

3027: Drawdown from current location = 0.85 ft
Drawdown from proposed location = 6.43 ft
Net drawdown = **5.6 ft**

10109: Drawdown from current location = 0.57 ft
Drawdown from proposed location = 5.46 ft
Net drawdown = **4.9 ft**

Net drawdown exceeds the drawdown allowance of 3.5 ft for all wells within 1 mile of the proposed location. Critical well analysis is necessary on those wells.

Critical Well Evaluation:

13307:

Water Column = 182 ft

DP = 5.4 ft (Net drawdown from the proposal indicated above)

DE = 44.6 ft (Water level decline from 2023 through 2048 based upon GMD3 model)

DD = 0 ft (No well use in the last 10 years)

DT = 50.0 ft

Economic Drawdown Constraint (EDC) = $0.4 * 182 \text{ ft} = 72.8 \text{ ft}$

Physical Drawdown Constraint (PDC) = $182 \text{ ft} - 60 \text{ ft} = 122 \text{ ft}$

Total drawdown of 50.0 ft is less than the EDC and the PDC, so this well is **not critical**.

12559 & 18484:

Water Column = 160 ft

DP = 5.6 ft (Net drawdown from the proposal indicated above)

DE = 42.7 ft (Water level decline from 2023 through 2048 based upon GMD3 model)

DD = 31.3 ft ($S = 0.1359$, $T = 2595 \text{ ft}^2/\text{day}$, $Q = 675 \text{ gpm}$, $t_p = 119 \text{ days}$, efficiency = 70%)

DT = 79.6 ft

Economic Drawdown Constraint (EDC) = $0.4 * 160 \text{ ft} = 64.0 \text{ ft}$

Physical Drawdown Constraint (PDC) = $160 \text{ ft} - 60 \text{ ft} = 100 \text{ ft}$

Total drawdown of 79.6 ft is greater than the EDC, so this well is **critical**.

3027:

Water Column = 161 ft

DP = 5.6 ft (Net drawdown from the proposal indicated above)

DE = 42.7 ft (Water level decline from 2023 through 2048 based upon GMD3 model)

DD = 31.3 ft (S = 0.0762, T = 8113 ft²/day, Q = 675 gpm, tp = 119 days, efficiency = 70%)

DT = 79.6 ft

Economic Drawdown Constraint (EDC) = 0.4 * 161 ft = 64.4 ft

Physical Drawdown Constraint (PDC) = 161 ft – 60 ft = 101 ft

Total drawdown of 79.6 ft is greater than the EDC, so this well is **critical**.

10109:

Water Column = 168 ft

DP = 4.9 ft (Net drawdown from the proposal indicated above)

DE = 45.0 ft (Water level decline from 2023 through 2048 based upon GMD3 model)

DD = 0 ft (No well use in the last 10 years)

DT = 49.9 ft

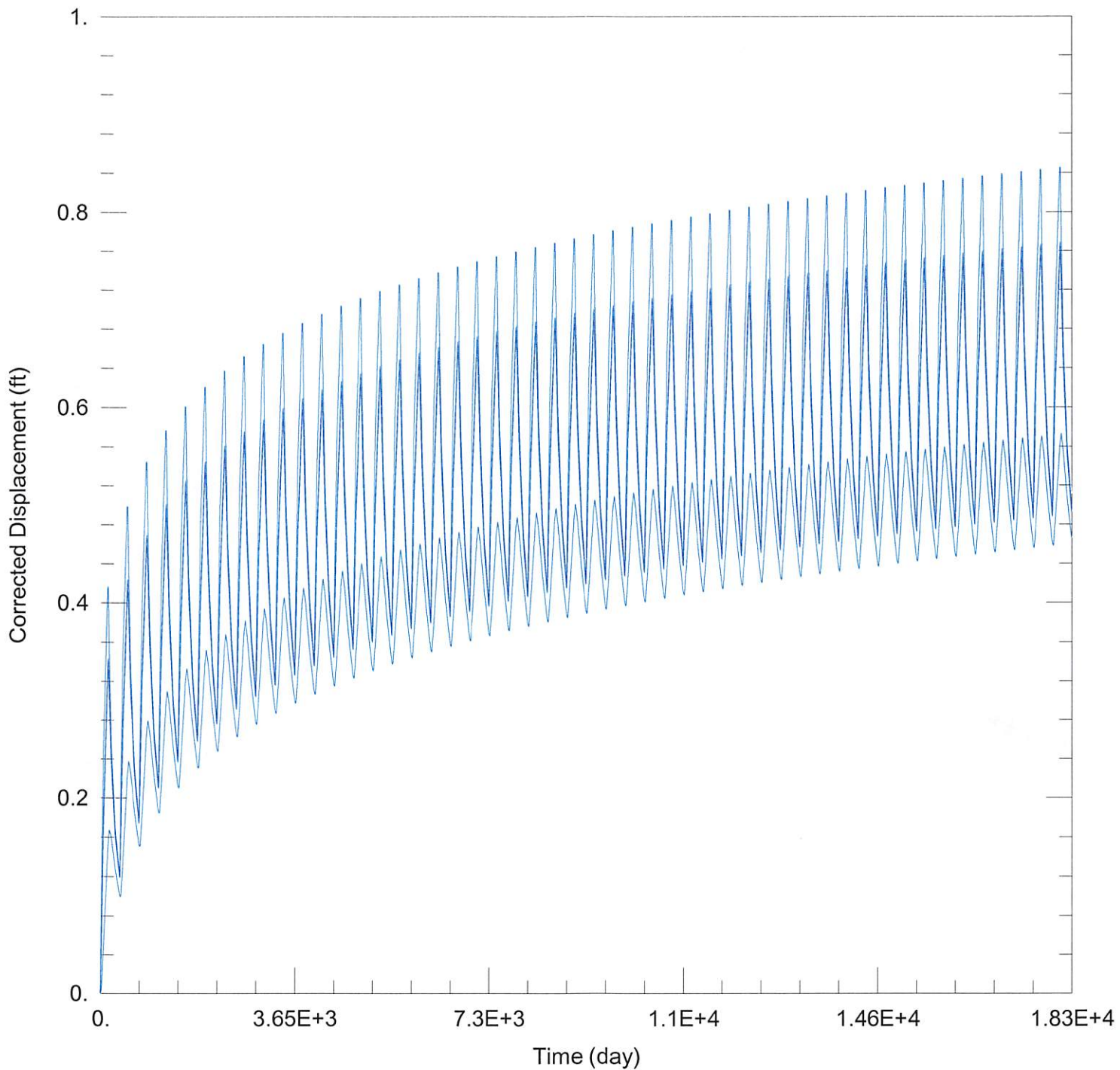
Economic Drawdown Constraint (EDC) = 0.4 * 168 ft = 67.2 ft

Physical Drawdown Constraint (PDC) = 168 ft – 60 ft = 108 ft

Total drawdown of 49.9 ft is less than the EDC and PDC, so this well is **not critical**.

Conclusion:

The proposed move includes three water rights that are split over three wells with a blanket authorized rate and quantity of 3480 gpm and 1600 AF. For this analysis, it was assumed that the two wells that are not proposed to be moved will continue to operate at their current rates and quantities, allowing for up to 2408 gpm and 1004.5 AF at the proposed well location. It is very unlikely that the proposed well will be able to run at that rate or will pump that quantity of water, but it would be permitted to do so. If the proposed well were to operate at its fully authorized rate and quantity, it is likely that a noticeable effect would be generated on two nearby critical wells. These wells were flagged as critical because the GMD3 model projects that they will lose more than 40% of the aquifer necessary to provide their current production over the next 25 years. 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\2023_moves\3424_6073_8059\3424 & 6073 & 8059 Current.aqt
 Date: 03/15/23 Time: 15:15:19

PROJECT INFORMATION

Company: GMD 3
 Project: 3424 & 6073 & 8059
 Location: Stevens County

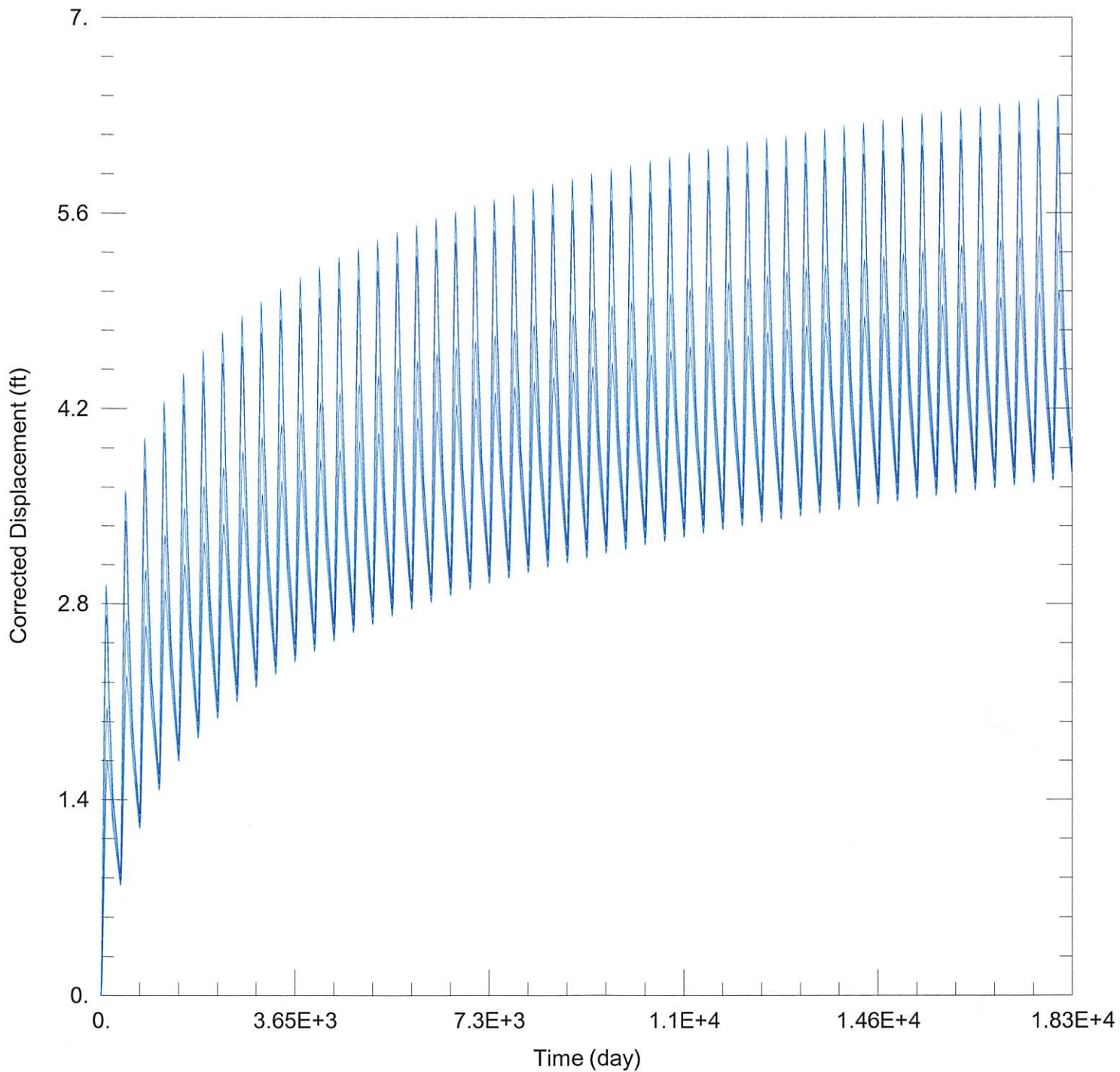
WELL DATA

Pumping Wells

Observation Wells

Well Name	X (ft)	Y (ft)
3424 & 6073 & 8059	-101393	165480

Well Name	X (ft)	Y (ft)
□	-101393	165480



WELL TEST ANALYSIS

Data Set: C:\...\3424 & 6073 & 8059 Proposed.aqt

Date: 03/15/23

Time: 15:15:13

PROJECT INFORMATION

Company: GMD 3

Project: 3424 & 6073 & 8059

Location: Stevens County

WELL DATA

Pumping Wells

Observation Wells

Well Name	X (ft)	Y (ft)
3424 & 6073 & 8059	-101562	163799

Well Name	X (ft)	Y (ft)
□	-101562	163799