

GENERAL CHEMISTRY – DRINKING WATER

Method Number	Analytes	Technique
ASTM D1498-76	Redox Potential Vs H ₂	Electrometric
ASTM D2974-87	Total Organic Content	Ashing
ASTM D3341-91	Tetraethyl Lead	Extraction
EPA 120.1	Specific Conductance	Wheatstone Bridge
EPA 130.2	Hardness-Total as CaCO ₃	Titrimetric (EDTA)
EPA 150.1	pH Hydrogen Ion	Electrometric
EPA 160.1	Residue-Filterable (TDS)	Gravimetric at 180°C
EPA 160.2	Residue-Nonfilterable (TSS)	Gravimetric at 103-105°C Post Washing
EPA 160.3	Residue-Total	Gravimetric at 103-105°C
EPA 160.4	Residue-Volatile	Gravimetric at 550°C
EPA 160.5	Residue-Settleable	Volumetric (Imhoff Cone)
EPA 170.1	Temperature	Thermometric
EPA 180.1	Turbidity	Nephelometric
EPA 300.0	Bromide, Chloride, Fluoride, Sulfate	Ion Chromatography
EPA 305.1	Acidity as CaCO ₃	Electrometric
EPA 310.1	Alkalinity as CaCO ₃	Electrometric
EPA 325.3	Chloride	Titrimetric, (Mercuric Nitrate)
EPA 330.4	Chlorine	DPD Ferrous Titrimetric
EPA 335.1	Cyanide Amenable to Cl ₂	Manual Distillation Titrimetric/Spectrophotometric
EPA 335.2	Cyanide	Distillation Spectrophotometric Manual
EPA 335.3	Cyanide	Distillation Spectrophotometric (Auto)
EPA 350.2 + .1	Ammonia	Distillation, Automated Phenate
EPA 351.1, .2, .3, .4- 350.1 .2 .3	Organic Nitrogen	Total Kjeldahl-N Minus Ammonia-N
EPA 351.2	Kjeldahl Nitrogen-Total	Digest/Distill Semiautomated Digester
EPA 353.2	Nitrate, Nitrite	Cd Reduction-Automated
EPA 360.1	Oxygen Dissolved	Electrode
EPA 360.2	Oxygen Dissolved	Winkler Azide Modification
EPA 365.2	Orthophosphate	Ascorbic Acid Manual Single Reagent
EPA 365.2 + .3	Phosphorus-Total	Persulfate Digestion

EPA 370.1	Silica-Dissolved	0.45 um Filtration + Colorimetric (Manual)
EPA 376.1	Sulfide-S	Titrimetric Iodine
EPA 377.1	Sulfite-SO3	Titrimetric Iodine-Iodate
EPA 405.1	B.O.D.	Dissolved Oxygen Depletion
EPA 410.1 or .2 or .3	Chemical Oxygen Demand (COD)	Titrimetric
EPA 415.1	Total Organic Carbon (TOC)	Combustion, Infrared Spectrometry
EPA 418.1	Petroleum Hydrocarbons	ASE Extraction, Infrared Spectrometry
EPA 420.1 + .2	Phenols	Manual Distillation Colorimetric Auto
EPA 1664A	Oil & Grease-HEM-LL	Gravimetric Hexane Extractable Material-LL
HACH 8000	Chem. Oxygen Demand (COD)	Titrimetric
SM19 2120 B	Color	Platinum-Cobalt
SM18 2520B	Salinity	Electrical Conductivity
SM18 3500-Cr D	Chromium (VI)	0.45 um Filter, Colorimetric DPC
SM18 3500 - FE D	Iron, Ferrous	Spectrophotometric Manual
SM19 4500-CLF	Chlorine	DPD Ferrous Titrimetric
SM19 4500CN-I	Weak Acid Dissoc. CN Prep	Distillation, Zinc Acetate
SM18 4500CO2C/D	Carbon Dioxide	Titrimetric/Calculation
SM19 4500-NO2-B	Nitrite	Spectrophotometric Manual
SM18 4500 P-E	Orthophosphate	Colorimetric
SM19 5210 B	Carbonaceous BOD (CBOD)	Dissolved Oxygen Depletion, Nitrification Inhibited
SM20 5540C	Surfactants	Colorimetric (Methylene Blue)
SM20 5540 D	Nonionic Surfactants as CTAS	Extraction, Spectrophotometric
SM19 9215B	Heterotrophic Plate Count	Pour Plate
SM19 9222 B	Total Coliform, Number per 100 ml	Membrane Filter (MF), Single Step or Two Steps
SM19 9222 D	Fecal Coliform, Number per 100 ml	Membrane Filter (MF), Single Step
SW846 NJ7196A	Hexavalent Chromium	NJDEP Water Modification

GENERAL CHEMISTRY - SW846 METHODS

Method Number	Analytes	Technique
AASHTO T267-86	Organic Matter (Ignition Loss)	Gravimetric
ASTM D93-90	Ignitability (Flashpoint)	Pensky Martens, Thermometric
ASTM D95-83	Water Content	Distillation, Volumetric
ASTM D97-87	Pour Point	Thermometric
ASTM D129-61	Percent Sulfur	Bomb Calorimeter, Gravimetric
ASTM D422-63(M)	Particle Sizing	Sieve Test Procedure
ASTM D473-81	Base Sediment	Extraction (Hot Toluene)
ASTM D482-91	Percent Ash (Dry Basis)	Gravimetric at 750-775°C
ASTM D808-91	Total Chlorine	Parr Bomb, Gravimetric
ASTM D1429-86	Specific Gravity of Solids	Aqueous Displacement
ASTM D1498-76	Redox Potential Vs H ₂	Electrometric
ASTM D1744-92	Moisture, Karl Fischer	K. Fischer Reagent-Electrometric Titration
ASTM D2937-94	Bulk Density (Dry Basis)	Volumetric, Gravimetric
ASTM D3286-85	Heat Content, BTU	Bomb Calorimeter
ASTM D3341-91	Tetraethyl Lead	Extraction
ASTM D3987-85	Neutral Leaching Procedure	Neutral pH, Aqueous Extraction
ASTM D4643-93	Percent Solids	Gravimetric
CORP ENG 81	Total Organic Carbon	Combustion, Infrared Spectrometry
EPA 1664A	Oil & Grease-HEM	Extraction & Gravimetric-LL
EPA 351.2M	Total Kjeldahl Nitrogen	Digest/Distill Semiautomated Digester
EPA 365.2M	Orthophosphate	Ascorbic Acid Manual Single Reagent
EPA 418.1M	Petroleum Hydrocarbons	ASE Extraction, Infrared Spectrometry
HACH 8000	Chem. Oxygen Demand (COD)	Titrimetric
LLOYD KAHN 1988	Total Organic Carbon (TOC)	Combustion, Infrared Spectrometry
Shell Burner Test	Ignitability	Bunsen Burner
SM18 2550 B	Temperature	Thermometric
SW846 1010	Ignitability	Pensky Martens
SW846 1311	Volatile Organics	TCLP, Toxicity Procedure
SW846 1311	Metals/SVOC's	TCLP, Toxicity Test

SW846 1312	Metals/Organics	Synthetic PPT Leachate Procedure
SW846 3060A	Metals	Chromium IV Digestion
SW846 7196A	Chromium (VI)	Colorimetric
SW846 9010B	Cyanide Total	Distillation
SW846 9010B	Cyanide Total, Cl ₂ Amenable	Distillation
SW846 9012A	Cyanide Total, Cl ₂ Amenable	Colorimetric, Automated
SW846 9020B	Total Organic Halides (TOX)	Combustion, Titration
SW846 9023	Extractable Organic Halides	Extraction
SW846 9034	Acid Soluble/Insoluble Sulfides	Titration
SW846 9040B	Waste Corrosivity/pH, >20 H ₂ O	Aqueous Waste, Potentiometric
SW846 9040B	pH, Hydrogen Ion	Aqueous, Electrometric
SW846 9040B	pH, Hydrogen Ion, Waste, >20% Water	Electrometric
SW846 9045C	pH, Soil and Waste	Mix with Water
SW846 9050A	Specific Conductance	Wheatstone Bridge
SW846 9056	Bromide, Chloride, Fluoride, Sulfate	Ion Chromatography
SW846 9060	Total Organic Carbon (TOC)	Combustion, Infrared Spectrometry
SW846 9065	Phenols	Colorimetric, Manual, 4AAP Distillation
SW846 9066	Phenols	Colorimetric, Automated, 4AAP Distillation
SW846 9071B	Oil & Grease, Sludge-HEM	Extraction & Gravimetric
SW846 9081	Cation-Exchange Capacity	Soils, Sodium Acetate
SW846 9095	Free Liquid	Flow-Through Paint Filter, Observation
SW846 7.3.3.2	Reactivity	HCN Release, Distill, Colorimetric
SW846 7.3.4.2	Reactivity	H ₂ S Release, Distil, Redox
SW846 CHAP 7	Ignitability (Flashpoint)	Pensky Martens, Thermometric