Evaluation of proposed move for Water Right No. 21444

Proposed: Move water right no. 21444 to a new location a distance of 2,524 ft to the southwest onto a new point of diversion.

Wells within 1 mile: 11216 ID3, 5135, 11216 ID6, 30734, 7255, 5237 ID4, and 5237 ID2.

The saturated thickness at the proposed well location is estimated to be 175.8 ft, based upon the GMD3 model. For saturated thickness between 150ft and 200 ft, the drawdown allowance is 3.5 ft.

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

S = 0.043, T = 27,570.7 ft^2/day, $tp_{current}$ = 123 days (based on average use and observed rate),

$Q_{current}$ = 47 gpm (based on 2021 field inspection), $tp_{proposed}$ = 144 days, $Q_{proposed}$ = 1005 gpm

Theis drawdowns were calculated as follows:

11216 ID3: Drawdown from current location = 0.09 ft

Drawdown from proposed location = 2.83 ft

Net drawdown = **2.7 ft**

5135: Drawdown from current location = 0.09

Drawdown from proposed location = 2.36 ft

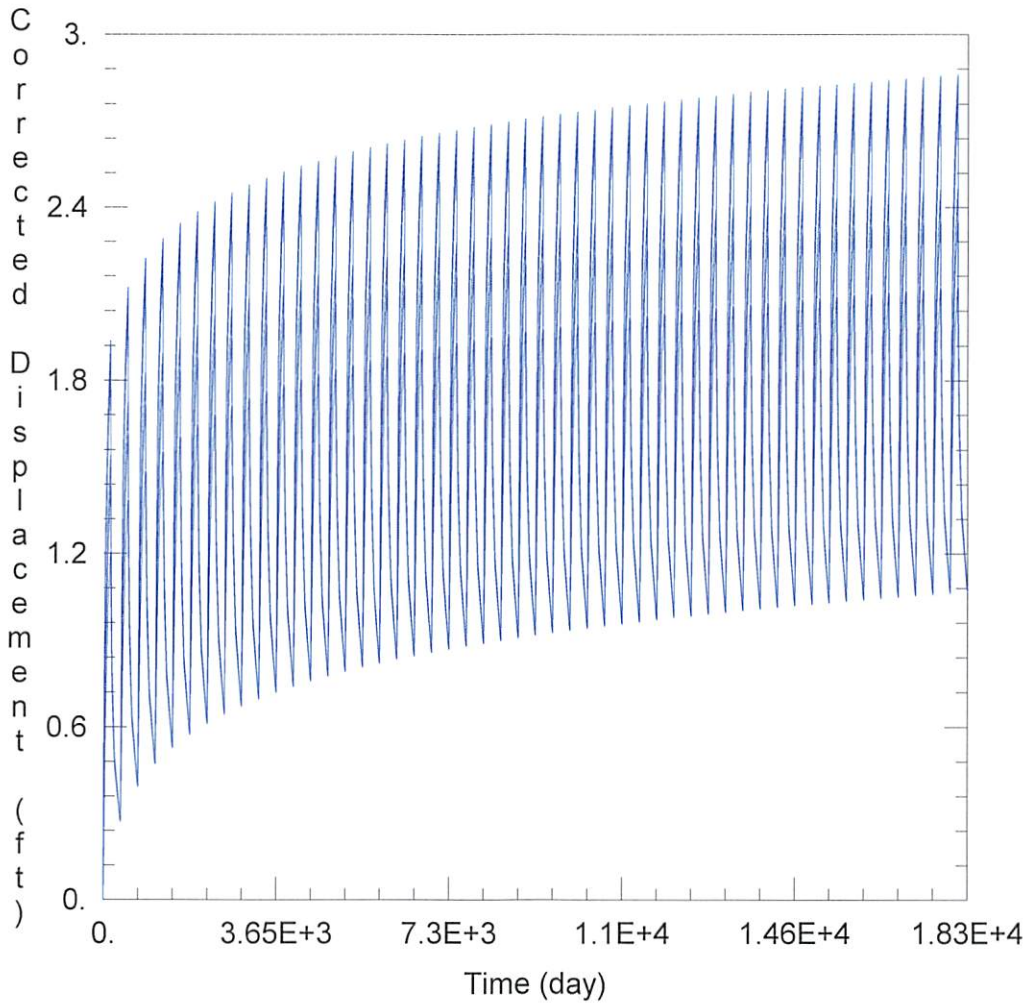
Net drawdown = **2.3 ft**

11216 ID6:	Drawdown from current location = 0.13 ft
	Drawdown from proposed location = 2.77 ft
	Net drawdown: **2.6 ft**
30734:	Drawdown from current location = 0.12 ft
	Drawdown from proposed location = 2.12 ft
	Net drawdown = **2.0 ft**
7255:	Drawdown from current location = 0.10 ft
	Drawdown from proposed location = 2.86 ft
	Net drawdown = **2.8 ft**
5237 ID4:	Drawdown from current location = 0.08 ft
	Drawdown from proposed location = 2.46 ft
	Net drawdown = **2.4 ft**
5237 ID2:	Drawdown from current location = 0.08 ft
	Drawdown from proposed location = 2.45 ft
	Net drawdown = **2.4 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\21444\21444 propsed.aqt
Date: 10/10/24 Time: 15:00:29

PROJECT INFORMATION

Test Well: 21444

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
21444	-52343	258466

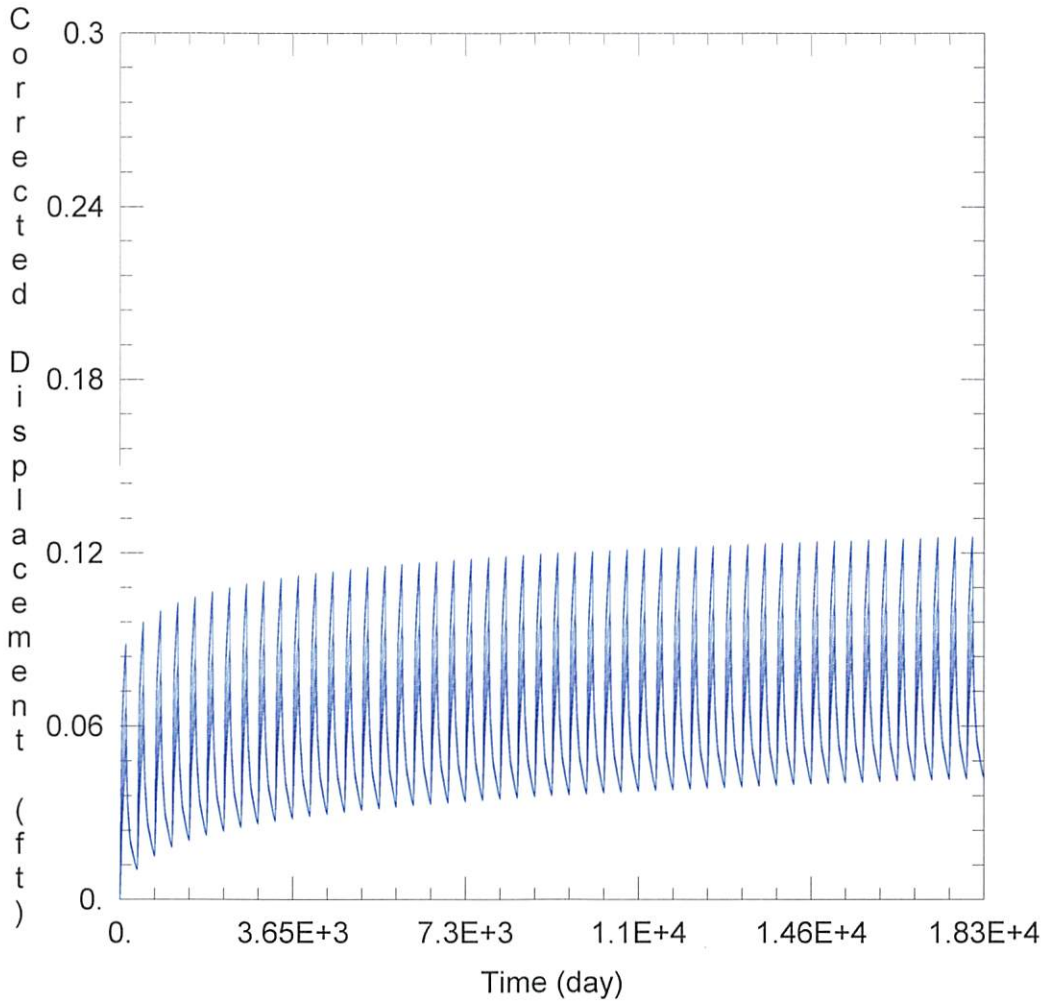
Observation Wells

Well Name	X (ft)	Y (ft)
▫	-52343	258466
▫ 11216 ID3 & 19925	-54987	258561
▫ 5135	-55584	260940
▫ 11216 ID6	-52779	261222
▫ 30734	-48056	261188
▫ 7255	-50789	256423
▫ 5237 ID4	-52473	254776
▫ 5237 ID2	-52473	254746

SOLUTION

Aquifer Model: Unconfined
Solution Method: Theis

T = 2.757E+4 ft^2/day
S = 0.043
Kz/Kr = 1.
b = 175.8 ft



WELL TEST ANALYSIS

Data Set: C:\Users\scanstation\Documents\move requests\21444\21444 current.aqt
Date: 10/10/24 Time: 15:00:24

PROJECT INFORMATION

Test Well: 21444

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
21444	-50521	260213

Observation Wells

Well Name	X (ft)	Y (ft)
▫	-50521	260213
▫ 11216 ID3 & 19925	-54987	258561
▫ 5135	-55584	260940
▫ 11216 ID6	-52779	261222
▫ 30734	-48056	261188
▫ 7255	-50789	256423
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