

## 5.11 Tip Sheet: How do I use null values?

There are two situations where a null value is appropriate. The first situation is a null value that is the result of non-quantitative test, which results in only the presence or absence of a constituent. The second situation is when an attempted measurement is not successfully completed due to logistical problems or unintentional errors, and a null value is stored in the data documenting the measurement attempt and the reason that no numerical result was stored. In general, most null values will be from laboratory analyses; however, null values can also be entered for field values.

There are two ways that a null value can be entered into QWDATA

- **Interactive**

- Details about how to enter data interactively in QWDATA is available in [Section 3.2](#).
- A null value is entered in the database interactively by entering a # in the value field in either the field form, the laboratory data entry form, or while editing existing data.
- After the '#' is entered, the user is required to qualify the null value with either a "null value remark" or a "null value qualifier", as described by the screen prompts:

You have specified a NULL result value. You must qualify null values with a null value remark code or a null value qualifier code.

**Null Value Remarks:**

**M:** Presence verified, not quantified  
**N:** Presumptive evidence of presence  
**U:** Analyzed for, not detected

**Null Value Qualifiers:**

**b:** Sample broken/spilled in shipment  
**c:** Sample lost in lab  
**e:** Required equipment not functional  
**f:** Sample discarded: improper filter  
**i:** Required sample type not received  
**l:** Analysis discarded: lab QC failure  
**m:** Results sent by separate memo  
**o:** Insufficient amount of water  
**p:** Sample discarded: improper preservative  
**q:** Sample discarded: holding time exceeded  
**r:** Sample ruined in preparation  
**u:** Unable to determine-matrix interference  
**w:** Sample discarded: warm when received  
**x:** Result failed quality assurance review

**Do you want to enter a remark code (R) or a qualifier code (Q)?**

- After you choose 'R' or 'Q', then you can choose the remark or qualifier for the null result.
- **Batch**
  - A null value also can be entered in using batch files if the value field of the parameter(s) of interest are blank in the tab-delimited "qwresult" file. A valid code in the null-qualifier field or remark code field must be present. Batch processing is discussed in [Section 3.8](#).