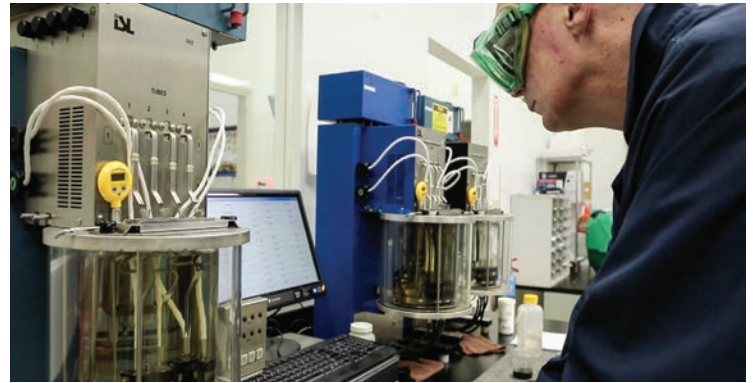


BUREAU VERITAS

Oil & Petrochemicals



Oil Condition Monitoring

Maintain Equipment Reliability With
Expert Used Oil & Lubricant Analysis



**BUREAU
VERITAS**



Oil Condition Monitoring

Routine oil condition monitoring (OCM) identifies small problems within machinery components before they become catastrophic failures that can incur costly repairs and bring production to a halt. Bureau Veritas is your trusted partner for global OCM solutions.



Data management solutions that keep you one step ahead of critical maintenance events



A partnership with experienced data analysts whose informed maintenance recommendations are based on equipment-specific knowledge



Engagement with a staff of laboratory professionals that take a personal interest in adding true value to the Bureau Veritas customer experience



Key Features

150 years of technical excellence in the Oil & Petrochemicals market

Global Lube Oil Analysis Management System (LOAMSSM) Platform for Oil Condition Monitoring

No interruption to the production process

Precise, dependable and prompt reporting

Independent and impartial testing results

Customer Benefits

Your product expert for fuels, lubricants, coolants and oil condition monitoring

Exclusive software that brings clarity and meaning to complex laboratory results and maintenance recommendations that improve production and save money

Samples can be taken while your equipment or fleet is in full operation

Accurate results, the first time, every time

Quality assurance executed to the highest standards, trusted by all parties



Testing & Analysis

Bureau Veritas operates OCM laboratories around the world. Our test slates identify trends in wear and contamination and pinpoint changes in the physical properties of lubricants, fuels 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.

Standardized ASTM procedures offer the most accurate and 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 programs for new and used lubricants, distillate 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

LOAMSSM - Lube Oil Analysis Management System

Never has it been easier for equipment managers and maintenance personnel to optimize 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 data to identify potential failures in progress
- Create report distributions for fast communication of critical conditions
- Move, merge or update equipment information across locations

LOAMSSM

Lube Oil Analysis Management System



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

Unit ID	Equipment Type	Manufacturer	Model
100	Diesels	Ford	F130
101	LTA MED Duty Trucks	Chrysler	3500
102	Diesels	Ford	F250
1030	Diesels	Isuzu	Unknown/Unspecified
1050	Valves	Valve	2003
1051	Valves	Valve	2001
107	Diesels	Ford	F-250
1082	Valves	Valve	2002
1083	Intercoolers	Intercoolers	5000
120	Diesels	Ford	F-250
1120	Valves	Valve	2000
1112	Valves	Valve	2003

Monitor Trends

- Graph test results by make or model to compare equipment performance
- Graph sample condition across similar unit populations
- Customizable 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

Component	Lower	Upper
COMPRESSOR	1	3
CRANK SHAFT	1	3
DIESEL ENGINE	1	3



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 operation costs
Process Manufacturing	An effective oil analysis program 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 program
Waste Treatment	Oil analysis as part of a robust maintenance program is a very cost effective way of meeting these requirements

Heavy Duty	Customer Benefits
Construction	An effective oil analysis program will help to identify component failures before they occur.
Mining	Oil sampling program 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 programs mean improved ROI.

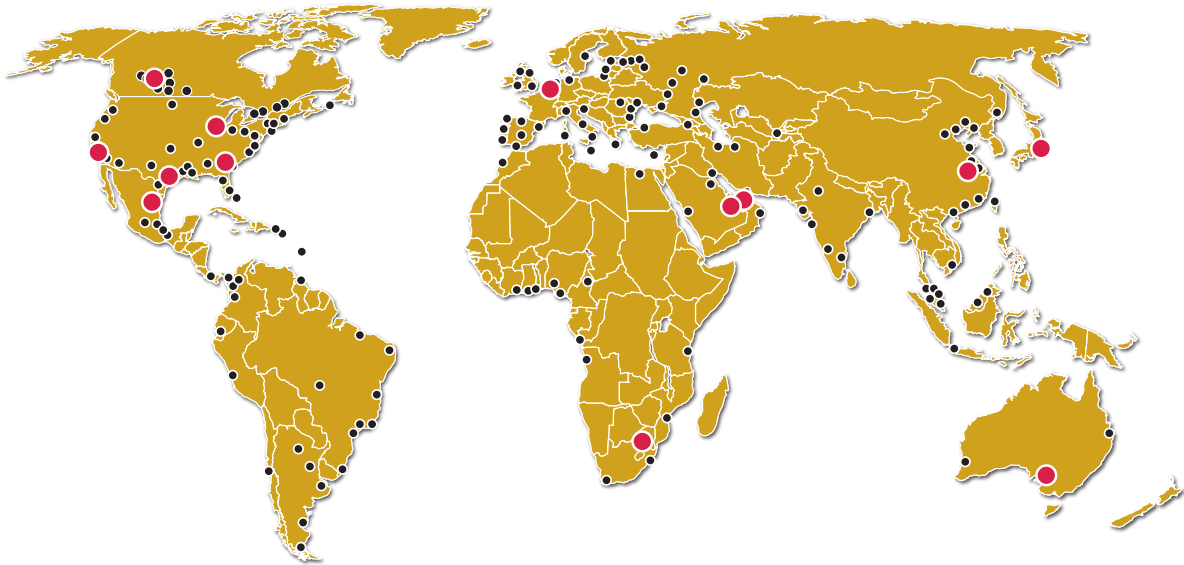
Innovation & Leadership

Aglobally recognized leader in OCM services, Bureau Veritas brings quality testing, 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 accreditation 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.

BUREAU VERITAS

Oil Condition Monitoring Global Network



- Oil Condition Monitoring Laboratories
- All Oil & Petrochemical Locations

Los Angeles - West

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