

Station Analysis Template: Discrete-Only Groundwater-Level Sites

This document describes the elements needed for a station analysis. The headers are in the RMS Station Analysis wizard. The hydrographer should populate the fields with the information described below.

Analysis Period: *Dates of record period associated with this analysis*

Analyst (pre-populated): *Name of record-period analyst*

Extreme for Period of Analysis/Period of Record (Optional): *Provide the maximum and minimum measured values for this period. State the period of record high and low for the site.*

Water-Level Fluctuations/Trends (Mandatory): *State how the site water-level record is usually affected by artificial stresses (pumping, etc), earth tides, or other effects. Describe how the water level record during the analysis period fits into the site's trend.*

Missing Data (Mandatory): *Provide dates and reasons for any gaps in the record.*

Measurements (Mandatory): *List the number and dates of water level measurements that were made during the period and note any unusual circumstances about the measurements.*

Datum Corrections (Mandatory, if applicable): *State if levels were run during the period and any noteworthy particulars about the leveling. Describe any movements of the measuring point (MP), land-surface datum (LSD), and reference marks (RMs) at the well. Describe how the surveyed effects were applied to the data.*

Water-Level Corrections (Mandatory, if applicable): *Clearly describe corrections applied to the water levels collected during the period, including measuring point corrections.*

Hydrographic Comparison (Mandatory, if applicable): *Provide sites used for hydrographic comparison, if applicable. Discuss how the comparison was done and document the results of the comparison. Where did the sites compare favorably, where did they compare poorly and why?*

Comments (Optional): *Provide any pertinent remarks or comments for the record period that are not contained in the above sections.*

Special Notes (Optional): *If the collection and maintenance of this record required any special (non-routine) trips during this period, state the date and purpose.*

Attachment 1. **Example station analysis for a discrete-data-only well.**

471423067450202, Theoretical Well 2 @ Smalltown, NH

Analysis Period: *October 1, 2016 - January 1, 2017*

Analyst: *Ima Jean Yuss*

Extreme for Period of Analysis/Period of Record: *The extremes in measured water level for the period of record are 21.26 feet (low - new this period on Oct 4) to 6.41 feet (high - May 6, 2011).*

Water-level fluctuations/Trends: *Maximum (highest) water levels occur during spring snowmelt season. Water levels measured during this analysis period are consistent with fall and winter month trends. The record shows that the water levels have declined overall since 2009, probably due to increased pumping from the aquifer.*

Missing Data: *None. Water levels were measured monthly, as expected.*

Measurements: *Three field visits were made (Oct 6, Nov 9, and Dec 16). All water levels were static. SVMAQ XMLs were uploaded to AQUARIUS for archiving and the measurement data were added to GWSI.*

Datum Corrections: *The measuring point is the top of the inner PVC casing, 2.70 ft above LSD, which is clearly marked on the steel casing. Levels were run on Oct 6, 2016 and showed no significant movement (≤ 0.004) among the reference marks since the last levels were run in 2011. The MP (MP1) has not moved since 2011. Based on these measurements, no datum corrections are needed.*

Water-Level Corrections: *A tape calibration correction of 0.02 was applied to the measurement (etape: ANRC001 used). No other corrections applied.*

Hydrographic Comparison: *Water levels in this well compare favorably with water levels in AX-123 and BZ-234 (graph located at N:/471423067450202/SiteVisit/Comparison/20170101) below) over this time period, except that AX-123 and BZ-234 are not affected by pumping since 2009.*

Comments: *An integrity test was last performed during the October visit. Summary of test in the Station Description and details in archive N:/471423067450202/Integrity_Testing.*

Special Notes: *Additional site maintenance trip should be scheduled to clear downed tree branch near well casing and maintain narrow path to the site.*