

## o-Phosphate–P in Water

### 1 SCOPE

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This method covers the determination of o-Phosphate–P in water.

This method is approved for the Clean Water Act for use in wastewater compliance monitoring, under National Pollutant Discharge Elimination System (NPDES). This method is equivalent to EPA Method 365.1, Rev. 2.0 (1993), Standard Methods 4500-P-F (2012) and USGS Method I-4601-85 and is approved for the Safe Drinking Water Act for use in drinking water compliance monitoring, under National Primary Drinking Water Regulations (NPDWR).

### 2 RANGE OF APPLICATION

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Range	0.1 – 7.0 $\mu\text{M}$ (3.1 – 217 $\mu\text{g P/L}$ )
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### 3 METHOD DETECTION LIMIT

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By EPA Procedure	MDL = 0.013 $\mu\text{M}$ (0.402 $\mu\text{g P/L}$ )
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### 4 METHOD PRINCIPLE

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Reaction with acidic molybdate in the presence of antimony forms an antimony phospho-molybdate complex, which is then reduced by ascorbic acid to phosphomolybdenum blue and is measured photometrically at 880 nm.

### 5 REFERENCES

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Methods for the Determination of Inorganic Substances in Environmental Samples, USEPA 600/R 93/100, August 1993: Method 365.1, Rev. 2.0.

Standard Methods for the Examination of Water and Wastewater, APHA/AWWA/WEF, method 4500-P-F (2012 forward).