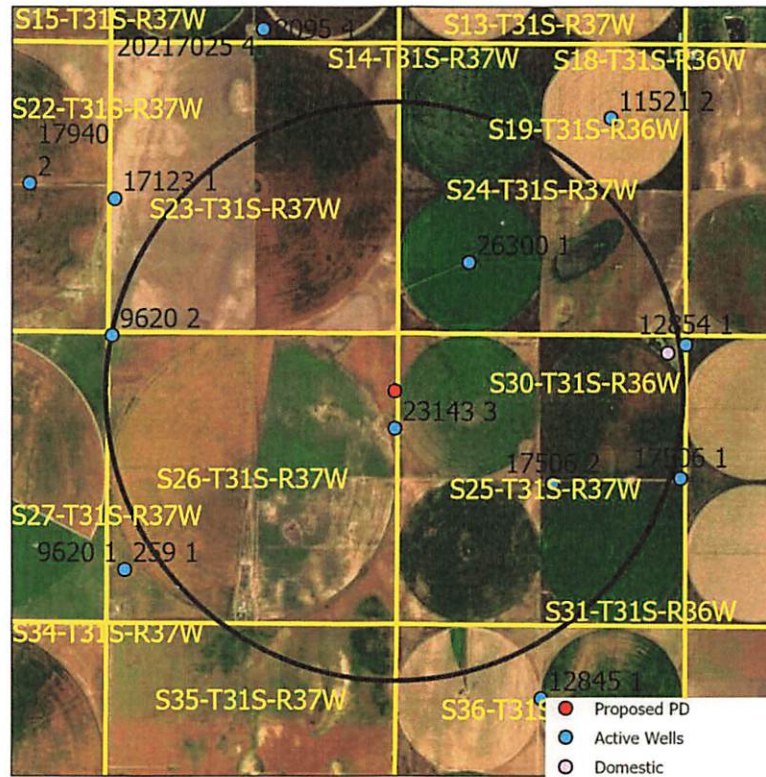


## Evaluation of proposed move for Water Right No. 23143

Proposed: Move water right no. 23143 a distance of 676 ft to a new location to the north.



Wells within 1 mile: 9620, 26300, 17506, and one domestic well in S25-31-37.

The saturated thickness at the proposed well location is estimated to be 141 ft, based upon the GMD3 model. For saturated thickness between 125 ft and 150 ft the drawdown allowance is 3.0 ft.

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

$S = 0.064$ ,  $T = 42,043 \text{ ft}^2/\text{day}$ ,  $tp_{\text{current}} = 84 \text{ days}$  (based on average use and observed rate),

$Q_{\text{current}} = 600 \text{ gpm}$  (based on 2018 field inspection),  $tp_{\text{proposed}} = 116 \text{ days}$ ,  $Q_{\text{proposed}} = 1800 \text{ gpm}$

Theis drawdowns were calculated as follows:

9620:	Drawdown from current location = 0.56 ft
	Drawdown from proposed location = 2.13 ft
	Net drawdown = <b>1.6 ft</b>
26300:	Drawdown from current location = 0.76 ft
	Drawdown from proposed location = 2.96 ft
	Net drawdown = <b>2.2 ft</b>

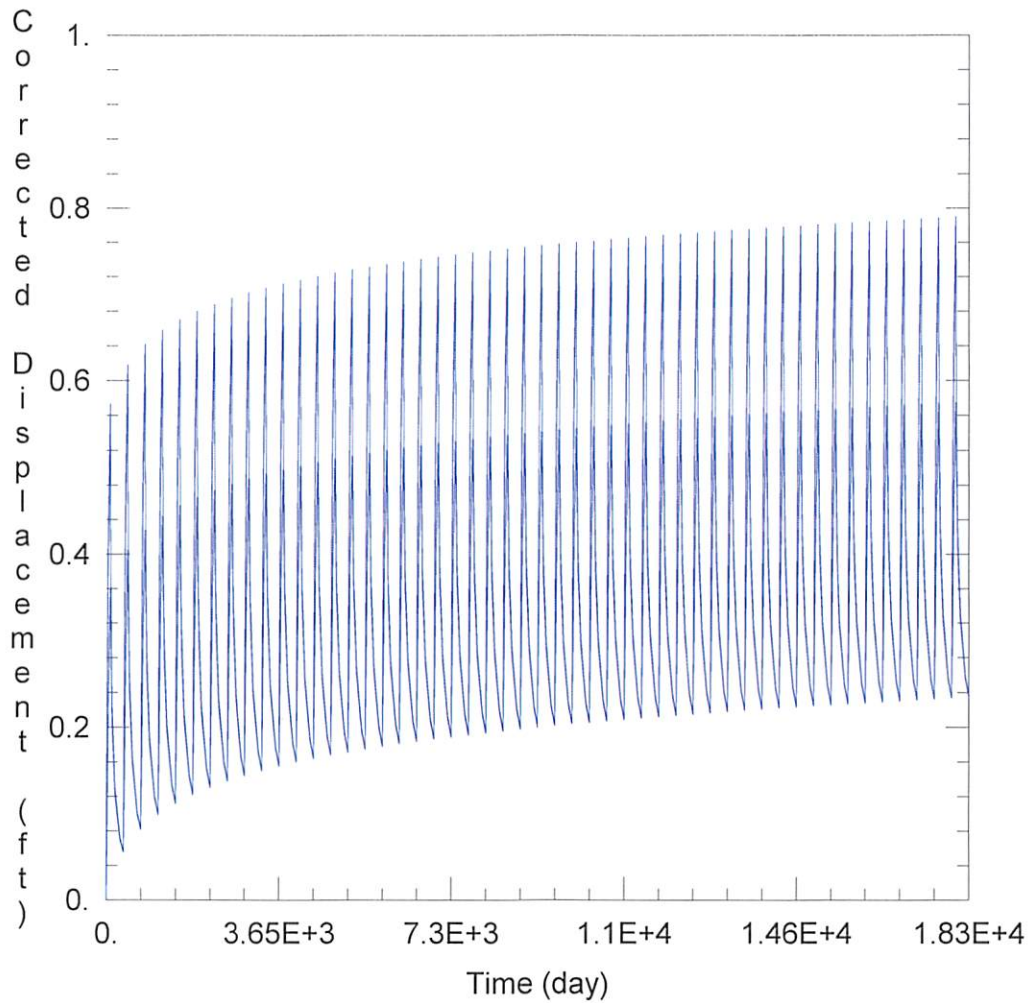
17506: Drawdown from current location = 0.79 ft  
Drawdown from proposed location = 2.70 ft  
Net drawdown = **1.9 ft**

Domestic S25-31-37: Drawdown from current location = 0.58 ft  
Drawdown from proposed location = 2.18 ft  
Net drawdown = **1.6 ft**

Net drawdown does not exceed the drawdown allowance of 3.0 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\23143\23143 current.aqt  
 Date: 01/16/25 Time: 11:17:37

PROJECT INFORMATION

Test Well: 23143

WELL DATA

Pumping Wells

Observation Wells

Well Name	X (ft)	Y (ft)
23143	-146425	164246

Well Name	X (ft)	Y (ft)
□	-146425	164246
□ 9620	-151592	165946
□ 26300	-145072	167283
□ 17506	-143528	163255
□ domestic	-141427	165614

SOLUTION

Aquifer Model: Unconfined

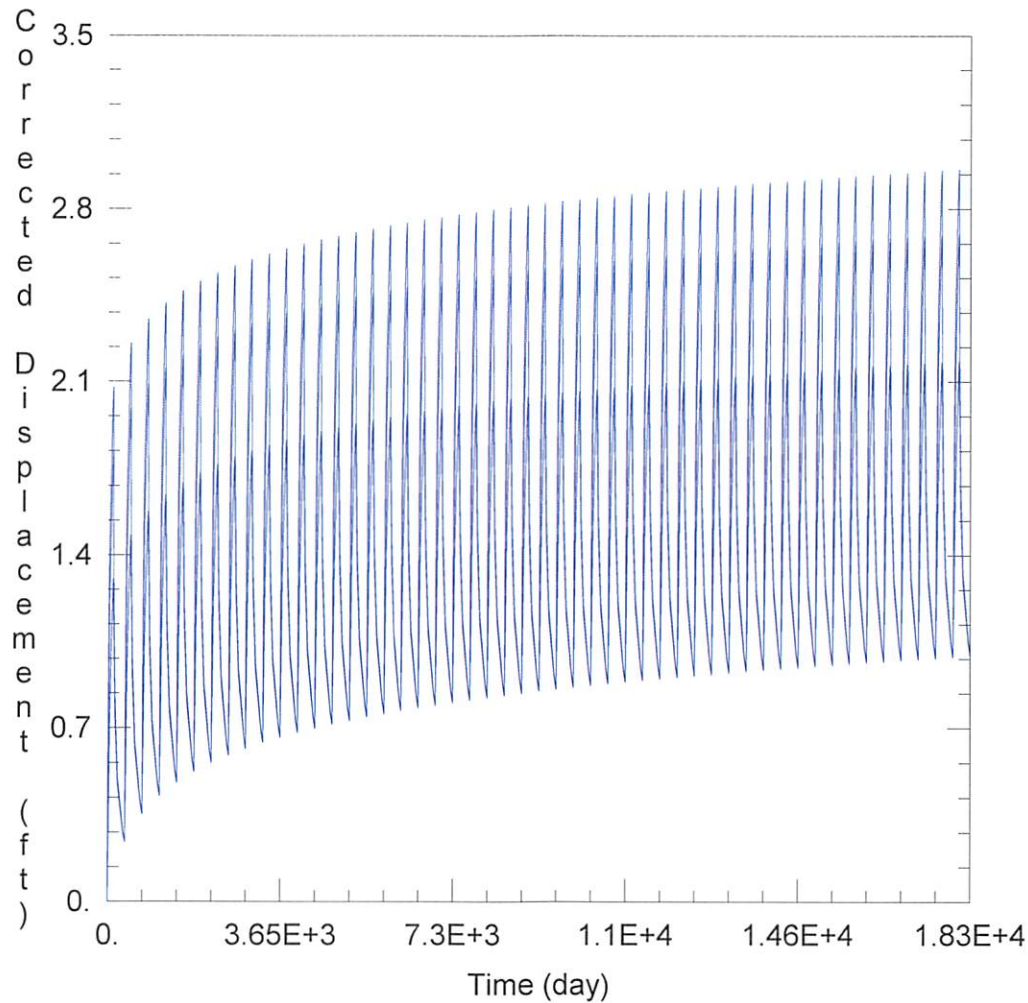
Solution Method: Theis

T = 4.204E+4 ft<sup>2</sup>/day

S = 0.064

Kz/Kr = 1.

b = 140.7 ft



WELL TEST ANALYSIS

Data Set: C:\Users\scanstation\Documents\move requests\23143\23143 proposed.aqt  
 Date: 01/16/25 Time: 11:17:40

PROJECT INFORMATION

Test Well: 23143

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
23143	-146429	164922

Observation Wells

Well Name	X (ft)	Y (ft)
□	-146429	164922
□ 9620	-151592	165946
□ 26300	-145072	167283
□ 17506	-143528	163255
□ domestic	-141427	165614

SOLUTION

Aquifer Model: Unconfined

Solution Method: Theis

T = 4.204E+4 ft<sup>2</sup>/day

S = 0.064

Kz/Kr = 1.

b = 140.7 ft