

Conductivity

SEAL Application ML-903

▶ SCOPE AND APPLICATION

This method covers the determination of Conductivity in waters.

Applicable Range: 0.5 $\mu\text{S}/\text{cm}$ – 200,000 $\mu\text{S}/\text{cm}$

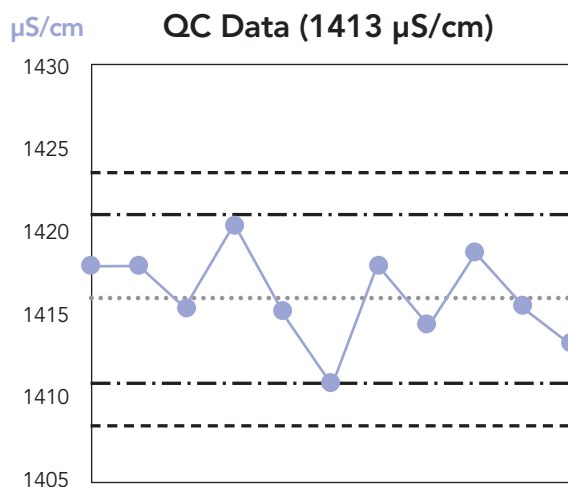
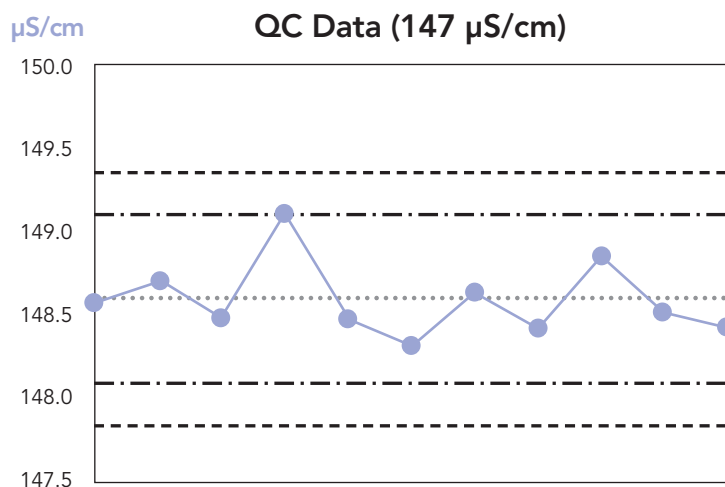
This method is equivalent to Standard Method 2510 B, ASTM D 1125, ISO 7888 and EN 27888.

▶ METHOD DESCRIPTION

Conductivity is measured by determining the resistance of the sample compared to a standard KCl solution. This is done using a conductivity cell with two plates of opposite charge. Ions in the solution will move between the plates depending on the resistance of the solution. Conductivity is expressed as the reciprocal of this electrical resistance.



▶ METHOD INFORMATION & QC DATA



Measurement Value:
 Average Value:
 2s:
 3s:

Accuracy:	Cond: $\pm 0.5\%$ of range
Electrode Type:	Conductivity Cell; 4 Poles, Graphite Standard
Measuring Range:	0.5 $\mu\text{S}/\text{cm}$ – 200,000 $\mu\text{S}/\text{cm}$
TDS:	0.00 mg/L – 50,000.00 mg/L as NaCl
Salinity:	0 – 42 ppt or %

Resistivity:	2.5 Ωcm – 49 Ωcm
Resolution:	0.01/0.10 (5 digits max.) 0.01 $\mu\text{S}/\text{cm}$ – 100 $\mu\text{S}/\text{cm}$ upon selection
Temperature Accuracy:	$\pm 0.3^\circ\text{C}$
Temperature Range:	-10 – 110 $^\circ\text{C}$