



Donaldson
Filtration Solutions

Industrial Fluid Analysis



donaldson.com



What Can the Donaldson Fluid Analysis Program Do For You?

Fluid analysis is a snapshot of what is happening inside your equipment. It tells you the condition of the lubricant and identifies component wear and contamination in virtually any industrial application so that you can:

- Identify opportunities for optimizing filtration performance
- Safely extend drain intervals
- Minimize downtime by identifying minor problems before they become major failures
- Maximize asset reliability
- Extend equipment life

Benefits of Using the Donaldson Fluid Analysis Program

- Partnership with a total filtration solutions provider
- High quality testing by an ISO 17025 A2LA accredited laboratory
- Results available immediately upon sample processing completion
- Innovative data management tools that will help you affect change in daily maintenance practices.



Test Kits and Sampling Supplies

To order test kits, sampling equipment or supplies, contact your local Donaldson Industrial Hydraulics distributor. Refer to the chart at right for recommended sampling intervals by component.

Donaldson Fluid Analysis Products

The Advanced Industrial Fluid Analysis Kit is designed to monitor component wear, contamination and fluid condition.

Product	Part #
Industrial Fluid Analysis Service	Part #X009330
24 Metals by ICP	
Water by Karl Fischer, ppm	
Viscosity at 40°C or 100°C	
Oxidation/Nitration by FTIR	
Total Acid Number	
ISO Particle Count/ Particle Quantifier	
Sample Extraction Pump	Part #P176431
Sample Extraction Tubing	Part #P176433



Suggested Sampling Intervals and Methods

Fluid analysis is most effective when samples are representative of typical operating conditions. Always take samples at regularly scheduled intervals and from

the same sampling point each time. How critical a piece of equipment is to production should be a major consideration for determining sampling frequency.

	Component Interval	Suggested Method & Location
Hydraulics	250 – 500 hours	By vacuum pump through oil fill port of system reservoir at mid-level
Gearboxes	750 hours	By vacuum pump through oil level plug or dipstick retaining tube
Compressors	Monthly or at least every 500 hours	By vacuum pump through oil fill port of system reservoir at mid-level
Turbines	Monthly or at least every 500 hours	By vacuum pump through oil level plug or dipstick retaining tube

Sending Samples to your Donaldson Laboratory

Step 1

Fill out the Component Registration Form and include it with your sample in the shipping container provided. Use this form only when sampling a component for the first time or when submitting changes in component or fluid information already submitted to the laboratory.

Step 2

Fill out the sample jar label completely and accurately, including unit ID, time on both the fluid and the unit and whether or not fluid has been added or changed.

Step 3

Complete the return address shipping label and apply it to the shipping container. Use only a trackable shipping service such as UPS or FedEx to send samples to the laboratory at:

Donaldson Fluid Analysis Laboratory
7898 Zionsville Road
Indianapolis, IN 46268

Step 4

Set up your account and receive your username and password for easy access to your test results by calling the laboratory's Customer Service at 877-458-3313. Go to www.donaldson.com, click on Industrial Hydraulics, and locate Fluid Analysis. Log in with your assigned username and password.

COMPONENT REGISTRATION FORM

IMPORTANT
Complete this form the first time component is sampled or to make changes.
Always use same unit ID on future samples.
Retain a copy for your records.

Donaldson
Filtration Solutions

Sales Representative _____
Company(sample source) _____
Attention _____

Customer's Address _____
City _____ State _____ Zip _____
Telephone _____ Fax _____ E-mail _____

Unit I.D. _____ Secondary I.D. _____

POSITION (if applicable): Chassis Left Right Front Rear Center

UNIT TYPE (check sampled component)

TRANSMISSION <input type="checkbox"/> Torque Converter <input type="checkbox"/> Hydrostatic Trans <input type="checkbox"/> Other	BTRQ BBHYD	HYDRAULIC <input type="checkbox"/> Piston Pump <input type="checkbox"/> Gear Pump <input type="checkbox"/> Rotary Vane <input type="checkbox"/> Hydraulic Servo	BHPIP BHGP BHVAN BHSER	COMPRESSORS <input type="checkbox"/> Reciprocating <input type="checkbox"/> Rotary Screw <input type="checkbox"/> Rotary Vane <input type="checkbox"/> Rotary Lobe <input type="checkbox"/> Centrifugal <input type="checkbox"/> Ammonia <input type="checkbox"/> Refrigeration	BCREC BCRSC BCRVN BCVRL BCCEM BCAC BR
GEAR SYSTEM <input type="checkbox"/> Spur <input type="checkbox"/> Helical <input type="checkbox"/> Bevel	BBSPU BBHEL RBDHL BVBL SBG HYP HER BWRM	BEARINGS <input type="checkbox"/> Sleeve <input type="checkbox"/> Trunion <input type="checkbox"/> Plain <input type="checkbox"/> Journal <input type="checkbox"/> Roller <input type="checkbox"/> Tapered Roller <input type="checkbox"/> Babbitt <input type="checkbox"/> Needle	BGSLV BGTRU BG BGJRL BGRLL BGTAR BGBAB BGNDL	TURBINE <input type="checkbox"/> Gas <input type="checkbox"/> Steam	BTGST BTSTM

Lube Grade _____ LISO UAGIMA LUBR

Side Loop (Kidney Loop-16) _____

DATE TAKEN _____

PHONE _____

CITY _____

CUSTOMER DONALDSON ACCOUNT # _____

ADVANCED INDUSTRIAL
Label must be attached to sample at Component registration form must be used on first time samples or for changes.
Required Field
PART # X009330
OIL CHANGES
FILTER CHANGES
Original Label _____

FROM: _____

TO: DONALDSON FLUID ANALYSIS
7898 ZIONSVILLE ROAD
P.O. BOX 68983
INDIANAPOLIS, IN 46268-2177

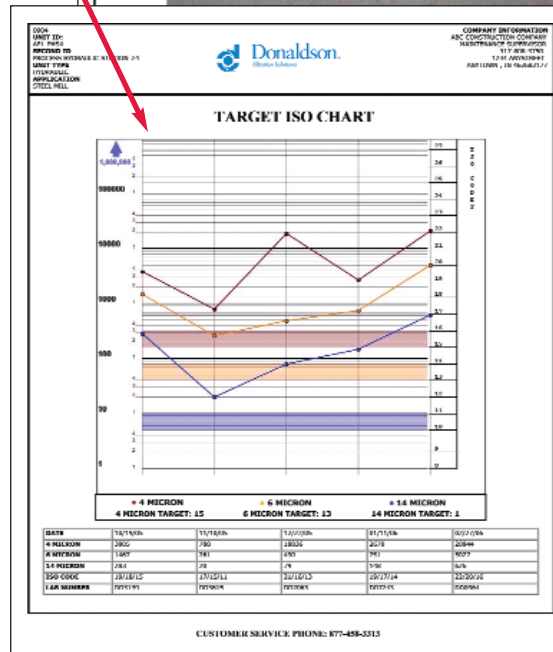
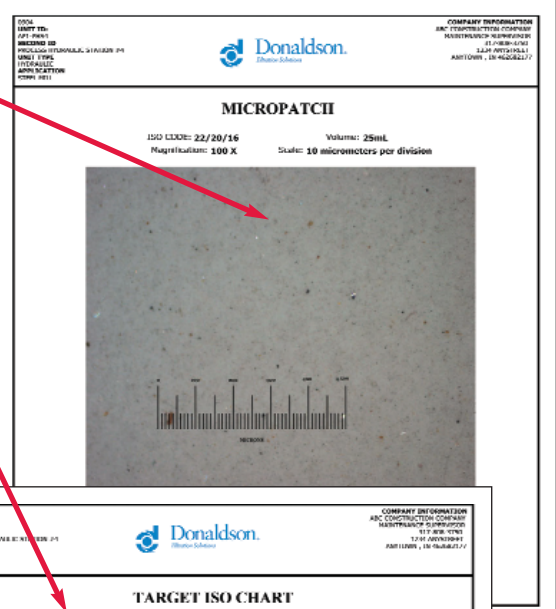
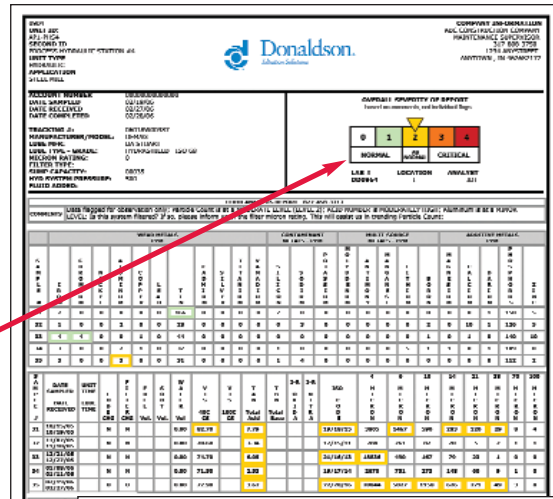
Data Management Solutions That Save You Time and Money

Donaldson's data management solutions make it fast and easy to maximize the value of your test results. Your Donaldson test report color codes individual results by severity for a better understanding of the overall severity of the report. It also provides a graphical representation of the cleanliness level of the fluid with a photomicropatch accompanied by the Target ISO Chart done on each sample.

With Donaldson, you're also on track for total program management with problem summary reports, sample processing turnaround tracking and data mining capabilities that allow you to affect positive change in your daily maintenance practices.

- Get test results almost immediately – online
- Identify significant trends in fluid cleanliness
- Use management reports to pinpoint problems with critical units
- Identify bottlenecks in sample turnaround time
- Influence equipment purchasing decisions
- Access your information from anywhere there is an internet connection

Go to www.donaldson.com and click on Industrial Hydraulics for a reference guide on how to read a fluid analysis report.



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 P.O. Box 1299
 Minneapolis, MN
 55440-1299 U.S.A.

Order Line: 800.846.1846
 Lab Assistance Line: 877.458.3313
 Fax: 952.703.4913
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donaldson.com

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