OIL CONDITION MONITORING

MAINTAIN EQUIPMENT RELIABILITY WITH EXPERT USED OIL & LUBRICANT ANALYSIS

MINING EQUIPMENT OPERATES IN DEMANDING ENVIRONMENTAL CONDITIONS AND IS CONTINUALLY EXPOSED TO THE CONTAMINATION OF SITE DUST AND DIRT, EXTENSIVE HOURS OF OPERATION, AND EXTREME RANGES IN TEMPERATURE.

Bureau Veritas offers an effective oil analysis programme that will help to identify component failures before they occur. Our testing packages help to safeguard your critical assets, such as engines, geared systems, hydraulic systems, and cooling systems. Left undetected, wear and contamination issues can result in catastrophic failure. Monitoring machine fluids with oil analysis, coolant analysis, and fuel analysis will ensure peak performance and extend equipment life and reliability.

ENGINES

The biggest concerns in maintaining engine health are wear and contamination. An engine oil's four worst enemies are dirt, soot, fuel dilution, and glycol, or engine coolant. Bureau Veritas' testing for engines includes spectrochemical analysis (21 - elements), viscosity at 100°C, fuel soot, and water (%).

GEARED SYSTEMS

Implementing a routine oil analysis programme to monitor transmission wear and contamination can prove to be an extremely viable means for preventing gearbox failure, reducing downtime and controlling maintenance costs. We offer application testing for transmissions, differentials, final drive, and gearboxes, that include spectrochemical analysis (21 - elements), viscosity at 40^0, water (%), and particle quantifier (PQ Index).

HYDRAULIC SYSTEMS

Hydraulic fluid cleanliness is critical to optimal hydraulic system performance and should be monitored regularly with oil analysis to maintain system health and reliability at a minimal cost. Our hydraulic systems testing includes spectrochemical analysis (21-elements), viscosity at 40°C, water (%), and ISO particle count.

COOLING SYSTEMS

Coolant testing and analysis monitor changes in coolant properties due to chemical reactions occurring within the cooling system before they escalate to engine or coolant system failure. Bureau Veritas offers cooling systems testing that includes corrosion metals and inhibitors (14-element ICP profile), appearance, colour, foam, oil, fuel, magnetic precipitate, non-magnetic precipitate, odour, pH, glycol %, freeze point, nitrites, specific conductance, total harness, and carboxylic acid.

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OIL CONDITION MONITORING

TESTING & ANALYSIS

Bureau Veritas operates OCM laboratories around the world. Our test states identify trends in wear and contamination and pinpoint changes in the physical properties of lubricants, fuel and coolants to improve equipment reliability. From spectrochemical analysis to analytical ferrography, companies around the world depend on us to deliver quality results and informative, actionable maintenance recommendations.

Standardised ASTM procedures offer the most accurate insightful methodologies for used oil condition monitoring, new oil and fuel product qualifications, and special investigations ASTM testing methodologies are routinely included in our OCM programmes for new and used lubricants, distillable fuels, coolants and refrigerants.

Key Fluids Tested	
Coolants	New and Used Lubricants
Deposits and Filter Contents	Refrigerants
Distillate Fuels	Turbine Oils
Greases and Wire Lubricants	Waste Oils
Metal-Working Fluids	

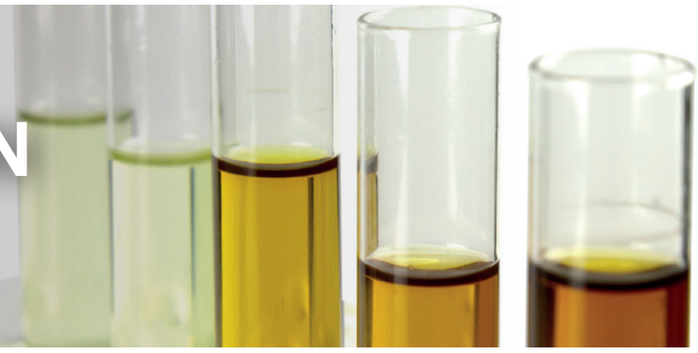
LOAMS^{SM} – LUBE OIL ANALYSIS MANAGEMENT SYSTEM

Never has it been easier for equipment managers and maintenance personnel to optimise productivity using real-time OCM data. Using LOAMS - our exclusive Lube Oil Analysis Management System software – Bureau Veritas clients can:

- Monitor sampling schedules and submit samples online for fast, accurate laboratory processing
- View test results immediately
- Filter data by multiple parameters to manage large accounts or sets of data
- Graph trends in sample to identify potential failures in process
- Create report distributions for fast communication of critical conditions
- Move, merge or update equipment information across locations

BUREAU VERITAS

OIL CONDITION MONITORING

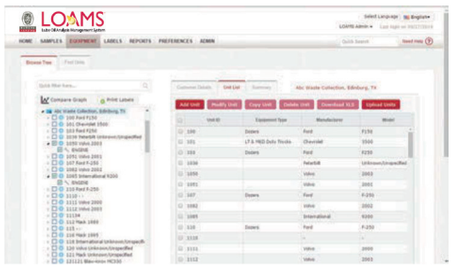


Manage Equipment

Monitor Trends

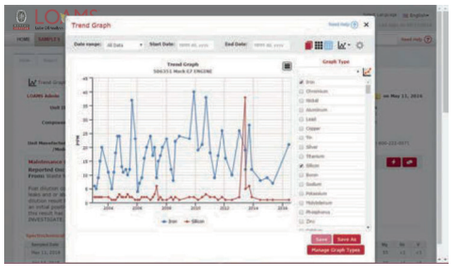
Streamline Communications

Manage Equipment



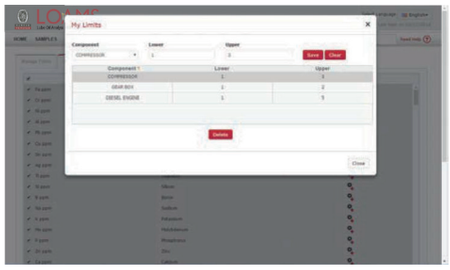
- Move, add new or modify existing units or components or merge duplicate
- Import & export equipment lists
  - View complete component sampling histories
  - Track maintenance events
- Create graphs to compare trends among multiple pieces of equipment

Monitor Trends



- Graph test results by make or model to compare equipment performance
- Graph sample conditions across similar unit populations
- Customisable home page provides a graphical view of your accounts at a glance

Streamline Communications



- Sort large sets of data by date range severity, unit ID, make or model
- Automate sample report and management report distribution to anyone in your address book
- Designate the format, severity and frequency of sample reports e-mailed to you

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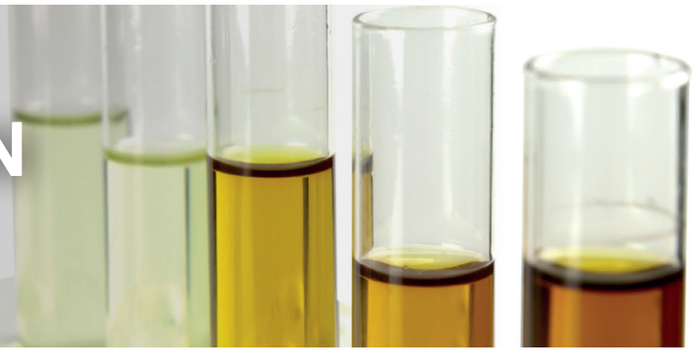
OIL CONDITION MONITORING



INDUSTRIAL & HEAVY DUTY APPLICATIONS FOR OCM

Industrial	Customer Benefits
Power Generation Utilities	Oil sampling will ensure your generating equipment is available when demand is up
HVAC/Building Maintenance	Routinely monitoring chillers & compressors is essential to uninterrupted operations, predictable downtime & controlled operations costs
Process Manufacturing	An effective oil analysis programme will keep your equipment running through effective condition monitoring of oil wetted components
Petrochemical	Achieve enhanced equipment reliability and improved maintenance scheduling with a world class oil condition monitoring programme
Waste Treatment	Oil analysis as part of a robust maintenance programme is a very cost effective way of meeting these requirements

Heavy Duty	Customer Benefits
Construction	An effective oil analysis programme will help to identify component failures before they occur
Mining	Oil sampling programme will keep a mine's critical equipment in operation by reducing costly unscheduled downtime
Forestry/Agriculture	Benefit from an early warning of potential problems that can result in machine downtime and major component failures during season
Freight & Trucking	Hauling freight is rough on engine components and smart fleet managers know that oil analysis programmes mean improved ROI

INNOVATION & LEADERSHIP

A globally recognised leader in OCM services, Bureau Veritas brings quality, an efficient data management platform and cost-effective condition-based maintenance solutions to a wide range of industries. Our dedication to our customers and to generating and reporting quality results starts at the top.

ISO 17025 accreditations is a testament to top management's commitment to greater quality awareness, continuous improvement and efficiency. Strict quality control procedures are followed through every phase of laboratory analyses, data interpretation and final report preparation and our Quality Team monitors laboratory operations and personnel training to ensure reliable, repeatable test results. With multiple testing facilities worldwide, our peerless reputation for service extends around the globe.

For more information:
Contact.africa@bureauveritas.com

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Shaping a World of Trust

www.bureauveritas.africa