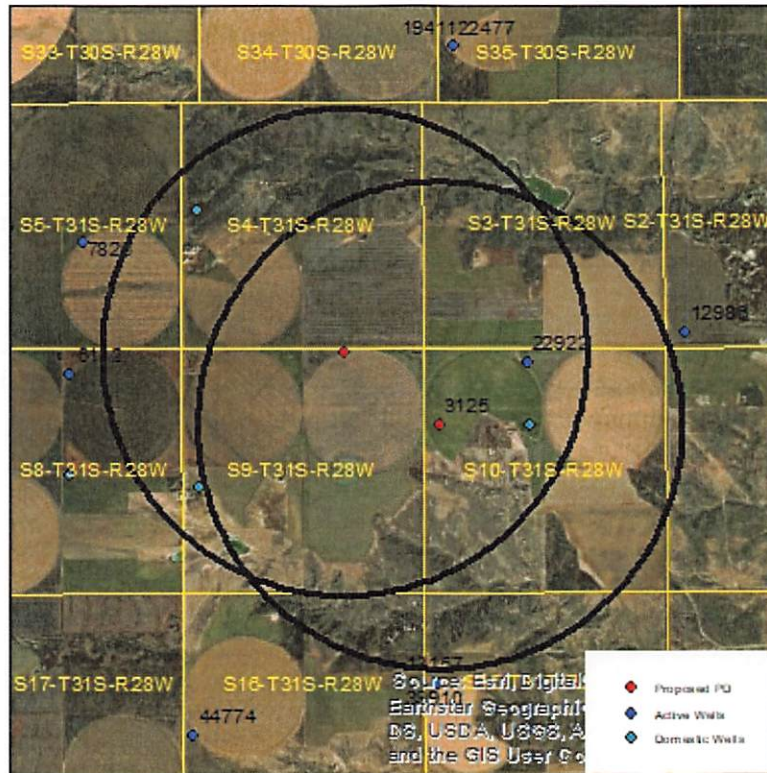


## Evaluation of proposed move for Water Right Nos 3125 & 22922

Proposed: Move water right no. 3125 a distance of 2,604 ft to the northwest. Move water right no. 22922 to the well currently authorized under water right no. 3125.



Wells within 1 mile: A domestic well in section 4-31-28, a domestic well in section 9-31-28, and a domestic well in section 10-31-28.

The saturated thickness at the proposed well location is estimated to be 270 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:

$S = 0.2249$ ,  $T = 52,903 \text{ ft}^2/\text{day}$ ,

3125:  $tp_{\text{current}} = 129$  days (based upon average use and observed rate),  $Q_{\text{current}} = 452$  gpm (based upon 2020 field inspection),  $tp_{\text{proposed}} = 103$  days,  $Q_{\text{proposed}} = 925$  gpm

22922:  $tp_{\text{current}} = 159$  days (based upon average use and observed rate),  $Q_{\text{current}} = 262$  gpm (based upon 2016 field inspection),  $tp_{\text{proposed}} = 80$  days,  $Q_{\text{proposed}} = 1670$  gpm

Theis drawdowns were calculated as follows:

Domestic 4-31-28:      Drawdown from current location = 0.46 ft  
                                 Drawdown from proposed location = 1.32 ft  
                                 Net drawdown = 0.9 ft

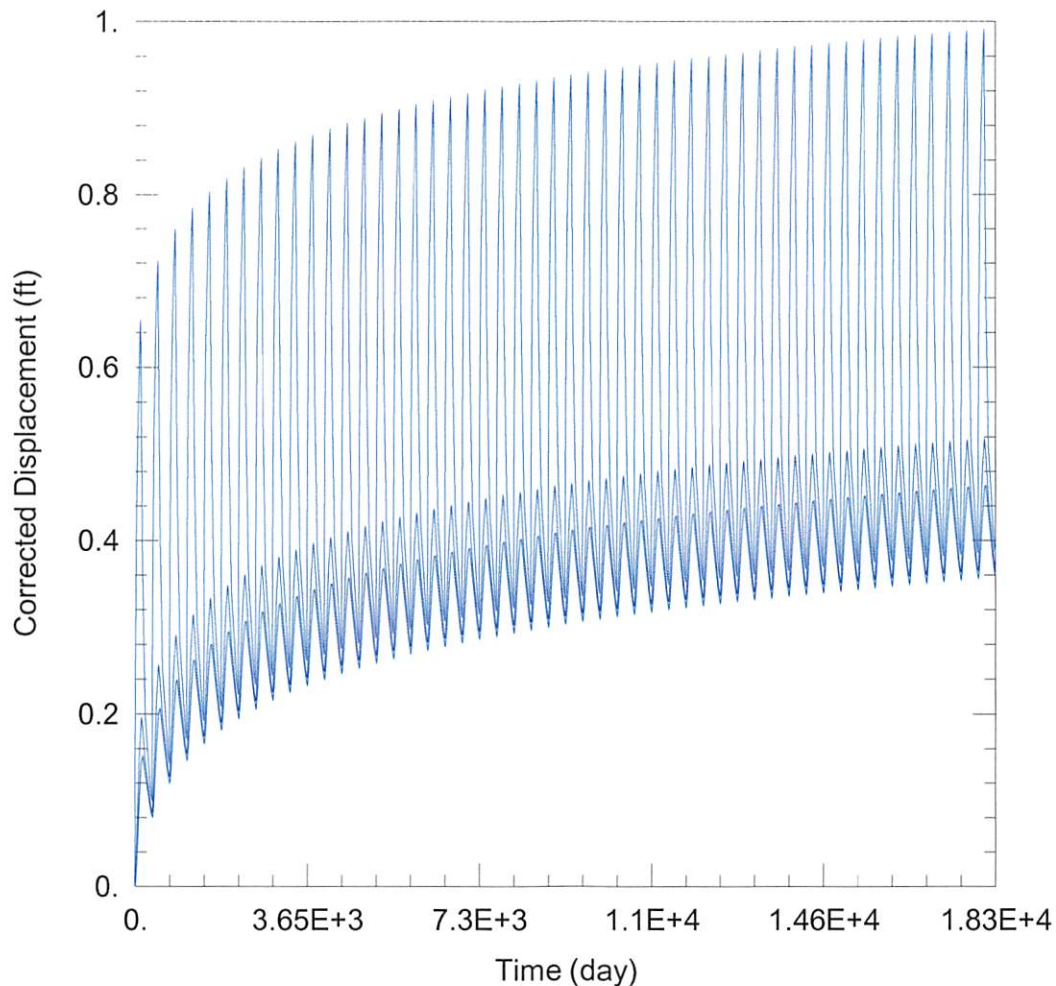
Domestic 9-31-28:      Drawdown from current location = 0.52 ft  
                                 Drawdown from proposed location = 1.47 ft  
                                 Net drawdown = **1.0 ft**

Domestic 10-31-28:      Drawdown from current location = 0.99 ft  
                                 Drawdown from proposed location = 1.86 ft  
                                 Net drawdown = **0.9 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\3125\_22922\3125 & 22922 Current.aqt

Date: 01/26/21

Time: 14:07:59

### PROJECT INFORMATION

Company: GMD 3

Project: 3125 & 22922

Location: Meade County

Test Well: 3125 & 22922

### WELL DATA

#### Pumping Wells

Well Name	X (ft)	Y (ft)
	127222	179770
	129125	181132

#### Observation Wells

Well Name	X (ft)	Y (ft)
□	127222	179770
□	129125	181132
□ Domestic 4-31-28	121921	184417
□ Domestic 9-31-28	121994	178429
□ Domestic 10-31-28	129193	179778

### SOLUTION

Aquifer Model: Unconfined

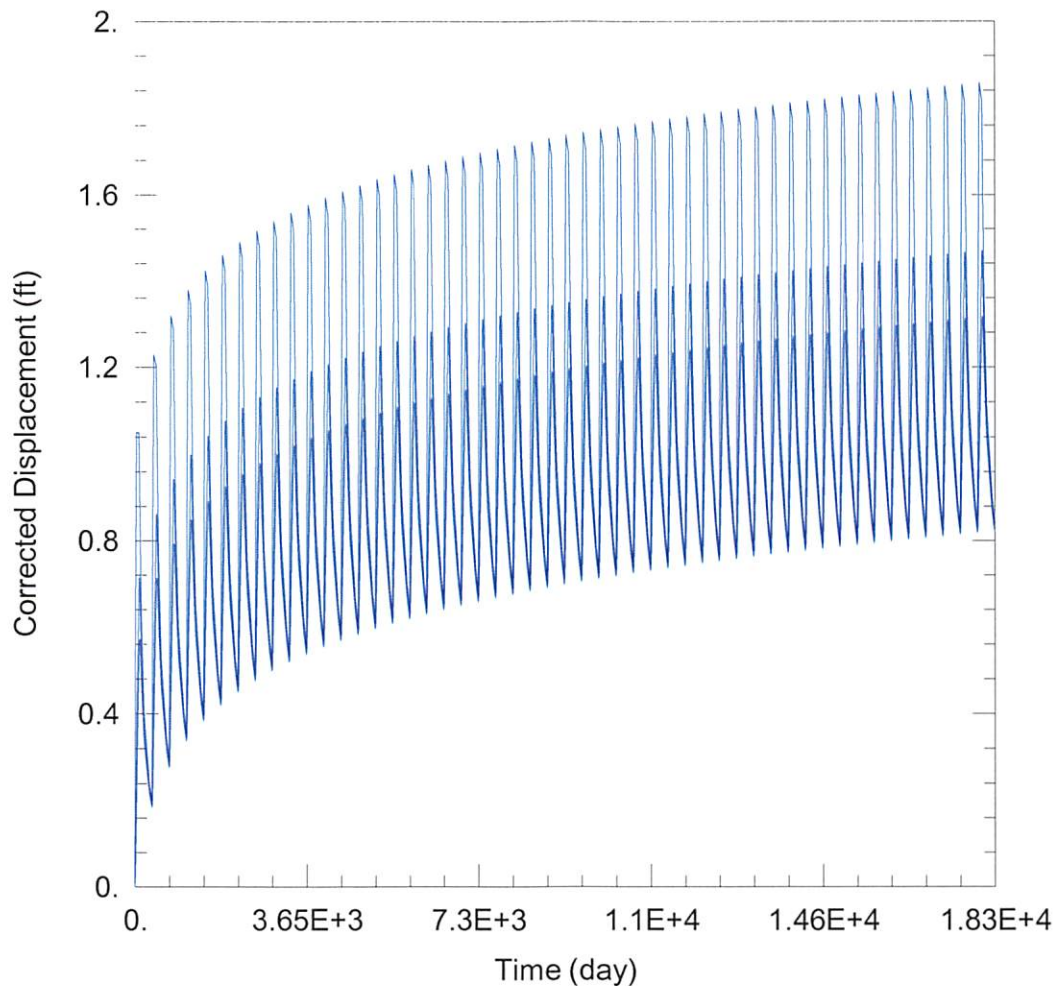
Solution Method: Theis

T =  $5.29E+4$  ft<sup>2</sup>/day

S = 0.2249

Kz/Kr = 1.

b = 270. ft



### WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2021\_Moves\3125\_22922\3125 & 22922 Proposed.aqt

Date: 01/26/21

Time: 14:07:52

### PROJECT INFORMATION

Company: GMD 3

Project: 3125 & 22922

Location: Meade County

Test Well: 3125 & 22922

### WELL DATA

#### Pumping Wells

Well Name	X (ft)	Y (ft)
	125154	181353
	127222	179770

#### Observation Wells

Well Name	X (ft)	Y (ft)
□	125154	181353
□	127222	179770
□ Domestic 4-31-28	121921	184417
□ Domestic 9-31-28	121994	178429
□ Domestic 10-31-28	129193	179778

### SOLUTION

Aquifer Model: Unconfined

Solution Method: Theis

T = 5.29E+4 ft<sup>2</sup>/day

S = 0.2249

Kz/Kr = 1.

b = 270. ft



## GMD3 Change Review

File No(s): 3125 & 22922.

DWR office: GC.

App filed to change: PDs.

Is Landowner(s) correct in WRIS: Buck Rexford.

If NO, is documentation included?

Is Water Use Correspondent correct in WRIS?   .

If NO, is documentation included?

Regulation(s) Reviewed: KAR 5-23-3

Point of diversion ID No(s)    being changed.

	ft. North	ft. West	3125
Authorized PD	3647	5056	Sect 10-31-28
Proposed PD	5226	1725	Sect 9-31-28
Difference	-1579 n	1949 w	
$a^2 + b^2 = c^2$	2493241	3798601	2508.354 foot move nw

GPS for proposed PD: Lat: 37.37230 Long: -100.36877.

	ft. North	ft. West	22922
Authorized PD	5000	3150	Sect 10-31-28
Proposed PD	3647	5056	
Difference	1353 s	-1906 w	
$a^2 + b^2 = c^2$	1830609	3632836	2337.401 foot move sw

GPS for proposed PD: Lat:    Long:   .

Is proposed PD stacking on existing WRs? 3125 new well, 22922 moving to the well exited by 3125.

Is Proposed PU overlapping existing WRs? No Change.

Neighboring certified well(s) notified:   .

Name All are the applicants.

Address   .

Zip   .

Email:    Phone:   .

Domestic well(s) notified:   .

Name   .

Address   .

Zip   .

Base Acres:   .

Perfected Acres:   .

Irr. Return-Flow   %

**3125: 422AF @ 925gpm**

**2010-2019 average reported use = 257.3AF**

**22922: 590AF @ 1670gpm**

**2020 GMD3 inspection calculated flow 452gpm (450gpm visual)**

## GMD3 Change Review

---

**2010-2019 average reported use = 183.9AF**

**2016 GMD3 inspection calculated flow of 262gpm (200gpm visual)**

Is a waiver needed: \_\_\_\_.

Recommendation: \_\_\_\_.



# 3125 & 22922 PD Change



January 25, 2021  
11:26 AM

DISCLAIMER: This map is not intended for conveyances, nor is it a legal survey. The information is presented on a best-efforts basis, and should not be relied upon for making financial, survey, legal or other commitments.

## Wells

?	Other	+	CON	●	FPR	▲	MUN	⚡	THX	□	Sections
●	IRR	⊠	DEW	⊕	HYD	▢	REC	?	Empty		
		⚠	DOM	★	IND	⊗	STK	●	WWC5 WELLS GMD3		

1:31,209

