

Diesel Fuel Analysis



**BUREAU
VERITAS**

Benefits of Diesel Fuel Analysis

While fuel costs and consumption are the most obvious overhead factors, aged or contaminated fuel affects the condition of your equipment and can significantly affect maintenance and repair costs. Testing fuel deliveries can:

- Reduce operational expenses
- Ensure satisfactory ignition, combustion and compatibility with fuel injection systems
- Maintain convenient handling at all levels without degradation or contamination

The properties and contaminants within fuels affect more than just the combustion and power output of an engine. Fuel characteristics also affect:

- filter plugging
- injector deposits and wear
- upper engine deposits
- soot generation
- acidity in combustion gases
- lube oil additive depletion

Diesel Fuel Analysis with Bureau Veritas

Bureau Veritas' diesel fuel test packages are carefully designed with selections from a broad range of ASTM tests which assess fuel suitability for use upon delivery and monitor fuel serviceability during long-term storage. The Bureau Veritas team then gives you the tools and support you need to monitor equipment condition and take decisive maintenance action that maximizes uptime and keeps production on track.

- Data management solutions that keep you one step ahead of critical maintenance events.
- An oil analysis 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 Analysts oil analysis experience.



DFS - DIESEL FUEL SPECIFICATION – ASTM D975

Verifies product to ASTM, OEM and purchasing specifications and root cause analysis of fuel related problems and deficiencies

| Test | Method |
|-----------------------------|--------------------|
| Ash Content | ASTM D482 |
| Carbon Residue, 10% Residue | ASTM D524 |
| Cetane Index (Calc.) | ASTM D4737 / D976 |
| Cloud Point | ASTM D2500 |
| Copper Corrosion, Strip | ASTM D130 |
| Density @ 15° C | ASTM D1298 |
| Distillation | ASTM D86 |
| Flash Point (PMCC) | ASTM D93 |
| Sediment & Water (BS&W) | ASTM D1796 / D2709 |
| Sulfur Content | ASTM D4294 / 5453 |
| Viscosity @ 40° C | ASTM D445 |

Minimum Sample Needed - 32 OZ.

DLTS - LONG TERM STORED PROPERTIES (ONLY)

Monitors degradation & gross contamination in diesel & gas turbine fuels

| Test | Method |
|---------------------------|-------------------------------------|
| Accelerated Stability | DuPont F20-61 |
| Micro-organism Culture | Test Kit |
| Particulate Contamination | ASTM D5452 |
| Sediment & Water (BS&W) | ASTM D1796 / D2709 |
| Trace Metals, ppm | ASTM D7111 (trace metals by ICP) |

Minimum Sample Needed - 16 OZ.

DFQ - QUALITY ASSURANCE PACKAGE

Monitor deliveries and storage tanks for diesel & gas turbine fuels; recommended for 'Center Level' samples where bottom samples receive DLC or DLTS testing

| Test | Method |
|-------------------------|--------------------|
| Cetane Index (Calc.) | ASTM D4737 / D976 |
| Cloud Point | ASTM D2500 |
| Density @ 15° C | ASTM D1298 |
| Distillation | ASTM D86 |
| Flash Point (PMCC) | ASTM D93 |
| Sediment & Water (BS&W) | ASTM D1796 / D2709 |
| Sulfur Content | ASTM D4294 / D5453 |

Minimum Sample Needed - 16 OZ.

DFC – BOTTOM / CLEARANCE SAMPLE

Monitors tanks for gross contamination in diesel & gas turbine fuels

| Test | Method |
|-------------------------|-------------------------------------|
| Micro-organism Culture | Test Kit |
| Sediment & Water (BS&W) | ASTM D1796 |
| Trace Metals, ppm | ASTM D7111 (trace metals by ICP) |

Minimum Sample Needed - 8 OZ.

To order kits, call 1.800.655.4473

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