

FUEL REPORT

Area QTS SUWANEE DC1 [17709] **[QTS SUWANEE DC1] MT3**

Diesel Fuel

Fluid No.2 DIESEL FUEL (ULTRALOW SULPHUR) (20000 GAL)

DIAGNOSIS

Recommendation

All laboratory tests indicate that this sample meets ASTM D975 specifications for No.2 ultra-low-sulfur diesel fuel.

Corrosion

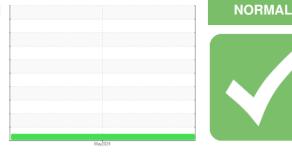
All metal levels are normal indicating no corrosion in the system.

Contaminants

There is no bacteria or fungus (yeast and/or mold) indicated in the sample. The water content is negligible. The amount and size of particulates present in the system are acceptable. 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.



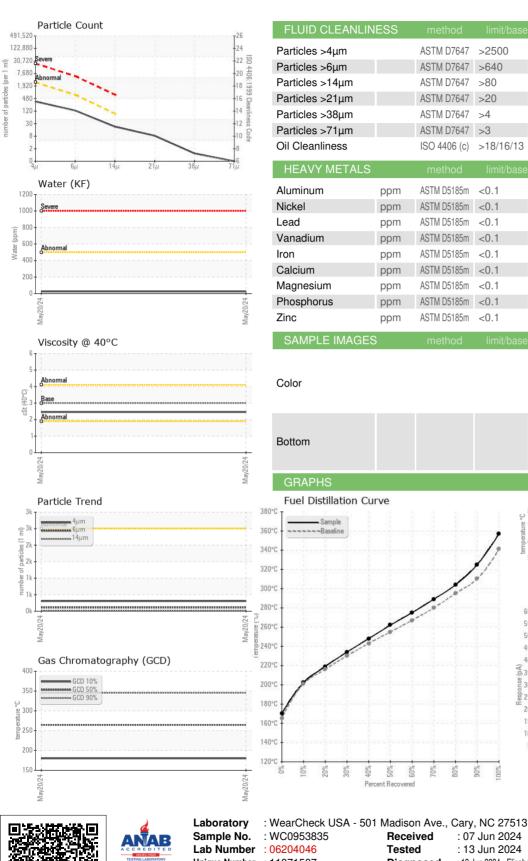
Sample Rating Trend



| SAMPLE INFORM | IATION | method | limit/base | current | history1 | history2 |
|----------------------------|--------|------------------|------------|-------------|----------|----------|
| Sample Number | | Client Info | | WC0953835 | | |
| Sample Date | | Client Info | | 20 May 2024 | | |
| Machine Age | hrs | Client Info | | 0 | | |
| Sample Status | | | | NORMAL | | |
| PHYSICAL PROP | ERTIES | method | limit/base | current | history1 | history2 |
| Fuel Color | text | *Visual Screen | Yllow | Red | | |
| ASTM Color | scalar | *ASTM D1500 | | L4.5 | | |
| Visc @ 40°C | cSt | ASTM D445 | 3.0 | 2.46 | | |
| Pensky-Martens Flash Point | °C | *PMCC Calculated | 52 | 60.2 | | |
| SULFUR CONTENT | | method | limit/base | current | history1 | history2 |
| Sulfur | ppm | ASTM D5185m | 10 | 0 | | |
| Sulfur (UVF) | ppm | ASTM D5453 | | 8 | | |
| DISTILLATION | | method | limit/base | current | history1 | history2 |
| Initial Boiling Point | °C | ASTM D86 | 165 | 170 | | |
| 5% Distillation Point | °C | ASTM D86 | | 192 | | |
| 10% Distill Point | °C | ASTM D86 | 201 | 202 | | |
| 15% Distillation Point | °C | ASTM D86 | | 211 | | |
| 20% Distill Point | °C | ASTM D86 | 216 | 219 | | |
| 30% Distill Point | °C | ASTM D86 | 230 | 234 | | |
| 40% Distill Point | °C | ASTM D86 | 243 | 248 | | |
| 50% Distill Point | °C | ASTM D86 | 255 | 262 | | |
| 60% Distill Point | °C | ASTM D86 | 267 | 275 | | |
| 70% Distill Point | °C | ASTM D86 | 280 | 289 | | |
| 80% Distill Point | °C | ASTM D86 | 295 | 304 | | |
| 85% Distillation Point | °C | ASTM D86 | | 314 | | |
| 90% Distill Point | °C | ASTM D86 | 310 | 325 | | |
| 95% Distillation Point | °C | ASTM D86 | | 343 | | |
| Final Boiling Point | °C | ASTM D86 | 341 | 357 | | |
| IGNITION QUALI | ΓY | method | limit/base | current | history1 | history2 |
| API Gravity | | ASTM D7777 | 37.7 | 37 | | |
| Cetane Index | | ASTM D4737 | <40.0 | 49 | | |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | <1.0 | <1 | | |
| Sodium | ppm | ASTM D5185m | <0.1 | 2 | | |
| Potassium | ppm | ASTM D5185m | <0.1 | 2 | | |
| Water | % | ASTM D6304 | <0.05 | 0.002 | | |
| ppm Water | ppm | ASTM D6304 | <500 | 25 | | |
| % Gasoline | % | *In-House | <0.50 | 0.0 | | |
| % Biodiesel | % | *In-House | <20.0 | 0.0 | | |



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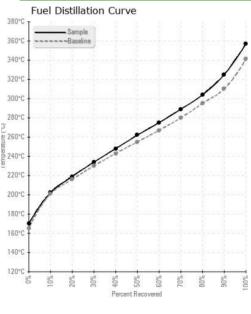


| FLUID CLEANLIN | ESS | method | limit/base | current | history1 | history2 |
|-----------------|-----|--------------|------------|----------|----------|----------|
| Particles >4µm | | ASTM D7647 | >2500 | 306 | | |
| Particles >6µm | | ASTM D7647 | >640 | 113 | | |
| Particles >14µm | | ASTM D7647 | >80 | 19 | | |
| Particles >21µm | | ASTM D7647 | >20 | 7 | | |
| Particles >38µm | | ASTM D7647 | >4 | 1 | | |
| Particles >71µm | | ASTM D7647 | >3 | 0 | | |
| Oil Cleanliness | | ISO 4406 (c) | >18/16/13 | 15/14/11 | | |
| HEAVY METALS | | method | limit/base | current | history1 | history2 |
| Aluminum | ppm | ASTM D5185m | <0.1 | 0 | | |
| Nickel | ppm | ASTM D5185m | <0.1 | 0 | | |
| Lead | ppm | ASTM D5185m | <0.1 | 1 | | |
| Vanadium | ppm | ASTM D5185m | <0.1 | 0 | | |
| Iron | ppm | ASTM D5185m | <0.1 | <1 | | |
| Calcium | ppm | ASTM D5185m | <0.1 | 0 | | |
| Magnesium | ppm | ASTM D5185m | <0.1 | 0 | | |
| Phosphorus | ppm | ASTM D5185m | <0.1 | 0 | | |
| Zinc | ppm | ASTM D5185m | <0.1 | 0 | | |
| SAMPLE IMAGES | \$ | method | limit/base | current | history1 | history2 |
| Color | | | | | no image | no image |
| Bottom | | | | | no image | no image |

80

50

GRAPHS



월 70 60 GCD Spectrum 600 **EDB** 550 500 450 400 Q 350 300 8 250 200 150 100

Time (min)

Pensky-Martens Flash Point (°C)



: WC0953835 : 07 Jun 2024 Received Lab Number : 06204046 Tested : 13 Jun 2024 Unique Number : 11071507 Diagnosed : 13 Jun 2024 - Elizabeth Valachovic Test Package : DF-2 (Additional Tests: Fuel, Screen) Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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Contact/Location: AJAY EL - PETSUM

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