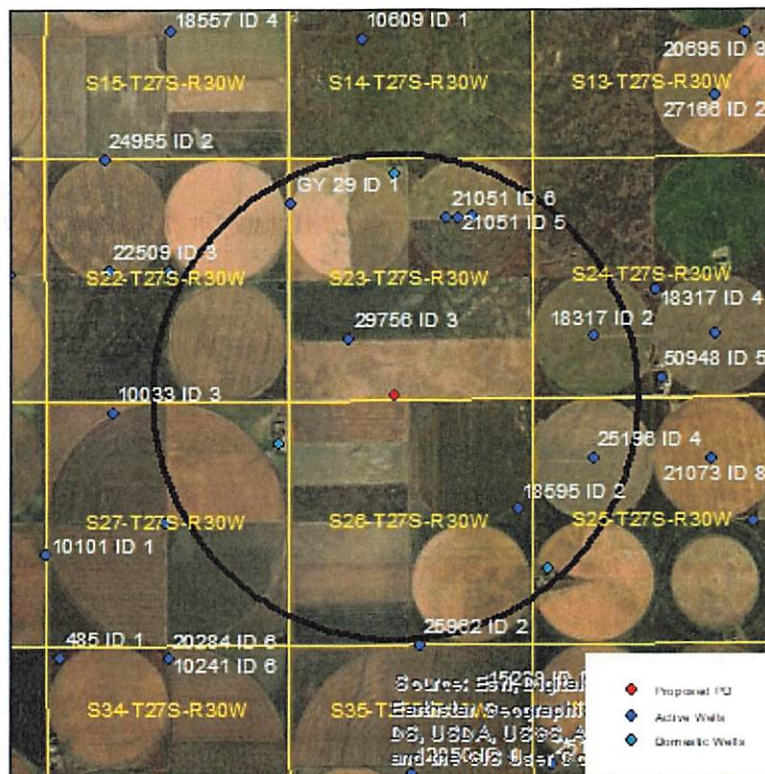


Evaluation of proposed move for Water Right No. 29756

Proposed: Move water right no. 29756 to a new well location, a distance of 1,582 ft to the southeast.



Wells within 1 mile: GY 29, 21051, 18317, 18595, 25196, a domestic well in section 23-27-30, a domestic well in section 25-27-30, and a domestic well in section 27-27-30.

The saturated thickness at the proposed well location is estimated to be 76 ft, based upon the driller's log and an observation well in section 23-27-30. For saturated thickness between 75 ft and 100 ft, the drawdown allowance is 2.0ft.

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

$S = 0.1297$, $T = 44,150 \text{ ft}^2/\text{day}$, $t_{p\text{current}} = 0 \text{ days}$ (no use in last 10 years), $Q_{\text{current}} = 0 \text{ gpm}$,
 $t_{p\text{proposed}} = 56 \text{ days}$, $Q_{\text{proposed}} = 1000 \text{ gpm}$

Theis drawdowns were calculated as follows:

GY 29:	Net drawdown = 0.5 ft
21051:	Net drawdown = 0.6 ft
18317:	Net drawdown = 0.6 ft
18595:	Net drawdown = 0.7 ft
25196:	Net drawdown = 0.6 ft
Domestic 23-27-30:	Net drawdown = 0.5 ft

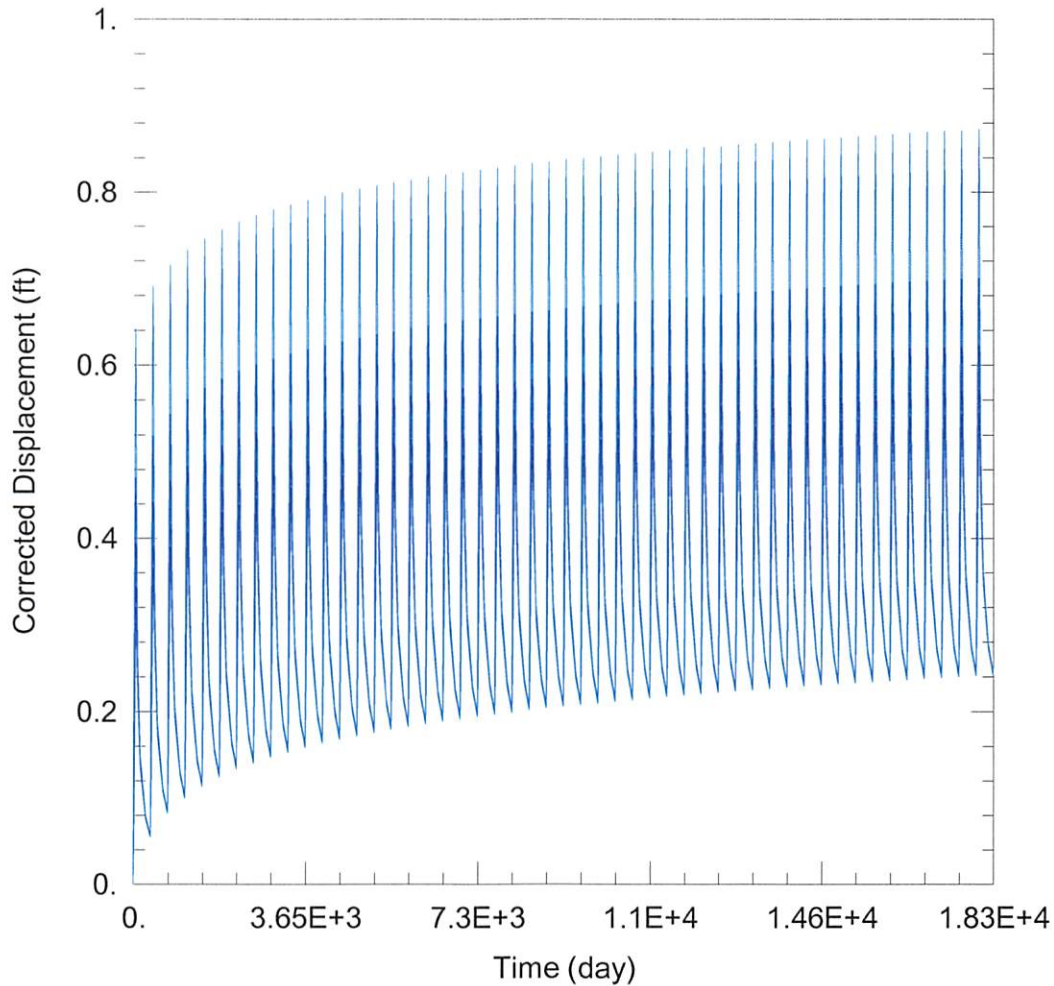
Domestic 25-27-30: Net drawdown = **0.5 ft**

Domestic 27-27-30: Net drawdown = **0.9 ft**

Net drawdown does not exceed the drawdown allowance of 2.0 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\trevora\Documents\2023_moves\29756\29756 proposed.aqt

Date: 07/27/23

Time: 10:14:54

PROJECT INFORMATION

Company: GMD3

Project: 29756

Location: Gray County

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
29756	65920	292792

Observation Wells

Well Name	X (ft)	Y (ft)
□	65920	292792
□ <u>GY 29</u>	63673	296987
□ <u>21051</u>	67291	296682
□ <u>18317</u>	70247	294082
□ <u>18595</u>	68580	290356
□ <u>25196</u>	70236	291457
□ <u>Domestic 23-27-30</u>	65921	297613
□ <u>Domestic 25-27-30</u>	69261	289079
□ <u>Domestic 27-27-30</u>	63399	291770

SOLUTION

Aquifer Model: Unconfined

Solution Method: Theis

T = 4.415E+4 ft²/day

S = 0.1297