Our UK fluid analysis laboratory is one of the largest and most sophisticated facilities of its kind in the UK and caters for customers across the globe.

**TRUSTED BY EXPERTS.**

The No.1 provider for Cat® equipment for the UK and Ireland, Finning UK is part of Finning International Inc., the world’s largest Cat heavy and general equipment dealer.

Every year we test over 215,000 fluid samples from all makes and models of machines, employed in mission critical applications across a diverse range of markets including:

**Construction, renewable energy, healthcare, information technology, agriculture, quarrying, rail and commercial marine.**

In each and every one of these markets we are widely recognised as the leader in our field, the people the experts trust.

Carrying out tests on a regular basis and comparing results with historical data enables us to make proactive recommendations, so action can be taken before failure occurs.

This not only significantly reduces unscheduled downtime and associated costs, but also minimises the risk of life threatening accidents, and prolongs equipment life, reducing the Total Cost of Ownership (TCO).

**48 hour response. Real time reporting.**

The whole process is very quick and extremely simple. Customers are provided with a kit so they can take their own samples. These are then sent to us by post. Testing takes place within 24 hours and results are available online, via our industry-leading Equipment Commander software, within 48 hours (24 hours on request).
THE BENEFITS OF FLUID ANALYSIS

Monitoring the condition of vital fluids, such as oil, fuel and coolants, provides visibility of asset performance and health across your entire business enabling you to:

REDUCE MAINTENANCE COSTS
Servicing equipment when it needs to be serviced, rather than sticking to a rigid service schedule, significantly reduces life cycle costs.

MINIMISE THE RISK OF SERIOUS ACCIDENTS
Identifying potential faults early significantly reduces the risk of catastrophic failure and the possibility of operator injury.

OPTIMISE EQUIPMENT LIFE
Protects vital components from unnecessary wear and tear, prolonging equipment life.

Fluid Analysis is a real benefit to us. Oil analysis data which supports our inspection report is viewable online helping our customers to buy with confidence.

Colm Moran, Inspection Services - Dispute Resolution - Iron Planet Europe.
Changing from scheduled maintenance to condition monitoring could save a typical rail operator £40,000 per annum across a 20 strong fleet.

**VALUE EXAMPLE: RAIL OPERATOR**

**SCHEDULE REPAIRS AND MAINTENANCE**
Analysing oil and other fluids such as fuel and coolants allows you to keep a close eye on the condition of vital components and schedule repairs and maintenance around your operations, reducing unscheduled downtime.

**REDUCE WASTE AND ENVIRONMENTAL IMPACT**
Only changing fluids when they need replacing maximises efficiency and reduces waste.

**EXTEND OIL LIFE**
Changing oil based on its condition ensures that you get maximum value from every litre used and minimises the cost of disposal.

Working in partnership with Leeds University we are able to provide the latest, cutting-edge Electron Microscopic Analysis.
ANY MACHINE, ANY MAKE, ANY MODEL, ANYWHERE

Finning’s fluid analysis expertise is renowned all over the world, and attracts customers from across the globe.

KLETTUR, ICELAND
Cat dealer and other makes of machinery

I have no doubt that carrying out regular sampling has saved us thousand of pounds.
Scott Steenvoorden, Service Manager, Peacock and Binnington.
Finning is a leading authority on international emission standards and compliance.
oil is the lifeblood of any machine. samples are tested for metal and water contamination, abrasive wear, viscosity, acidity and cleanliness. this not only allows us to accurately predict its remaining life, but also enables us to identify changes in component condition and highlight wear trends, which can be the difference between a minor repair and a major failure.

testing and analysis services
we offer a full range of testing and analysis services, which are tailored to each individual customer’s needs. these include:

around 50% of all engine downtime can be attributed to problems associated with the cooling system. these problems can also spread to the transmission and hydraulic systems. our coolant analysis service offers a simple, low-cost way to evaluate the chemistry of your coolant, check for contaminants and monitor the condition of your cooling system.
Fuel analysis identifies impurities that could lead to injector blockages, impair operational efficiency and increase wear & tear on other vital components. Our state-of-the-art testing apparatus can identify organic contaminants such as fungi, yeast and bacteria, the presence of which can lead to costly repairs and increase the risk of unscheduled downtime.

Like all liquids, diesel exhaust fluid is susceptible to contamination when it is moved from one vessel to another. Our bespoke testing service provides you with assurance that any diesel exhaust fluid that is transferred is still within specification and free from dilution and contamination.

Monitoring the condition of transformer oil is vital to the efficient running of any equipment. Failure of electric power distribution can compromise safety and will inevitably result in high repair costs and extended downtime.
**ANALYSIS IN ACTION**

Finning’s industry leading online reporting system, Equipment Commander, allows you to view up-to-the-minute information and historical data - at any time of the day or night, from anywhere in the world.

As soon as any sample has been analysed and the report compiled, the results are emailed directly to you, and posted online.

Equipment Commander is available in multiple languages and can be branded with your own corporate identity.

- **Full history and graphing features** highlight trends on a particular machine or compartment or across an entire fleet
- **Electronic ticket generator** automatically creates tickets so there is no need to write them out by hand
- **Interactive features** allow you to gain detailed information about any and every machine in your fleet at the click of a mouse

All options are accessible from the user-friendly front page, making the whole system quick and easy to use.
The graph below illustrates trends for key elements in a gearbox. The green line (Copper) started to climb at the start of 2013 and accelerated in February, at which time the brown and blue readings (Iron and PQ) also started to trend upwards.

This enabled us to identify that there was a problem with the gearbox bearings, which contain an important copper component.

By increasing sampling frequency we were able to monitor the bearings condition and ensure replacement took place before critical failure occurred.

As a direct result of Finning’s fluid and condition monitoring service we have withdrawn 18 gearboxes over two years with no loss of service.

Martin Fink, Technical Engineer, Arriva.

 unforeseen failure would have meant replacing the entire gearbox at a cost of around £10,000, with lost revenue and penalties adding ten’s of thousands more to the final bill.

VALUE EXAMPLE:
MINING
Replacing the spider gear on one 16M grader before any serious damage to the transmission occurs could save £40,000
BESPOKE SERVICES

Our business is all about keeping your business up and running, at all times. The more we know about your business, the more we can do to help. Our aim is to build long-term working relationships with our customers so that we can provide each and every one of them with a service that is tailored to their individual needs.

CONSULTANCY SERVICE

Our industry-leading consultancy service has been specifically developed to help our customers optimise the performance of their equipment, maximise operational efficiency and lower operating costs.

Our team of specialists work with you to identify sample requirements and the best means of monitoring mission critical equipment to ensure maximum uptime.

- Each customer has their own dedicated account manager, backed up by an expert team of analysts and engineers
- Ongoing requirements are discussed at regular one-to-one meetings
- Reports & recommendations are always created by the same technician, allowing them to build up in-depth knowledge of your fleet
- Equipment Commander forecasts wear patterns improving the reliability and productivity of each and every machine you operate

SPECIALIST SERVICES

We offer a range of specialist services, which can be accessed separately or as part of a bespoke preventative maintenance package. These include:

FILTER ANALYSIS
We can carry out analysis of the trapped particles in the filter, reporting various particle composition and micro-photography. This provides an accurate picture of the filter’s condition.

MAGNETIC PLUG DEBRIS ANALYSIS
Analysis of the particles on magnetic plugs provides advance warning of wear and possible failure.

CONDITION MONITORING
Our Finsight condition monitoring team compare fluid analysis results with information from various other sources including engineer reports and live satellite feeds that are transmitted directly from the heart of each machine. This enables them to build up a complete picture of equipment health and make recommendations to prevent unpredicted failure.

FUEL SOLUTIONS
We offer a total fuel package from bulk tank inspections, to advanced on-board testing that enables you to identify potential problems before they become major issues.
Changing oil based on traffic light alert recommendations could save a typical marine company over £100,000 a year.

Since we began working with Finning in 2004, we have seen a dramatic reduction in service failure. To date, we have not experienced a catastrophic failure on any component that has been analysed.

Philip Handford, Continuous Improvement Manager, First Scot Rail Limited.

Fluid sampling provides valuable data to help identify wear patterns, which helps to plan preventative maintenance, minimising failures and unscheduled downtime.

David Morgan, Wind Turbine Business Manager, ZF Services Limited.
WHY FINNING?

TRUSTED BY EXPERTS
Tried and trusted in a diverse range of industries from quarrying, mining, construction and agriculture, to rail, transport, marine, power generation and defence.

SERVICE EXCELLENCE
We offer a personal service tailored to the needs of each customer. Results are available within 48 hours of receipt of the sample (24 hours on request) and accessible online 24/7.

WORLDWIDE CAPABILITY
Our expertise is renowned all over the world and attracts customers from across the globe, from the freezing winds of Iceland and the Northwest Territories to the heat drenched Outback of Australia.

OVER 40 YEARS EXPERIENCE
Finning pioneered fluid analysis and remains at the forefront of its evolution today, working alongside partners, such as Leeds University, we are developing the next generation of analysis techniques to provide ever more detailed results.

TECHNOLOGY LED
Our Fluid Analysis service uses the latest technology including online reporting to ensure you have the data you need, when you need it. Our specialist condition monitoring team, Finsight, can provide a complete picture of the health of every machine in your fleet, by comparing fluid analysis results with electronic engineer reports and live satellite feeds direct from the heart of the machine.