REPORTING 6.6.6

Report alkalinity and ANC to three significant figures. Only the value from filtered samples is to be published as alkalinity. Titration values from unfiltered samples are to be entered and published as ANC (the NWIS parameter code dictionary uses the term "alkalinity, unfiltered" instead of ANC).

Alkalinity and ANC should be reported in milliequivalents per liter (or microequivalents per liter), if possible. If this option is not available in the data base, calculate alkalinity and ANC in milligrams per liter, assigning all neutralizing capacity to the carbonate system.

If calculating ANC, alkalinity, bicarbonate, or carbonate in milligram units, then report: less than 1,000 mg/L, to whole numbers; 1,000 mg/L and above, to three significant figures. Carbonate alkalinity usually is reported in the data base in milligrams per liter as calcium carbonate.

Conversion factors listed below are taken from Hem (1985).

Multiply	By	To obtain
Alkalinity (mg/L as HCO_3^-)	0.8202	Alkalinity (mg/L as $CaCO_3$)
Alkalinity (mg/L as HCO_3^-)	0.4917	Alkalinity (mg/L as CO_3^{2-})
Alkalinity (mg/L as $CaCO_3$)	0.08332	Alkalinity (meq/L as $CaCO_3$)
Bicarbonate (mg/L as HCO_3^-)	0.01639	Bicarbonate (meq/L as HCO_3^-)
Bicarbonate (mg/L as HCO_3^-)	16.388	Bicarbonate (µeq/L as HCO_3^-)
Carbonate (mg/L as CO_3^{2-})	0.03333	Carbonate (meq/L as CO_3^{2-})
Hydroxide (mg/L as OH^-)	0.05880	Hydroxide (meq/L as OH^-)

Report the average value for duplicate samples or the median when more than two replicate samples are used for quality control and the value falls within the appropriate quality-assurance criterion for variability.

Use the correct parameter code to indicate (1) the method of titration or calculation and (2) a filtered or unfiltered sample.