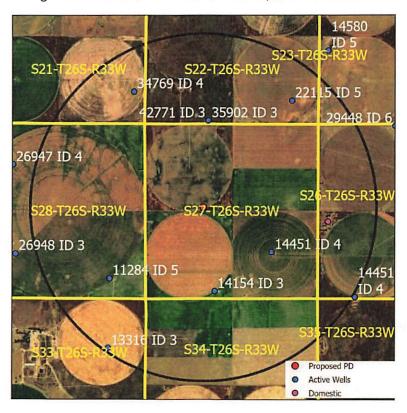
Evaluation of proposed move for Water Right No. 35902 & 42771

Proposed: Move water right no. 35902 & 42771 a distance of 2,644 ft to the south onto a new location.



Wells within 1 mile: 34769, 22115, 11284, 14154, 14451, 13316, and one domestic well above.

The saturated thickness at the proposed well location is estimated to be 213 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 = 0.065, T = 13,028 ft²/day, tp_{current} = 147 days (based on average use and observed rate),

Q_{current} = 412 gpm (based on 2015 field inspection), tp_{proposed} = 123 days, Q_{proposed} = 960 gpm

Theis drawdowns were calculated as follows:

34769:

Drawdown from current location = 2.01 ft

Drawdown from proposed location = 3.11 ft

Net drawdown = 1.1 ft

22115:

Drawdown from current location = 1.94 ft

Drawdown from proposed location = 3.06 ft

Net drawdown = 1.1 ft

11284: Drawdown from current location = 1.29 ft

Drawdown from proposed location = 3.39 ft

Net drawdown: 2.1 ft

14154: Drawdown from current location = 1.35 ft

Drawdown from proposed location = 4.09 ft

Net drawdown: 2.74 ft

14451: Drawdown from current location = 1.47 ft

Drawdown from proposed location = 4.15 ft

Net drawdown: 2.68 ft

13316: Drawdown from current location = 1.08 ft

Drawdown from proposed location = 2.73 ft

Net drawdown: 1.65 ft

Domestic 26-26-33: Drawdown from current location = 1.41 ft

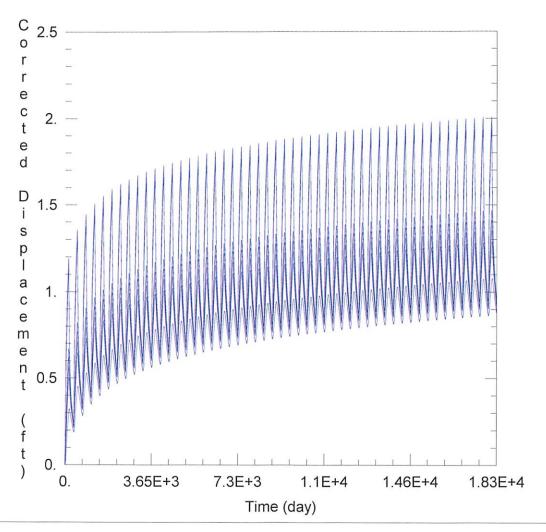
Drawdown from proposed location = 3.25 ft

Net drawdown = 1.8 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\35902 & 42771\current.aqt

Date: 03/17/25 Time: 16:01:52

PROJECT INFORMATION

Test Well: 35902 & 42771

WELL DATA

Pumping Wells			
Well Name	X (ft)	Y (ft)	
35902 & 42771	-34592	324493	

Well Name	X (ft)	Y (ft)
	-34592	324493
34769	-36860	325370
· 22115	-32045	325094
11284	-37602	319708
· 14154	-34393	319322
14451	-32654	320501
13316	-37634	317585
 Domestic 	-30938	321426

Observation Wells

SOLUTION

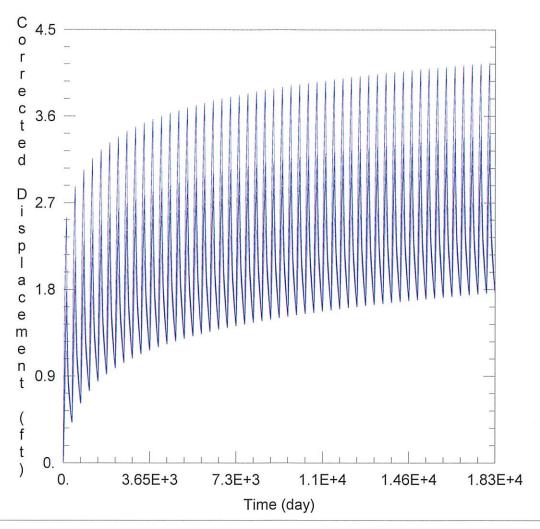
Aquifer Model: Unconfined

 $T = 1.303E + 4 \text{ ft}^2/\text{day}$

Kz/Kr = 1.

Solution Method: <u>Theis</u> S = 0.065

b = $\frac{0.065}{213.3}$ ft



WELL TEST ANALYSIS

Data Set: C:\Users\scanstation\Documents\move requests\35902 & 42771\proposed.aqt

Date: 03/17/25 Time: 16:01:56

PROJECT INFORMATION

Test Well: 35902 & 42771

WELL DATA

Pumping Wells			
Well Name	X (ft)	Y (ft)	
35902 & 42771	-34738	321853	

Observation Wells		
Well Name	X (ft)	Y (ft)
	-34738	321853
34769	-36860	325370
22115	-32045	325094
· 11284	-37602	319708
· 14154	-34393	319322
14451	-32654	320501
13316	-37634	317585
 Domestic 	-30938	321426

SOLUTION

Aquifer Model: Unconfined

 $T = 1.303E + 4 \text{ ft}^2/\text{day}$

Kz/Kr = 1.

Solution Method: Theis

S = 0.065b = 213.3 ft