

Fluid Analysis Reference Guide

Oil Analysis Test Categories

Xx Name	Wear Metals	Xx Name	Additives	Xx Name	Contaminants
Al Aluminum	Bearings Blocks Blowers Bushings Clutches Cylinders Housings Pistons Pump Bearings Motor Housings Rotors Thrust Bearings Thrust Washers			Alumina Bauxite Catalyst Coal Fly Ash Foundry Dust Granite Grease Thickener Paint Road Dust	
Sb Antimony	Alloy Steel			Ceramic Products Paint	
Ba Barium	Fuel Additive Grease Thickener Oil Additive: Detergent				
Be Beryllium	Alloy Steel				
B Boron		Coolant Inhibitor Oil Additive: AntiWear		Oil Additive: Ext Pressure Oil Additive: Detergent	
Cd Cadmium	Journal Bearings Plating				
Ca Calcium		Cement Dust Fuller's Earth Grease Thickener Gypsum Hard Water Lignite		Hard Rock Dust Oil Additive: Detergent Oil Additive: Rust Inhibitor Road Dust Rubber Salt Water Slag	
Cr Chromium	Exhaust Valves Sleeve Liners Low Alloy Steel Oil Coolers Rings Rods			Roller Bearings Stainless Steel Taper Bearings Water Treatment Paint	
Cu Copper	Babbitt Bearings (Underlay) Bearing Cage Brass Bronze Cam Bushings Clutches Governors Guides Oil Coolers			Oil Pumps Pump Piston & Thrust Plate Steering Disc Valve Train Bushings Wear Plates Wrist Pin Bushings Oil Additive: Anti Wear Paint	
Fe Iron	Bearings Blocks Brake Pads Cam Shaft Cast Iron Crankshafts Cylinders Discs Gears Housings			Hydraulic Pump Vanes Gears Pistons Liners Oil Pump Power Take Off (PTO) Rings Screws Shafts	

Predictor Source of Spectrometry Metals

	Wear Metals	Contaminants & Abrasives
Pb Lead	Babbitt Journal Bearing (Overlay) Bronze Alloy Solder Balancing Weights	Gasoline Additives Paint Road Dust
Mg Magnesium	Turbine Metallurgy	Hard Water Oil Additive: Detergent Road Dust Sea Water Fuller's Earth
Mo Molybdenum	Alloy Steel Ring	Oil Additive: Ext Pressure Grease
Ni Nickel	Hardened Steels Stainless Steel Plating	
P Phosphorous		Oil Additive: AntiWear Oil Additive: Ext Pressure
K Potassium		Coolant Inhibitor Fly Ash Fuel Element Granite Paper Dust Road Dust
Si Silicon	Alloy Steel Asbestos Cement Dust Fly Ash Road Dust Glass	Granite Grease Limestone Oil Additive: Antifoam Synthetic Lubricant Sealant
Ag Silver	Bearing (Overlay) Needle Bearings	Oil Cooler (Solder) Wrist Pin Bushings
Na Sodium	Activated Alumina Coolant Inhibitor Dirt Fly Ash	Grease Oil Additives Paper Mill Dust Road Salt
Sn Tin	Bearing Cage Babbitt Bearing Flashing	Piston Overlay Solder
Ti Titanium	Gas Turbine Bearings Turbine Blades	Paint
V Vanadium	Turbine Blades Valves	Bunker Oil
Zn Zinc	Brass Plating	Cathodic Protection Galvanizing Grease Oil Additive: Anti Wear