upon an observation well in section 10-25-35 and the driller's log. 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 = 0.1685, T = 19,797 ft²/day, $tp_{current} = 107$ days (based upon average use and observed rate), $Q_{current} = 519$ gpm (based upon 2014 field inspection), $tp_{proposed} = 107$ days, $Q_{proposed} = 830$ gpm

Theis drawdowns were calculated as follows:

21528 ID6:

Drawdown from current location = 1.07 ft

Drawdown from proposed location = 1.05 ft

Net drawdown = 0.0 ft

Drawdown from proposed location = 1.02 ft

Net drawdown = -0.1 ft

20928 ID3: Drawdown from current location = 0.89 ft

Drawdown from proposed location = 0.98 ft

Net drawdown = **0.1 ft**

20927 ID6: Drawdown from current location = 0.94 ft

Drawdown from proposed location = 1.34 ft

Net drawdown = **0.4 ft**

15730 ID4: Drawdown from current location = 0.70 ft

Drawdown from proposed location = 0.94 ft

Net drawdown = **0.2** ft

45870 ID5: Drawdown from current location = 0.82 ft

Drawdown from proposed location = 1.00 ft

Net drawdown = **0.2** ft

26383 ID3: Drawdown from current location = 0.66 ft

Drawdown from proposed location = 0.92 ft

Net drawdown = 0.3 ft

14344 S4 ID2: Drawdown from current location = 0.90 ft

Drawdown from proposed location = 1.55 ft

Net drawdown = **0.7 ft**

14344 S4 ID5: Drawdown from current location = 0.65 ft

Drawdown from proposed location = 0.86 ft

Net drawdown = 0.2 ft

14344 S9 ID5: Drawdown from current location = 0.69 ft

Drawdown from proposed location = 0.88 ft

Net drawdown = 0.2 ft

14344 S9 ID6: Drawdown from current location = 0.85 ft

Drawdown from proposed location = 0.92 ft

Net drawdown = **0.1** ft

14344 S9 ID7: Drawdown from current location = 1.10 ft

Drawdown from proposed location = 1.66 ft

Net drawdown = **0.6** ft

Domestic 1: Drawdown from current location = 0.68 ft

Drawdown from proposed location = 0.97 ft

Net drawdown = 0.3 ft

Domestic 2: Drawdown from current location = 0.62 ft

Drawdown from proposed location = 0.80 ft

Net drawdown = **0.2** ft

Domestic 3: Drawdown from current location = 0.66 ft

Drawdown from proposed location = 0.89 ft

Net drawdown = 0.2 ft

Domestic 4: Drawdown from current location = 1.18 ft

Drawdown from proposed location = 2.66 ft

Net drawdown = 1.5 ft

Domestic 5: Drawdown from current location = 0.90 ft

Drawdown from proposed location = 1.03 ft

Net drawdown = **0.1 ft**

Domestic 6: Drawdown from current location = 1.14 ft

Drawdown from proposed location = 1.09 ft

Net drawdown = **0.0** ft

Domestic 7: Drawdown from current location = 0.87 ft

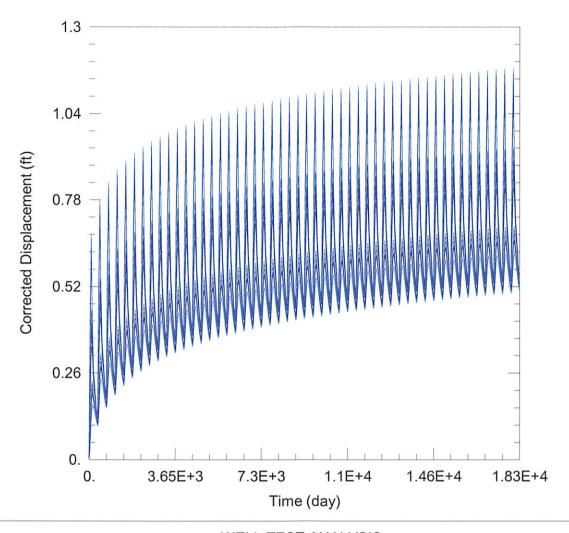
Drawdown from proposed location = 0.93 ft

Net drawdown = 0.1 ft

Net drawdown does not exceed the drawdown allowance of 4.0 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

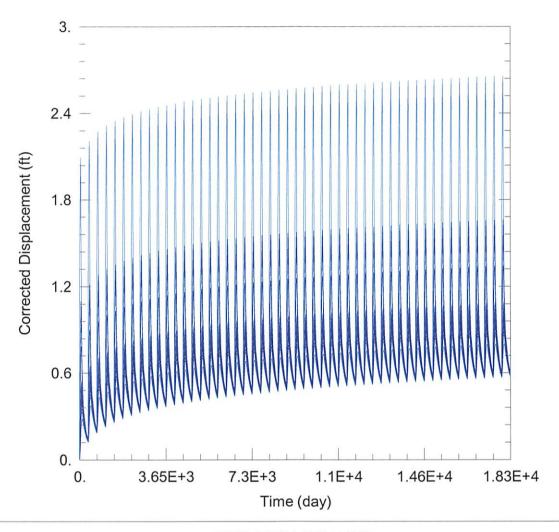
PROJECT INFORMATION

Company: GMD 3 Project: 21528 ID4 Location: Kearny County
Test Well: 21528 ID4

WELL DATA

Pumping Wells				
Well Name	X (ft)	Y (ft)		
21528 ID4	-102098	372571		

Observation Wells				
Well Name	X (ft)	Y (ft)		
	-102098	372571		
□ 21528 ID6	-99477	373559		
□ 20934 ID2	-102184	369964		
□ 20928 ID3	-99461	375238		
□ 20927 ID6	-102033	376027		
□ 15730 ID4	-102571	377868		
□ 45870 ID5	-100453	376505		
□ 26383 ID3	-106413	376575		
□ 14344 S4 ID2	-104719	375210		
□ 14344 S4 ID5	-107898	373978		
□ 14344 S9 ID5	-107556	372246		
□ 14344 S9 ID6	-104761	369555		
□ 14344 S9 ID7	-104776	372461		



WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2020_moves\21528\21528 Proposed.aqt

Date: 07/14/20 Time: 15:51:33

PROJECT INFORMATION

Company: GMD 3
Project: 21528 ID4
Location: Kearny County
Test Well: 21528 ID4

WELL DATA

Pumping Wells			
Well Name	X (ft)	Y (ft)	
21528 ID4	-103193	373657	

Observation Wells				
Well Name	X (ft)	Y (ft)		
	-103193	373657		
□ 21528 ID6	-99477	373559		
□ 20934 ID2	-102184	369964		
□ 20928 ID3	-99461	375238		
□ 20927 ID6	-102033	376027		
□ 15730 ID4	-102571	377868		
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