

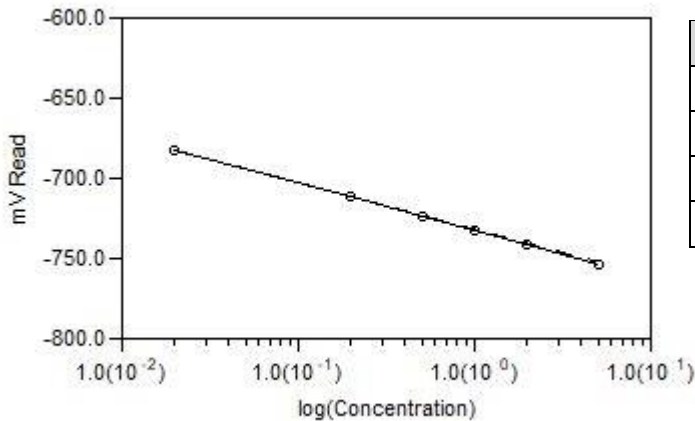
Method Abstract #132

Sulfide by Direct Measure

Scope and Application This method conforms to Standard Methods 4500-S₂ G and ASTM D 4658. It determines the concentration of sulfide ions in a water sample.

Method Summary The concentration of sulfide is determined by a silver/sulfide ion selective electrode. After calibrating with known standards, the sample's response can be compared to the calibration curve and a concentration determined. An alkaline antioxidant reagent (AAR) may be added to samples and standards to inhibit oxidation of sulfide by oxygen and to provide a constant ionic strength and pH.

Sample Calibration Curve



Method Performance

Parameter	Specification
Measuring Range*	0.04 – 4,000ppm
MDL**	0.02ppm
RSD @ 0.02ppm	4.23% or +/- 0.00085ppm
RSD @ 2ppm	3.25% or +/- 0.065ppm

*Data for this measuring range was obtained using laboratory prepared standards formulated from ammonium chloride. The measuring range may be increased by using 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.

RSD values are better than those specified in Standards Methods.

