

CAT® S.O.S.™ SERVICES

WE SEE WHAT OPERATORS CAN'T

WARNING:
COOLANT LEAK DETECTED

REPAIR BEFORE
FAILURE SAVINGS: **\$42,000**



CAT® S•O•SSM SERVICES

A SMALL SAMPLE REVEALS A LOT ABOUT YOUR EQUIPMENT HEALTH



Your equipment is an investment. You expect it to work whenever and wherever it's needed. And just as you depend on these assets, they rely on quality fluids to perform under pressure.

Fluid analysis is the process of sampling, testing and diagnosing the operating condition of those fluids. The chemicals, metals and other elemental constituents found within a sample can “tip off” the health of major mechanical systems and/or components, including:

ENGINES
TRANSMISSIONS
PUMPS, VALVES & SEALS
HYDRAULICS
DIFFERENTIALS

POWERTRAINS
GEARBOXES
COMPRESSORS
FINAL DRIVES

WHAT DOES “S•O•S” STAND FOR?

When it comes to durable, reliable equipment, Caterpillar has continuously set the standard for our industry. Back in the 1960s, we rolled out “Scheduled Oil Sampling” to help our customers extend the life of their equipment even further. Since then, your needs have evolved and so have our capabilities. Today, S•O•S Services includes expert analysis for:

OIL

Checking for wear and wear rate, condition, contamination, proper lubricant usage

COOLANT

Checking for correct fluid usage, condition, adequate freeze/boil protection, contamination

DIESEL FUEL

Checking for acceptable quality, microbial growth, contamination, appropriate usage

WHAT DO OUR PEOPLE STAND FOR?



Unlike third-party laboratories, only the S•O•S Services Program gives you access to expert scientists, dedicated product engineers and the local support of Caterpillar's global dealer network.

OUR TEAM GIVES YOU:

- QUICK TURNAROUND
- KNOWLEDGEABLE INTERPRETATIONS
- RECOMMENDATIONS YOU CAN EASILY UNDERSTAND AND ACT ON



"I'm a chemist by training, but talking to customers is my passion. We act like an extension of your operation to ensure maximum uptime."

— **DANA FRANKLIN**
Chemist, Corporate Accounts
Caterpillar S•O•S Services



NOW, THAT'S SMART!

Cat S•O•S Services was founded in 1968 and annually tests about 7 million samples. With this rich history, we have created reliable wear tables that accurately predict component failures before they happen.

WHAT KIND OF EQUIPMENT SHOULD I TEST?



EXAMPLES OF INDUSTRIES SERVED:

- Agriculture
- Aviation
- Construction
- Demolition, scrap & waste
- Forestry
- Governmental (municipal and defense)
- Industrial power
- Landscaping
- Marine
- Material handling
- Mining
- Oil & gas
- Power generation
- Quarry, aggregates & cement
- Rail

EXAMPLES OF NON-COMMERCIAL EQUIPMENT:

- Automotive & racing
- Lawn & garden
- Personal / recreational
- Yachting & pleasure craft

If it has a lubricated system, takes coolant or runs on diesel, S•O•S Services is your complete solution—from massive mining machines, to generators for emergency power, to your personal vehicle and much more. Get an accurate look into the health of your machinery along with targeted recommendations if a problem is detected.

EVERY BRAND OF FLUID, EVERY BRAND OF EQUIPMENT

If you don't own Cat products, that's OK: We analyze all fluids on all equipment models, whether made by Caterpillar or another manufacturer. In fact, about 25% of all samples come from equipment other than Cat. That's why S•O•S Services is your one-stop solution for mixed fleets.

NOW, THAT'S SMALL!

Our lab experts see what operators miss during walkaround inspections.

Concentration of elements is shown in parts per million (ppm).

For comparison:

1 PPM IS LIKE
ONE DROP
OF MILK IN...



CASE IN POINT:

A \$42,000 FAILURE STOPPED IN ITS TRACKS

Preventing costly repairs and unplanned downtime starts with a simple fluid sample.

Take the case of a truck driver who had begun to notice some slight coolant loss in his Cat C3406E diesel engine. He was having to add about half a gallon of coolant per month, and he thought maybe there was a loose hose or small leak somewhere.

Although the driver had not been participating in routine fluid sampling, he decided to take an engine oil sample. What happened next is a testament to his Cat dealer for providing services beyond what competitors can offer.



**IT DOESN'T MATTER HOW BIG
OR SMALL YOUR OPERATION.
EVERYONE DESERVES TO HAVE
SOMEONE LOOKING OUT FOR
THEM AND THEIR BUSINESS.**

After analyzing the sample, the dealer discovered this minor coolant entry issue actually signaled a major problem. The dealer consulted with the driver and convinced him that this should not be overlooked. Further engine inspection revealed significant damage amounting to \$26,000 in service and repairs as a result of the leak. (Component inspection showed additional work needed to repair the battery and starter.) The dealer worked carefully with the customer's budget and provided the necessary repairs.

But if the engine had gone to failure, the cost to repair and rebuild components would have cost \$42,000.

For a truck driver with only two or three trucks, saving \$16,000 from one simple fluid sample is proof of the value of S•O•S Services.

CONNECT WITH THE EXPERTS

Let's talk about your individual or operational needs. Learn what a smart sampling program includes, request a sample kit or discover how your dealer can handle equipment management for you at www.cat.com

BUILT FOR IT.™



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