EIM Help - Entering Observations

Version 2.3 April 2020

An Observation is an activity conducted in the field without instruments and that <u>doesn't have a Result Value</u> associated with it. If you attempted to take a Measurement or Sample at a location but conditions prohibited it, you can document this in EIM by entering an Observation.

For Time Series data, enter an observation if you want to document a data gap (timespan of unsuccessful or rejected measurements). Enter one observation, with appropriate start and end date/times, per timespan.

Entering an observation into EIM is optional.

This document also covers how to enter stream flow data for dry or stagnant sites. If a stream is dry or stagnant, flow should be entered as a Measurement with a Result Value of zero as explained below under example 2.

Example scenarios where you might choose to enter an Observation:

- Could not gain access to site road was closed
- Stream is partially frozen you were unable to measure flow
- Field meter was malfunctioning or did not meet data quality objectives

Requirements for Entering Observations

Yellow-shaded fields in the data entry templates are required for Observations.

It is recommended that Observations also be qualified using a Result Data Qualifier, if an appropriate one exists. Wells have their own Result Data Qualifiers listed on page 3. You can also enter a Field Collection Comment to further describe the details of the Observation. See section on Observations vs. Comments at the end of this document.

Code	Description
FA	No site access
FD	Site was dry
FE	Equipment failure
FH	Flow too high to measure
FI	Ice-impacted
FL	Above or below instrument limit
FS	Stagnant water - no flow
FT	Flow tidally impacted

Example scenarios for entering Observations.

1. Unable to measure or sample all parameters at a field location because you can't gain access:

Enter one Observation record for the field collection attempt to document all parameters you intended to collect:

- Field Collection Type (Column D) = Observation
- Result Parameter Name (Column AH) = Unable to Measure
- Result Value (Column AM) = Leave blank do not enter a zero
- Result Data Qualifier (Column AS) = FA (No site access)
- Field Collection Comment (Column J, optional) = List parameters unable to be measured (e.g. pH, temperature, flow)

Unable to measure or sample all parameters at a field location because the <u>stream was dry or</u> <u>water stagnant</u> (not flowing):

Enter one Observation record for the field collection attempt to document all parameters you intended to collect (except flow*):

- Field Collection Type (Column D) = Observation
- Result Parameter Name (Column AH) = Unable to Measure
- Result Value (Column AM) = Leave blank do not enter a zero
- Result Data Qualifier (Column AS) = FD (Dry) or FS (Stagnant No Flow)
- Field Collection Comment (Column J, optional) = List parameters unable to be measured (e.g. pH, temperature)

*Enter FLOW as a separate Measurement record with a Result Value of zero (0):

- Field Collection Type (Column D) = Measurement
- Result Parameter Name (Column AH) = Flow
- Result Value (Column AM) = Zero (0)
- Result Data Qualifier (Column AS) = FD (Dry) or FS (Stagnant No Flow)

3. If the stream was ice-impacted you may or may not have been able to take samples or measurements (including flow):

A. If you are submitting a flow measurement that you obtained in an ice-impacted waterway, enter a Measurement record:

- Field Collection Type (Column D) = Measurement
- Result Parameter Name (Column AH) = Flow
- Result Value (Column AM) = Your measured value
- Result Data Qualifier (Column AS) = FI (Ice Impacted)

B. If you did not measure flow or any other parameter because the waterway was iceimpacted and you want to indicate that in EIM (optional) you would enter an Observation record:

- Field Collection Type (Column D) = Observation
- Result Parameter Name (Column AH) = Unable to Measure
- Result Value (Column AM) = Leave blank do not enter a zero
- Result Data Qualifier (Column AS) = FI (Ice Impacted)
- Field Collection Comment (Column J, optional) = List parameters unable to be measured (e.g. pH, temperature)

- **4. Unable to measure due to equipment failure:** For example, your field meter broke and you want to indicate that you tried to take measurements at your site.
 - Field Collection Type (Column D) = Observation
 - Result Parameter Name (Column AH) = Unable to Measure
 - Result Value (Column AM) = Leave blank do not enter a zero
 - Result Data Qualifier (Column AS) = FE (Equipment Failure)
 - Field Collection Comment (Column J, optional) = List parameters unable to be measured (e.g. pH, temperature)

Observations and Wells

If you are unable to measure water level in well, enter the following:

- Field Collection Type (Column D) = Observation
- Field Collection Comment (Column J, optional) = Enter Observation details here. Ex: "The well was dry."
- Result Parameter Name (Column AH) = Water level in well (unable to measure).
 - Or if you were unable to measure depth to product in well, enter "Depth to product (LNAPL) in well (unable to measure)"
- Result Value (Column AM) = Leave blank do not enter a zero
- Result Data Qualifier (Column AS) = Enter a water level data qualifier, if applicable
- Result Comment (Column AZ) = Same as the Field Collection Comment

Well Water Level Observation Data Qualifiers Examples

Code	Description
WLD	Well was dry during measurement attempt
WLF	Well was flowing and could not be measured
WLM	Well was plugged and not in hydraulic contact with the aquifer
WLN	Well measurement discontinued
WLO	Well water level affected by/could not be measured due to obstruction in well
WLV	LNAPL (floating product) or other foreign substance on well water
WLW	Well was destroyed and could not be measured

All available Data Qualifiers can be found on EIM Help Center.

Observations vs. Comments

Observations differ from Comments in EIM. Observations are entered when you have no Result Value to report, but want to note that you tried to obtain data. Comments are entered when you want to make note about a measurement or sample where you were able to obtain a Result Value.

Please see the EIM Help Document <u>Entering Comments</u> for more information.

Revision History

Revision Date	Revision No.	Summary of Changes	Reviser(s)
3/13/09	1.0	Original Document	
11/06/09	1.1	Updated references to spreadsheet column headings per data model change	CN, CL
2/07/11	1.2	Included Sample Matrix and Source as required fields	CN
8/1/13	2.0	Change in how Observations are recorded. Updated references to spreadsheet column heading per data model change	KC, CN
09/07/17	2.1	Updated links and terminology Result Spreadsheet to Result Template	KC
01/27/20	2.2	Added information about documenting data gaps in Time Series data using observations, updated wording that Result Data Qualifiers are recommended not required (because we don't have Time Series Observation-specific Result Data Qualifiers at this time).	KC
04/09/20	2.3	Added information about entering observations for depth to product in well	KC