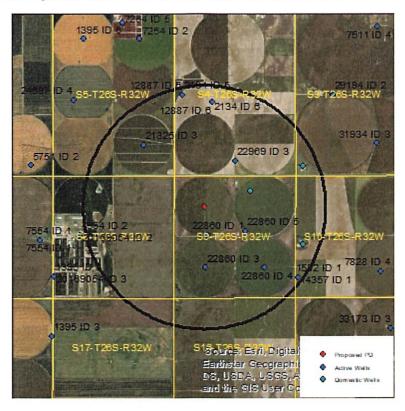
#### Evaluation of proposed move for Water Right No. 22860

Proposed: Move water right no. 22860 a distance of 1,226 ft to the northwest.



Wells within 1 mile: 22860 ID3, 22860 ID4, 22860 ID5, 1582 & 14357, 21325, 2134 & 12887 ID5, 2134 & 12887 ID6, 22969, a domestic well in section 3-26-32, a domestic well in section 9-26-32, and a domestic well in section 10-26-32.

The saturated thickness at the proposed well location is estimated to be 280 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 = 0.1775, T = 14,956 ft<sup>2</sup>/day, tp<sub>current</sub> = 82 days (based upon average use and observed rate),  $Q_{current} = 498$  gpm (based upon 2019 field inspection), tp<sub>proposed</sub> = 71 days,  $Q_{proposed} = 830$  gpm

Theis drawdowns were calculated as follows:

22860 ID3: Drawdown from current location = 1.58 ft

Drawdown from proposed location = 1.52 ft

Net drawdown = -0.1 ft

22860 ID4: Drawdown from current location = 0.97 ft

Drawdown from proposed location = 1.17 ft

Net drawdown = 0.2 ft

22860 ID5: Drawdown from current location = 1.41 ft

Drawdown from proposed location = 1.83 ft

Net drawdown = 0.4 ft

1582 & 14357: Drawdown from current location = 0.71 ft

Drawdown from proposed location = 0.93 ft

Net drawdown = 0.2 ft

21325: Drawdown from current location = 0.67 ft

Drawdown from proposed location = 1.15 ft

Net drawdown = 0.5 ft

2134 & 12887 ID5: Drawdown from current location = 0.56 ft

Drawdown from proposed location = 0.95 ft

Net drawdown = 0.4 ft

2134 & 12887 ID6: Drawdown from current location = 0.59 ft

Drawdown from proposed location = 1.00 ft

Net drawdown = 0.4 ft

22969: Drawdown from current location = 0.85 ft

Drawdown from proposed location = 1.62 ft

Net drawdown = 0.8 ft

Domestic 3-26-32: Drawdown from current location = 0.64 ft

Drawdown from proposed location = 0.99 ft

Net drawdown = 0.4 ft

Domestic 9-26-32: Drawdown from current location = 1.01 ft

Drawdown from proposed location = 1.80 ft

Net drawdown = 0.8 ft

Domestic 10-26-32: Drawdown from current location = 0.72 ft

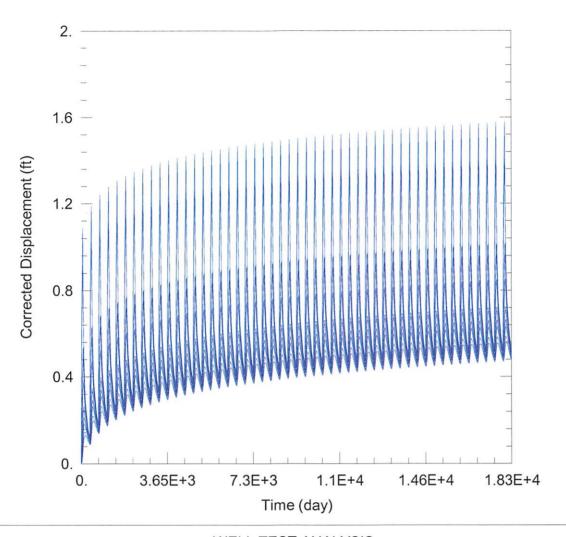
Drawdown from proposed location = 1.00 ft

Net drawdown = 0.3 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\22860\22860 Current.aqt

Date: 04/15/21 Time: 14:21:29

#### PROJECT INFORMATION

Company: GMD 3
Project: 22860 ID 1
Location: Finney County
Test Well: 22860 ID 1

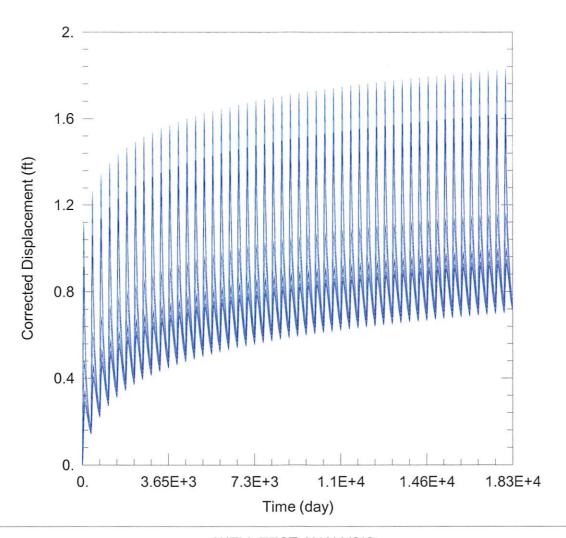
# WELL DATA

 Pumping Wells

 Well Name
 X (ft)
 Y (ft)

 22860 ID 1
 -8684
 337753

Observation Wells		
Well Name	X (ft)	Y (ft)
	-8684	337753
□ 22860 ID 3	-8771	336351
□ 22860 ID 4	-6171	336343
□ 22860 ID 5	-7008	337942
<ul><li>1582 &amp; 14357</li></ul>	-4726	335931
<b>21325</b>	-11456	341676
□ 2134 & 12887 ID 5	-9751	343827
□ 2134 & 12887 ID 6	-8451	343503
<b>22969</b>	-7470	340964
□ Domestic 3-26-32	-4502	340765
□ Domestic 9-26-32	-6816	339657
□ Domestic 10-26-32	-4503	337351



### WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2021\_Moves\22860\22860 Proposed.aqt

Date: 04/15/21 Time: 14:21:22

### PROJECT INFORMATION

Company: GMD 3
Project: 22860 ID 1
Location: Finney County
Test Well: 22860 ID 1

### **WELL DATA**

 Pumping Wells

 Well Name
 X (ft)
 Y (ft)

 22860 ID 1
 -8802
 338973

Observation Wells		
Well Name	X (ft)	Y (ft)
	-8802	338973
□ 22860 ID 3	-8771	336351
□ 22860 ID 4	-6171	336343
□ 22860 ID 5	-7008	337942
<ul><li>1582 &amp; 14357</li></ul>	-4726	335931
<b>21325</b>	-11456	341676
□ 2134 & 12887 ID 5	-9751	343827
□ 2134 & 12887 ID 6	-8451	343503
<b>22969</b>	-7470	340964
□ Domestic 3-26-32	-4502	340765
<ul> <li>Domestic 9-26-32</li> </ul>	-6816	339657
<ul> <li>Domestic 10-26-32</li> </ul>	-4503	337351