

# Engine analysis



- This service monitors engine and lubricant conditions to detect premature wear and contamination

## Description

Monitoring engine and lubricant conditions helps you detect problems and contamination before they result in excessive wear and failure. This analysis is applicable to spark or compression engines in virtually all types of mobile and stationary equipment, and helps to support an Optimized Drain Interval (ODI) program.

## 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 – Engine

	Essential ◆	Enhanced ◆◆	Elite ◆◆◆
Coolant Indicator	✓	✓	✓
Fuel Dilution	C	C	✓
Metals	✓	✓	✓
Nitration			✓
Oxidation	✓ ★	✓ ★	✓ ★
Particle Quantifier (PQ) Index		✓	✓
Soot	✓	✓	✓
Total Acid Number (TAN)	★	★	★
Total Base Number (TBN)		✓	✓
Viscosity* at 40°C or 100°C	✓	✓	
Viscosity at 40°C and 100°C			✓
Viscosity Index			✓
Water Vol % Fourier transform infrared spectroscopy (FTIR)	✓	✓	✓

### Key



Included test



TAN in lieu of oxidation for select synthetic products



Conditional test

\*Viscosity reported at 40°C or 100°C, based on oil type or service level. Analysis may vary by laboratory, product supplied or oil condition.

### Sample frequency

Sample at OEM recommended frequency or, for general guidance, begin with:

- Off-highway diesel engine: **250 hours**
- On-highway diesel engine: **25,000 km or 15,000 miles**

Adjust frequency based on asset's economic impact, operating environment, machine age, oil age or sample results trend.