



FUEL REPORT

Sample Rating Trend



WATER



Area

[LNR B2B CUMMINS]

Machine Id

C-2-A

Component

Bulk Tank Diesel Fuel

Fluid

DIESEL FUEL No. 2 (--- GAL)

DIAGNOSIS

▲ Recommendation

We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Corrosion

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

▲ Contaminants

Free water present. Moderate concentration of visible dirt/debris present in the fuel. There is no bacteria or fungus (yeast and/or mold) present in the sample.

Fuel Condition

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

SAMPLE INFORMATION

| method | limit/base | current | history1 | history2 |
|---------------|-----------------|--------------------|----------|----------|
| Sample Number | Client Info | WC0914198 | --- | --- |
| Sample Date | Client Info | 27 Mar 2024 | --- | --- |
| Machine Age | hrs Client Info | 0 | --- | --- |
| Sample Status | | ABNORMAL | --- | --- |

PHYSICAL PROPERTIES

| method | limit/base | current | history1 | history2 |
|----------------------------|---------------------|-------------|----------|----------|
| Fuel Color | text *Visual Screen | Red | --- | --- |
| ASTM Color | scalar *ASTM D1500 | L4.5 | --- | --- |
| Visc @ 40°C | cSt ASTM D445 4.1 | 2.42 | --- | --- |
| Pensky-Martens Flash Point | °C *PMCC Calculated | 61.4 | --- | --- |

SULFUR CONTENT

| method | limit/base | current | history1 | history2 |
|--------------|-----------------|----------|----------|----------|
| Sulfur | ppm ASTM D5185m | 0 | --- | --- |
| Sulfur (UVF) | ppm ASTM D5453 | 8 | --- | --- |

DISTILLATION

| method | limit/base | current | history1 | history2 |
|------------------------|-------------|------------|----------|----------|
| Initial Boiling Point | °C ASTM D86 | 172 | --- | --- |
| 5% Distillation Point | °C ASTM D86 | 195 | --- | --- |
| 10% Distill Point | °C ASTM D86 | 204 | --- | --- |
| 15% Distillation Point | °C ASTM D86 | 212 | --- | --- |
| 20% Distill Point | °C ASTM D86 | 219 | --- | --- |
| 30% Distill Point | °C ASTM D86 | 234 | --- | --- |
| 40% Distill Point | °C ASTM D86 | 247 | --- | --- |
| 50% Distill Point | °C ASTM D86 | 260 | --- | --- |
| 60% Distill Point | °C ASTM D86 | 274 | --- | --- |
| 70% Distill Point | °C ASTM D86 | 288 | --- | --- |
| 80% Distill Point | °C ASTM D86 | 304 | --- | --- |
| 85% Distillation Point | °C ASTM D86 | 315 | --- | --- |
| 90% Distill Point | °C ASTM D86 | 326 | --- | --- |
| 95% Distillation Point | °C ASTM D86 | 344 | --- | --- |
| Final Boiling Point | °C ASTM D86 | 359 | --- | --- |

IGNITION QUALITY

| method | limit/base | current | history1 | history2 |
|--------------|------------------|-----------|----------|----------|
| API Gravity | ASTM D7777 | 37 | --- | --- |
| Cetane Index | ASTM D4737 <40.0 | 49 | --- | --- |

CONTAMINANTS

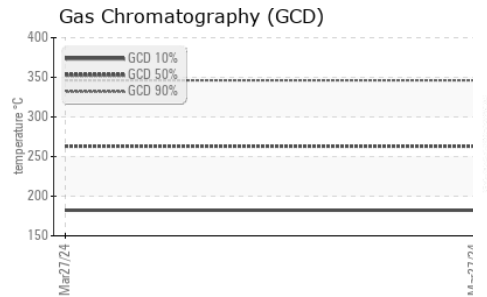
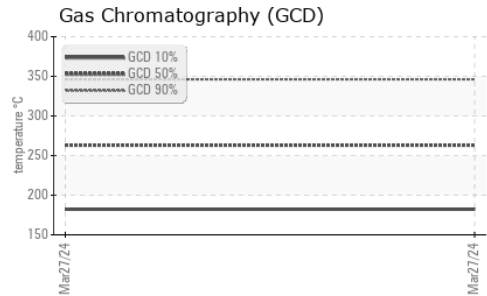
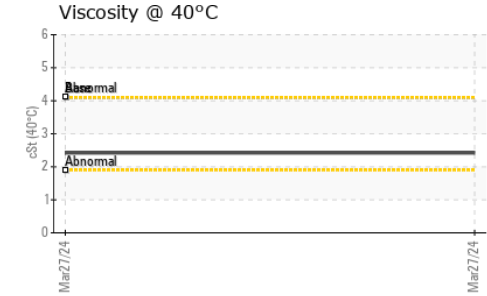
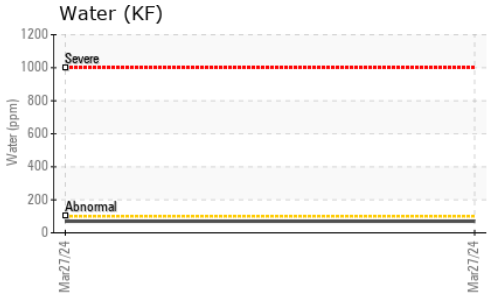
| method | limit/base | current | history1 | history2 |
|-------------|----------------------|--------------|----------|----------|
| Silicon | ppm ASTM D5185m <1.0 | 0 | --- | --- |
| Sodium | ppm ASTM D5185m <0.1 | 1 | --- | --- |
| Potassium | ppm ASTM D5185m <0.1 | 0 | --- | --- |
| Water | % ASTM D6304 <0.05 | 0.007 | --- | --- |
| ppm Water | ppm ASTM D6304 <500 | 70 | --- | --- |
| % Gasoline | % *In-House <0.50 | 0.0 | --- | --- |
| % Biodiesel | % *In-House <20.0 | 0.0 | --- | --- |

MICROBIAL

| method | limit/base | current | history1 | history2 |
|----------|---------------------------|------------|----------|----------|
| Bacteria | CFU/ml WC-Method >=100000 | 0 | --- | --- |
| Yeast | CFU/ml WC-Method >=100000 | 0 | --- | --- |
| Mold | Colonies WC-Method MODER | --- | --- | --- |



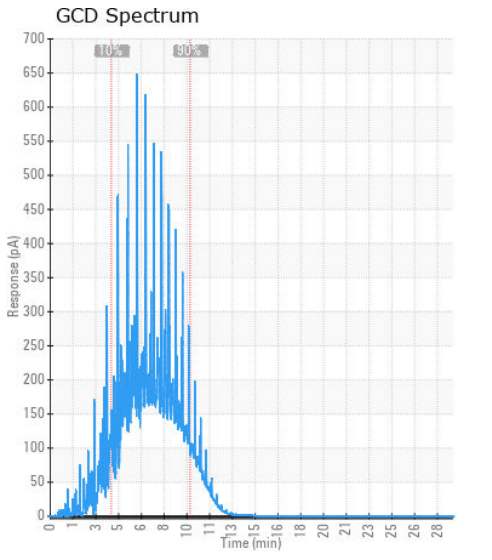
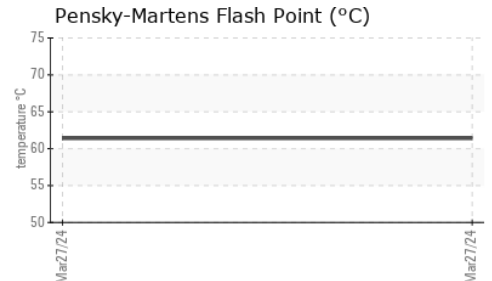
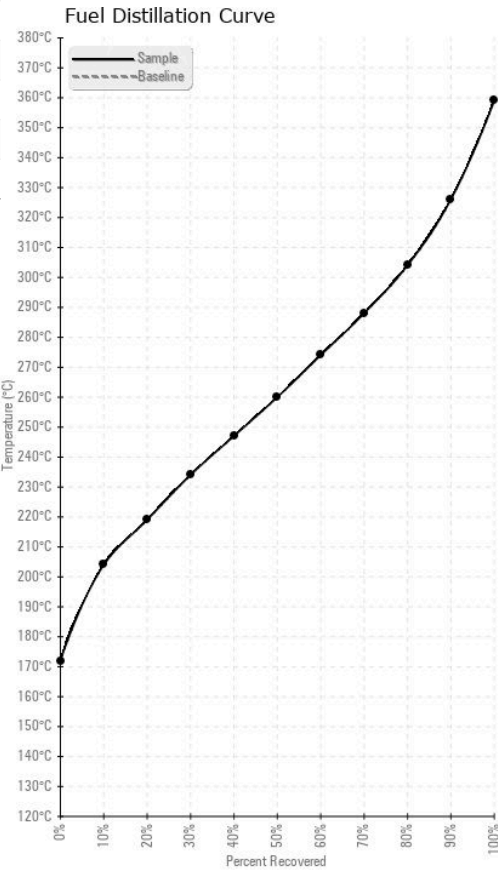
FUEL REPORT



| 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 | 0 | --- | --- |
| Vanadium | ppm | ASTM D5185m | <0.1 | 0 | --- | --- |
| Iron | ppm | ASTM D5185m | <0.1 | 0 | --- | --- |
| 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 | |

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0914198 **Received** : 03 Apr 2024
Lab Number : **06138211** **Tested** : 15 Apr 2024
Unique Number : 10963019 **Diagnosed** : 15 Apr 2024 - Doug Bogart
Test Package : DF-2 (Additional Tests: Bacteria, Fuel, Screen)

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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)