

Approval Guidance: Continuous Groundwater-Level Records

Well Identifier and Name

Analysis Period: *Dates of review period associated with this approval*

Approver: *Name of record-period approver (should not be the same as the collector/analyst)*

1. Discrete data:

- 1.1. Were discrete water-level data entered into GWSI?
- 1.2. Were all corrections applied properly to the discrete data, including corrections related to tape calibration, measuring point, and datum changes?
- 1.3. Was a hydrograph of new and historic discrete values created and reviewed?
- 1.4. Were water-level measurement policies followed?
- 1.5. Were SVMobileAQ XML files or other original record archived?
- 1.6. Were discrete data discussed in the Station Analysis?

2. Field notes:

- 2.1. Were routine and non-routine field-visit activities documented?
- 2.2. Were field notes adequately reviewed for completeness and accuracy (and corrected, if necessary)?
- 2.3. Were reviews documented in accordance with WSC procedures? (If not, this task must be completed before approval)

3. Station level notes:

- 3.1. Was the date of last visual/manual check of vertical relationship between measuring point and reference marks documented?
- 3.2. Are levels or reference point inspections overdue? *If stable, confirm every 3 to 5 years*
- 3.3. Date of last station levels?
- 3.4. If levels run during the record period,
 - 3.4.1. Have levels data been reviewed for accuracy?
 - 3.4.2. Have levels been updated in the Historic Levels Summary and Station Description?
- 3.5. Was a datum correction identified (if no, go on to section 4)?
 - 3.5.1. Is the presumed cause for the datum correction explained in the Station Analysis and is the explanation valid?
 - 3.5.2. Does the application of the correction to the time series agree with the presumed cause and explanation?
 - 3.5.3. Were discrete water-level measurements properly adjusted for the period based upon the datum correction?
 - 3.5.4. Were land surface datum and datum history updated in NWIS?
 - 3.5.5. Does the application of the correction extend into a period of previously approved data? If so, was the approved period evaluated in accordance with applicable revision criteria?

4. Station Description:

- 4.1. Was the Station Description updated to reflect any changes that occurred or were made during the record period?
5. Water-level edits
 - 5.1. Check instantaneous values for periods of missing data and spikes/anomalies.
 - 5.2. Are thresholds set to adequately manage data spikes or anomalies?
6. Water-level corrections:
 - 6.1. Are water-level corrections reasonable for the site conditions and measurement method limitations?
 - 6.2. Do applied water-level corrections agree with reasons provided in Station Analysis?
 - 6.3. Are water-level corrections applied correctly in the database?
7. Qualifiers and other metadata
 - 7.1. Are appropriate data qualifiers assigned or otherwise described as expected by use of metadata?
8. Daily values
 - 8.1. Are partial days adequately labeled and does the time-series software show evidence that they have been reviewed?
9. Hydrographic comparison and review
 - 8.1. Have hydrographic comparisons been adequately made and discussed?
 - 8.2. Does the period reviewed look reasonable when compared to the period of record?
10. Manuscript
 - 10.1. Have SIMS Manuscript elements been updated as needed?
11. Approval Summary: Provide brief assessment of the record period in context of the findings outlined above. Discuss analyst's evaluation and quality of groundwater-level record. **Add the approval summary to the Approval Comments for the period in RMS.**