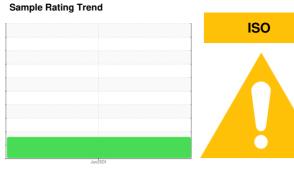


FUEL REPORT

UNASSIGNED CD6068H74883

Diesel Fuel

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



DIAGNOSIS

Recommendation

Laboratory test indicate that this fuel is suitable for use and meets all test requirements. We advise that you filter this fluid before use. We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

△ Contaminants

There is a moderate amount of silt (particulates < 14 microns in size) present in the fuel. The water content is negligible.

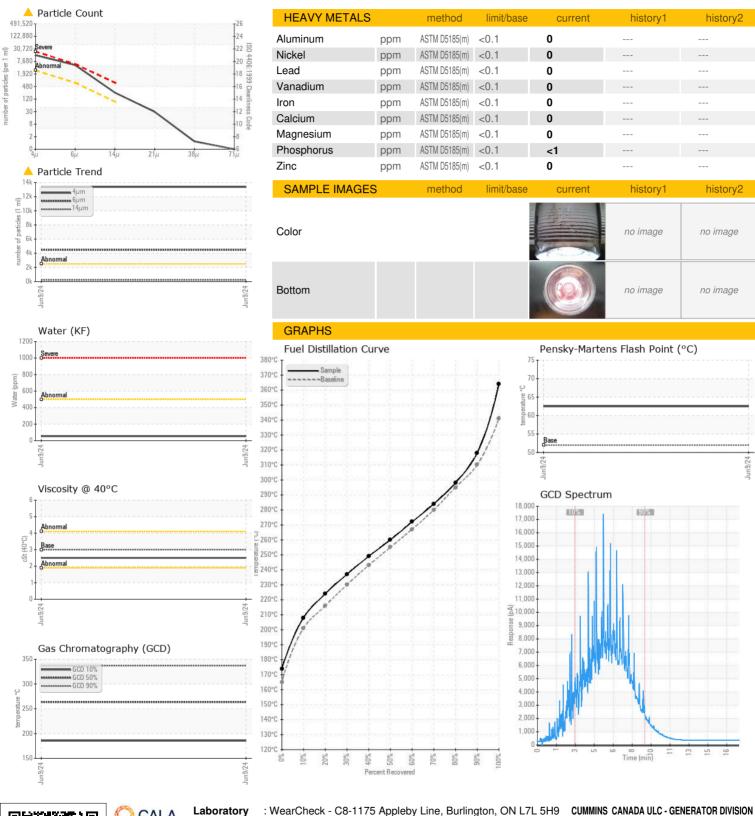
Fuel Condition

The fuel is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

| PHYSICAL PROPERTIES method limit/base current history1 history2 | i) (GAL) | | | | Jun2U24 | | |
|---|------------------------|---------|---------------|------------|--------------|-----------|----------|
| Sample Date Client Info Q9 Jun 2024 Client Info Qn Qn Qn Qn Qn Qn Qn Q | SAMPLE INFORM | MATION | method | limit/base | current | history1 | history2 |
| Sample Date Client Info 09 Jun 2024 | Sample Number | | Client Info | | CU0023352 | | |
| Machine Age Ars Client Info ABNORMAL Sample Status Machine St | • | | Client Info | | 09 Jun 2024 | | |
| PHYSICAL PROPERTIES method minit/base current history1 history2 | | hrs | | | | | |
| Specific Gravity | Sample Status | | | | ABNORMAL | | |
| Specific Gravity | | ERTIES | method | limit/hase | current | history1 | history2 |
| Fuel Color | | LITTILO | | | | Thotory I | History |
| Vise @ 40°C cSt ASTM D7279(m) 3.0 2.5 | • | tovt | | | | | |
| Pensky-Martens Flash Point °C ASTM D7215* 52 62.5 SULFUR CONTENT method limit/base current history1 history2 Sulfur ppm ASTM D2887* 10 16 DISTILLATION method limit/base current history1 history2 Initial Boiling Point °C ASTM D2887* 197 15% Distillation Point °C ASTM D2887* 201 208 15% Distill Point °C ASTM D2887* 201 208 20% Distill Point °C ASTM D2887* 216 30% Distill Point °C ASTM D2887* 230 237 50% Distill Point °C ASTM D2887* 243 249 | | | | | • | | |
| SULFUR CONTENT method limit/base current history1 history2 Sulfur ppm ASTM D518S(m) 10 16 DISTILLATION method limit/base current history1 history2 Initial Boiling Point °C ASTM D2887* 197 10% Distill Point °C ASTM D2887* 201 208 15% Distill Point °C ASTM D2887* 216 20% Distill Point °C ASTM D2887* 216 224 30% Distill Point °C ASTM D2887* 230 237 40% Distill Point °C ASTM D2887* 243 249 50% Distill Point °C ASTM D2887* 267 272 50% Distill Point °C ASTM D2887* 280 284 | | | . , | | | | |
| Sulfur ppm ASTM D5185(m) 10 16 | • | | | | 02.5 | | |
| DISTILLATION | SULFUR CONTE | NT | method | limit/base | current | history1 | history2 |
| Initial Boiling Point | Sulfur | ppm | ASTM D5185(m) | 10 | 16 | | |
| 5% Distillation Point | DISTILLATION | | method | limit/base | current | history1 | history2 |
| 10% Distill Point | Initial Boiling Point | °C | ASTM D2887* | 165 | 174 | | |
| 15% Distillation Point °C ASTM D2887° 216 224 | 5% Distillation Point | °C | ASTM D2887* | | 197 | | |
| 20% Distill Point | 10% Distill Point | °C | ASTM D2887* | 201 | 208 | | |
| 30% Distill Point | 15% Distillation Point | °C | ASTM D2887* | | 216 | | |
| 40% Distill Point | 20% Distill Point | °C | ASTM D2887* | 216 | 224 | | |
| Solution Solution | 30% Distill Point | °C | ASTM D2887* | 230 | 237 | | |
| 60% Distill Point | 40% Distill Point | °C | ASTM D2887* | 243 | 249 | | |
| 70% Distill Point °C ASTM D2887' 280 284 80% Distill Point °C ASTM D2887' 295 298 85% Distillation Point °C ASTM D2887' 308 90% Distill Point °C ASTM D2887' 310 318 95% Distillation Point °C ASTM D2887' 337 95% Distillation Point °C ASTM D2887' 341 364 364 37.7 35 35 35 35 35 35 35 35 35 35 35 35 | 50% Distill Point | °C | ASTM D2887* | 255 | 260 | | |
| 80% Distill Point °C ASTM D2887* 295 298 85% Distillation Point °C ASTM D2887* 308 90% Distill Point °C ASTM D2887* 310 318 95% Distillation Point °C ASTM D2887* 341 364 Final Boiling Point °C ASTM D2887* 341 364 GNITION QUALITY method limit/base current history1 history2 | 60% Distill Point | °C | ASTM D2887* | 267 | 272 | | |
| 85% Distillation Point °C ASTM D2887* 308 90% Distill Point °C ASTM D2887* 310 318 95% Distillation Point °C ASTM D2887* 341 364 Final Boiling Point °C ASTM D2887* 341 364 IGNITION QUALITY method limit/base current history1 history2 API Gravity ASTM D1298* 37.7 35 Cetane Index ASTM D4737* <40.0 | 70% Distill Point | °C | ASTM D2887* | 280 | 284 | | |
| 90% Distill Point °C ASTM D2887* 310 318 95% Distillation Point °C ASTM D2887* 341 364 Final Boiling Point °C ASTM D2887* 341 364 IGNITION QUALITY method limit/base current history1 history2 API Gravity ASTM D1298* 37.7 35 Cetane Index ASTM D4737* <40.0 45 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) <1.0 0 Sodium ppm ASTM D5185(m) <0.1 <1 Potassium ppm ASTM D5185(m) <0.1 0 Water % ASTM D6304* <0.05 0.005 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >2500 Δ 13365 Particles >6μm ASTM D7647 >20 26 Particles >21μm ASTM D7647 >4 1 Particles >38μm ASTM D7647 >4 1 Particles >38μm ASTM D7647 >4 1 Particles >71μm ASTM D7647 >4 1 Pa | 80% Distill Point | °C | ASTM D2887* | 295 | 298 | | |
| 95% Distillation Point °C ASTM D2887* 341 364 Final Boiling Point °C ASTM D2887* 341 364 IGNITION QUALITY method limit/base current history1 history2 API Gravity ASTM D1298* 37.7 35 Cetane Index ASTM D4737* <40.0 45 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) <1.0 0 Sodium ppm ASTM D5185(m) <0.1 <1 Potassium ppm ASTM D5185(m) <0.1 0 Water % ASTM D6304* <0.05 0.005 ppm Water ppm ASTM D6304* <500 54 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >2500 13365 Particles >6μm ASTM D7647 >640 4484 Particles >21μm ASTM D7647 >20 26 Particles >38μm ASTM D7647 >4 1 Particles >71μm ASTM D7647 >3 0 Particles >71μm ASTM D7647 >4 1 | 85% Distillation Point | °C | ASTM D2887* | | 308 | | |
| Final Boiling Point °C ASTM D2887* 341 364 | 90% Distill Point | °C | ASTM D2887* | 310 | 318 | | |
| IGNITION QUALITY method limit/base current history1 history2 | 95% Distillation Point | °C | ASTM D2887* | | 337 | | |
| API Gravity | Final Boiling Point | °C | ASTM D2887* | 341 | 364 | | |
| Cetane Index ASTM D4737* <40.0 | IGNITION QUALIT | ΓΥ | method | limit/base | current | history1 | history2 |
| CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) <1.0 | API Gravity | | ASTM D1298* | 37.7 | 35 | | |
| Silicon ppm ASTM D5185(m) <1.0 | Cetane Index | | ASTM D4737* | <40.0 | 45 | | |
| Sodium ppm ASTM D5185(m) < 0.1 | CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Potassium ppm ASTM D5185(m) < 0.1 0 Water % ASTM D6304* < 0.05 0.005 ppm Water ppm ASTM D6304* < 500 54 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >2500 13365 Particles >6μm ASTM D7647 >640 4484 Particles >14μm ASTM D7647 >80 216 Particles >21μm ASTM D7647 >20 26 Particles >38μm ASTM D7647 >4 1 Particles >71μm ASTM D7647 >3 0 | Silicon | ppm | ASTM D5185(m) | <1.0 | 0 | | |
| Water % ASTM D6304* <0.05 0.005 ppm Water ppm ASTM D6304* <500 54 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >2500 13365 Particles >6μm ASTM D7647 >640 4484 Particles >14μm ASTM D7647 >80 216 Particles >21μm ASTM D7647 >20 26 Particles >38μm ASTM D7647 >4 1 Particles >71μm ASTM D7647 >3 0 | Sodium | ppm | ASTM D5185(m) | <0.1 | <1 | | |
| ppm Water ppm ASTM D6304* <500 54 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >2500 ▲ 13365 Particles >6μm ASTM D7647 >640 ▲ 4484 Particles >14μm ASTM D7647 >80 ▲ 216 Particles >21μm ASTM D7647 >20 26 Particles >38μm ASTM D7647 >4 1 Particles >71μm ASTM D7647 >3 0 | Potassium | ppm | ASTM D5185(m) | <0.1 | 0 | | |
| FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >2500 ▲ 13365 Particles >6μm ASTM D7647 >640 ▲ 4484 Particles >14μm ASTM D7647 >80 ▲ 216 Particles >21μm ASTM D7647 >20 26 Particles >38μm ASTM D7647 >4 1 Particles >71μm ASTM D7647 >3 0 | Water | % | ASTM D6304* | < 0.05 | 0.005 | | |
| Particles >4μm ASTM D7647 >2500 ▲ 13365 Particles >6μm ASTM D7647 >640 ▲ 4484 Particles >14μm ASTM D7647 >80 ▲ 216 Particles >21μm ASTM D7647 >20 26 Particles >38μm ASTM D7647 >4 1 Particles >71μm ASTM D7647 >3 0 | ppm Water | ppm | ASTM D6304* | <500 | 54 | | |
| Particles >6μm ASTM D7647 >640 4484 Particles >14μm ASTM D7647 >80 216 Particles >21μm ASTM D7647 >20 26 Particles >38μm ASTM D7647 >4 1 Particles >71μm ASTM D7647 >3 0 | FLUID CLEANLIN | ESS | method | limit/base | current | history1 | history2 |
| Particles >14μm ASTM D7647 >80 ▲ 216 Particles >21μm ASTM D7647 >20 26 Particles >38μm ASTM D7647 >4 1 Particles >71μm ASTM D7647 >3 0 | Particles >4µm | | ASTM D7647 | >2500 | 13365 | | |
| Particles >21μm ASTM D7647 >20 26 Particles >38μm ASTM D7647 >4 1 Particles >71μm ASTM D7647 >3 0 | Particles >6µm | | ASTM D7647 | >640 | 4484 | | |
| Particles >38μm ASTM D7647 >4 1 Particles >71μm ASTM D7647 >3 0 | Particles >14µm | | ASTM D7647 | >80 | <u> </u> | | |
| Particles >71μm | Particles >21µm | | ASTM D7647 | >20 | 26 | | |
| | Particles >38µm | | ASTM D7647 | >4 | 1 | | |
| Oil Cleanliness ISO 4406 (c) >18/16/13 🔺 21/19/15 | Particles >71µm | | ASTM D7647 | >3 | 0 | | |
| | Oil Cleanliness | | ISO 4406 (c) | >18/16/13 | <u> </u> | | |



FUEL REPORT





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

Lab Number

: CU0023352 : 02640930

Unique Number : 5798469

Received : 10 Jun 2024 **Tested** : 12 Jun 2024 Diagnosed : 13 Jun 2024 - Kevin Marson

Test Package : FUEL (Additional Tests: CC Flash, PrtCount) To discuss this sample report, contact Customer Service at 1-800-268-2131.

Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

7175 PACIFIC CIRCLE MISSISSAUGA, ON CA L5T 2A5

Contact: Elisia Johnson elisia.johnson@cummins.com

T: (905)795-0050 F: (905)795-9252