



WORLD CLASS

INDUSTRIAL SYSTEMS LABORATORY ANALYSIS



SPECTRO® | JET-CARE®

spectro-oil.com | jet-care.com



OUR INDEPENDENT
ANALYSIS SERVICES
HELP ENSURE YOUR
PRIME MOVERS ARE
CONSISTENTLY
OPERATING AT PEAK
PERFORMANCE.

Industrial systems including wind, gas, steam turbines and engines are essential components of a strong economy. When equipment fails, the implications can be catastrophic. As worldwide leaders in industrial equipment condition monitoring, our independent oil analysis service ensures your prime movers are consistently operating at peak performance, by identifying potential issues and allowing you to take immediate corrective action.

Our analysis service help save you time and money by:

- Creating trends from initial commissioning
- Confirming the appropriate lubricant for your application
- Meeting OEM specifications and recommended limits
- Routinely monitoring equipment and operational conditions
- Pinpointing the location/nature of mechanical issues
- Extending your oil drain cycle.

**Landfill Gas to Energy | Wastewater Treatment Plant
Anaerobic Digestion/Biogas Facility | Wind Turbines
Combined Heat & Power (CHP) | Steam & Gas Turbines
and Generators | All Associated Transformers**

QUALITY

Our unrivalled expertise, quality control and integrity are supported by industry recognised accreditation* that ensures each of our laboratories maintains the same exacting high standards. UKAS (United Kingdom Accreditation Service) and SAS (Swiss Accreditation Service) verify that our laboratories comply with ISO/IEC 17025:2017, the testing and calibration laboratory standard.



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*The use of the UKAS/SAS marks does not imply that all activities are accredited by UKAS/SAS. Accreditation covers the laboratory activities in accordance with the schedule, which can be found on the Spectro | Jet-Care website.

ANALYSIS OFFERING

Analysis is performed from samples provided by the site, using easy to use sample kits. The kits include a sample pump to extract the fluid cleanly and directly into the bottle, labelling and outer packaging allow safe transit.



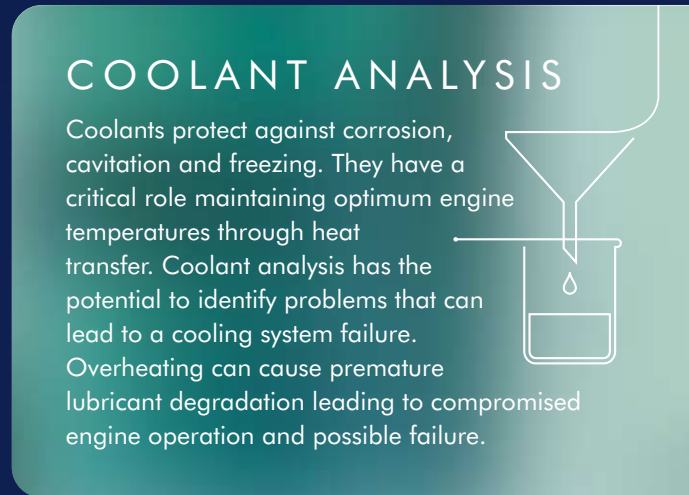
OIL ANALYSIS

Unscheduled maintenance of critical equipment limits availability and therefore the profitability of the operator. Quality used oil analysis provides a core tool to monitor equipment condition with rapid turn times, coupled with clear and concise reporting, expensive downtime and repairs can be minimised.



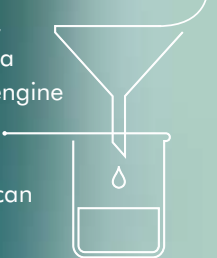
HYDRAULIC ANALYSIS

The regular sampling and testing of hydraulic fluids is key to ensuring critical control systems are kept in optimum condition, as well as meeting safety standards. With regular testing of hydraulic fluid you will gain a clearer picture of system cleanliness and performance.



COOLANT ANALYSIS

Coolants protect against corrosion, cavitation and freezing. They have a critical role maintaining optimum engine temperatures through heat transfer. Coolant analysis has the potential to identify problems that can lead to a cooling system failure. Overheating can cause premature lubricant degradation leading to compromised engine operation and possible failure.



FUEL ANALYSIS

Periodic monitoring of fuel tanks and bowzers is fundamental to ensure that fuel cleanliness is maintained at all times and to identify where treatment is needed. Water encourages the development of bacteria and fungi which could lead to blockages and consequent operational problems. The testing of samples for water content and microbiological growth of aerobic bacteria and viable fungal spores provide positive indication of fuel system contamination.



GAS ANALYSIS

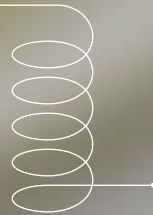
Fuel gases, including biogas, natural gas, and SynGas, can contain extremely harmful contaminants affecting both performance and operating costs of engines, turbines, micro-turbines, boilers and flares. Sampling and analysis can provide vital information to determine the presence and concentrations of contaminants such as siloxanes, sulphurs (including H₂S) and volatile organic compounds (VOCs). Regular scheduled testing can result in repeatable data sets ultimately providing building blocks for more accurate decision making.





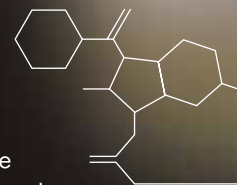
TRANSFORMER INSULATING OIL ANALYSIS

The analysis of insulating oils provides valuable information about the oil and allows the early detection of problems which may include contact arcing, ageing insulating paper and contamination. Routine analysis is essential for a cost efficient electrical maintenance program and can provide insight into likely failure modes.



SILICON ANALYSIS

Siloxanes in bio-fuels can significantly affect both the performance and operational costs of gas engines, gas turbines, micro-turbines and flares. Our sampling method provides valuable information, through the evaluation of the non-speciated siloxane mass, to determine the presence and quantity of siloxanes in landfill and digester gas. The results are repeatable and provide the building blocks for accurate maintenance decisions on bio-fuelled engines.



DEBRIS & FILTER ANALYSIS

We use the analytical capabilities of Scanning Electron Microscopes (SEM) and powerful optical microscopes for the in-depth examination of debris. Particles can be found within filters, on magnetic chip detectors or during routine visual inspection of fluid test samples. Taking into account the type, form, quantity, size and condition of the particles enables us to make recommendations on the likely source of the debris.



WE ARE LEADERS IN
EQUIPMENT CONDITION
MONITORING FOR INDUSTRIAL
SYSTEMS WORLDWIDE.

SAMPLE KITS



OIL KIT & COOLANT KIT



HYDRAULIC/FUEL KIT



TRANSFORMER KIT



SILICON TESTING KIT

BESPOKE KITS

We can design bespoke kits to reflect customer’s image and address any specific requirements you may have. To discuss a project please contact the Spectro | Jet-Care team.



webECHO™

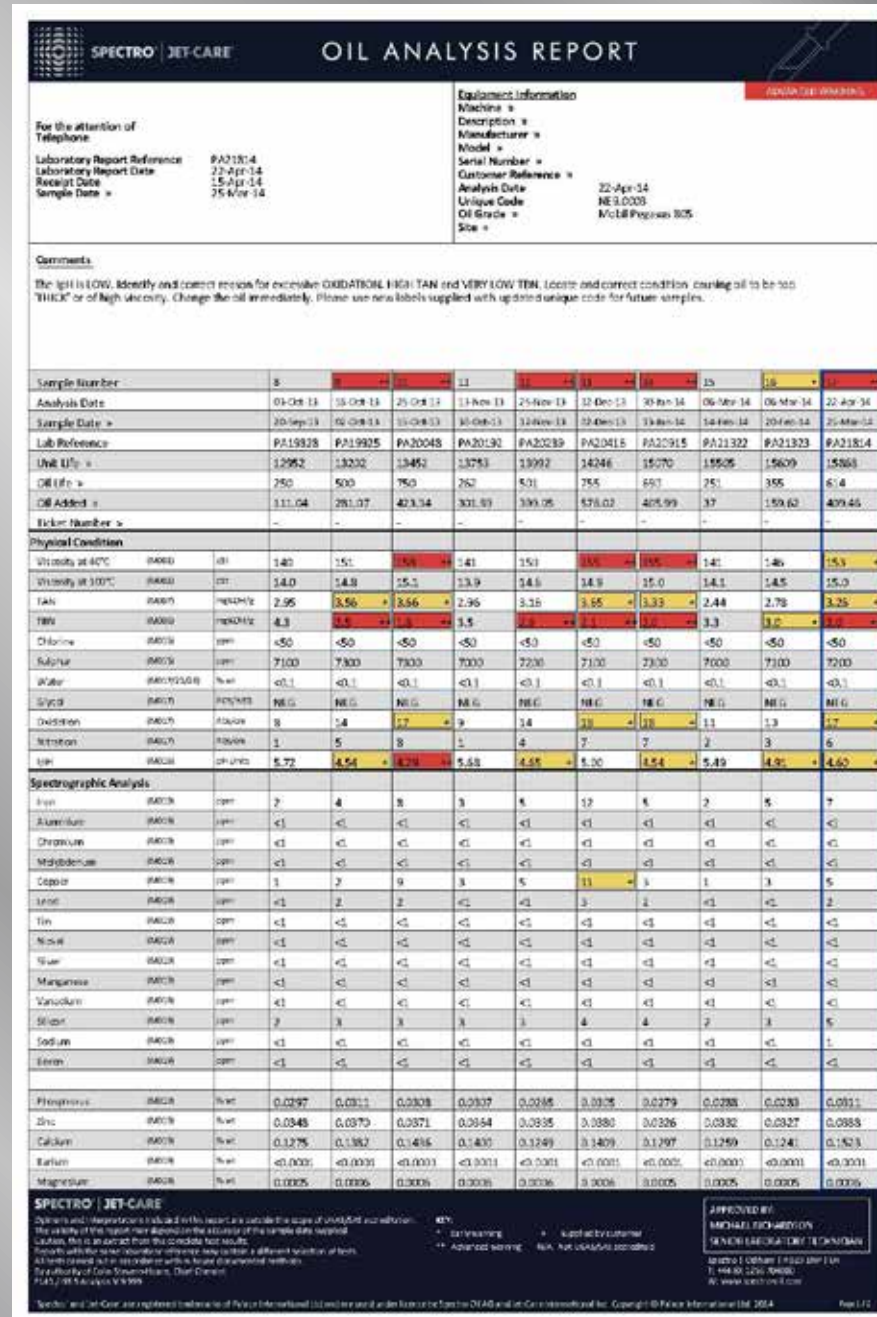


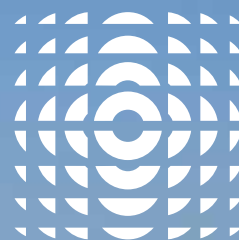
webECHO is a versatile online resource available 24/7/365 to manage your equipment, fleet data and access your latest reports and trends through a single portal. The integrated system allows you to download reports, view graphs, read the advice dialogue and analyse data in real time. Bespoke KPI’s are easily produced according to customers requirements.

webECHO can also run on a variety of mobile devices such as iPads® and Android™ tablets. webECHO is available at no extra charge as part of our support service and is a convenient and user-friendly way to manage your analysis results and trend monitoring.

REPORTING & TECHNICAL SUPPORT

Within two working days your results are reported either by email or can be accessed through our online portal, webECHO™. The analysis reports are provided in PDF format and show the equipment history which can be discussed further with our technical team, who not only understand laboratory analysis but also the equipment sampled.





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