

Compressor extended service analysis



► This extended service analysis helps determine oxidation stability, identify potential varnish buildup and monitor system condition.

Description

Using lubricant analysis to monitor compressor performance can help improve unit reliability and maintenance metrics. This service offers a more extensive level of testing designed to support equipment reliability decisions for critical compressor applications.

Extended service compressor analysis provides comprehensive data that can be paired with visual inspections and operational knowledge to help determine oxidation stability, identify potential varnish buildup and ensure proper system performance.

Potential benefits



Improved equipment reliability by identifying potential failures before they occur



Increased productivity through reduction of unscheduled downtime




Reduced parts replacement and labor costs



Reduced lubricant consumption and disposal with optimized drain interval

Analysis options – Compressor extended service

	Suitability for continued use	Varnish prediction*	Maximum service*
Demulsibility	✓		✓
Flash Point (Pensky Martens)	✓	✓	✓
Foam Test Sequence 1	✓		✓
Membrane Patch Colorimetry (MPC)**		✓	✓
Metals	✓	✓	✓
Nitration	✓	✓	✓
Oxidation	✓★	✓★	✓★
Particle Count	✓	✓	✓
Particle Quantifier (PQ) Index	✓	✓	✓
Rotation Pressure Vessel Oxidation Test (RPVOT)	✓		✓
RULER - Amine		✓	✓
RULER - Phenolic		✓	✓
Total Acid Number (TAN)	✓	✓	✓
Ultracentrifuge	✓	✓	✓
Viscosity at 40°C and 100°C	✓	✓	✓
Viscosity Index	✓	✓	✓
Water Vol % Karl Fischer (KF)	✓	✓	✓

Key

✓ Included test

★ TAN in lieu of oxidation for select synthetic products

*For select compressor lubricant products only. Contact your ExxonMobil representative for details. Analysis may vary by laboratory, product supplied or oil condition.

** The MPC has a sample preparation time of at least 96 hrs. as prescribed per ASTM method.

Sample frequency Sample at OEM recommended frequency or, for general guidance, begin with: **Quarterly**. Adjust frequency based on asset's economic impact, operating environment, machine age, oil age or sample results trend.