

Description	Related Test Method	Volume
Distillation	ASTM D86	500ml / 16oz
Precipitation Number	ASTM D91	50ml / 1.69oz
Flash & Fire Point – Cleveland Open Cup	ASTM D92	80ml / 2.7oz
Flash Point – Pensky Martens Closed Cup	ASTM D93	80ml / 2.7oz
Saponification Number (SAP)	ASTM D94	25ml / 0.85oz
Water by Distillation	ASTM D95	300ml / 10oz
Water by Distillation of a Solid	ASTM D95	50 grams
Copper Corrosion, Oils	ASTM D130	30ml / 1oz
Cone Penetration, Worked 60 Strokes	ASTM D217	1 Pound
Viscosity, SSU or cSt @ 100°F or 40°C	ASTM D445	20ml / 0.66oz
Viscosity, SSU or cSt @ 210°F or 100°C	ASTM D445	20ml / 0.66oz
Ash, Percent	ASTM D482	30ml / 1oz
Aniline Point	ASTM D611	30ml / 1oz
Turbine Oil Rust Test	ASTM D665A	500ml / 16oz
Sulfated Ash	ASTM D874	40ml / 1.33oz
Foam (Sequence I, II, & III)	ASTM D892	380ml / 12.6oz
Pentane Insolubles	ASTM D893	30ml / 1oz
Total Acid Number (TAN) / Neutralization Number	ASTM D974	20ml / 0.66oz
Distillation	ASTM D1078	500ml / 16oz
Refractive Index (Abbe Refractometer)	ASTM D1218	5ml / 0.17oz
Surface Tension (One Phase)	ASTM D1331A	100ml / 3.33oz
Water Separability of Petroleum Oils & Synthetic Fluids	ASTM D1401	50ml / 1.69oz
Cone Penetration ¼ Cone, Unworked	ASTM D1403	¼ Pound
Color	ASTM D1500	10ml / 0.33oz
Water & Sediment in Fuel Oils	ASTM D1796	50ml / 1.69oz
Dropping Point	ASTM D2265	5 Gram
Four-Ball Wear Test, 20 & 40 kg @ 1200 rpm (49.40 per load)	ASTM D2266	50ml / 1.69oz
Viscosity Index (All temps plus VI)	ASTM D2270	40ml / 1.33oz
Rotating Pressure Vessel Oxidation Test (AKA: RPVOT)	ASTM D2272	200ml / 6.66oz
Centrifuging – Trace Sediment in Lubricating Oils	ASTM D2273	100ml / 3.33oz
Solids – Evaporation Test, Oven Drying	ASTM D2369	10ml / 0.33oz
Volatile Content of Coatings (Per EPA Test 24)	ASTM D2369	10ml / 0.33oz
Cloud Point	ASTM D2500	30ml / 1oz
Four-Ball EP Test (Grease)	ASTM D2596	150 Grams
Four-Ball EP Test (Fluids)	ASTM D2783	150ml / 5oz
Anti-Freeze / Ethylene & Propylene Glycols Only	ASTM D2982A	20ml / 0.66oz
Falex – Automatic	ASTM D3233A	100ml / 3.33oz
Falex – Stepwise	ASTM D3233B	100ml / 3.33oz
Glycol Ratio & Freeze Point (Anti-Freeze)	ASTM D3321	10ml / 0.33oz
GM Quenchometer, Ni or Ni-Cr Balls	ASTM D3520	300ml / 10oz
Water & Sediment	ASTM D4007	50ml / 1.69oz
Specific Gravity	ASTM D4052	20ml / 0.66oz
Four-Ball Wear Test, 20 & 40 kg @ 1200 rpm (49.40 per load)	ASTM D4172	50ml / 1.69oz
X-Ray Fluorescence – 23 Elements	ASTM D4294	20ml / 0.66oz
X-Ray Fluorescence Chlorine (Cl) Only	ASTM D4294	20ml / 0.66oz
X-Ray Fluorescence Sulfur (S) Only	ASTM D4294	20ml / 0.66oz
Water by Karl Fischer – Volumetric Method	ASTM D4377	20ml / 0.66oz
Cast Iron Chip Corrosion (1 Dilution)	ASTM D4627	20ml / 0.66oz
Gravimetric (Specified Filter Pore Size)	ASTM D4898	60ml / 2oz
ICP – Aqueous – 20 Elements	ASTM D5185	5ml / 0.17oz
ICP – Aqueous – 20 Elements + Phosphorus (P)	ASTM D5185	5ml / 0.17oz
ICP – Arsenic (AS) – Oils	ASTM D5185	5ml / 0.17oz
ICP – Arsenic (AS), Cadmium (Cd), Chromium (Cr), & Lead (Pb) Only – Oils	ASTM D5185	5ml / 0.17oz
ICP – Greases – 22 Elements	ASTM D5185	5ml / 0.17oz
ICP – Oils – 22 Elements	ASTM D5185	5ml / 0.17oz
ICP – Sodium (Na) – Oils	ASTM D5185	5ml / 0.17oz
ICP – Sulfur (S) – Oils	ASTM D5185	5ml / 0.17oz

Description	Related Test Method	Volume
Falex – Thin Film	ASTM D5620A	50ml/ 1.69oz
Oil Separation from Grease	ASTM D6184 (Fed 791C, 321.3)	20 Grams
Quenchalyzer	ASTM D6200	1 Gallon
Water by Karl Fischer – Coulometric Method (Levels <1000ppm)	ASTM D6304	20ml / 0.66oz
Quenchalyzer - Agitated	ASTM D6482	1000ml / 32oz
Pour Point	ASTM D6749	50ml / 1.69oz
pH	ASTM E70	30ml / 1oz
Antioxidant Content of Ucon Calendar Lubes	Dow/Ucon Method	10ml / 0.33oz
U.S. Steel Pressure Oil Separation (Grease)	U.S. Steel Method	1 Pound
Acid Split Emulsion Ratio (includes % Tramp Oil, Cuff & Sediment)		100ml / 3.33oz
Alkaline Reserve		20ml / 0.66oz
Aluminum Corrosion (Oil or Water Extendable)		50ml / 1.69oz
Aluminum Wire Drawing Oil Analysis		240ml / 8oz
Amine Value		20ml / 0.66oz
Appearance: Visual Color, Clarity, and Particulate		10ml / 0.33oz
Bacteria & Fungus Counts (Aqueous)		50ml / 1.69oz
Bacteria & Fungus Counts (Oils)		10ml / 0.33oz
Bijur Standard Filtration Test		1 Gallon
Brookfield Viscosity @ Room Temperature		350ml / 10oz
Carbide Corrosion Test (Oil Cobalt Leach)		50ml / 1.69oz
Centrifuge Low Speed (As Received)		100ml / 3.33oz
Centrifuge High Speed (As Received)		50ml / 1.69oz
Cobalt Leach Test (Aqueous)		100ml / 3.33oz
Compatibility – 4 Weeks @ 105°F		250ml / 8oz
Compatibility – 5 Days @ 160°F & 2 Days @ 0 °F		100ml / 3.33oz
Conductivity		10ml / 0.33oz
Copper Corrosion, Aqueous (6 Hrs. @ 80°C)		30ml / 1oz
Corrosion Test (per 30 Days) (Specify Parameters: Vapor Phase, Sandwich, or Panel Partially Submerged)		200ml / 6.66oz
DR Ferrography Readings (Oils)		10ml / 0.33oz
DR Ferrography Readings (Water Glycols Only)		10ml / 0.33oz
Epsilon		600ml / 20oz
Falex Wear Test (Specified Pin Type)		75ml / 2.5oz
Ferrographic Analysis		10ml / 0.33oz
Foam Test, Blender		65ml / 2.1oz
Four-Ball Special Test with Graphs and Pictures (set your own parameters)		50ml / 1.69oz
Freeze/Thaw Stability		50ml / 1.69oz
FT-IR Fingerprint		5ml / 0.17oz
Oil Analysis by FTIR (Oxidation, Fuel Dilution, ect.)		10ml / 0.33oz
Galvanic Corrosion Test, Al, Cu, & Fe Metals (6 Hrs. @ 80°C)		30ml / 1oz
Gas Chromatograph Qualitative Analysis (GC)		10ml / 0.33oz
Gas Chromatograph Qualitative Headspace Analysis		10ml / 0.33oz
Hardness (ICP as CaCO2)		10ml / 0.33oz
Hiac Automatic Particle Count (CM, NAS, SAE or ISO 4406)		30ml / 1oz
Humidity Cabinet, Cycling, Specify Test Parameters (per 30 Days)		100ml / 3.33oz
Humidity Cabinet, Static, 120°F or Specified Temperature (per 30 Days)		120ml / 4oz
Nitrite Test Strip		14ml / 0.5oz
Ratio by Colorimeter		10ml / 0.33oz
Ratio by Titration		50ml / 1.69oz
Solids – Evaporation Test, Infrared Drying		10ml / 0.33oz
Tramp Oil, Cuff & Sediment % (Aqueous)		100ml / 3.33oz
Twist Compression		50ml / 1.69oz
VOC	ASTM E1868-10	30ml / 1 oz
Particle Counting/Analysis by Optical Microscope	ISO 16232/4406/4407	Varies
Water by Refractometer – Aqueous, Synthetic Metalworking Fluids (Levels >40%)		5ml / 0.17oz
Rubber Swell, Room Temperature or Specified Temperature (per 7 Days) (Seal Swell)		50ml / 1.69oz

