Evaluation of proposed move for Water Right No. 28330
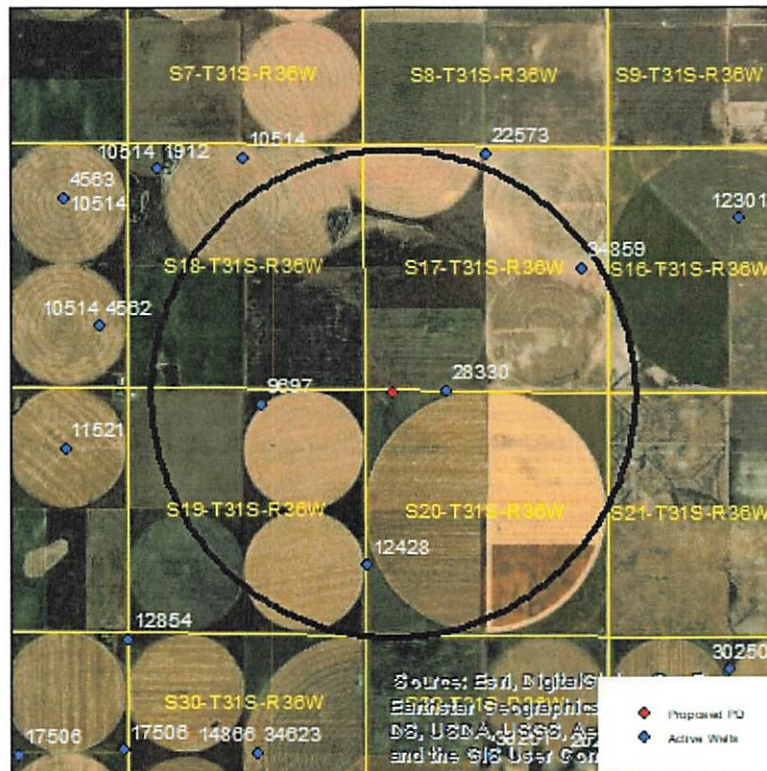
Proposed: Move water right no. 28330 to a new well location, a distance of 1,161 ft to the west.

Wells within 1 mile: 34859, 9697, and 12428.

The saturated thickness at the proposed well location is estimated to be 211 ft, based upon driller's log and an observation well in section 13-31-37. 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 (note S and T values were estimated from the driller's log, not the GMD3 model):

$S = 0.2539$, $T = 9414.5$ ft^2/day, $tp_{current} = 102$ days (based on average use and observed rate), $Q_{current} = 925$ gpm (based on 2020 field inspection), $tp_{proposed} = 127$ days, $Q_{proposed} = 1400$ gpm

Theis drawdowns were calculated as follows:

34859: Drawdown from current location = 2.09 ft

 Drawdown from proposed location = 3.43 ft

 Net drawdown = **1.3 ft**

9697: Drawdown from current location = 2.08 ft

 Drawdown from proposed location = 3.43 ft

 Net drawdown = **2.7 ft**

12428:   Drawdown from current location = 2.04 ft

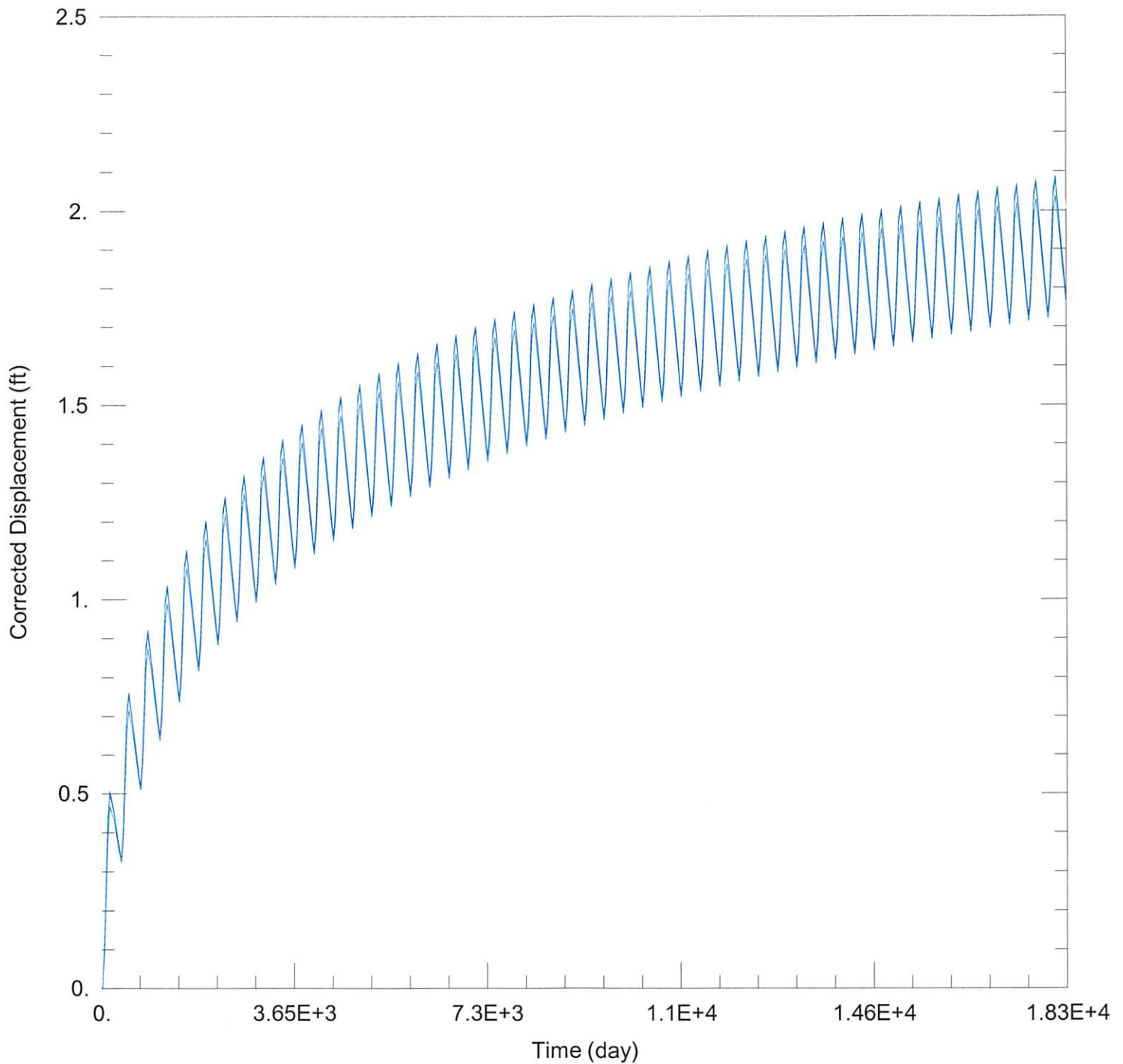   Drawdown from proposed location = 4.02 ft

                                   Net drawdown = **2.0 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\trevora\Documents\2022_moves\28330\28330 Current.aqt
Date: 11/10/22   Time: 15:42:08

PROJECT INFORMATION
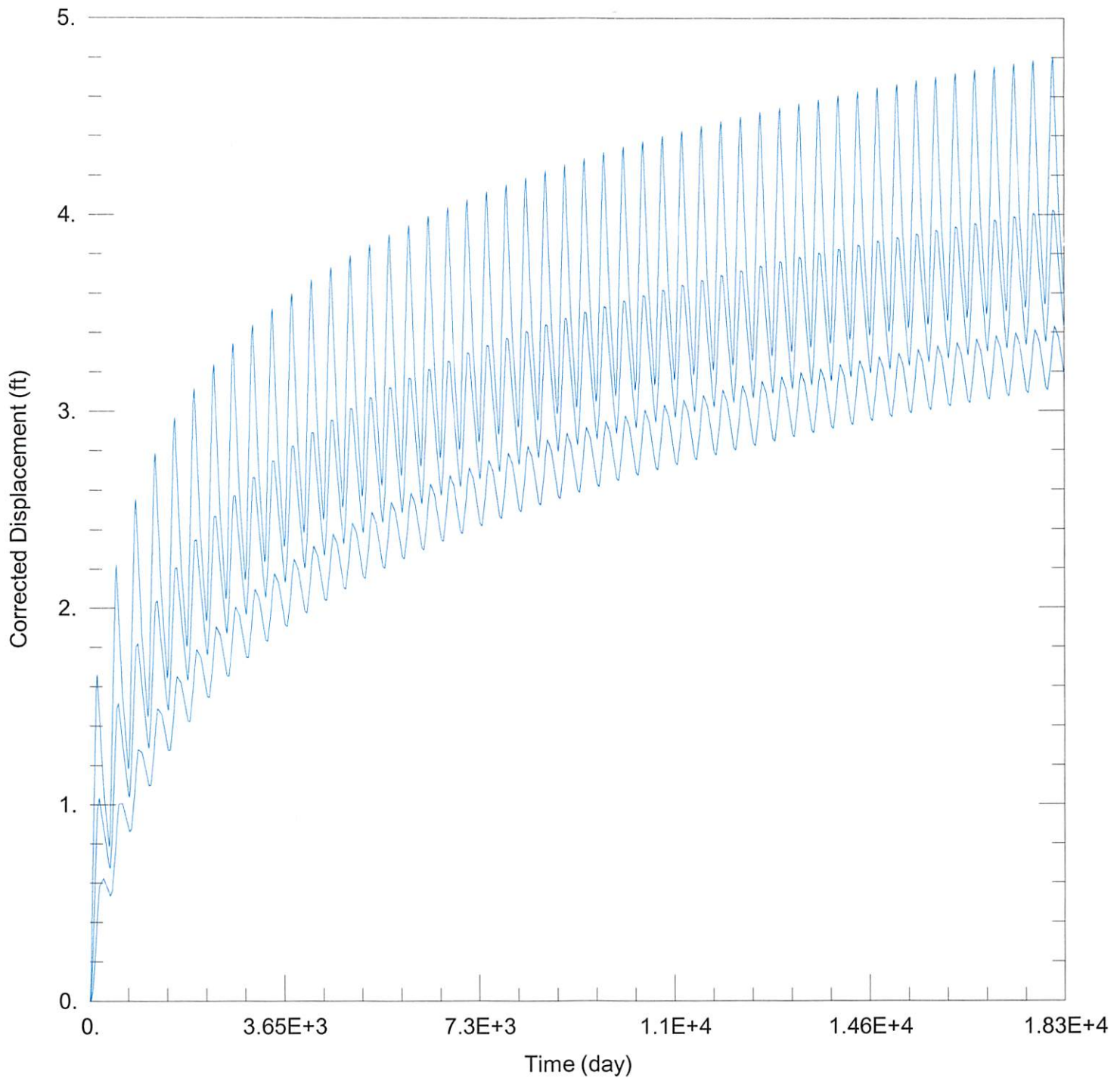
Company: GMD 3
Project: 28330
Location: Stevens County

WELL DATA

Pumping Wells			Observation Wells		
Well Name	X (ft)	Y (ft)	Well Name	X (ft)	Y (ft)
28330	-134175	171156	□	-134175	171156

WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2022_moves\28330\28330 Proposed.aqt
Date: 11/10/22   Time: 15:42:01

PROJECT INFORMATION

Company: GMD 3
Project: 28330
Location: Stevens County

WELL DATA

Pumping Wells			Observation Wells		
Well Name	X (ft)	Y (ft)	Well Name	X (ft)	Y (ft)
28330	-135336	171107	▫	-135336	171107