

FUEL REPORT

Area [W121559] **CUMMINS HILLCO SUPPORT CHERRY** Component

Diesel Fuel Fluic

No.2 DIESEL FUEL (ULTRALOW SULPHUR) (2082 GAL)

DIAGNOSIS

Recommendation

All laboratory tests indicate that this sample meets specifications for No.2 ultra-low sulfur diesel fuel.

Corrosion

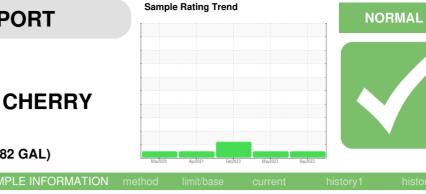
All metal levels are normal indicating no corrosion in the system.

Contaminants

There is no Bacteria, Yeast and/or Fungus indicated in the sample. The water content is negligible. 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.



| SAMPLE INFORM | IATION | method | limit/base | current | history1 | history2 |
|-----------------|--------|--------------|------------|-------------|-------------|---------------|
| Sample Number | | Client Info | | WC0797375 | WC0683033 | WC0711881 |
| Sample Date | | Client Info | | 21 Sep 2023 | 01 May 2023 | 08 Feb 2023 |
| Machine Age | hrs | Client Info | | 0 | 117 | 0 |
| Sample Status | | | | NORMAL | NORMAL | ATTENTION |
| PHYSICAL PROP | ERTIES | method | limit/base | current | history1 | history2 |
| ASTM Color | scalar | *ASTM D1500 | | L4.0 | | 4.5 |
| Visc @ 40°C | cSt | ASTM D445 | 3.0 | 2.56 | 2.6 | 2.59 |
| SULFUR CONTER | ΝT | method | limit/base | current | history1 | history2 |
| Sulfur | ppm | ASTM D5185m | 10 | 0 | 0 | 0 |
| Sulfur (UVF) | ppm | ASTM D5453 | | 8 | | 6 |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | <1.0 | 0 | 0 | 0 |
| Sodium | ppm | ASTM D5185m | <0.1 | 0 | 0 | <1 |
| Potassium | ppm | ASTM D5185m | <0.1 | 0 | 0 | 0 |
| Water | % | ASTM D6304 | <0.05 | 0.004 | 0.004 | 0.005 |
| ppm Water | ppm | ASTM D6304 | <500 | 45.8 | 46.5 | 50.9 |
| % Gasoline | % | *In-House | <0.50 | 0.0 | | 0.0 |
| % Biodiesel | % | *In-House | <20.0 | 4.6 | | 5.0 |
| FLUID CLEANLIN | ESS | method | limit/base | current | history1 | history2 |
| Particles >4µm | | ASTM D7647 | >2500 | | | 1 9758 |
| Particles >6µm | | ASTM D7647 | >640 | | | 1 925 |
| Particles >14µm | | ASTM D7647 | >80 | | | 54 |
| Particles >21µm | | ASTM D7647 | >20 | | | 6 |
| Particles >38µm | | ASTM D7647 | >4 | | | 0 |
| Particles >71µm | | ASTM D7647 | >3 | | | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >18/16/13 | | | A 21/18/13 |
| HEAVY METALS | | method | limit/base | current | history1 | history2 |
| Aluminum | ppm | ASTM D5185m | <0.1 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | <0.1 | 0 | 0 | 0 |
| Lead | ppm | ASTM D5185m | <0.1 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | <0.1 | 0 | 0 | 0 |
| Iron | nnm | ASTM D5185m | <01 | 0 | 0 | 0 |

| SAMPLE IMAGES | | method | | | | history2 |
|---------------|-----|-------------|------|---|----|----------|
| Zinc | ppm | ASTM D5185m | <0.1 | 0 | 0 | 0 |
| Phosphorus | ppm | ASTM D5185m | <0.1 | 2 | 0 | 2 |
| Magnesium | ppm | ASTM D5185m | <0.1 | 0 | <1 | 0 |
| Calcium | ppm | ASTM D5185m | <0.1 | 0 | 0 | 0 |
| Iron | ppm | ASTM D5185m | <0.1 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | <0.1 | 0 | 0 | 0 |
| Lead | ppm | ASTM D5185m | <0.1 | 0 | 0 | 0 |

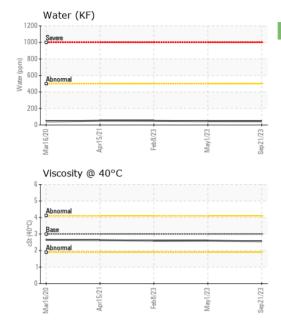
Color

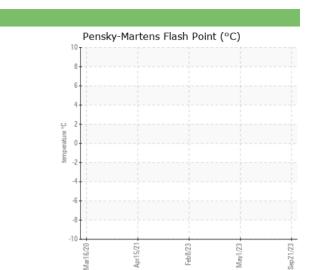
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Contact/Location: BRANDON RICE - NATRAL



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