

ANALYTICAL METHODS USED AT LAWRENCE EXPERIMENT STATION

<u>PARAMETER</u>	<u>METHOD</u>	<u>REPORTED AS</u>
BOD	5-day oxygen depletion at 20°C	mg/l BOD
Dissolved Oxygen	Azide modification of Winkler method. 0.0375 N sodium thio-sulfate titrant, 300 ml sample	mg/l D.O.
pH	Electrometric, glass indicator, silver chloride reference	pH Units
Turbidity	Nephelometric. Hach Turbidi-meter. Model 2100A	Nephelometric Turbidity Units
Total Alkalinity	0.02 N sulfuric acid potentiometric titration to pH 4.5, Orion Model 701, Digital pH meter	mg/l CaCO ₃
Suspended Solids	Filtration through standard glass fiber filter paper. Residue dried at 103-105°C. Gravimetric	mg/l S.S.
Total Solids	Evaporation to dryness at 103-105°C. Gravimetric	mg/l T.S.
Settleable Solids	Gravimetric settling using an Imhoff cone	ml/l sett. solids
Total Kjeldahl-Nitrogen	Acid digestion using Technicon BD-40 Block Digester. Colorimetric analysis (reaction of ammonia, sodium salicylate, sodium nitroprusside, and sodium hypochlorite in buffered alkaline medium) using Technicon Auto Analyzer II	mg/l TKN
Ammonia-Nitrogen	Phenate method, automated. Colorimetric analysis using Technicon Auto Analyzer II	mg/l NH ₃ -N
Nitrate-Nitrogen	Hydrazine reduction method, automated. Colorimetric analysis using Technicon Auto Analyzer II	mg/l NO ₃ -N