



FUEL REPORT

Sample Rating Trend

NORMAL



Area
[PMOAS3030710]
 Machine Id
CATERPILLAR 320 30A00520
 Component
Diesel Fuel
 Fluid
{not provided} (--- QTS)



DIAGNOSIS

Recommendation

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

Corrosion

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

Contaminants

The water content is negligible. There is no bacteria or fungus (yeast and/or mold) indicated in the sample. There is no indication of any contamination in the fuel.

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 | DC0034044 | --- | --- |
| Sample Date | Client Info | 18 Jan 2024 | --- | --- |
| Machine Age | hrs Client Info | 608 | --- | --- |
| Sample Status | | NORMAL | --- | --- |

PHYSICAL PROPERTIES

| method | limit/base | current | history1 | history2 |
|-------------|--------------------|-------------|----------|----------|
| ASTM Color | scalar *ASTM D1500 | L4.5 | --- | --- |
| Visc @ 40°C | cSt ASTM D445 | 2.66 | --- | --- |

SULFUR CONTENT

| method | limit/base | current | history1 | history2 |
|--------------|-----------------|-----------|----------|----------|
| Sulfur | ppm ASTM D5185m | 8 | --- | --- |
| Sulfur (UVF) | ppm ASTM D5453 | 15 | --- | --- |

IGNITION QUALITY

| method | limit/base | current | history1 | history2 |
|-------------|------------|-------------|----------|----------|
| API Gravity | ASTM D7777 | 36.0 | --- | --- |



CONTAMINANTS

| method | limit/base | current | history1 | history2 |
|-------------|----------------------|--------------|----------|----------|
| Silicon | ppm ASTM D5185m <1.0 | <1 | --- | --- |
| Sodium | ppm ASTM D5185m <0.1 | <1 | --- | --- |
| Potassium | ppm ASTM D5185m <0.1 | <1 | --- | --- |
| Water | % ASTM D6304 <0.05 | 0.002 | --- | --- |
| ppm Water | ppm ASTM D6304 <500 | 22 | --- | --- |
| % Gasoline | % *In-House <0.50 | 0.0 | --- | --- |
| % Biodiesel | % *In-House <20.0 | 0.0 | --- | --- |

HEAVY METALS

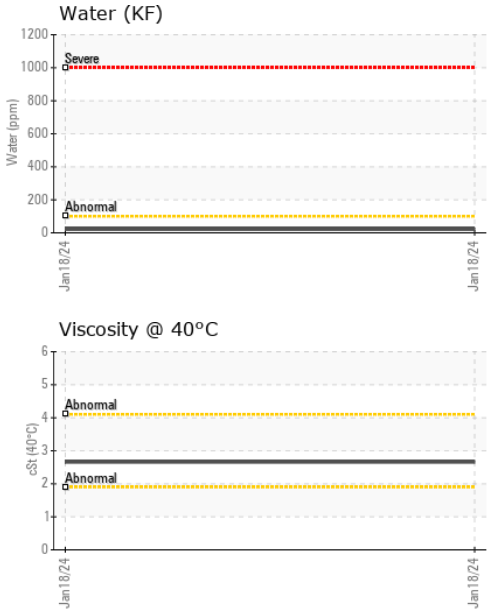
| method | limit/base | current | history1 | history2 |
|------------|----------------------|--------------|----------|----------|
| Aluminum | ppm ASTM D5185m <0.1 | 0 | --- | --- |
| Nickel | ppm ASTM D5185m <0.1 | 0 | --- | --- |
| Lead | ppm ASTM D5185m <0.1 | 0 | --- | --- |
| Vanadium | ppm ASTM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

SAMPLE IMAGES

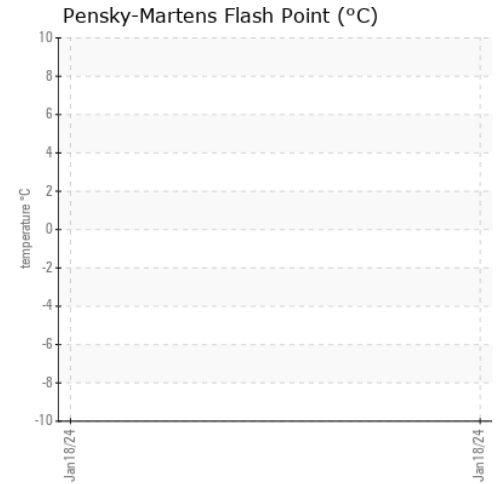
| method | limit/base | current | history1 | history2 |
|--------|------------|---|----------|----------|
| Color | |  | no image | no image |
| Bottom | |  | no image | no image |



FUEL REPORT



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DC0034044
Lab Number : 06098063
Unique Number : 10896293
Test Package : DF-5 (Additional Tests: API, Cetane, Fuel, Screen)

Received : 22 Feb 2024
Tested : 27 Feb 2024
Diagnosed : 27 Feb 2024 - Doug Bogart

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)