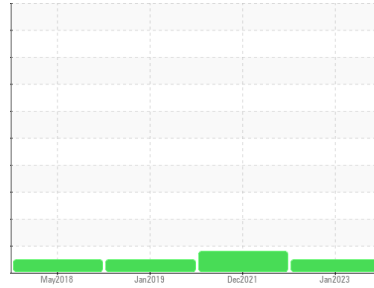




FUEL REPORT

Sample Rating Trend

NORMAL



Area
[PMOAS2144706]
 Machine Id
6D24-302687 20A02330-5 (S/N 2057502)
 Component
Diesel Fuel
 Fluid
No.2 DIESEL FUEL (LOW-SULPHUR) (--- GAL)

DIAGNOSIS

Recommendation

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

Corrosion

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

Contaminants

There is no Bacteria, Yeast and/or Fungus indicated in the sample. The water content is negligible. There is no indication of any contamination in the fuel.

Fuel Condition

Sulfur value derived by ASTM D5453 method for ULSD validation.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|--------------------|-------------|-------------|------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | | DC0019312 | DC0014086 | DCM1040120 |
| Sample Date | Client Info | | | 18 Jan 2023 | 15 Dec 2021 | 07 Jan 2019 |
| Machine Age | hrs | Client Info | | 818 | 790 | 703 |
| Sample Status | | | | NORMAL | ATTENTION | NORMAL |

| PHYSICAL PROPERTIES | | method | limit/base | current | history1 | history2 |
|---------------------|--------|-------------|------------|-------------|----------|----------|
| ASTM Color | scalar | *ASTM D1500 | | L4.5 | L4.5 | L5.5 |
| Visc @ 40°C | cSt | ASTM D445 | 3.0 | 2.42 | 2.44 | 2.49 |

| SULFUR CONTENT | | method | limit/base | current | history1 | history2 |
|----------------|-----|-------------|------------|------------|----------|----------|
| Sulfur | ppm | ASTM D5185m | 250 | 168 | 169 | 262 |
| Sulfur (UVF) | ppm | ASTM D5453 | | 136 | 169 | 292 |

| IGNITION QUALITY | | method | limit/base | current | history1 | history2 |
|------------------|--|------------|------------|-------------|----------|----------|
| API Gravity | | ASTM D7777 | 37.7 | 36.4 | --- | --- |

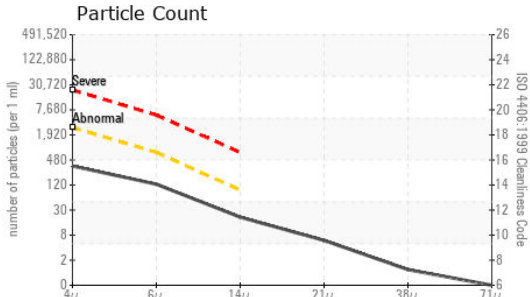
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|--------------|-----|-------------|------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m | <1.0 | 0 | 0 | 0 |
| Sodium | ppm | ASTM D5185m | <0.1 | 0 | <1 | <1 |
| Potassium | ppm | ASTM D5185m | <0.1 | 0 | 0 | 0 |
| Water | % | ASTM D6304 | <0.05 | 0.003 | 0.003 | 0.001 |
| ppm Water | ppm | ASTM D6304 | <500 | 36.4 | 34.8 | 10 |
| % Gasoline | % | *In-House | <0.50 | 0.0 | 0.0 | 0.0 |
| % Biodiesel | % | *In-House | <20.0 | 0.0 | 0.0 | 0.0 |

| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|-------------------|--|--------------|------------|-----------------|------------|----------|
| Particles >4µm | | ASTM D7647 | >2500 | 302 | ▲ 4385 | --- |
| Particles >6µm | | ASTM D7647 | >640 | 111 | ▲ 1138 | --- |
| Particles >14µm | | ASTM D7647 | >80 | 18 | 66 | --- |
| Particles >21µm | | ASTM D7647 | >20 | 5 | 14 | --- |
| Particles >38µm | | ASTM D7647 | >4 | 1 | 1 | --- |
| Particles >71µm | | ASTM D7647 | >3 | 0 | 0 | --- |
| Oil Cleanliness | | ISO 4406 (c) | >18/16/13 | 15/14/11 | ▲ 19/17/13 | --- |

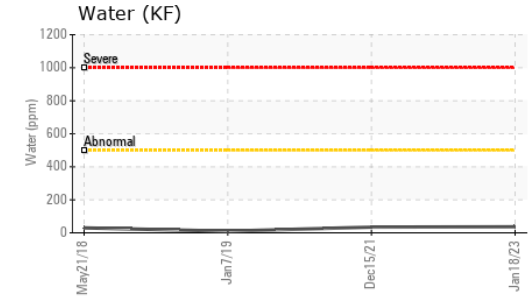
| HEAVY METALS | | method | limit/base | current | history1 | history2 |
|--------------|-----|-------------|------------|----------|----------|----------|
| Aluminum | ppm | ASTM D5185m | <0.1 | 0 | 0 | <1 |
| Nickel | ppm | ASTM D5185m | <0.1 | 0 | 0 | 0 |
| Lead | ppm | ASTM D5185m | <0.1 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | <0.1 | 0 | 0 | 0 |
| Iron | ppm | ASTM D5185m | <0.1 | 0 | 0 | 0 |
| Calcium | ppm | ASTM D5185m | <0.1 | 0 | 0 | 0 |
| Magnesium | ppm | ASTM D5185m | <0.1 | 0 | 0 | 0 |
| Phosphorus | ppm | ASTM D5185m | <0.1 | 0 | <1 | 0 |
| Zinc | ppm | ASTM D5185m | <0.1 | 0 | 0 | 0 |



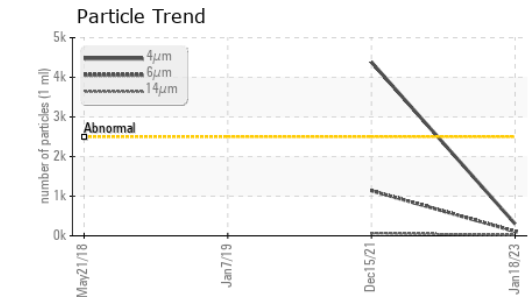
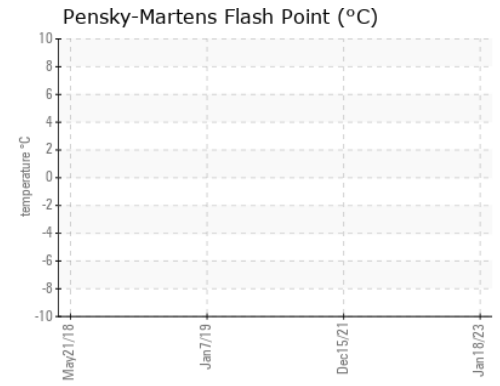
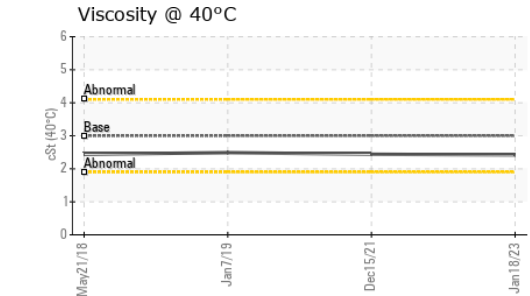
FUEL REPORT



| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|----------|----------|
| Color | | | | | |
| Bottom | | | | | |



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DC0019312 **Received** : 12 Apr 2023
Lab Number : 05817919 **Diagnosed** : 19 Apr 2023
Unique Number : 10426002 **Diagnostician** : Doug Bogart
Test Package : DF-5 (Additional Tests: API, Cetane, Fuel, Screen)

KELLY GENERATOR & EQUIPMENT INC
 1955 DALE LN
 OWINGS, MD
 US 20736
 Contact: LESLIE SNURR
 LSNURR@KGE.COM
 T: (410)257-5225
 F: (410)257-5227

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)