

# Harney Basin Recorder Well Network

Harney Basin Groundwater Study  
Advisory Committee Meeting  
April 20, 2017

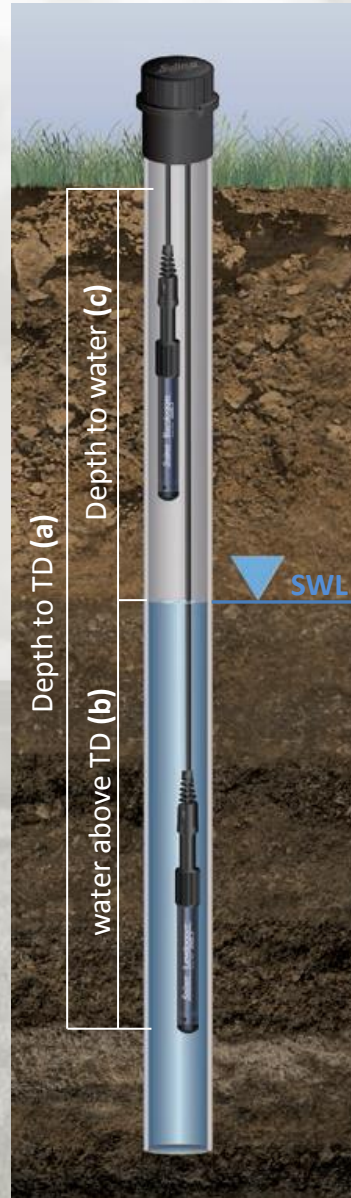


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Hydrogeologist  
Oregon Water Resources Department

# Recorder Well Installations

## Solinst Levelogger & Barologger Transducers

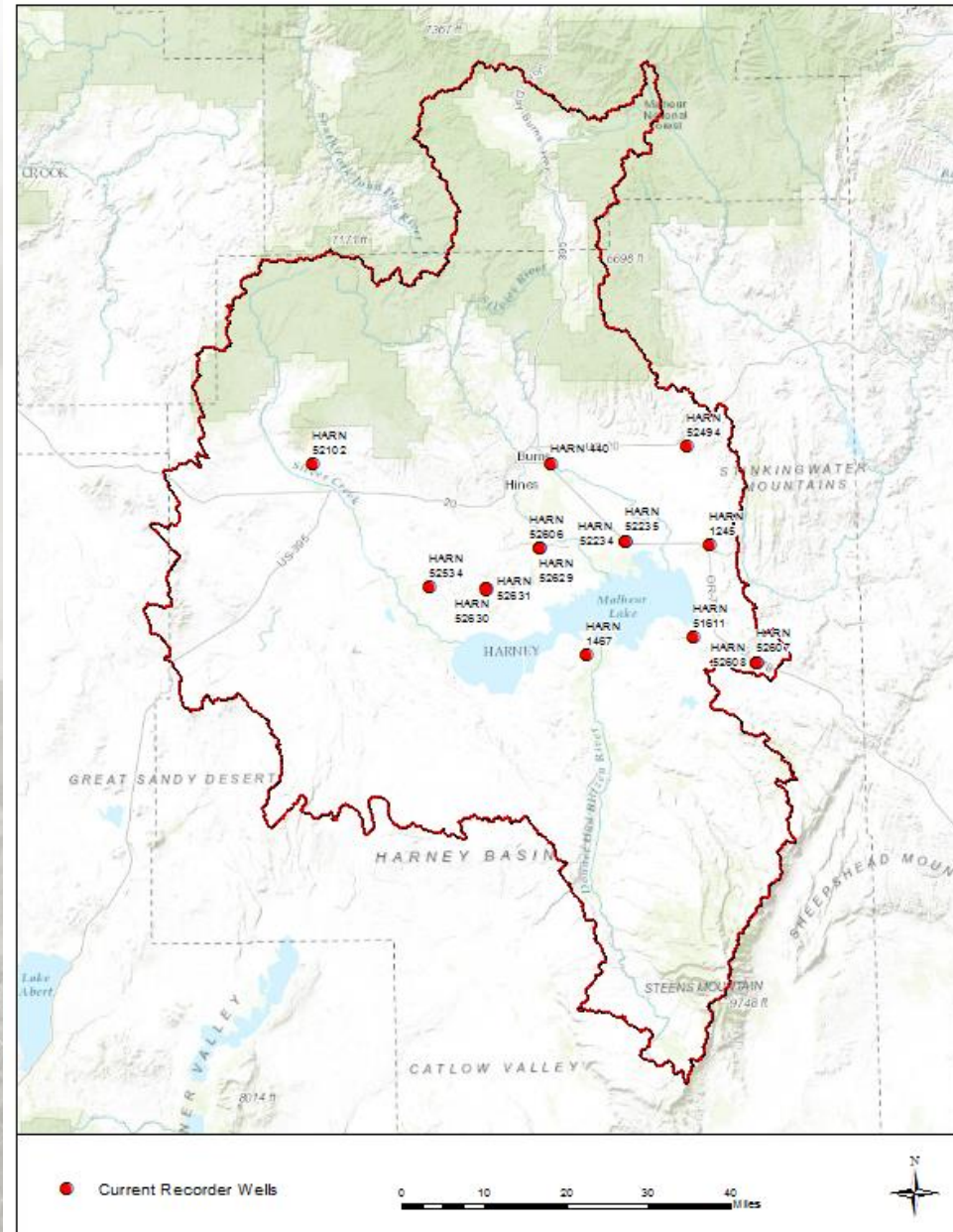
- Levelogger set at known depth **(a)**.
- Levelogger measures absolute pressure below the static water level (water column above transducer plus barometric pressure).
- Barologger measures absolute pressure above the static water level (barometric pressure).
- Levelogger – Barologger = height of water column above transducer **(b)**.
- **$a - b = \text{depth to water (c)}$**
- Recorder data confirmed quarterly with manual e-tape measurements.



# Harney Basin Recorder Network

## Harney Basin Recorder Wells (as of 04-2017):

1. HARN 440 – miscellaneous recorder
2. HARN 1467 – miscellaneous recorder
3. HARN 1245 – miscellaneous recorder
4. HARN 51611 – miscellaneous recorder
5. HARN 52102 – permit condition obs well
6. HARN 52234 – OWRD dedicated obs well pair
7. HARN 52235 – OWRD dedicated obs well pair
8. HARN 52494 – permit condition obs well
9. HARN 52534 – permit condition obs well
10. HARN 52606 – OWRD dedicated obs well pair
11. HARN 52607 – OWRD dedicated obs well pair
12. HARN 52608 – OWRD dedicated obs well pair
13. HARN 52629 – OWRD dedicated obs well pair
14. HARN 52630 – OWRD dedicated obs well pair
15. HARN 52631 – OWRD dedicated obs well pair



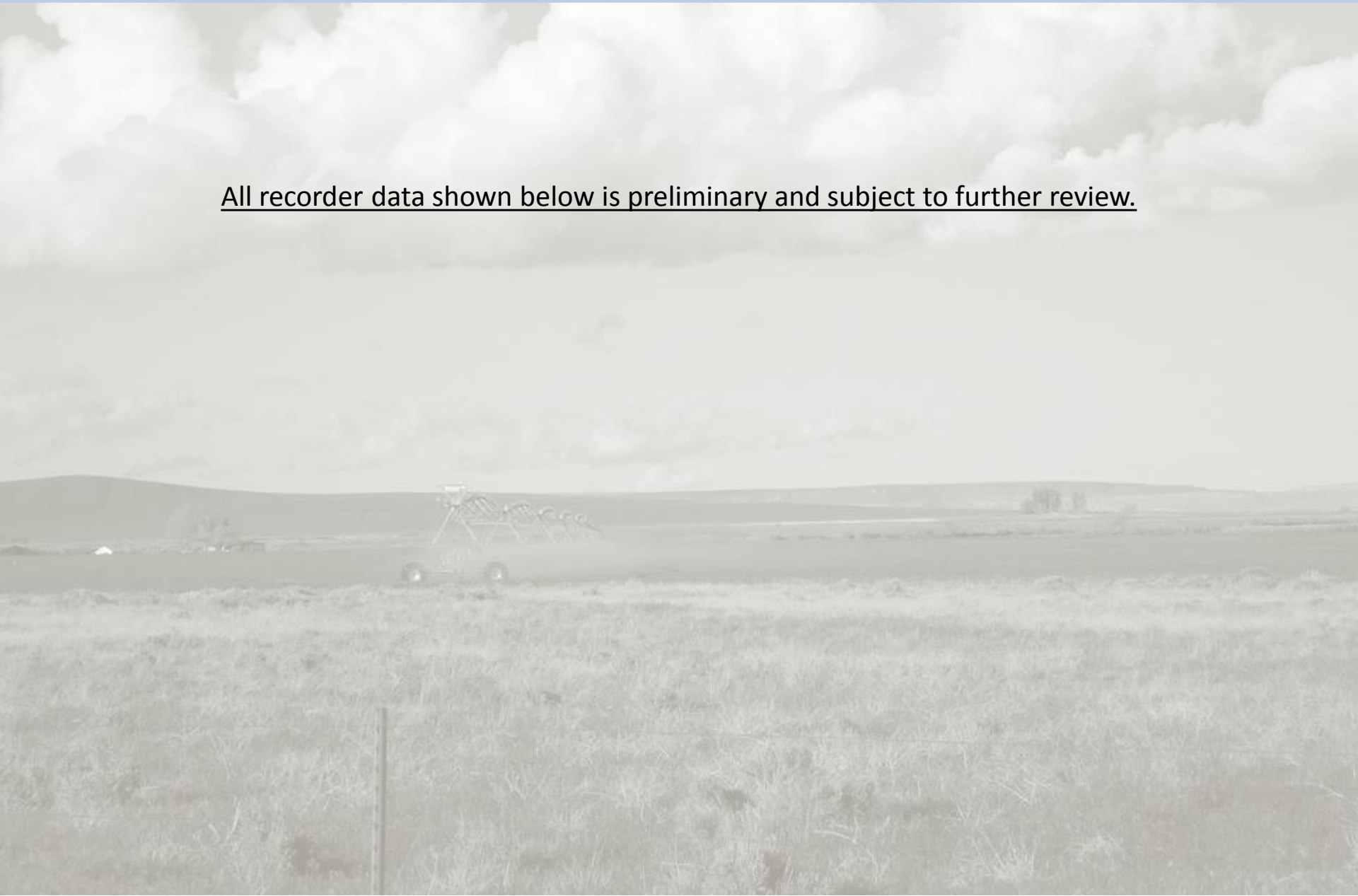
# Harney Basin Recorder Network

## Recorder Well Status (as of 04-2017):

1. HARN 440 – current: hydrograph below
2. HARN 1467 – current: hydrograph below
3. HARN 1245 – current: hydrograph below
4. HARN 51611 – current: hydrograph below
5. HARN 52102 – current: hydrograph below
6. HARN 52234 – current: hydrograph below
7. HARN 52235 – troubleshooting equipment problems – partial hydrograph below
8. HARN 52494 – current: hydrograph below
9. HARN 52534 – current: hydrograph below
10. HARN 52606 – current: short period of record – not plotted below
11. HARN 52607 – current: short period of record – not plotted below
12. HARN 52608 – current: short period of record – not plotted below
13. HARN 52629 – current: short period of record – not plotted below
14. HARN 52630 – current: short period of record – not plotted below
15. HARN 52631 – current: short period of record – not plotted below

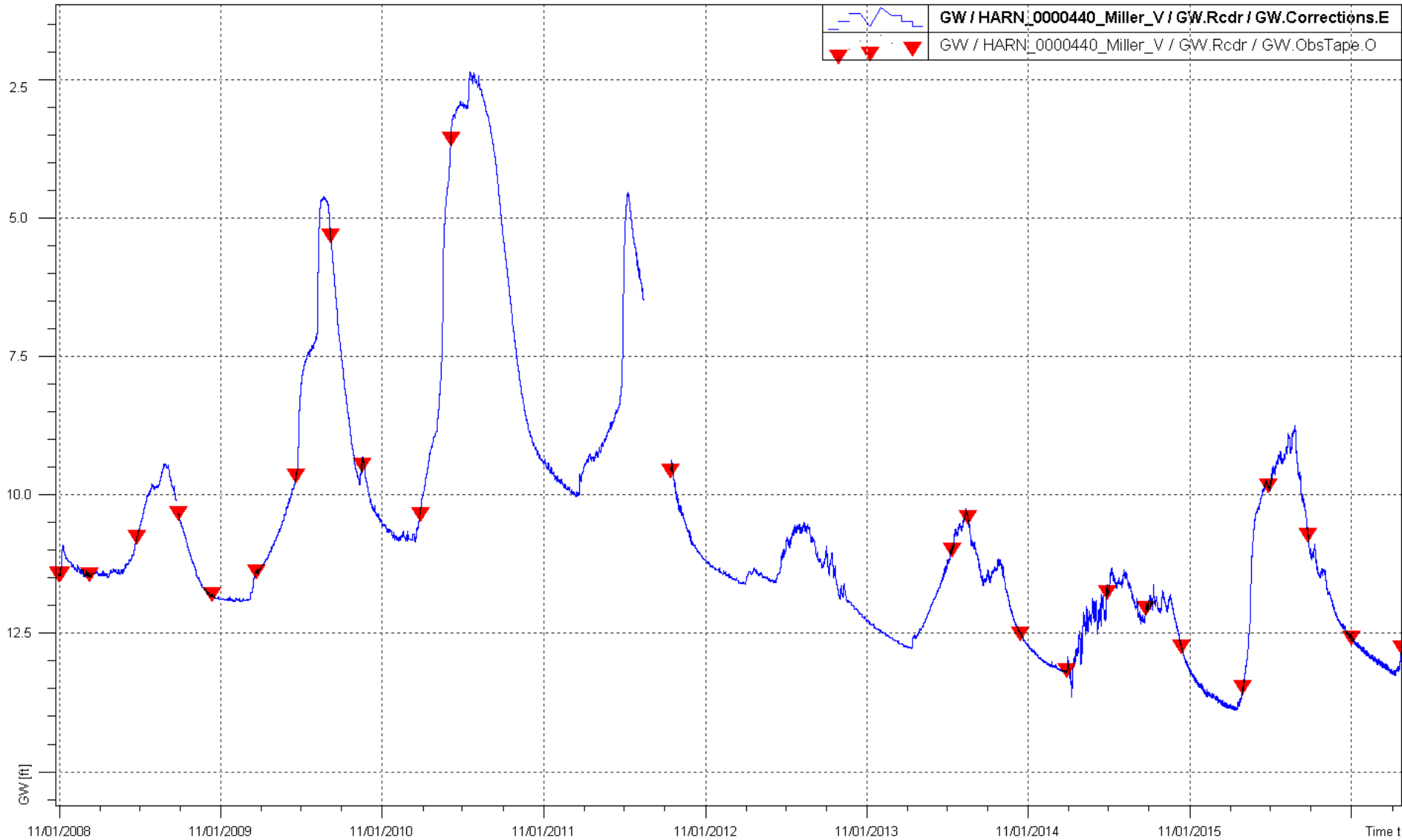
# Harney Basin Recorder Network

All recorder data shown below is preliminary and subject to further review.



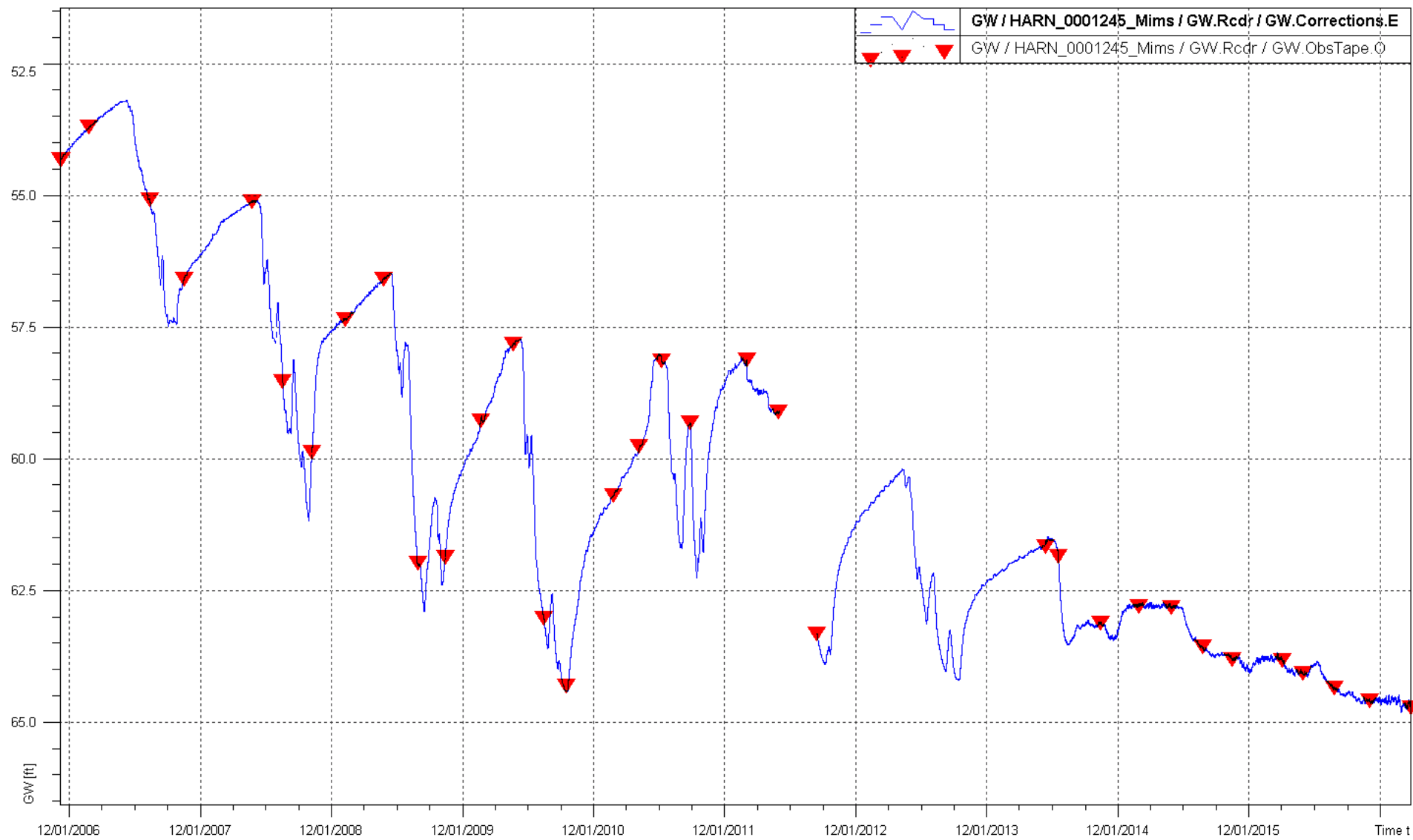
# Recorder Well Hydrographs

HARN 440



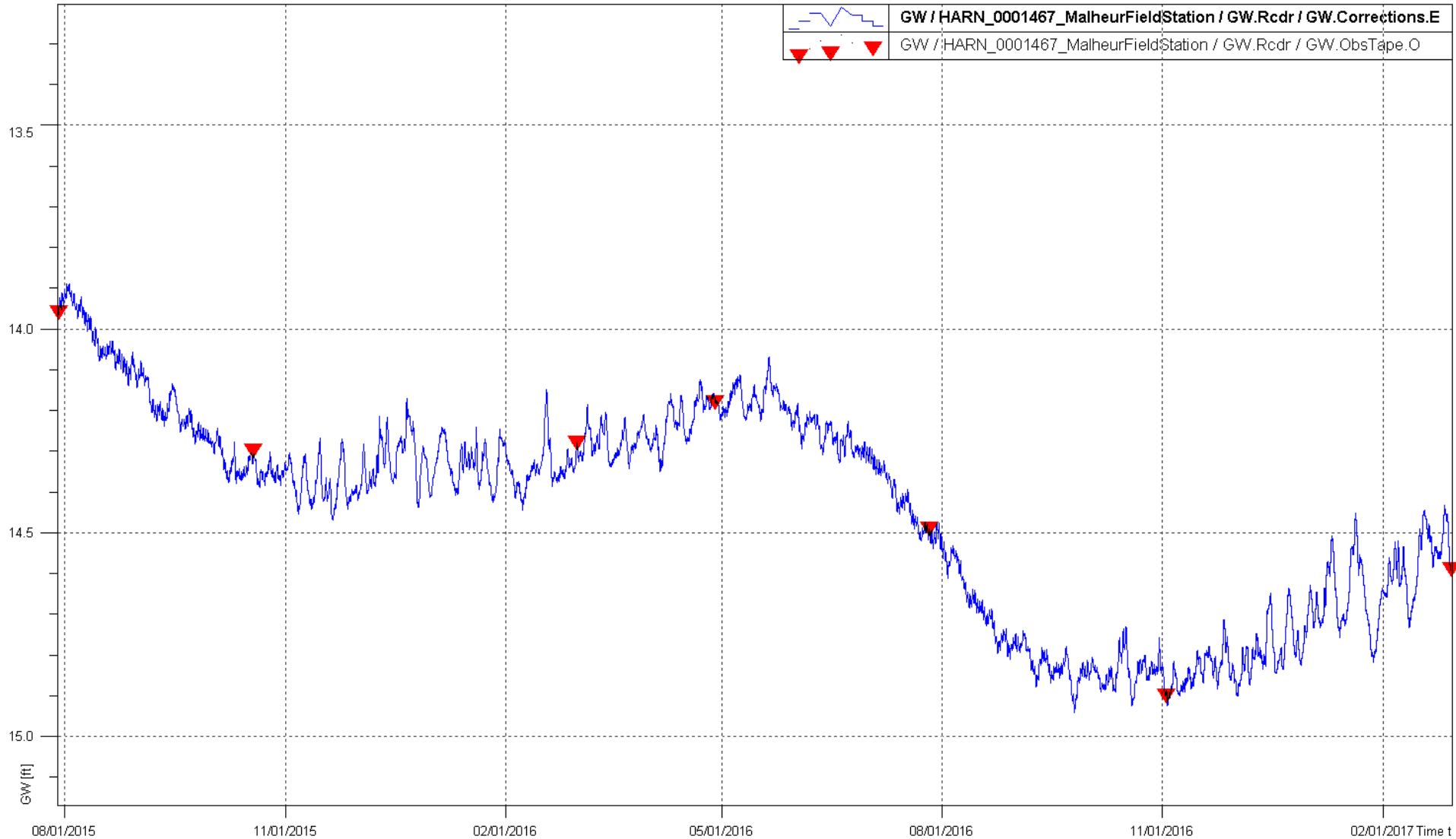
# Recorder Well Hydrographs

HARN 1245



# Recorder Well Hydrographs

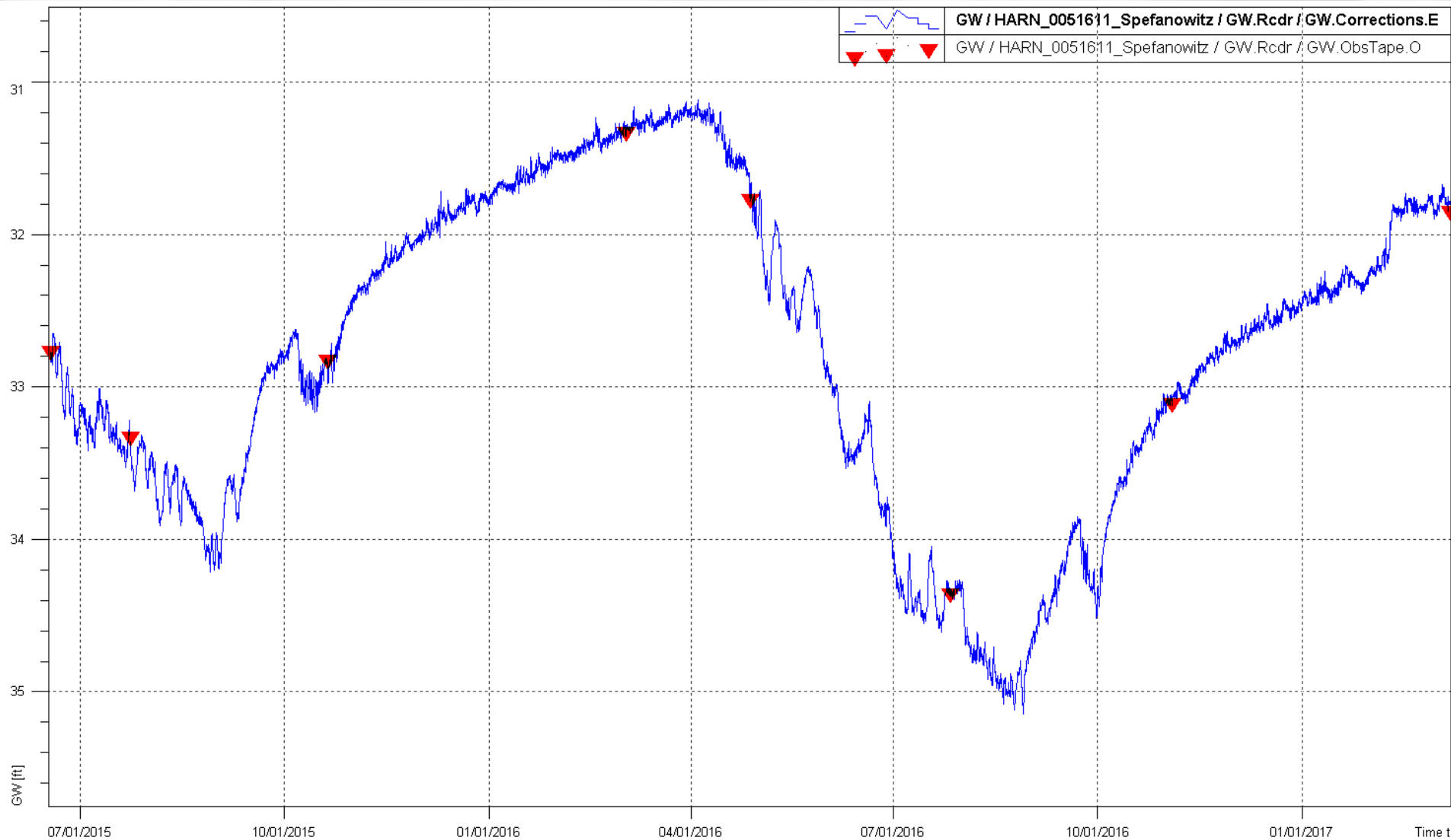
HARN 1467





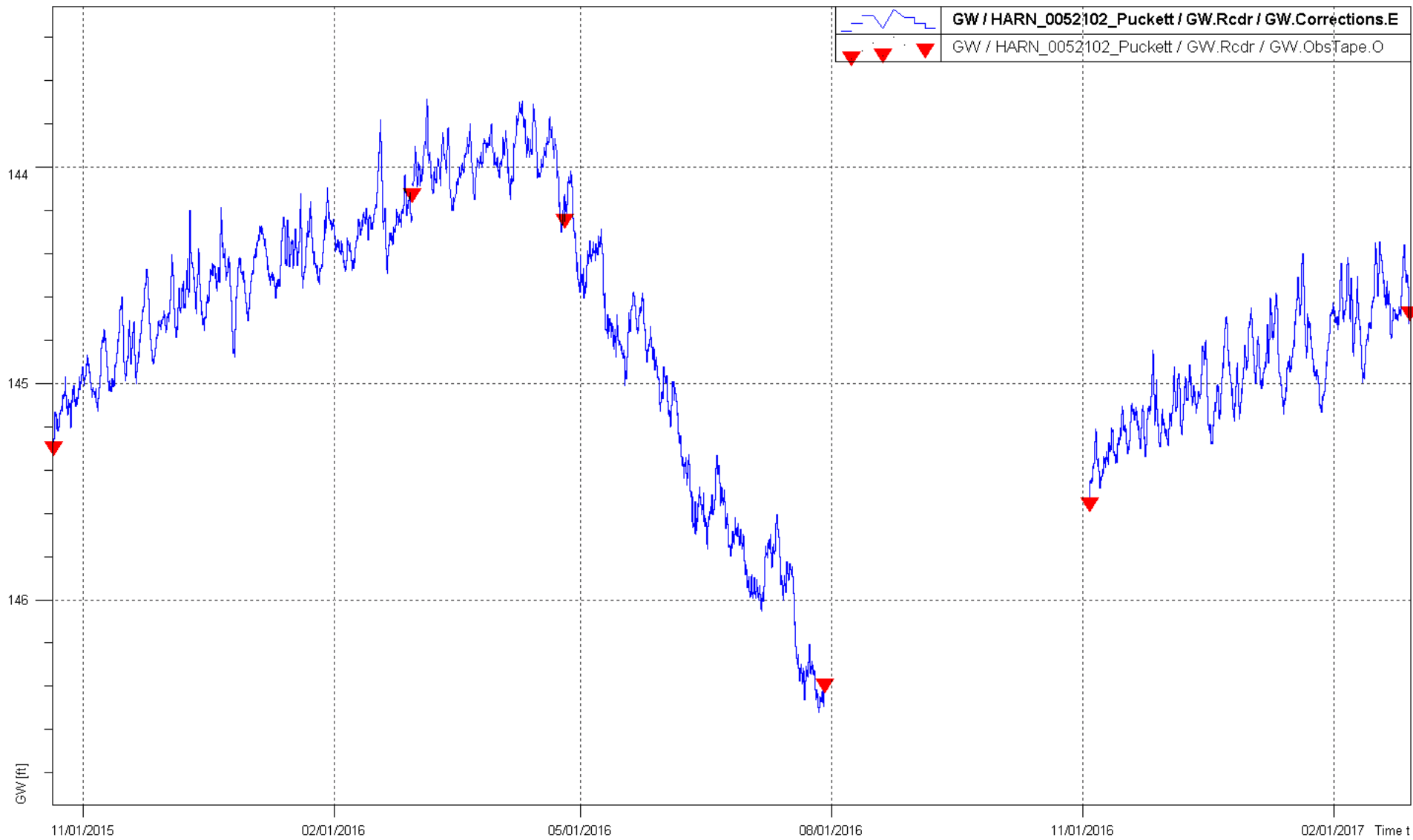
# Recorder Well Hydrographs

HARN 51611



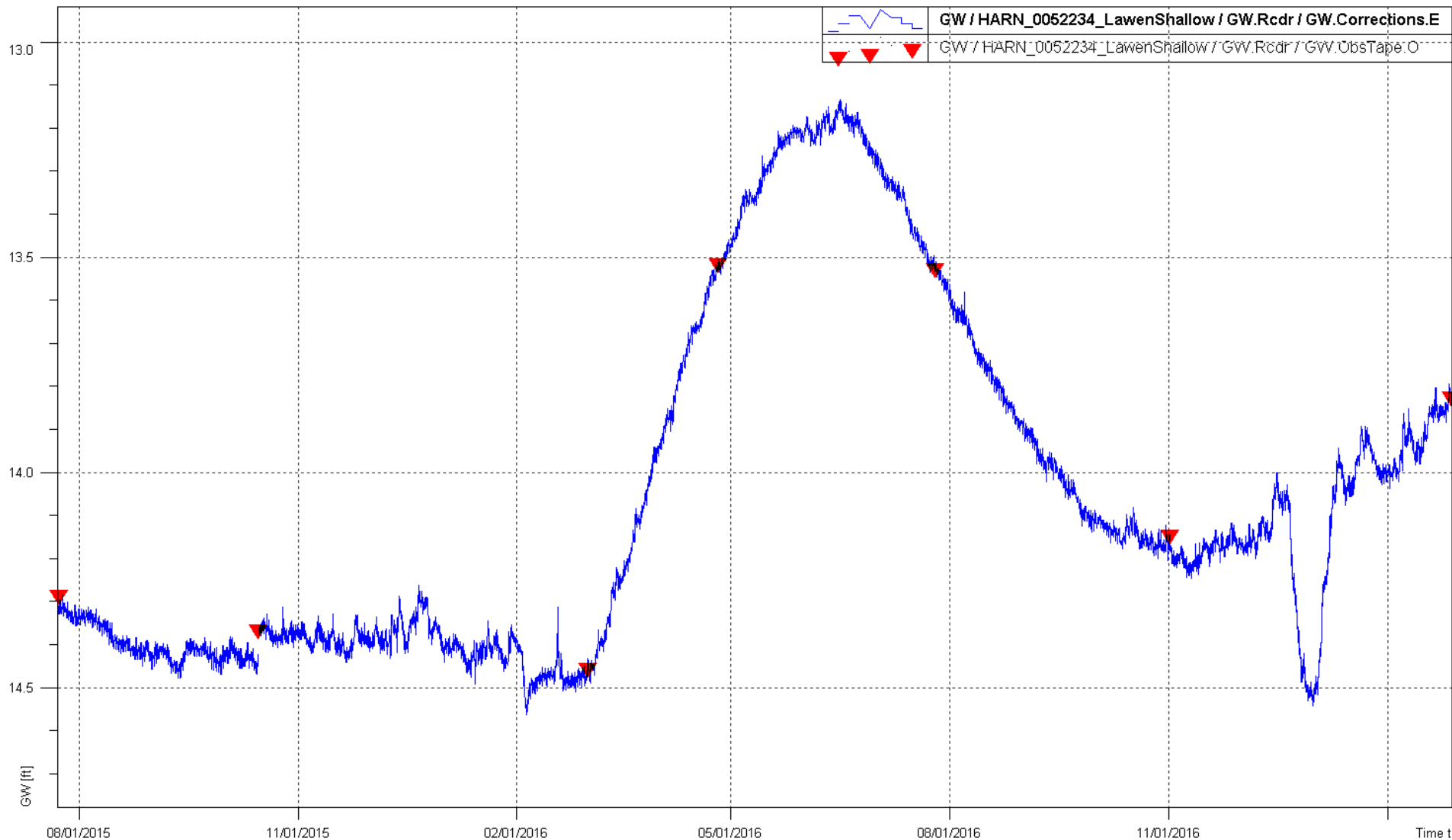
# Recorder Well Hydrographs

HARN 52102



# Recorder Well Hydrographs

HARN 52234



# Recorder Well Hydrographs

## HARN 52234 & HARN 52235 (shallow/deep well pair)

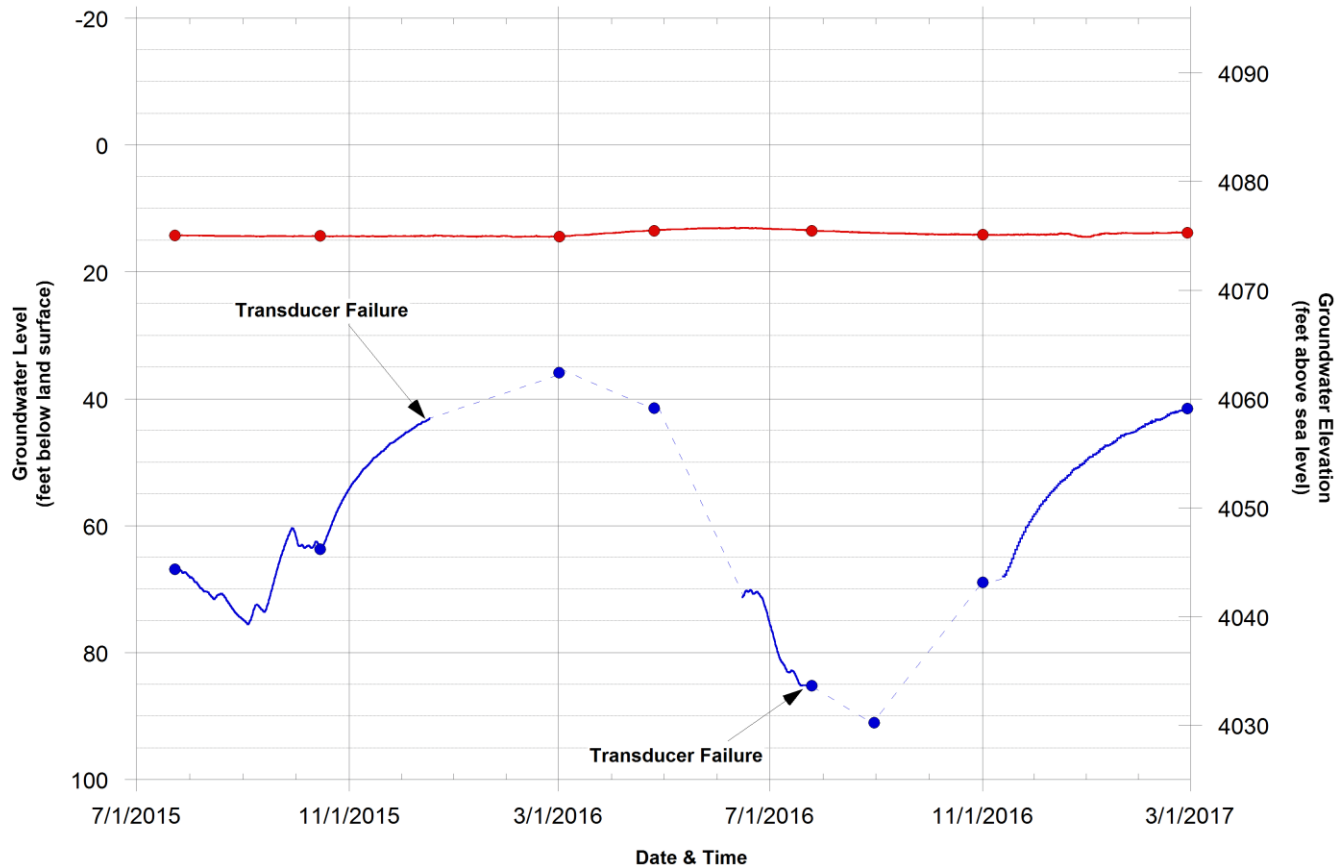
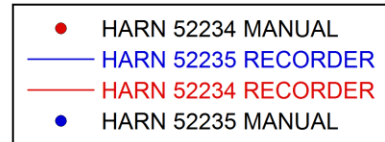
### HARN 52235:

Well Depth = 496 ft  
Casing Depth = 496 ft  
Open Interval = 450-470 ft

### HARN 52234:

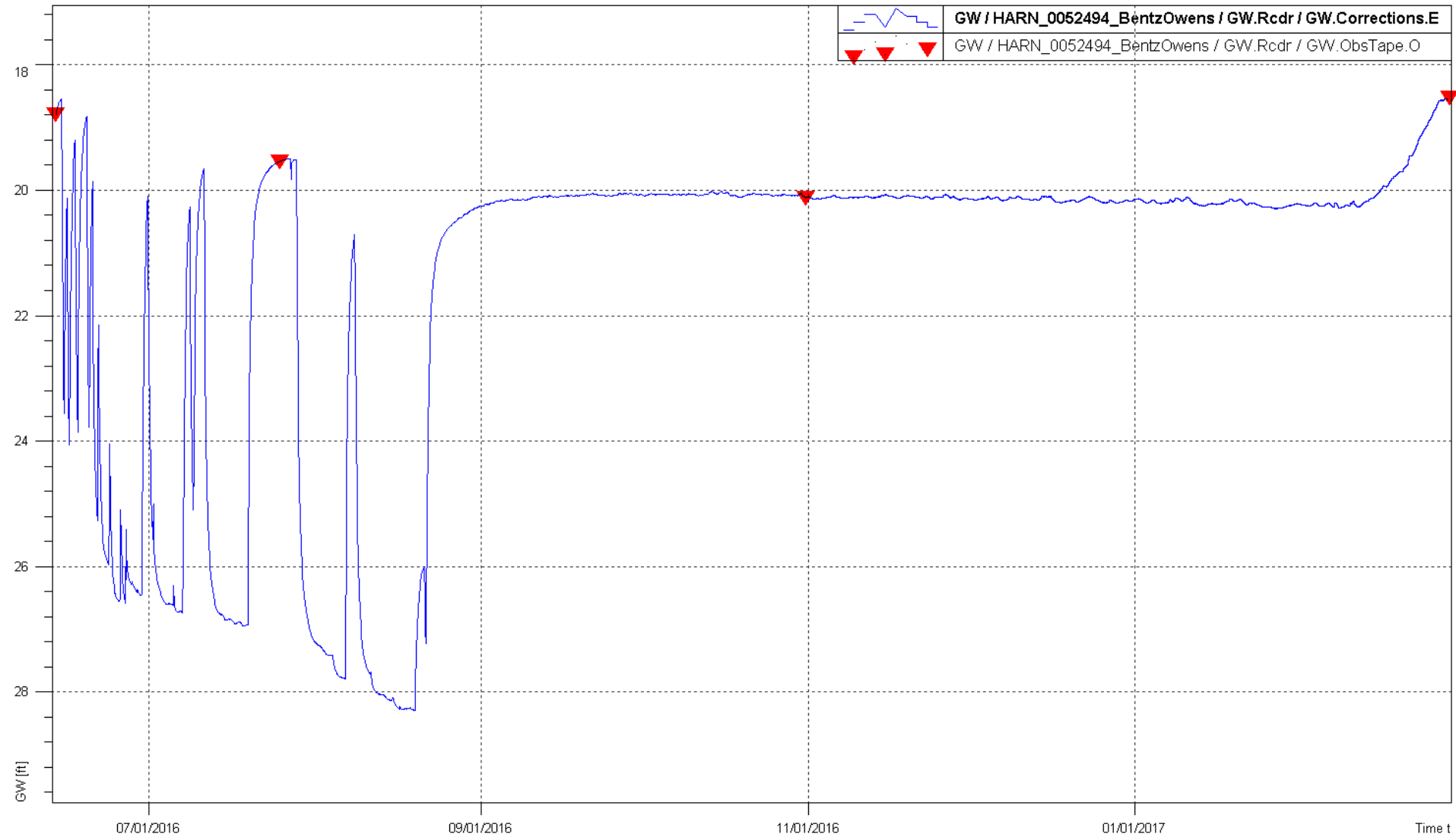
Well Depth = 76 ft  
Casing Depth = 76 ft  
Open Interval = 55-75 ft

### HARN 52235 (LAWEN DEEP) & HARN 52234 (LAWEN SHALLOW)



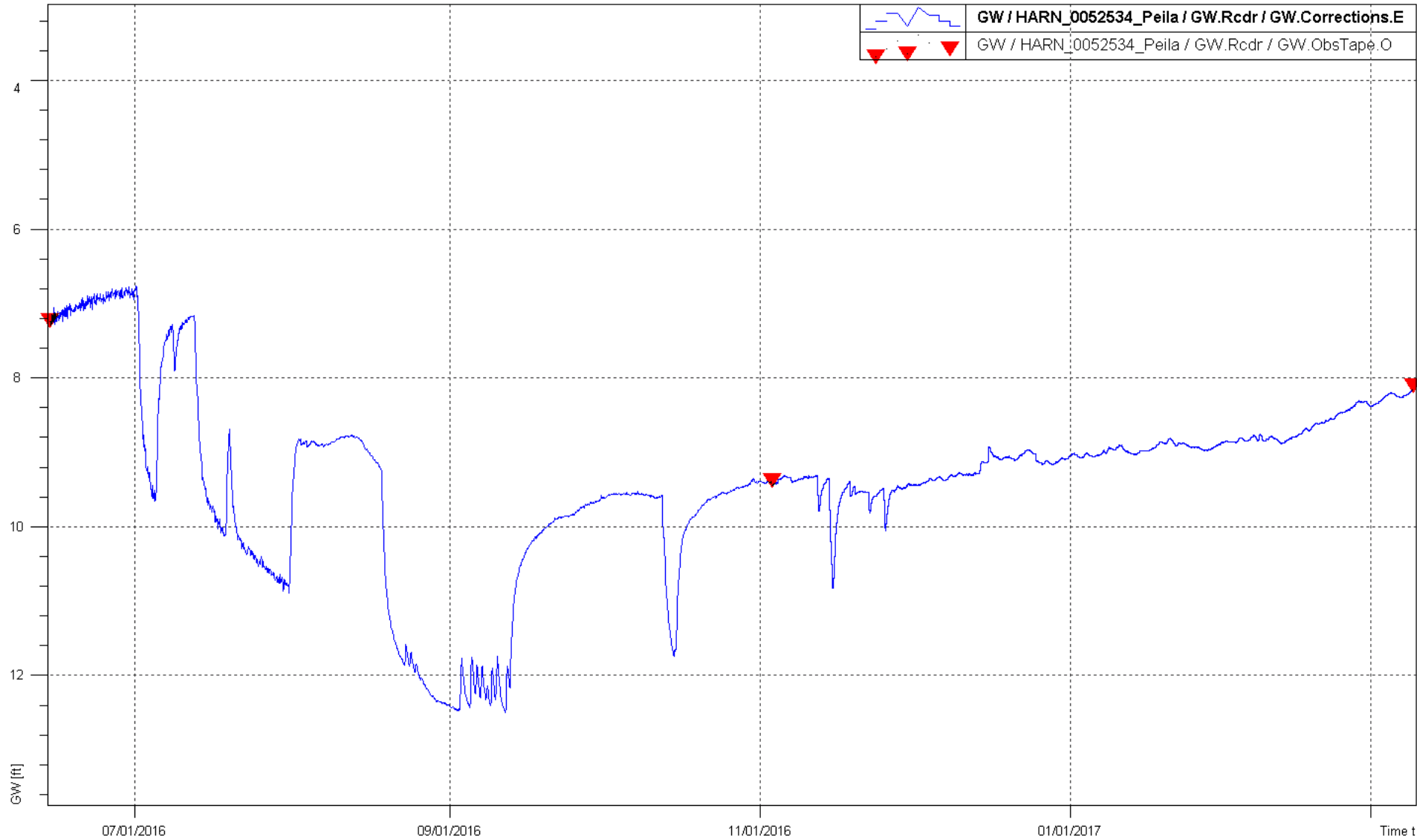
# Recorder Well Hydrographs

HARN 52494



# Recorder Well Hydrographs

HARN 52534



# Thank You

## Questions?

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