

FUEL REPORT

Sample Rating Trend

Area [PMOAS3214392] 400R0Z071 372321

Diesel Fuel Fluid No.2 DIESEL FUEL (LOW-SULPHUR) (--- GAL)

DIAGNOSIS

Recommendation

We advise that you filter this fluid before use. All laboratory tests indicate that this sample meets specifications for No.2 ultra-low-sulfur diesel fuel.

Corrosion

All metal levels are normal indicating no corrosion in the system.

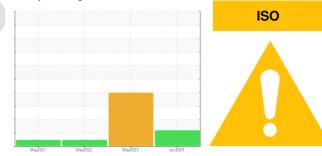
Contaminants

There is a high amount of particulates present in the fuel. The water content is negligible. There is no bacteria or fungus (yeast and/or mold) indicated in the sample. There is no indication of any contamination in the fuel.

Fuel Condition

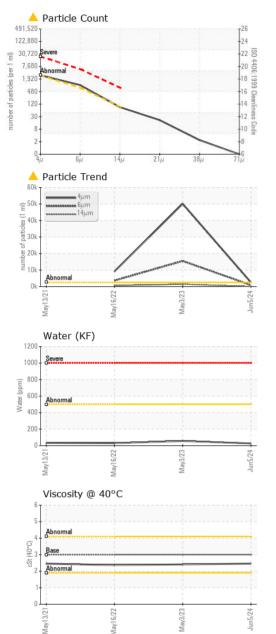
Sulfur value derived by ASTM D5453 method for ULSD validation. Sulfur level is acceptable for ULSD specification.

| AL) | | May202 | 21 May2022 | May2023 Ji | un2024 | |
|-----------------|---------|--------------|------------|-------------------|--------------------|-------------|
| SAMPLE INFOR | MATION | method | limit/base | current | history1 | history2 |
| Sample Number | | Client Info | | DC0035905 | DC0029125 | DC0013770 |
| Sample Date | | Client Info | | 05 Jun 2024 | 03 May 2023 | 16 May 2022 |
| Machine Age | hrs | Client Info | | 1513 | 1398 | 0 |
| Sample Status | | | | ABNORMAL | ABNORMAL | NORMAL |
| PHYSICAL PRO | PERTIES | method | limit/base | current | history1 | history2 |
| ASTM Color | scalar | *ASTM D1500 | | L4.0 | L4.5 | L5.5 |
| Visc @ 40°C | cSt | ASTM D445 | 3.0 | 2.46 | 2.41 | 2.37 |
| SULFUR CONTE | INT | method | limit/base | current | history1 | history2 |
| Sulfur | ppm | ASTM D5185m | 250 | 0 | 0 | 0 |
| Sulfur (UVF) | ppm | ASTM D5453 | | 11 | 15 | 14 |
| IGNITION QUAL | ITY | method | limit/base | current | history1 | history2 |
| API Gravity | | ASTM D7777 | 37.7 | 36.5 | 37.0 | 37.5 |
| CONTAMINANTS | S | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | <1.0 | <1 | 0 | 0 |
| Sodium | ppm | ASTM D5185m | <0.1 | 2 | 0 | <1 |
| Potassium | ppm | ASTM D5185m | <0.1 | 2 | 0 | 0 |
| Water | % | ASTM D6304 | < 0.05 | 0.003 | 0.005 | 0.003 |
| ppm Water | ppm | ASTM D6304 | <500 | 26 | 56.6 | 30.3 |
| % Gasoline | % | *In-House | <0.50 | 0.0 | 0.0 | 0.0 |
| % Biodiesel | % | *In-House | <20.0 | 0.0 | 0.0 | 0.0 |
| FLUID CLEANLI | NESS | method | limit/base | current | history1 | history2 |
| Particles >4µm | | ASTM D7647 | >2500 | <u> </u> | 6 50108 | 9097 |
| Particles >6µm | | ASTM D7647 | >640 | <u> </u> | 🔺 15471 | 3606 |
| Particles >14µm | | ASTM D7647 | >80 | 76 | 1 380 | 687 |
| Particles >21µm | | ASTM D7647 | >20 | 18 | <mark>▲</mark> 366 | 215 |
| Particles >38µm | | ASTM D7647 | >4 | 2 | 1 7 | 7 |
| Particles >71µm | | ASTM D7647 | >3 | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >18/16/13 | A 19/17/13 | A 23/21/18 | 20/19/17 |
| HEAVY METALS | ; | method | limit/base | current | history1 | history2 |
| Aluminum | ppm | ASTM D5185m | <0.1 | 0 | 6 | 0 |
| Nickel | ppm | ASTM D5185m | <0.1 | <1 | 0 | 0 |
| Lead | ppm | ASTM D5185m | <0.1 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Iron | ppm | ASTM D5185m | <0.1 | 0 | 0 | 0 |
| Calcium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Magnesium | ppm | ASTM D5185m | <0.1 | <1 | 0 | 0 |
| Phosphorus | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Zinc | ppm | ASTM D5185m | <0.1 | 1 | 0 | 0 |



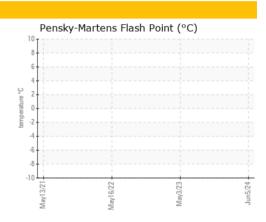


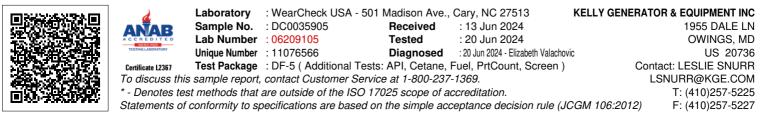




| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|------------|----------|----------|
| Color | | | | | |
| Bottom | | | \bigcirc | | |

GRAPHS





Contact/Location: LESLIE SNURR - KELOWI