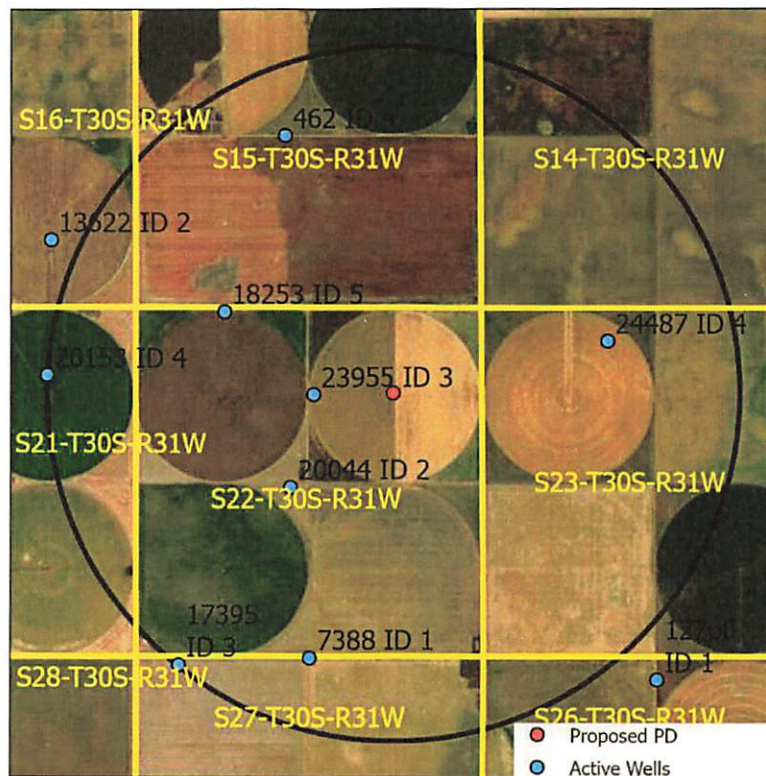


## Evaluation of proposed move for Water Right No. 23955

Proposed: Move water right no. 23955 a distance of 1,214 ft to the east onto a new location.



Wells within 1 mile: 462, 18253, 20044, 24487, 7388, and 17395.

The saturated thickness at the proposed well location is estimated to be 178 ft, based upon the GMD3 model. For saturated thickness between 150 ft and 200 ft, the drawdown allowance is 3.5 ft.

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

$S = 0.056$ ,  $T = 40,477 \text{ ft}^2/\text{day}$ ,  $tp_{\text{current}} = 63 \text{ days}$  (based on average use and observed rate),

$Q_{\text{current}} = 550 \text{ gpm}$  (based on 2017 field inspection),  $tp_{\text{proposed}} = 89 \text{ days}$ ,  $Q_{\text{proposed}} = 815 \text{ gpm}$

Theis drawdowns were calculated as follows:

462: Drawdown from current location = 0.23 ft  
Drawdown from proposed location = 1.43 ft  
Net drawdown = **1.2 ft**

18253: Drawdown from current location = 1.02 ft  
Drawdown from proposed location = 1.81 ft  
Net drawdown = **0.8 ft**

20044: Drawdown from current location = 0.65 ft  
Drawdown from proposed location = 2.32 ft  
Net drawdown = **1.7 ft**

24487: Drawdown from current location = 0.63 ft  
Drawdown from proposed location = 1.86 ft  
Net drawdown = **1.2 ft**

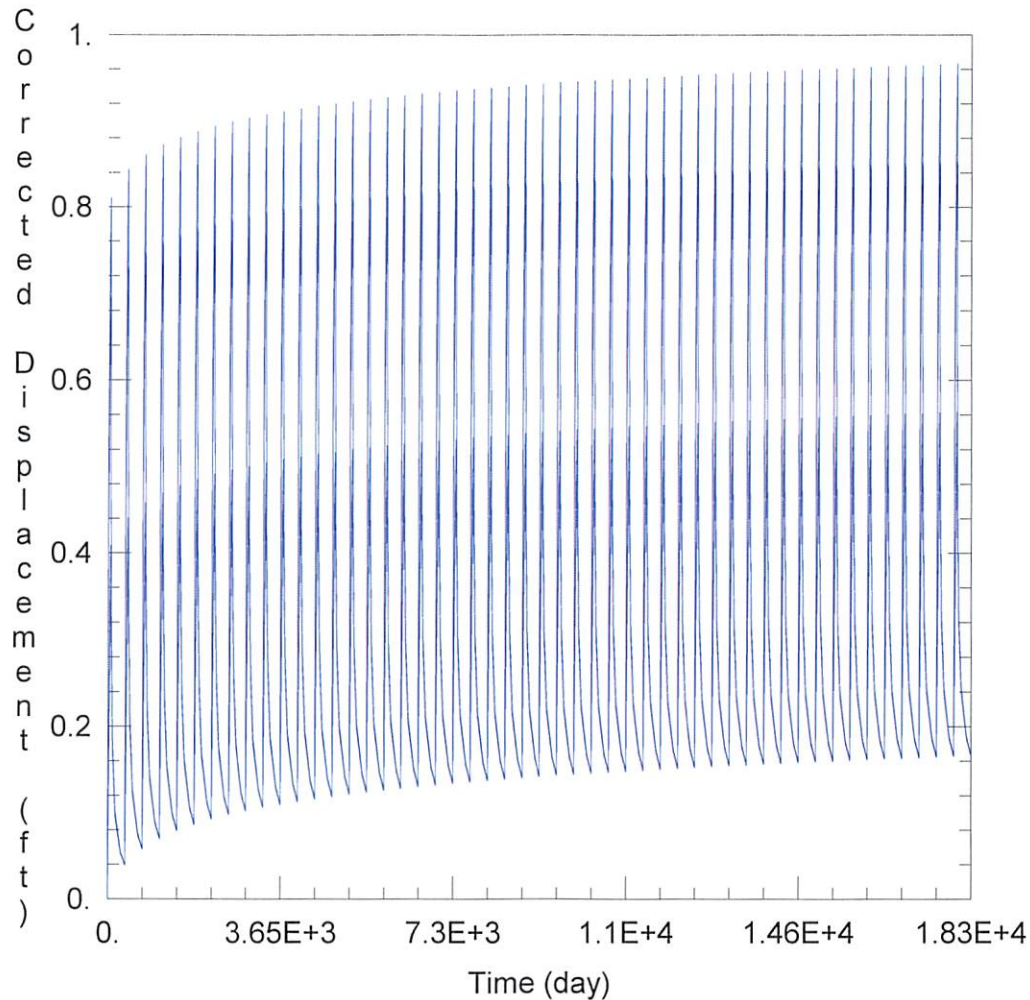
7388: Drawdown from current location = 0.23 ft  
Drawdown from proposed location = 1.66 ft  
Net drawdown = **1.4 ft**

17395: Drawdown from current location = 0.20 ft  
Drawdown from proposed location = 1.39 ft  
Net drawdown = **1.2 ft**

Net drawdown does not exceed the drawdown allowance of 3.5 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\23955\23955 current.aqt  
 Date: 04/02/25 Time: 13:52:46

PROJECT INFORMATION

Test Well: 23955

WELL DATA

Pumping Wells

| Well Name | X (ft) | Y (ft) |
|-----------|--------|--------|
| 23955     | 29516  | 201236 |

Observation Wells

| Well Name | X (ft) | Y (ft) |
|-----------|--------|--------|
| □         | 29516  | 201236 |
| □ 462     | 29076  | 205172 |
| □ 18253   | 28147  | 202487 |
| □ 20044   | 29169  | 199826 |
| □ 24487   | 33987  | 202046 |
| □ 7388    | 29462  | 197234 |
| □ 17395   | 27459  | 197126 |

SOLUTION

Aquifer Model: Unconfined

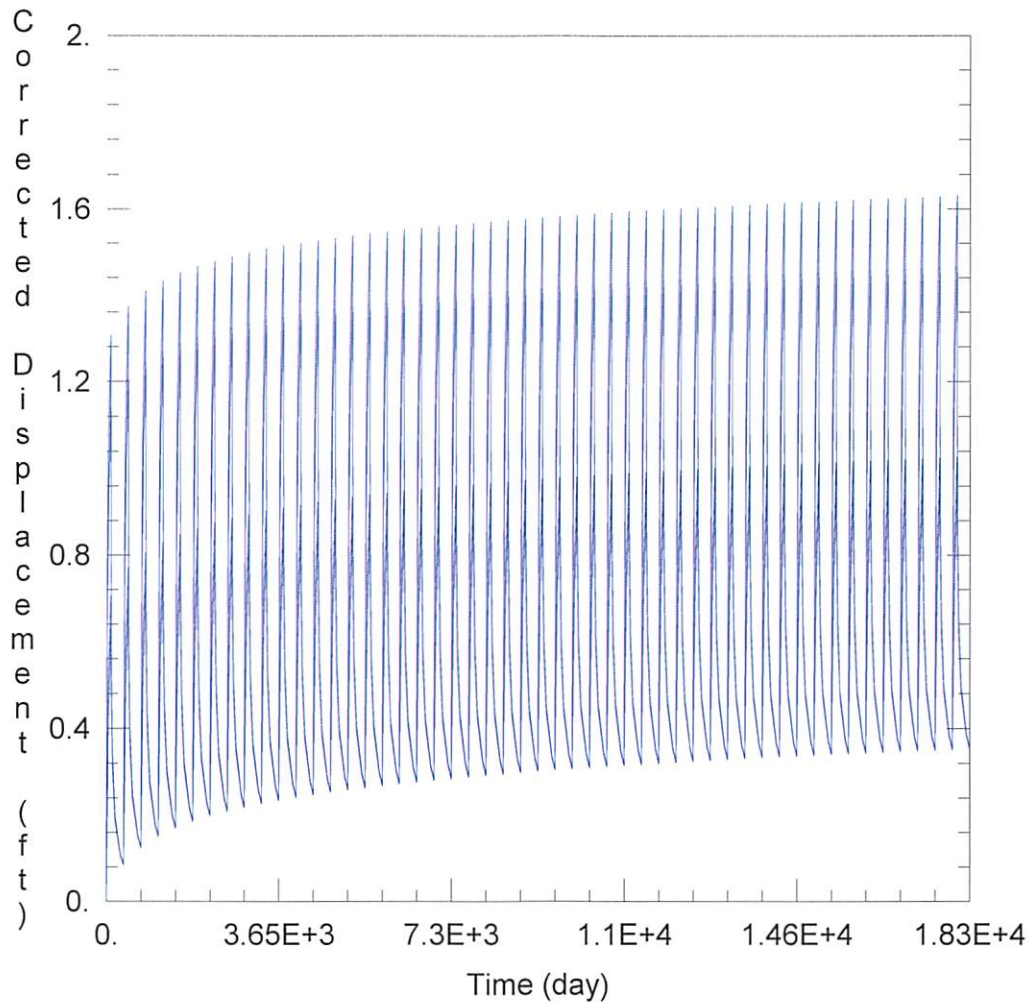
Solution Method: Theis

T = 4.048E+4 ft<sup>2</sup>/day

S = 0.056

Kz/Kr = 1.

b = 178. ft



WELL TEST ANALYSIS

Data Set: C:\Users\scanstation\Documents\move requests\23955\23955 proposed.aqt  
 Date: 04/02/25 Time: 13:58:38

PROJECT INFORMATION

Test Well: 23955

WELL DATA

Pumping Wells

| Well Name | X (ft) | Y (ft) |
|-----------|--------|--------|
| 23955     | 29516  | 201236 |

Observation Wells

| Well Name | X (ft) | Y (ft) |
|-----------|--------|--------|
| □         | 29516  | 201236 |
| □ 462     | 29076  | 205172 |
| □ 18253   | 28147  | 202487 |
| □ 20044   | 29169  | 199826 |
| □ 24487   | 33987  | 202046 |
| □ 7388    | 29462  | 197234 |
| □ 17395   | 27459  | 197126 |

SOLUTION

Aquifer Model: Unconfined

Solution Method: Theis

T = 4.048E+4 ft<sup>2</sup>/day

S = 0.056

Kz/Kr = 1.

b = 178. ft