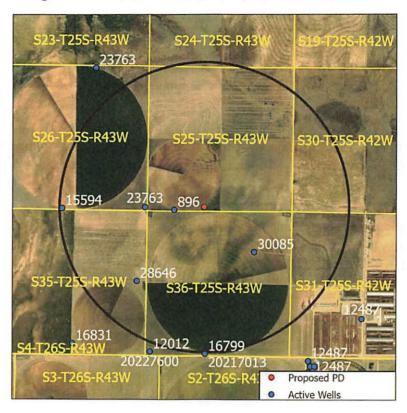**Evaluation of proposed move for Water Right No. 896**

Proposed: Move water right no. 896 to a new well location, a distance of 1095 ft to the northeast.

Wells within 1 mile: 15594, 23763, 28646, 30085.

The saturated thickness at the proposed well location is estimated to be 431 ft, based upon the driller's log and observation well in Section 35-25-43. 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:

$S = 0.1188$, $T = 2314.5$ ft^2/day, $tp_{current} = 220$ days, $Q_{current} = 200$ gpm), $tp_{proposed} = 65$ days, $Q_{proposed} = 1115$ gpm

Theis drawdowns were calculated as follows:

15594:	Drawdown from current location = 3.15 ft
	Drawdown from proposed location = 4.55 ft
	Net drawdown = **1.4 ft**
23763:	Drawdown from current location = 6.12 ft
	Drawdown from proposed location = 8.06 ft
	Net drawdown = **1.9 ft**

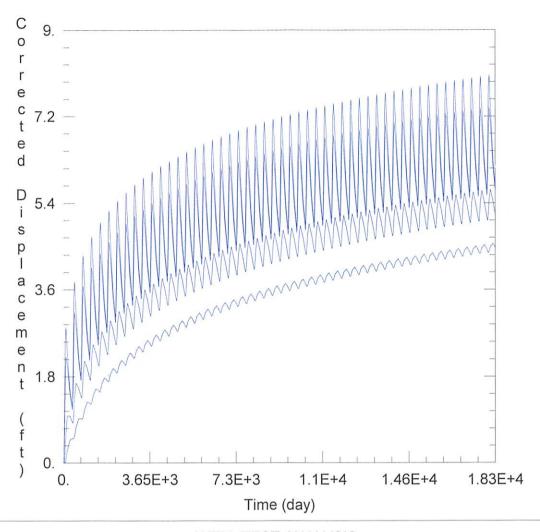| 28646:	Drawdown from current location = 3.80 ft
	Drawdown from proposed location = 5.68 ft
	Net drawdown = **1.9 ft**
30085:	Drawdown from current location = 3.57 ft
	Drawdown from proposed location = 7.39 ft
	Net drawdown = **3.8 ft**

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 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\896\896 proposed.aqt
Date: 05/15/24   Time: 14:30:52

PROJECT INFORMATION

Project: 896
Location: Hamilton County

WELL DATA

Pumping Wells				Observation Wells		
Well Name	X (ft)	Y (ft)		Well Name	X (ft)	Y (ft)
896	-344488	354211		▫	-344488	354211
				▫ 15594	-349676	354166
				▫ 23763	-346652	354203
				▫ 28646	-346943	351516
				▫ 30085	-342664	352579

SOLUTION

Aquifer Model: Unconfined   Solution Method: Theis

T   = 2314.5 ft^2/day   S   = 0.1188
Kz/Kr = 1.   b   = 431. ft

Corrected Displacement (ft) vs **Time (day)**

Y-axis: 0., 1.3, 2.6, 3.9, 5.2, 6.5
X-axis: 0., 3.65E+3, 7.3E+3, 1.1E+4, 1.46E+4, 1.83E+4

WELL TEST ANALYSIS

Data Set: C:\Users\scanstation\Documents\move requests\896\896 current.aqt
Date: 05/15/24   Time: 14:31:01

PROJECT INFORMATION

Project: 896
Location: Hamilton County

WELL DATA

Pumping Wells		
Well Name	X (ft)	Y (ft)
896	-345579	354109

Observation Wells		
Well Name	X (ft)	Y (ft)
▫	-345579	354109
▫ 15594	-349676	354166
▫ 23763	-346652	354203
▫ 28646	-346943	351516
▫ 30085	-342664	352579

SOLUTION

Aquifer Model: Unconfined   Solution Method: Theis

T = 2314.5 ft^2/day S = 0.1188
Kz/Kr = 1. b = 431. ft