

EFFECTIVE DATE	N P Analytical Laboratories	METHOD CODE
REVISED: 05/01/25	LABORATORY TEST METHOD SUMMARY	PH
REPLACES: 09/25/24	pH	PAGE 1 OF 1
KEY WORDS: pH, hydrogen ion concentration, acidity, alkalinity		

1. SCOPE AND PURPOSE:

- 1.1. This method measures the hydrogen-ion concentration (pH) of water, other water-based liquids, and of the aqueous extract of wettable, pulverized materials
- 1.2. There is no assurance that matrices other than those listed can be assayed using this method.
 - 1.2.1. Example: non-soluble samples (i.e. cheese), is not suitable for this method.

2. PRINCIPLE:

- 2.1. Aqueous samples are measured directly on a pH meter. For dry samples, a portion of ground sample is mixed with a volume of water and shaken for one hour. The pH of the sample is measured on a pH meter.
- 2.2. The confidence range of this method is 2.0 to 10.0 pH units when using a 5 gram sample.
- 2.3. Acidity or basicity outside the range of 2.0 to 10.0 pH units will cause a sizable error in the response of the pH electrode.

3. PRECISION:

Records of method precision based on Method Validation and/or known control summaries are located in the QA Master file for this test method. Assay precision may vary with test matrix and analyte level. Terms used to describe method precision are defined in NPSOP3000, *Validation of Quantitative Chemical Tests*.

4. REFERENCES:

- 4.1. Official Methods of Analysis of the AOAC International, Method 973.41, Method 943.02
- 4.2. LI-00.908-1 pH/Acidity: Food/Juices/Tomato/Petfood