Evaluation of proposed move for Water Right Nos. 437 & 9150

Proposed: Move water right nos. 437 & 9150 to a new well location, a distance of 2,518 ft to the northeast.



Wells within 1 mile: 5391, 9283 & 12407, 18287, and 9297.

The saturated thickness at the proposed well location is estimated to be 167 ft, based upon the driller's log and an observation well in section 20-29-39. For saturated thickness between 150 ft and 200 ft, the drawdown allowance is 3.5 ft.

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

S = 0.2241, T = 6952.2 ft²/day, $tp_{current} = 170$ days (based on average use and observed rate), $Q_{current} = 449$ gpm (based on 2018 field inspection), $tp_{proposed} = 80$ days, $Q_{proposed} = 1800$ gpm

Theis drawdowns were calculated as follows:

5391: Drawdown from current location = 1.67 ft

Drawdown from proposed location = 3.61 ft

Net drawdown = 1.9 ft

9283 & 12407: Drawdown from current location = 1.55 ft

Drawdown from proposed location = 3.84 ft

Net drawdown = 2.3 ft

18287:

Drawdown from current location = 1.71 ft

Drawdown from proposed location = 4.54 ft

Net drawdown = 2.8 ft

9297:

Drawdown from current location = 2.49 ft

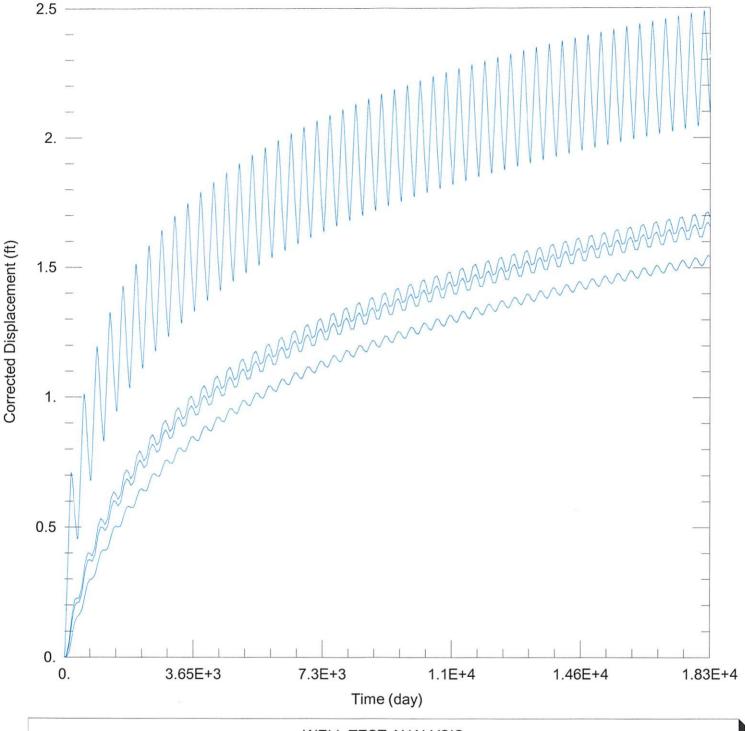
Drawdown from proposed location = 3.67 ft

Net drawdown = 1.2 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\trevora\Documents\2023_moves\437_9150\437 & 9150 Current.aqt

Date: 01/27/23 Time: 16:21:21

Pumping Wells

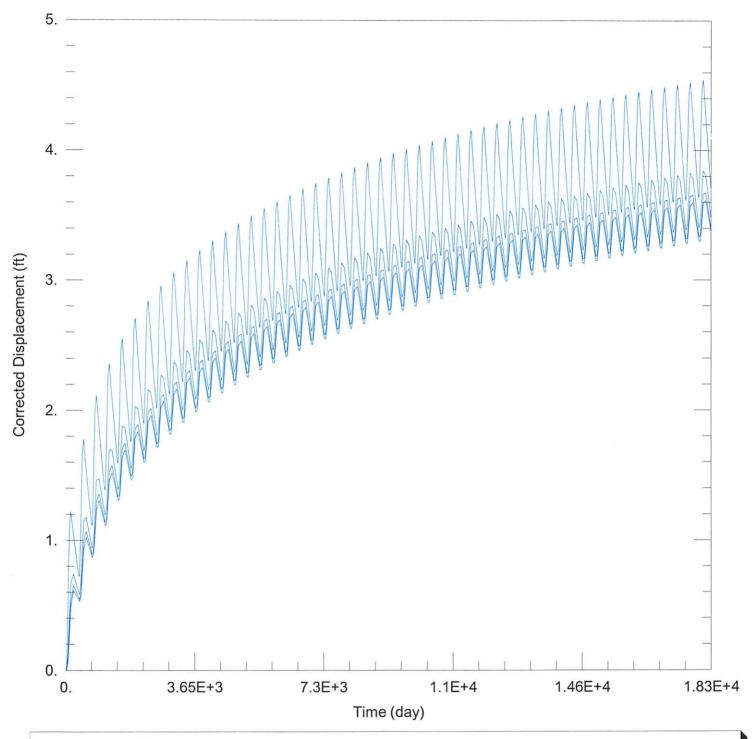
PROJECT INFORMATION

Company: GMD 3
Project: 437 & 9150
Location: Stanton County

WELL DATA

Observation Wells

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Well Name	X (ft)	Y (ft)	Well Name	X (ft)	Y (ft)	
437 & 9150	-236963	232926		-236963	232926	



WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2023_moves\437_9150\437 & 9150 Proposed.aqt

Date: 01/27/23 Time: 16:21:13

PROJECT INFORMATION

Company: GMD 3
Project: 437 & 9150
Location: Stanton County

WELL DATA

Pumping vveiis			Observation wells		
Well Name	X (ft)	Y (ft)	Well Name	X (ft)	Y (ft)
137 & Q150	235043	23/1555		-235043	234555