



FUEL REPORT

Sample Rating Trend



WATER



Area

HIGHLANDS CASHIERS HOSPITAL [17713]

Machine Id

[HIGHLANDS CASHIERS HOSPITAL] GENERATOR 2

Component

Diesel Fuel

Fluid

No.2 DIESEL FUEL (ULTRALOW SULPHUR) (5300 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 | WC0957794 | --- | --- |
| Sample Date | Client Info | 23 Jun 2024 | --- | --- |
| Machine Age | hrs Client Info | 0 | --- | --- |
| Sample Status | | ABNORMAL | --- | --- |

PHYSICAL PROPERTIES

| method | limit/base | current | history1 | history2 |
|----------------------------|---------------------|---------|-------------|----------|
| Fuel Color | text *Visual Screen | Yellow | Red | --- |
| ASTM Color | scalar *ASTM D1500 | | L4.5 | --- |
| Visc @ 40°C | cSt ASTM D445 | 3.0 | 2.4 | --- |
| Pensky-Martens Flash Point | °C *PMCC Calculated | 52 | 59.3 | --- |

SULFUR CONTENT

| method | limit/base | current | history1 | history2 |
|--------------|-----------------|---------|-----------|----------|
| Sulfur | ppm ASTM D5185m | 10 | 4 | --- |
| Sulfur (UVF) | ppm ASTM D5453 | | 10 | --- |

DISTILLATION

| method | limit/base | current | history1 | history2 |
|------------------------|-------------|---------|------------|----------|
| Initial Boiling Point | °C ASTM D86 | 165 | 170 | --- |
| 5% Distillation Point | °C ASTM D86 | | 191 | --- |
| 10% Distill Point | °C ASTM D86 | 201 | 200 | --- |
| 15% Distillation Point | °C ASTM D86 | | 208 | --- |
| 20% Distill Point | °C ASTM D86 | 216 | 216 | --- |
| 30% Distill Point | °C ASTM D86 | 230 | 231 | --- |
| 40% Distill Point | °C ASTM D86 | 243 | 245 | --- |
| 50% Distill Point | °C ASTM D86 | 255 | 258 | --- |
| 60% Distill Point | °C ASTM D86 | 267 | 273 | --- |
| 70% Distill Point | °C ASTM D86 | 280 | 287 | --- |
| 80% Distill Point | °C ASTM D86 | 295 | 303 | --- |
| 85% Distillation Point | °C ASTM D86 | | 315 | --- |
| 90% Distill Point | °C ASTM D86 | 310 | 326 | --- |
| 95% Distillation Point | °C ASTM D86 | | 344 | --- |
| Final Boiling Point | °C ASTM D86 | 341 | 359 | --- |

IGNITION QUALITY

| method | limit/base | current | history1 | history2 |
|--------------|------------|---------|-----------|----------|
| API Gravity | ASTM D7777 | 37.7 | 36 | --- |
| Cetane Index | ASTM D4737 | <40.0 | 47 | --- |

CONTAMINANTS

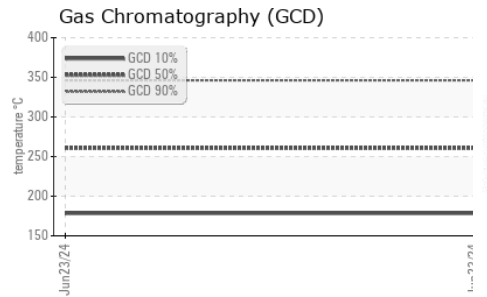
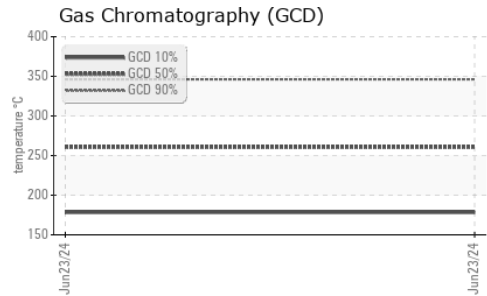
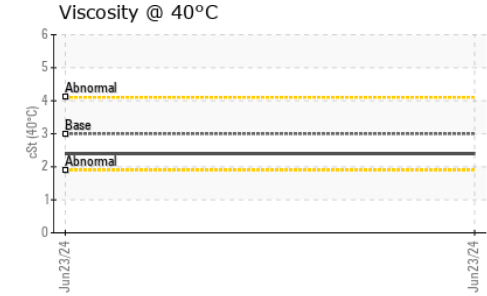
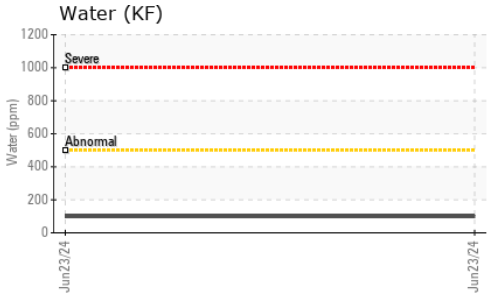
| method | limit/base | current | history1 | history2 |
|-------------|-----------------|---------|--------------|----------|
| Silicon | ppm ASTM D5185m | <1.0 | 0 | --- |
| Sodium | ppm ASTM D5185m | <0.1 | 1 | --- |
| Potassium | ppm ASTM D5185m | <0.1 | <1 | --- |
| Water | % ASTM D6304 | <0.05 | 0.009 | --- |
| ppm Water | ppm ASTM D6304 | <500 | 99 | --- |
| % 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 | --- | --- |



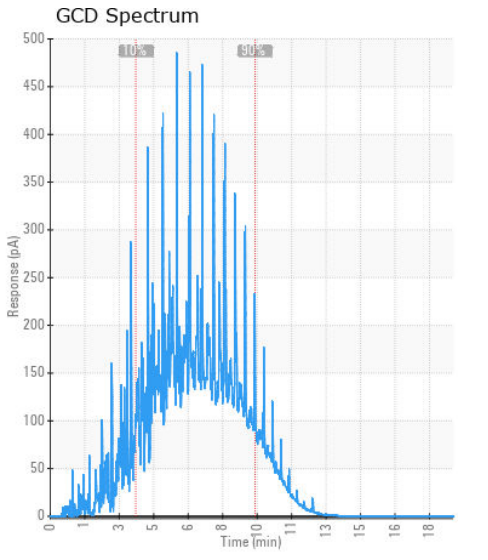
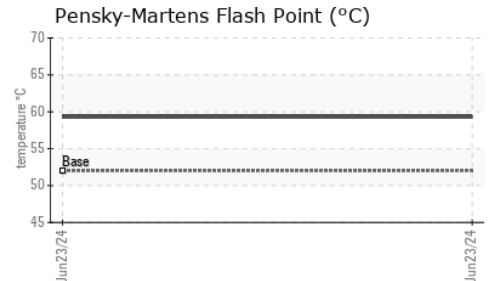
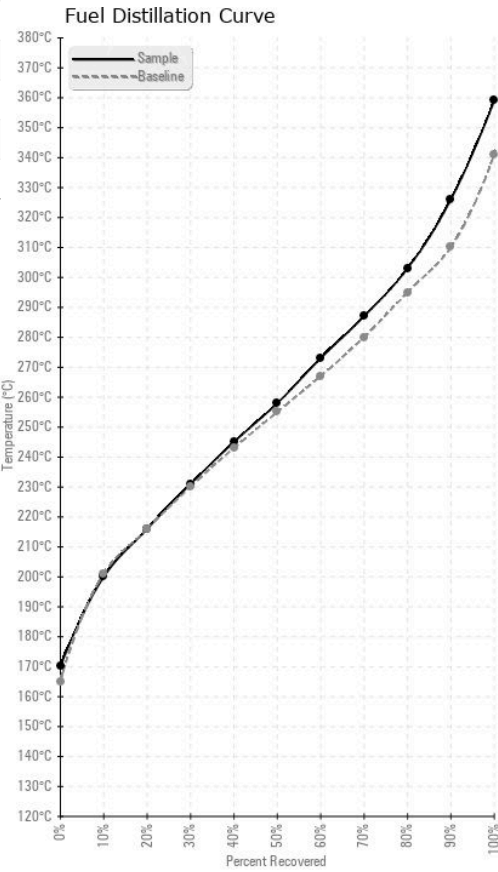
FUEL REPORT



| 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



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0957794 **Received** : 24 Jun 2024
Lab Number : 06218721 **Tested** : 01 Jul 2024
Unique Number : 11096918 **Diagnosed** : 01 Jul 2024 - Doug Bogart
Test Package : DF-2 (Additional Tests: Bacteria, Fuel, Screen)

PETROLEUM RECOVERY SERVICES
 210 POWELL DR
 SUMMERVILLE, SC
 US 29483
 Contact: AJAY EL
 Ajay@prsfuel.com
 T: (843)225-1777
 F:

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)