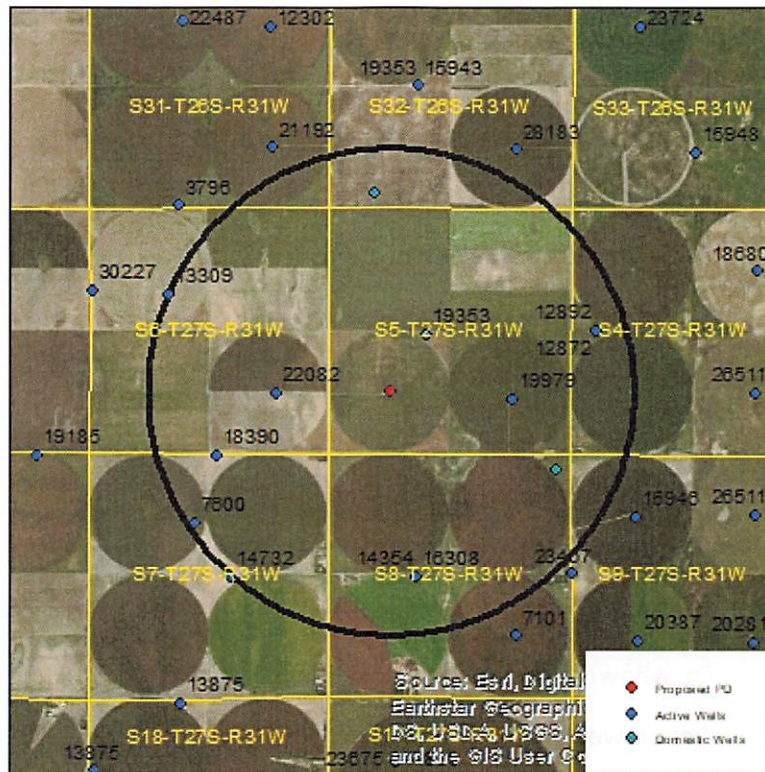


Evaluation of proposed move for Water Right No 19353

Proposed: Move water right no. 19353 a distance of 1,444 ft to the southwest.



Wells within 1 mile: 19979, 12872 & 12892, 22082, 13309, 18390, 7600, 14354 & 16308, a domestic well in section 32-26-31, and a domestic well in section 8-27-31.

The saturated thickness at the proposed well location is estimated to be 325 ft, based upon an observation well in section 9-27-31. 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:

$S = 0.128$, $T = 6,822.1 \text{ ft}^2/\text{day}$, $tp_{\text{current}} = 120$ days (presumed pumping time due to no observed rate), $Q_{\text{current}} = 224$ gpm (based upon 120 days operation), $tp_{\text{proposed}} = 124$ days, $Q_{\text{proposed}} = 755$ gpm

Theis drawdowns were calculated as follows:

19979: Drawdown from current location = 1.28 ft
 Drawdown from proposed location = 4.12 ft
 Net drawdown = **2.8 ft**

12872 & 12892: Drawdown from current location = 0.96 ft
 Drawdown from proposed location = 2.90 ft
 Net drawdown = **1.9 ft**

22082: Drawdown from current location = 0.99ft
Drawdown from proposed location = 4.30 ft
Net drawdown = **3.3 ft**

13309: Drawdown from current location = 0.73 ft
Drawdown from proposed location = 2.67 ft
Net drawdown = **1.9 ft**

18390: Drawdown from current location = 0.77 ft
Drawdown from proposed location = 3.17 ft
Net drawdown = **2.4 ft**

7600: Drawdown from current location = 0.68 ft
Drawdown from proposed location = 2.71 ft
Net drawdown = **2.0 ft**

14354 & 16308: Drawdown from current location = 0.68 ft
Drawdown from proposed location = 2.71 ft
Net drawdown = **2.0 ft**

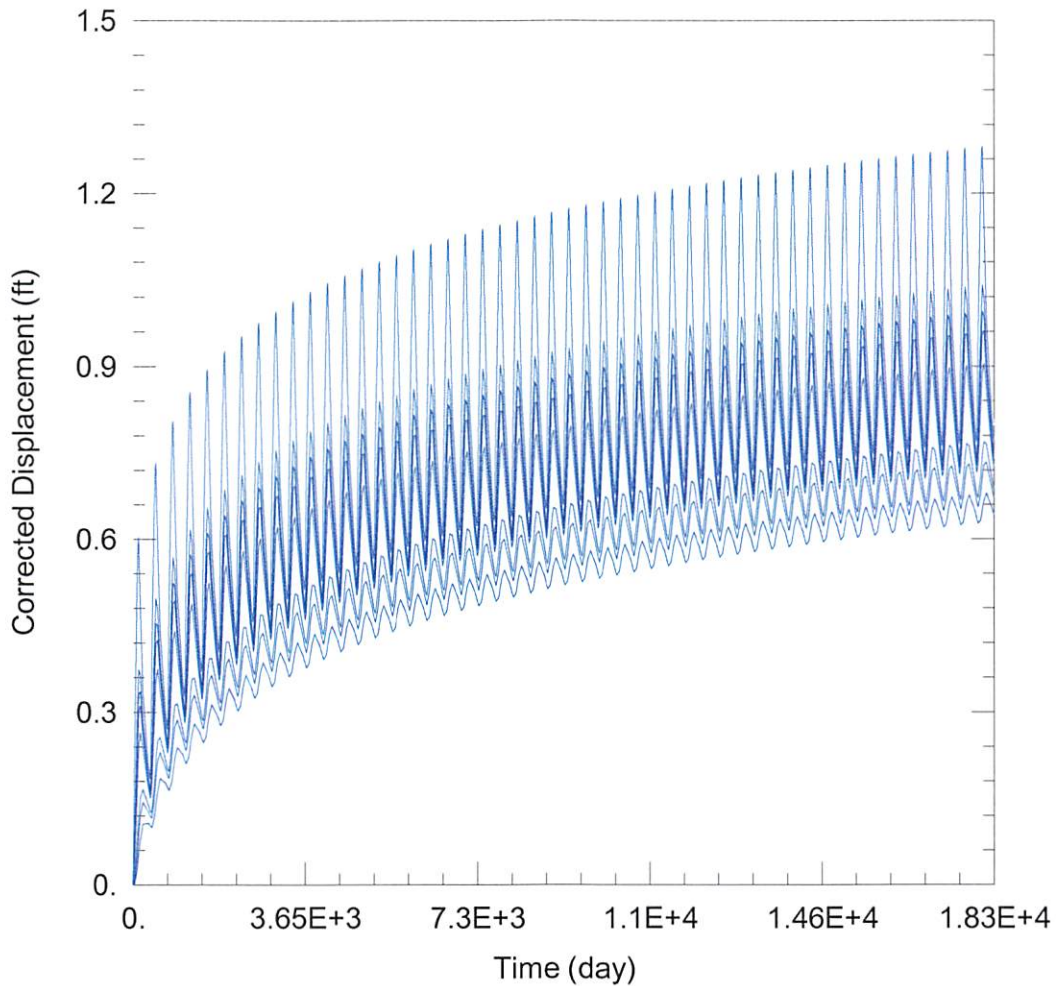
Domestic 32-26-31: Drawdown from current location = 1.04 ft
Drawdown from proposed location = 3.05 ft
Net drawdown = **2.0 ft**

Domestic 8-27-31: Drawdown from current location = 0.91 ft
Drawdown from proposed location = 3.18 ft
Net drawdown = **2.3 ft**

Net drawdown does not exceed the drawdown allowance of 4.0 ft for any wells within 1 mile of the proposed location. Therefore, critical well analysis is not necessary.

Conclusion:

Based upon information from the GMD3 model, this proposal will cause minimal effects on neighboring wells, and is unlikely to create an impairment. GMD3 staff recommends approval of the application.



WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2020_moves\19353\19353 Current.aqt

Date: 07/10/20

Time: 14:26:30

PROJECT INFORMATION

Company: GMD 3

Project: 19353

Location: Haskell County

Test Well: 19353

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
19353	18315	310960

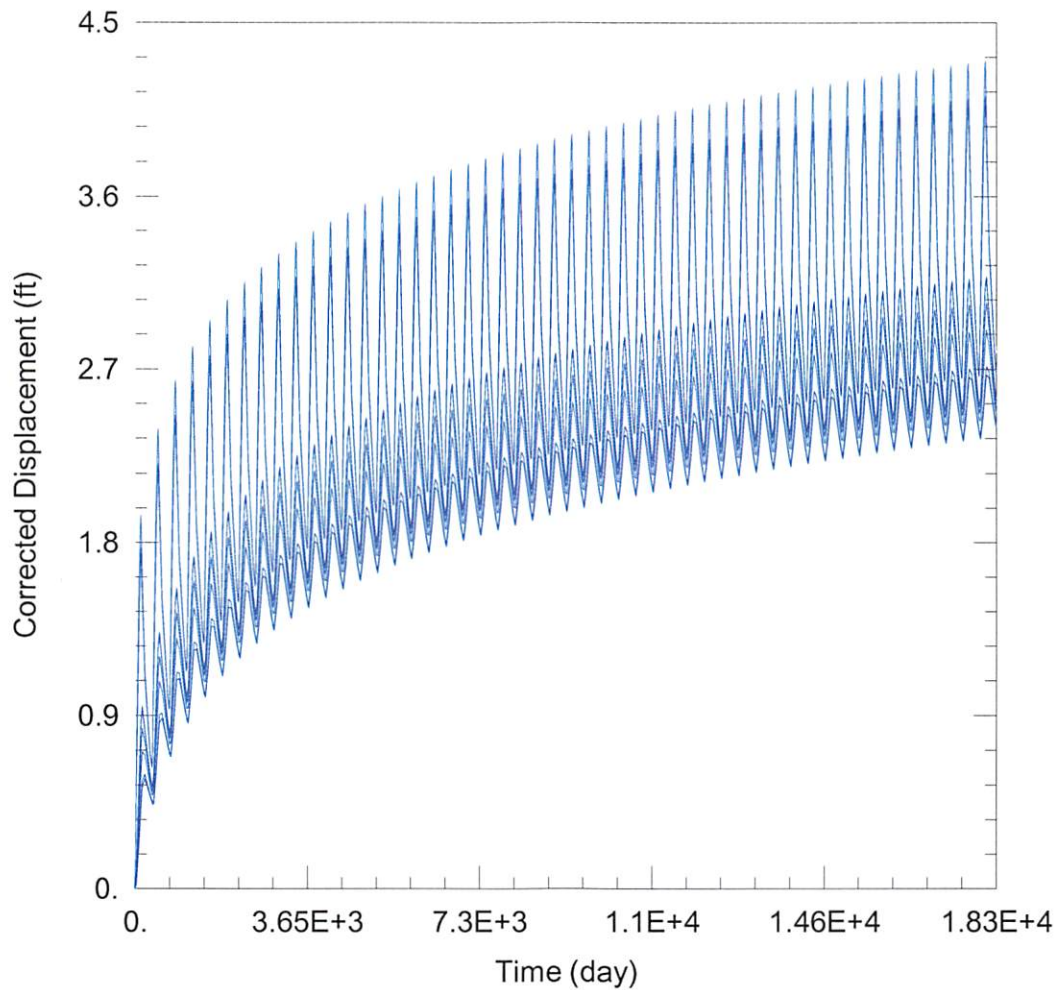
Observation Wells

Well Name	X (ft)	Y (ft)
□	18315	310960
□ 19979	20198	309577
□ 12872 & 12892	21987	311039
□ 22082	15063	309712
□ 13309	12703	311834
□ 18390	13761	308357
□ 7600	13271	306874
□ 14354 & 16308	13271	306874
□ Domestic 32-26-31	17176	314023
□ Domestic 8-27-31	21139	308033

SOLUTION

Aquifer Model: Unconfined

Solution Method: Thiele



WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2020_moves\19353\19353 Proposed.aqt

Date: 07/10/20

Time: 14:26:23

PROJECT INFORMATION

Company: GMD 3

Project: 19353

Location: Haskell County

Test Well: 19353

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
19353	17536	309743

Observation Wells

Well Name	X (ft)	Y (ft)
□	17536	309743
□ <u>19979</u>	20198	309577
□ <u>12872 & 12892</u>	21987	311039
□ <u>22082</u>	15063	309712
□ <u>13309</u>	12703	311834
□ <u>18390</u>	13761	308357
□ <u>7600</u>	13271	306874
□ <u>14354 & 16308</u>	13271	306874
□ <u>Domestic 32-26-31</u>	17176	314023
□ <u>Domestic 8-27-31</u>	21139	308033

SOLUTION

Aquifer Model: Unconfined

Solution Method: Threat