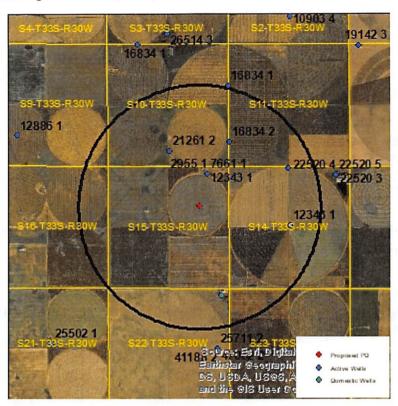
### Evaluation of proposed move for Water Right Nos 2955, 7661, and 12343

Proposed: Move water right nos. 2955, 7661, and 12343 a distance of 1456 ft to the southwest.



Wells within 1 mile: 21261, 16834, 22520, 12343, and a domestic well in section 22-33-30.

The saturated thickness at the proposed well location is estimated to be 279 ft, based upon an observation well in section 22-33-30 and the driller's log at the proposed well location. For saturated thicknesses greater than 200 ft, the drawdown allowance is 4.0 ft.

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

$$S = 0.1119$$
,  $T = 12,601$  ft<sup>2</sup>/day, tp<sub>current</sub> = 122 days, Q<sub>current</sub> = 509 gpm, tp<sub>proposed</sub> = 108 days,

Q<sub>proposed</sub> = 1100 gpm

Theis drawdowns were calculated as follows:

21261: Drawdown from current location = 2.22 ft

Drawdown from proposed location = 3.60 ft

Net drawdown = 1.4 t

16834: Drawdown from current location = 2.38 ft

Drawdown from proposed location = 3.31 ft

Net drawdown = 0.9 ft

22520: Drawdown from current location = 1.56 ft

Drawdown from proposed location = 2.73 ft

Net drawdown = 1.2 ft

12343: Drawdown from current location = 1.40 ft

Drawdown from proposed location = 2.82 ft

Net drawdown = 1.4 ft

Domestic 22-33-30: Drawdown from current location = 1.20 ft

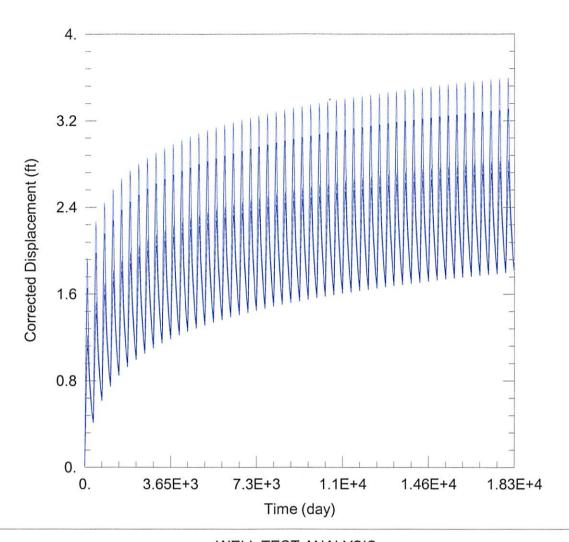
Drawdown from proposed location = 2.84 ft

Net drawdown = 1.6 ft

None of the net well effects exceed the drawdown allowance of 4.0 ft, therefore none of the neighboring wells are likely to be impaired.

#### **Conclusion:**

The proposed change is not likely to unreasonably contribute to an impairment situation. Therefore, GMD3 staff recommends approval of the application.



## WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2019 moves\2955 7661 12343\2955 Proposed.agt

Date: 09/23/19 Time: 15:16:48

## PROJECT INFORMATION

Company: GMD 3

Project: 2955\_7661\_12343 Location: Meade County Test Well: 2955\_7661\_12343

## **WELL DATA**

Mall Mana

 Pumping Wells

 Well Name
 X (ft)
 Y (ft)

 2955 & 7661 & 12343
 67772
 110955

well name	Χ (π)	Υ (π)
	67772	110955
<b>21261</b>	66472	113360
<b>16834</b>	69061	113774
<b>22520</b>	71646	112620
<ul><li>12343</li></ul>	71710	110151

68740

**Observation Wells** 

V/ /£1/

107106

### SOLUTION

Aquifer Model: Unconfined

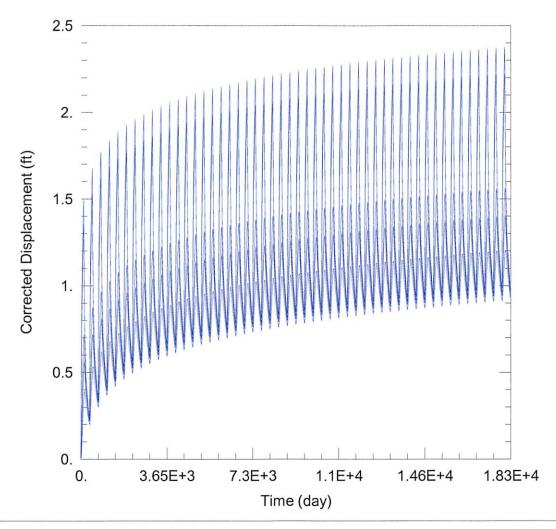
 $T = 1.26E + 4 \text{ ft}^2/\text{day}$ 

Kz/Kr = 1.

Solution Method: Theis

Domestic 22-33-30

S = 0.1119b = 279. ft



## WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2019 moves\2955 7661 12343\2955 Current.aqt

Date: 09/23/19 Time: 15:16:58

# PROJECT INFORMATION

Company: GMD 3

Project: 2955\_7661\_12343 Location: Meade County Test Well: 2955\_7661\_12343

### WELL DATA

**Pumping Wells** 

 Well Name
 X (ft)
 Y (ft)

 2955 & 7661 & 12343
 68118
 112370

Well Name	X (ft)	Y (ft)
0	68118	112370
<ul><li>21261</li></ul>	66472	113360
□ 16834	69061	113774
<b>22520</b>	71646	112620
· 12343	71710	110151
Domestic 22-33-30	68740	107106

Observation Wells

## SOLUTION

Aquifer Model: Unconfined

 $T = 1.26E + 4 \text{ ft}^2/\text{day}$ Kz/Kr = 1.

S =  $\frac{0.1119}{279}$  ft

Solution Method: Theis