



DA 3500 Discrete Analyzer Methods

Analyte	MDL ¹	Range	Reference
Alkalinity*	9 mg CaCO ₃ /L	20–200 mg CaCO ₃ /L	EPA Method 310.2
Ammonia*	0.006 mg N/L	0.020–10.0 mg N/L	EPA Method 350.1; SM 4500-NH ₃ B; SM 4500-NH ₃ H; EPA Method 351.3 (TKN Distillates)
Calcium*	1.0 mg Ca/L	10–100 mg Ca/L	Cresolphthalein
Chloride*	0.9 mg Cl/L	5.0–50 mg Cl/L	SM 4500-Cl ⁻ E
Chlorine, Total Residual	0.03 mg Cl/L	0.05–4 mg Cl/L	SM 4500-Cl G
Chromium (VI)*	0.01 mg Cr(VI)/L	0.05–1.0 mg Cr(VI)/L	SM 3500-Cr B
Cyanide, Total	0.002 mg CN/L	0.005–0.05 mg CN/L	SM 4500-CN ⁻ E
Ethanol			
Fluoride*	0.15 mg F/L	0.25–2.0 mg F/L	SM 4500-F D
Glucose			
Hardness	2.0 mg CaCO ₃ /L	—	Calculated
Iron*	0.02 mg Fe/L	0.05–1.0 mg Fe/L	Ferrozine
Manganese*	0.003 mg Mn/L	0.02–0.50 mg Mn/L	HACH Method 8149
Magnesium*	1.0 mg Mg/L	5–50 mg Mg/L	Xylidyl Blue
Nitrate/Nitrite*	0.02 mg N/L	0.03–5.0 mg N/L	EPA Method 353.2; SM 4500-NO ₃ E
Nitrite*	0.002 mg N/L	0.010–0.25 mg N/L	SM 4500-NO ₂ ⁻ B
Nitrogen, Total Kjeldahl (TKN)	0.1 mg N/L	0.50–10.0 mg N/L	EPA Method 351.2. Block Digestion, No Distillation.
Phenolics	0.05 mg/L	0.50–5.0 mg/L	EPA Method 420.1
Phenolics	0.025 mg/L	0.10–2.0 mg/L	EPA Method 420.4
Orthophosphate, Single Reagent*	0.020 mg P/L	0.050–1.0 mg P/L	EPA Method 365.1; SM 4500-P E

DA 3500 Methods continued...

Analyte	MDL ¹	Range	Reference
Orthophosphate, Low Level*	0.002 mg P/L	0.005–0.10 mg P/L	EPA Method 365.5
Orthophosphate, Dual Reagent*	0.01 mg P/L	0.050–1.0 mg P/L	EPA Method 365.3
Phosphorus, Total	0.020 mg P/L	0.050–1.0 mg P/L	EPA Method 365.1; SM 4500– P E
Phosphorus, Total	0.01 mg P/L	0.050–1.0 mg P/L	EPA Method 365.3
Protein			
Silica*	0.6 mg SiO ₂ /L	2.00–20 mg SiO ₂ /L	SM 4500-SiO ₂ C
Sulfate*	0.8 mg SO ₄ /L	5.0–50 mg SO ₄ ²⁻ /L	SM 4500-SO ₄ ²⁻ E; ASTM D516–02
Sulfide*	0.03 mg S/L	0.1–2.0 mg S ²⁻ /L	SM 4500-S ²⁻ D
Xylose			

* Ranges can be extended to higher concentrations using automatic dilution.

¹ Determined according to 40 CFR Part 136 Appendix B.