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""2.2 Chemical and Physical Analyses""; ""2.2.1 Boiling Point Distribution""; ""2.2.2 Density, Specific Gravity, and API Gravity""; ""2.2.3 Emulsion Formation""; ""2.2.4 Evaporation""; ""2.2.5 Fire Point and Flash Point""; ""2.2.6 Fractionation""; ""2.2.7 Metal Content""; ""2.2.8 Pour Point""; ""2.2.9 Sulfur Content""; ""2.2.10 Surface Tension and Interfacial Tension""; ""2.2.11 Viscosity""; ""2.2.12 Water Content""; ""2.3 Chromatographic Analyses""; ""2.3.1 Adsorption Chromatography""; ""2.3.2 Gas Chromatography""; ""2.3.3 Gas Chromatographya€?Mass Spectrometry""""2.3.4 High-Performance Liquid Chromatography""; ""2.3.5 Thin Layer Chromatography""; ""2.4 Spectroscopic Analyses""; ""2.4.1 Infrared Spectroscopy""; ""2.4.2 Mass Spectrometry""; ""2.4.3 Nuclear Magnetic Resonance""; ""2.4.4 Ultraviolet Spectroscopy""; ""2.4.5 X-Ray Diffraction""; ""2.5 Molecular Weight""; ""2.6 Instability and Incompatibility""; ""2.7 The Future""; ""References""; ""Chapter 3 Sampling and Measurement""; ""3.1 Introduction""; ""3.2 Sampling""; ""3.2.1 Sampling Protocol""; ""3.2.2 Representative Sample""; ""3.2.3 Sampling Error""""3.3 Volume Measurement""; ""3.4 Method Validation""; ""3.4.1 Requirements""; ""3.4.2 Detection Limit""; ""3.4.3 Accuracy""; ""3.4.4 Precision""; ""3.5 Quality Control and Quality Assurance""; ""3.5.1 Quality Control""; ""3.5.2 Quality Assurance""; ""3.6 Assay and Specifications""; ""3.6.1 Assay""; ""3.6.2 Specifications""; ""3.6.2.1 Distillation""; ""3.6.2.2 Low-Boiling Hydrocarbons""; ""3.6.2.3 Metallic Constituents""; ""3.6.2.4 Salt Content""; ""3.6.2.5 Sulfur Content""; ""3.6.2.6 Viscosity and Pour Point""; ""3.6.2.7 Water and Sediment""; ""3.6.3 Other Tests""; ""References""
