

# **FUEL REPORT**

#### Sample Rating Trend

**VIS DEBRIS** 

## SLS 21 - 38 WOOD STREAM TRAIL Component

**Diesel Fuel** Fluid

{not provided} (--- GAL)

### DIAGNOSIS

#### Recommendation

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.

#### Corrosion

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

### Contaminants

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

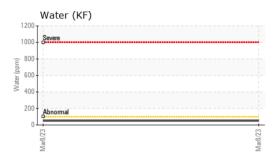
#### **Fuel Condition**

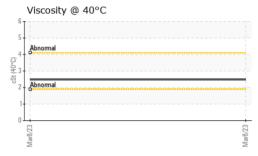
Sulfur value derived by ASTM D5453 method for ULSD validation. Sulfur level is acceptable for ULSD specification.

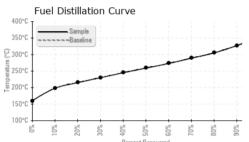
|                            |               |                          |            | Mar2023     |          |          |
|----------------------------|---------------|--------------------------|------------|-------------|----------|----------|
| SAMPLE INFORM              | <b>IATION</b> | method                   | limit/base | current     | history1 | history2 |
| Sample Number              |               | Client Info              |            | WC0798120   |          |          |
| Sample Date                |               | Client Info              |            | 08 Mar 2023 |          |          |
| Vachine Age                | hrs           | Client Info              |            | 0           |          |          |
| Sample Status              |               |                          |            | ABNORMAL    |          |          |
| PHYSICAL PROP              | ERTIES        | method                   | limit/base | current     | history1 | history2 |
| Specific Gravity           |               | *ASTM D1298              |            | 0.841       |          |          |
| -uel Color                 | text          | *Visual Screen           |            | Yllow       |          |          |
| ASTM Color                 | scalar        | *ASTM D1500              |            | L1.0        |          |          |
| visc @ 40°C                | cSt           | ASTM D445                |            | 2.48        |          |          |
| Pensky-Martens Flash Point | °C            | *PMCC Calculated         |            | 57          |          |          |
| SULFUR CONTEN              | NT            | method                   | limit/base | current     | history1 | history2 |
| Sulfur                     | ppm           | ASTM D5185m              |            | 0           |          |          |
| Sulfur (UVF)               | ppm           | ASTM D5453               |            | 12          |          |          |
| DISTILLATION               |               | method                   | limit/base | current     | history1 | history2 |
| Initial Boiling Point      | °C            | ASTM D86                 |            | 160         |          |          |
| 5% Distillation Point      | °C            | ASTM D86                 |            | 187         |          |          |
| 10% Distill Point          | °C            | ASTM D86                 |            | 198         |          |          |
|                            |               |                          |            |             |          |          |
| 15% Distillation Point     | °C            | ASTM D86                 |            | 208         |          |          |
| 20% Distill Point          | °C            | ASTM D86                 |            | 215         |          |          |
| 30% Distill Point          | °C            | ASTM D86                 |            | 230         |          |          |
| 40% Distill Point          | °C            | ASTM D86                 |            | 245         |          |          |
| 50% Distill Point          | °C            | ASTM D86                 |            | 259         |          |          |
| 60% Distill Point          | °C            | ASTM D86                 |            | 273         |          |          |
| 70% Distill Point          | °C            | ASTM D86                 |            | 289         |          |          |
| 80% Distill Point          | °C            | ASTM D86                 |            | 305         |          |          |
| 85% Distillation Point     | °C            | ASTM D86                 |            | 315         |          |          |
| 90% Distill Point          | °C            | ASTM D86                 |            | 327         |          |          |
| 95% Distillation Point     | °C            | ASTM D86                 |            | 344         |          |          |
| Final Boiling Point        | °C            | ASTM D86                 |            | 351         |          |          |
| Distillation Residue       | %             | ASTM D86                 |            | 1.4         |          |          |
| Distillation Loss          | %             | ASTM D86                 |            | 0.7         |          |          |
| IGNITION QUALIT            | ΓY            | method                   | limit/base | current     | history1 | history2 |
| API Gravity                |               | ASTM D7777               |            | 36.8        |          |          |
| Cetane Index               |               | ASTM D4737               | <40.0      | 47.7        |          |          |
| CONTAMINANTS               |               | method                   | limit/base | current     | history1 | history2 |
| Silicon                    | ppm           | ASTM D5185m              | <1.0       | 0           |          |          |
| Sodium                     | ppm           | ASTM D5185m              | <0.1       | 0           |          |          |
|                            | ppm           | ASTM D5185m              | <0.1       | 0           |          |          |
| Potassium                  |               |                          | -0.05      | 0.005       |          |          |
| Potassium<br>Water         | %             | ASTM D6304               | < 0.05     | 0.005       |          |          |
| Water                      |               | ASTM D6304<br>ASTM D6304 | <500       |             |          |          |
|                            | %<br>ppm<br>% |                          |            | 50.1<br>0.0 |          |          |



# **FUEL REPORT**





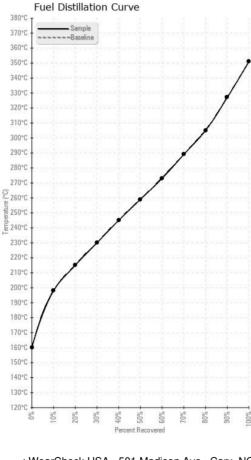


| HEAVY METALS |     | method      | limit/base | current | history1 | history2 |
|--------------|-----|-------------|------------|---------|----------|----------|
| Aluminum     | ppm | ASTM D5185m | <0.1       | 0       |          |          |
| Nickel       | ppm | ASTM D5185m | <0.1       | 0       |          |          |
| 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       |          |          |

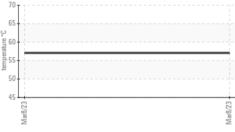


Bottom





### Pensky-Martens Flash Point (°C)



#### : WearCheck USA - 501 Madison Ave., Cary, NC 27513 **KB POWER SYSTEMS LLC** : 28 Apr 2023 Recieved 738 Old Buies Creek Rd Diagnosed : 12 May 2023 Lillington, NC Diagnostician : Doug Bogart US 27546 Test Package : DF-2 (Additional Tests: Screen) Contact: DWAYNE REGISTER dwayne@kbpowersystemsnc.com T: (919)577-9136

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)

: WC0798120

: 05833359

Report Id: KBPHOL [WUSCAR] 05833359 (Generated: 01/16/2024 14:03:46) Rev: 1

Certificate L2367

Laboratory

Sample No.

Lab Number

Unique Number : 10446852

Contact/Location: DWAYNE REGISTER - KBPHOL

F: