Schroeder INDUSTRIES
Advanced Fluid Conditioning Solutions®

Fluid Analysis Services

Clean Oil For Predictive Maintenance

MADE IN USA

L-5042 | Created 4.2025

An ISO 9001:2015 Certified Company

Your Introduction to Fluid Analysis Services

Clean fluids are the key to long equipment life, precision operation, lower maintenance costs and decreased downtime. Schroeder Industries' Fluid Analysis Services can unlock the door to increased savings by detecting potential problems early, so that service/downtime can be scheduled and catastrophic failures/costs can be avoided.

Schroeder Industries' Fluid Analysis Services provide users of industrial and mobile equipment with a complete analytical report including:

- System status (rated as Normal, Caution or Critical).
- Graphs of sample and limit data for easy detection of abnormal results.
- Comments and recommendations (where applicable).
- Photo of the contamination contained in the current oil sample. Kits including patch photo are available.
- An oil analysis report will be sent via email to the address provided on the component registration form or is readily available on-line
- Early warning limits based on industry standards, provided targets or a provided baseline.
- Current sample data displayed with up to 10 previous sample results.

A Typical Fluid Analysis Program

Schroeder Industries' Fluid Analysis Services can be used to implement a preventative maintenance program for each critical piece of equipment. The program should begin with a complete examination of the equipment by the customer to determine system criticality and sensitivity, as well as collecting a baseline sample to compare against.

New Oil/Baseline Samples

A sample of new oil should be sent to the lab for analysis. This sample will act as a baseline for comparison with subsequent sample results. New oil/Baseline samples should be taken from the tote after filtering, this will provide the most accurate representation of the oil properties before it is used.

Below is a listing of commonly cited sampling frequencies. These are given as a starting point only. Sampling frequency should be increased as environment severity and system criticality increases.

Sampling Frequency

Equipment Type	Hours
Hydraulics - Industrial	700
Hydraulics - Mobile	200
Hydraulics - Aviation	150
Steam Turbines	500
Transmissions	300
Air/Gas Compressors	500
Chillers	500
Gear Boxes - High Speed/Duty	300
Gear Boxes - Low Speed/Duty	1000
Bearings - Journal and Rolling Element	500
Diesel Fuel - Bulk Storage	Quarterly
Diesel Fuel - Day Tanks	Quarterly

Sampling Information

The Fluid Analysis Sample Form must be filled out as completely and accurately as possible. Accurate laboratory assessment of your sample depends on it. The most important information is:Your Company

- Your Name
- Your Email / Contact Information
- Unit ID / Name
- Date of Sample
- Type of oil *(Manufacturer & Brand)*, or fuel, should be included for most accurate information about your oil sample

Schroeder Industries' Fluid Analysis Services offer our customers a valuable means of extending equipment life, lowering maintenance costs, and decreasing downtime by improving overall system performance using preventative maintenance strategies. To choose the correct program for you please contact your Schroeder Industries distributor or Schroeder Industries directly.

Schroeder Industries Sample Kits and Laboratory Reports

Prepaid Sample Kits

Our Fluid Analysis Service includes testing for mineral oil based fluids, water glycol fluids, grease testing, MPC varnish potential testing, and diesel fuel test kits. Each kit is supplied with a clean sample bottle with mailer bottle, component registration form and prepaid Fluid Analysis Service.

Fluid Analysis Laboratory Reports

For each sample submitted to the lab, our customers will receive complete analytical lab reports including system status and recommendations.

Understanding Your Fluid Analysis Laboratory Report

Status and Recommendations

Corrective actions are recommended when applicable. The status of the sample is rated in three categories:

- **Normal**
  - System is operating within the parameters established by provided limitsand/or baseline data.
  - System requires no immediate action.
- **Caution**
  - System is operating outside of caution limits in one or more areas.
  - System requires scheduled maintenance.
- **Critical**
  - System is operating outside of critical limits in one or more areas.
  - System requires immediate attention.

Fluid Laboratory Tests

Using a 100 mL minimum sample, the following tests can be performed:

Particle Count

Particle contamination is responsible for most of the wear that causes mechanical failure. The amount of damage inflicted depends largely upon particle size. Contamination must be controlled in any system deemed critical to operation or expensive to repair. Accurate particle count trends provided by Schroeder Industries are an effective means of monitoring contamination and wear.

The level of contamination is determined automatically by a laser particle counter. The results are shown as the cumulative counts per milliliter of fluid according to ISO 4406. (For water glycol fluids the patch test photo is used to estimate the ISO code). The current sample ISO code is displayed along with the number of particles present in each micron level. The results are also graphed for easy detection of increased particle contamination. The accompanying chart lists components and target ISO cleanliness levels. When the target ISO code is exceeded, improvement of the system filtration, elimination of the source of ingression or installation of auxiliary off-line filtration may be required. (eg. By using Schroeder Industries quality filters, oil care and diagnostic systems)

Fuel Laboratory Tests

Using a 250 mL plastic jar the following tests can be performed:

Particle Count

ISO CODE representing the number of particles of solid contamination present in a given sample.

- **Water Content**
  - Determination of the amount of water present in a given sample; reported as ppm or percent
- **Bottom Solids and Water**
  - Volume of free water and sediment in a given fuel sample
- **Clear and Bright Visual Inspection**
  - Visual inspection for haze or lack of clarity, indicating the presence of water
- **Bateria, Fungi, and Mold**
  - Presence and severity of microbial growth

Using a 1L metal jar, the following tests can be performed:

same tests as above, in addition to:

- **Cold Filter Plugging Point**
  - Lowest temperature (°C) at which a given volume of fuel still passes through a standardized device under cold conditions
- **Pour Point**
  - Temperature (°C) where fuel loses its flow characteristics
- **Cloud Point**
  - Temperature (°C) where fuel begins to take on a cloudy appearance
- **Distillation**
  - Assessing the boiling temperature range of the sample fuel

ISO 4406

Most Sensitive System Component	Low/Medium Pressure Under 2000 psi (moderate conditions)		High Pressure 2000 to 2999 psi (low/medium with severe conditions*)		Very High Pressure 3000 psi and over (high pressure with severe conditions*)	
	ISO Target Levels	Micron Ratings	ISO Target Levels	Micron Ratings	ISO Target Levels	Micron Ratings
Pumps						
Fixed Gear or Fixed Vane	20/18/15	20	19/17/14	10	18/16/13	5
Fixed Piston	19/17/14	10	18/16/13	5	17/15/12	3
Variable Vane	18/16/13	5	17/15/12	3	not applicable	not applicable
Variable Piston	18/16/13	5	17/15/12	3	16/14/11	3**
Valves						
Check Valve	20/18/15	20	20/18/15	20	19/17/14	10
Directional (solenoid)	20/18/15	20	19/17/14	10	18/16/13	5
Standard Flow Control	20/18/15	20	19/17/14	10	18/16/13	5
Cartridge Valve	19/17/14	10	18/16/13	5	17/15/12	3
Proportional Valve	17/15/12	3	17/15/12	3	16/14/11	3**
Servo Valve	16/14/11	3**	16/14/11	3**	15/13/10	3**
Actuators						
Cylinders, Vane Motors, Gear Motors	20/18/15	20	19/17/14	10	18/16/13	5
Piston Motors, Swash Plate Motors	19/17/14	10	18/16/13	5	17/15/12	3
Hydrostatic Drives	16/15/12	3	16/14/11	3**	15/13/10	3**
Test Stands	15/13/10	3**	15/13/10	3**	15/13/10	3**
Bearings						
Journal Bearings	17/15/12	3	—	—	—	—
Industrial Gearboxes	17/15/12	3	—	—	—	—
Ball Bearings	15/13/10	3**	—	—	—	—
Roller Bearings	16/14/11	3**	—	—	—	—
Fuels						
Bulk Storage	18/16/13	—	—	—	—	—
Dispensing Nozzle	15/13/10	—	—	—	—	—
Eqiupment Fuel Tank	15/13/10	—	—	—	—	—
Fuel Systems* **	<12/9/6	—	—	—	—	—

* Severe conditions may include high flow surges, pressure spikes, frequent cold starts, extremely heavy duty use, or the presence of water.

** Two or more system filters of the recommended rating may be required to achieve and maintain the desired Target Cleanliness Level.

***Engine manufacturer requirements vary and may require fuel cleaner than the recommendation in the table above.
Micron Ratings: Contact factory for recommendations for your application.

Water Content

Water is the second most destructive contaminant in hydraulic systems. Water can reduce lubricity, encourage rusting, form sludge, and encourages oxidation, corrosion and cavitation. By knowing the water content of your system, you can help stop the damage water causes to critical system components by utilizing a Schroeder Industries water removal system.

The Karl Fischer Method based on ASTM D 1744 (volumetric) and ASTM D 6304 (coulometric) determines the water content, which is displayed in parts per million (PPM) and percent (%). (Water glycol fluids normally have upper and lower limits that are set to manufacturers specifications.) The results are also graphed for easy identification of abnormal results.

The crackle test method utilizes the difference between evaporation points in water and oil; water boils at a lower temperature than oil, creating bubbles and a crackle sound within the sample at the appropriate temperature. When the water content exceeds the oil manufacturer's recommended water content, the system should be protected against water penetration and measures should be introduced to extract water from the oil (e.g. by using Schroeder Industries Aquamicron® elements for water absorption or by using the thin-layer evaporation unit Schroeder Industries MAFH Series or NAV Series of Dehydration Units. Consult Schroeder Industries or your distributor for assistance in selecting the appropriate dehydrator for your application.)

Viscosity

Viscosity is an important physical property of hydraulic oils. Large changes in viscosity can cause excess heat generation, cavitation, oil film loss, leakage etc. Changes can also indicate that different fluids have been mixed. Analysis oil viscosity with Schroeder Industries can help determine the extent of oil contamination, degradation or when the wrong fluid has been added.

Maintaining the correct viscosity is important for achieving long component service life. Viscosity is reported in centistokes (cSt.) @ 40°C. The data is displayed along with warning limits. Caution limits are calculated at +/-10% new oil viscosity and critical limits at +/- 15% new oil viscosity. (Water glycol fluids can have limits set similarly but the water content should also be monitored as changes in it also affect the viscosity. The manufacturer should be consulted.) Graphs showing the viscosity trends along with limits allow for quick recognition of abnormal situations. When large changes in viscosity are detected a partial drain of the affected oil and adding fresh fluid may correct the problem. However in some instances a complete oil change may be required.

The kinematic viscosity of a fluid is determined by measuring the time required for the fluid to flow, under gravity, a known distance through a calibrated capillary viscometer at a constant temperature (40° C) and pressure (atmospheric). The result is given in centistokes (cSt.).

Total Acid Number (TAN)

Oxidation is the primary mechanism of oil degradation. The presence of excess heat, wear metals, and water can increase the rate of oxidation. The by-products of oxidation are organic acids, which are detected by the TAN test. Oxidation is the primary mechanism of oil degradation. It causes sludge/varnish problems, loss of lubricity, etc.

TAN results are reported in mg/g KOH (Potassium Hydroxide). Since all hydraulic fluids have some inherent acidic properties any increases in TAN must be compared to the new oil value as a baseline. Typically caution limits are set at +0.6 new oil value and critical limits are set at +1.0 new oil value. Certain application specific fluids may require limits set to manufacturer specifications.

The results are graphed along with the limits to clearly show when oil oxidation has increased above acceptable levels. When the TAN has increased above the critical level, the oil should be changed immediately to prevent damage from occurring to your equipment.

The TAN is determined by the milligrams of potassium hydroxide (KOH) required to neutralize the acidity of one gram of oil using an automatic titrator.

Spectrographic Analysis

Additives can become depleted over the oil's lifetime by various means: washout, use, etc. Wear metals can indicate abnormal wear patterns and can also increase the oxidation rates. Other contaminants can indicate contamination of the oil by incompatible fluids.

Additive, wear metal and contaminant levels are displayed in parts-per-million (PPM). The oil sample is analyzed for 24 wear metal components. The results are also graphically displayed for easy detection of increasing or decreasing levels. The manufacturer blends additives into the oil in different forms and quantities. The additive package varies with the oil type. Wear metals indicate wear on particular components of an individual unit. These metals will indicate a wear problem on the microscopic level (<5 microns) before the problem can be detected by conventional means. The existence of a wear problem is determined by absolute values of metals, and more importantly, by a relative increase over previous trending in one or more metals. Contaminants can be an indicator of internal or external contamination. The source and amount can be determined by a comparison with new oil data. Below is a list of additive types, wear metal and contaminant sources.

To determine concentrations of elements, the sample is aspirated into an argon plasma where each element is excited and caused to emit a characteristic wavelength of light. The ICP detects the light, identifies the elements and calculates their concentration.

Additives

Additives	Function
Magnesium (Mg)	Dispersant / Detergent
Calcium (Ca)	Dispersant / Detergent
Barium (Ba)	Dispersant / Detergent
Zinc (Zn)	Anti-Wear
Molybdenum (Mo)	Anti-Wear
Phosphorous (P)	Anti-Wear
Wear Metals	**Typical Source**
Titanium (Ti)	Turbine Components, Bearings, Platings
Chromium (Cr)	Rings, Roller/Taper, Bearings, Rods, Platings
Iron (Fe)	Cylinders, Gears, Rings, Crankshafts, Liners, Bearings, Housings, Rust
Nickel (Ni)	Valves, Shafts, Gears, Rings, Turbine Components
Copper (Cu)	Bearings, Bushings, Bronze, Thrust-Washers, Friction Plates, Oil Cooler
Aluminum (Al)	Pistons, Bearings, Pumps, Blowers, Rotors, Thrust-Washers, Dirt
Lead (Pb)	Bearing Overlays, Grease, Paint, Possible Additive in Gear Oils
Tin (Sn)	Bearings, Bushings, Piston Platings, Solder, Coolers
Contaminants	**Typical Source**
Sodium (Na)	Coolant, Sea Water, Possible Additive
Boron (B)	Coolant, Sea Water, Dirt, Possible Additive
Silicon (Si)	Dirt, Possible Additive (Anti-Foam)

Conductivity

The presence of pumps and filters create electrical charges within a system. This test determines the ability of the oil to dissipate an electrical charge within that system. A higher conductivity relates to the speed at which the oil can dissipate the charge, low conductivity readings indicate an accumulation of charge and can create a dangerous situation.

Conductivity of a sample is measured in pS/m (picosiemens/meter) using a digital conductivity meter in accordance with ASTM D2624.

Gravimetric

Insoluble contamination can not only plug filters but can also damage functional system components, resulting in wear and eventual system failure. Schroeder Industries' Gravimetric solids test, based on a modified ISO 4405 protocol provides a valuable method for determining the contamination level of system fluids, wash fluids used in component cleanliness tests, or the fluids from a component test station.

The gravimetric method determines fluid contamination by weighing suspended solids per unit volume of fluid. The fluid sample is drawn through a membrane filter under vacuum conditions and the insoluble contamination is collected on the surface of the filter.

The increase in mass of the membrane after filtration represents the suspended solids within the sample

Patch Test/Photo

Equipment wear severity also depends on the shape and hardness of the contaminating particles. Schroeder Industries' patch test and contamination photo compliment the particle count test by providing visual evidence of size, amount and identity (if possible) of the particles.

The solid contaminants are physically separated from the oil by vacuum filtering of fluid through a 0.8-micron membrane filter. The resulting "patch" is examined using an optical microscope. An imaging system is used to capture a digital image of the patch which is attached to the report. The patch can be used to confirm and estimate the ISO 4406 cleanliness code. If you require a photomicrograph patch with your oil analysis, the Premium Kit with PhotoMicrograph will show you the evidence of contamination in your system.

MPC Varnish Potential Testing

Due to age and oxidization, harmful byproducts can develop within oil. In industrial equipment, the oil may be in service for many years and be at risk of forming these byproducts which can lead to the buildup of harmful varnish or sludge.

When performing the MPC Varnish Potential Test, the hydraulic fluid is filtered through a membrane patch, the resulting patch is then measured with a visible light spectrometer using the CIELAB color scale (ASTM E308). The measured reading is then used to assign a status in regards to varnish level (0-15 is normal, 15-30 is monitor, 30-40 is abnormal, >40 is Critical).

Bacteria, Fungi, and Mold

Diesel fuel is a food source for a variety of microbes. Water provides oxygen and a space for movement and growth for micro-organisms. Microbes are a soft contaminant that can lead to the rapid blinding of filter media and the early plugging of filtration. Microbes can also form films on the surfaces of fuel storage tanks and piping that are difficult to remove. The continuous removal of water from fuel can prevent the opportunity for microbial growth to overwhelm fuel storage and handling systems.

Cold Filter Plugging Point

The CFPP is the lowest temperature (°C) at which a given volume of fuel still passes through a standardized filter device under cold conditions. It defines the point at which a fuel is no longer filterable.

Pour Point

The pour point is the temperature (°C) where paraffin crystals start to form throughout the fuel and where fuel loses its flow characteristics. This is commonly seen as “gelling” on the surface of filters. This test is normally monitored during the colder operating months to identify any potential issues that would cause difficulty in cold start or operating conditions.

Fluid Analysis Sets

The Fluid Analysis Set from Schroeder Industries provides the necessary tools to determine levels of solid particulate contamination present in a particular fluid sample. Using the vacuum pump contained in the kit, the fluid sample is drawn through a membrane patch. The residual dirt left on the patch is viewed under a microscope and compared to photos of known contamination levels in the Schroeder Industries Contamination.

Kit Type	Part Number
Fluid Analysis Kit	7630322

Schroeder INDUSTRIES
Advanced Fluid Conditioning Solutions®

Fluid Analysis Report

Advanced
Analysis Package: Advanced

DEMO - USA

Sample number
#Press #23-6

Sampled date
03.13.2025

Uploaded date
03.13.2025

Reason for analysis
Routine

Fluid condition
Action

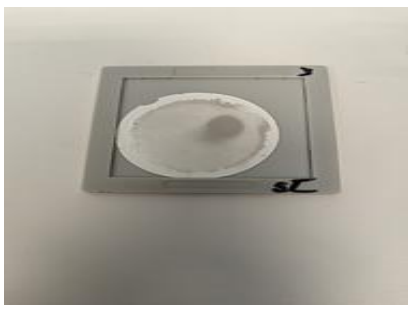
Fluid Manufacturer	Shell	Site	Injection Molding
Fluid Name	Tellus S2 V	Asset	Press #23 - Elaine
Fluid Viscosity Grade	46	Asset Reference	Press #23
Fluid Type	-	Limit Profile	Demo 16/14/11

Recommended actions

Action **High Contamination (>6µm)**

A high level of contamination has been identified, meaning there is an increased risk of component wear and mechanical failure. It is recommended to determine the source of contamination ingress and implement improved filtration.

Oil Patch



Schroeder INDUSTRIES
Advanced Fluid Conditioning Solutions®

Fluid Analysis Report

Advanced
Analysis Package: Advanced

DEMO - USA

Sample number
#Press #23-6

Sampled date
03.13.2025

Uploaded date
03.13.2025

Reason for analysis
Routine

Fluid condition
Action

Sample date			12.12.2023	06.14.2024	12.03.2024	12.09.2024	12.13.2024	03.13.2025
Sample Number			Press #23-1	Press #23-3	Press #23-2	Press #23-4	Press #23-5	Press #23-6
Condition			Critical	Action	Action	Ok	Ok	Action

Analytical test

Appearance			-	-	-	-	-	-
Water Content	ASTM D6304	PPM	89	90	91	90	91	89
Conductivity	ASTM D2624	pS/m	546	521	520	511	503	530
Viscosity at 40°C	ASTM D445	mm^2/s	46.2	46.6	46	46	46.2	46.4
Viscosity at 100°C	ASTM D445	mm^2/s	6.9	7	7.1	6.8	6.8	6.9
Viscosity Index	ASTM D2270	Index	112	110	110	108	110	112

Particle Count

ISO Code	ISO 4406 - 1999		19/17/14	17/15/12	18/16/12	16/14/11	15/13/10	18/16/13
SAE Class	SAE AS 4059		3	3	3	1	1	3
>4µm (c)		p/100ml	3454	782	2161	353	253	2378
>6µm (c)		p/100ml	804	219	400	136	40	402
>14µm (c)		p/100ml	126	21	38	10	9	53
>21µm (c)		p/100ml	34	5	9	4	2	10
>38µm (c)		p/100ml	5	5	3	1	1	5
>70µm (c)		p/100ml	2	2	2	1	1	2

Element Analysis

Additives

Zinc	ASTM D5185	PPM	1	2	2	2	1	1
Magnesium	ASTM D5185	PPM	1	1	1	0	0	0
Calcium	ASTM D5185	PPM	0	0	0	0	0	0
Phosphorus	ASTM D5185	PPM	2	2	2	2	2	3
Boron	ASTM D5185	PPM	0	0	0	0	0	1
Sulfur	ASTM D5185	PPM	-	-	-	-	-	-

Wear Metals

Nickel	ASTM D5185	PPM	1	2	1	1	0	0
Vanadium	ASTM D5185	PPM	0	0	0	0	0	0
Silver	ASTM D5185	PPM	0	0	0	0	0	0
Titanium	ASTM D5185	PPM	0	0	0	0	0	0
Iron	ASTM D5185	PPM	0	0	0	0	0	0
Lead	ASTM D5185	PPM	1	1	1	1	1	0
Chromium	ASTM D5185	PPM	11	4	6	2	1	2
Aluminium	ASTM D5185	PPM	3	4	2	5	5	4
Copper	ASTM D5185	PPM	0	0	0	0	0	0
Tin	ASTM D5185	PPM	1	1	2	1	2	2
Molybdenum	ASTM D5185	PPM	0	0	0	0	0	0
Manganese	ASTM D5185	PPM	-	-	-	-	-	-

Contamination

Silicon	ASTM D5185	PPM	1	1	2	1	0	0
Sodium	ASTM D5185	PPM	0	0	0	0	0	0
Potassium	ASTM D5185	PPM	-	-	-	-	-	-

Schroeder INDUSTRIES
Advanced Fluid Conditioning Solutions®

Fluid Analysis Report

Advanced
Analysis Package: Advanced

DEMO - USA

Sample number
#Press #23-6

Sampled date
03.13.2025

Uploaded date
03.13.2025

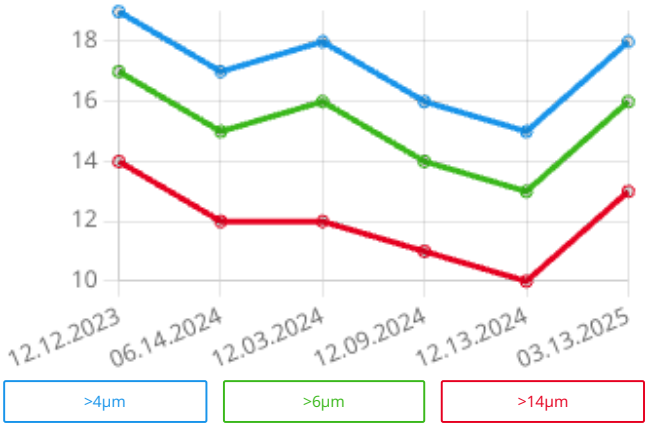
Reason for analysis
Routine

Fluid condition
Action

Additional Tests

Barium	ASTM D5185	PPM	0	0	0	0	0	0
Beryllium		PPM	0	0	0	0	0	0
Tungsten		PPM	0	0	0	0	0	0
Cadmium	ASTM D5185	PPM	0	0	0	0	0	0
Total Acid Number	ASTM D664	mgKOH/g	0.29	0.31	0.32	0.3	0.3	0.29

Trending



Note: the laboratory will retain unused portions of samples for a maximum period of one month.

Schroeder's Fluid Analysis Services provide users of industrial and mobile hydraulic equipment with a complete analytical report available on our Fluid Care Portal. All Kits offered are prepaid sample kits to meet your different testing requirements.

Analysis of **Hydraulic Fluids:**

BASIC OIL ANALYSIS KIT, BOX 10 – p/n 7651336
ADVANCED OIL ANALYSIS KIT, BOX 10 - p/n 7651338
PREMIUM OIL ANALYSIS KIT, BOX 10 – p/n 7651337

Appearance	Bottle Photo
ISO Particle Count	Performed by ISO 11500, reported ISO 4406
Filter Patch	Photo of filter patch
Karl Fischer Water %	ASTM D6304C
Viscosity at 40C	ASTM D445
Viscosity at 100C	ASTM D445
Viscosity Index	ASTM D2270
ICP Spectrometry	ASTM D5185
Total Acid Number (TAN)	ASTM D664
Varnish Potential (MPC)	ASTM D7843

Analysis of **Grease:**

BASIC GREASE TEST PACKAGE, SI - Each – p/n 7651491
ADVANCED GREASE TEST PACKAGE, SI - Each - p/n 7651492

Color	Visual Color
Total Magnetic Iron (TMI)	Ferrous Screening
FTIR Oxidation	Direct Trend Method
ICP Spectrometry	25 Element ASTM D5185-05
Karl Fischer	% Water ASTM D6304
RULER	Remaining Useful Life
Penetration Test	Quarter Cup
Ferrography	Photographic Report

Analysis of **Coolants:**

The Basic and Advanced Oil Analysis Kits can also be used for testing coolants. Simply indicate on the **Component Registration Form** that the hydraulic fluid is a coolant and include coolant manufacturer and brand name.

Appearance	Color, Clarity, Odor, Precipitates
pH	
Conductivity - Coolants	
Refractive Index	Freeze Point, Boiling Point, % Glycol
Nitrates by Titration	
Sediment Patch	Photo of Filter Patch

FLUID ANALYSIS SERVICES

Analysis of **Diesel Fuel:**

- **CLEANLINESS FUEL ANALYSIS KIT - Each** – p/n 7651753
- **CONTAMINATION FUEL ANALYSIS KIT - Each** - p/n 7651754
- **FILTER PLUGGING FUEL ANALYSIS KIT - Each** - p/n 7651755
- **WINTER FUEL ANALYSIS KIT - Each** - p/n 7651756

				ISO Particle Count	ASTM 11500, reported by ASTM 4406
				Karl Fischer Water %	ASTM D6304B
				Bottom Solids and Water	ASTM D2709
				Clear and Bright Visual Inspection	ASTM D4176
				Bacteria, Fungi, and Mold	In House Method
				Cold Filter Plugging Point	ASTM D6371
				Pour Point	ASTM D97
				Cloud Point	ASTM D5773
				Distillation	ASTM D86

Condition Monitoring Tools for Field Use Providing Immediate Results

CS 1220 with AS3008:

- All costs of analysis
- Sample bottle, sampling instructions, fluid analysis sample form, shipping canister
- Computerized data storage, trending report (up to 3 years).

HYTRAX Contamination Monitoring System:

- Real-time measurement of solid and water contamination
- Integrated motor-pump group for use on pressure-less reservoirs

Schroeder PRO: Total Fluid Health

- Advanced portable fluid condition monitoring unit
- Particulate Contamination & Relative Water Content
- Oil Life Indication - Relative to new fluid condition
- Real-time display of contaminate present in fluid

Water Saturation Sensor

- Provides percent water saturation with optional Integral 4-digit display
- Fluid temperature displayed in Celsius or Fahrenheit
- Oil Life Indication - Relative to new fluid condition
- Real-time display of contaminate present in fluid

For Additional Condition Monitoring Tools available for Real-Time Fluid Cleanliness, please visit our SCHROEDER INDUSTRIES Filter Systems & Diagnostic-IoT website - https://catalog.schroederindustries.com/category/electronics

PN#00000000 / 02.26 / FSP2003-2165