

## Method Abstract #88

### Acidity

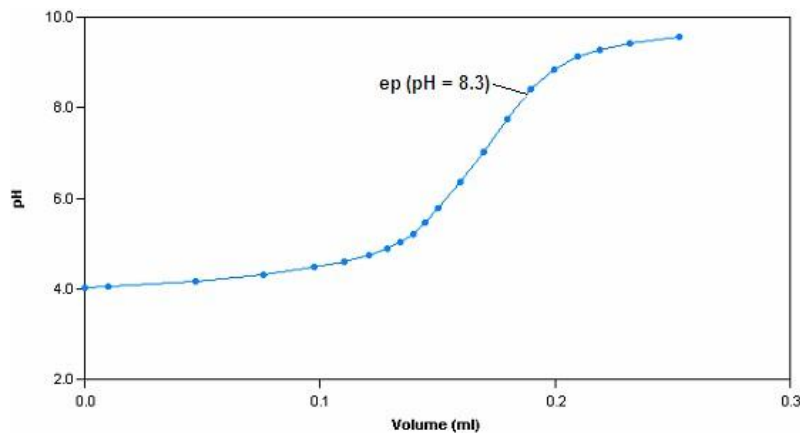
#### Scope and Application

This method conforms to Standard Method 2310 B and ASTM D 1067. The acidity of a water sample is its quantitative capacity to react with a strong base to a designated pH. The acidity of a solution is based on the total acidic constituent of a solution.

#### Method Summary

This method involves the titration of a sample with standardized sodium hydroxide to endpoints of pH 3.7 and 8.3, signifying the “methyl orange acidity” and the “phenolphthalein” or total acidity respectively. Since acidity represents a solution’s specific properties rather than a specific chemical’s concentration, it is measured as an equivalent amount of calcium carbonate.

**Sample Titration Curve**



**Method Performance**

Parameter	Specification
Measuring Range*	1 – 1000ppm
RSD @ 10ppm	0.89%
RSD @ 100ppm	0.97%
RSD @ 1000ppm	0.52%

\*Data for this measuring range was obtained using laboratory prepared standards formulated from potassium hydrogen phthalate. The measuring range may be increased by using larger capacity analysis vessels and/or auto-dilution.

\*\*The Method Detection Limit (MDL) was determined based on data obtaining a coefficient of variance better than 30%. Results may differ depending on laboratory practices and sample matrix.