



FUEL REPORT

Sample Rating Trend



ISO



Machine Id
1
 Component
Diesel Fuel
 Fluid
NOT GIVEN (--- GAL)

DIAGNOSIS

Recommendation

We advise that you filter this fluid before use. 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

There is a high amount of particulates present in the fuel. There is no bacteria or fungus (yeast and/or mold) indicated 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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC05927964	---	---
Sample Date	Client Info			17 Aug 2023	---	---
Machine Age	hrs	Client Info		0	---	---
Sample Status				ATTENTION	---	---

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		*ASTM D1298		0.865	---	---
Fuel Color	text	*Visual Screen		Red	---	---
ASTM Color	scalar	*ASTM D1500		L4.5	---	---
Visc @ 40°C	cSt	ASTM D445		2.73	---	---
Pensky-Martens Flash Point	°C	*PMCC Calculated		62	---	---

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m		0	---	---
Sulfur (UVF)	ppm	ASTM D5453		11	---	---

DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86		171	---	---
5% Distillation Point	°C	ASTM D86		197	---	---
10% Distill Point	°C	ASTM D86		210	---	---
15% Distillation Point	°C	ASTM D86		221	---	---
20% Distill Point	°C	ASTM D86		229	---	---
30% Distill Point	°C	ASTM D86		243	---	---
40% Distill Point	°C	ASTM D86		255	---	---
50% Distill Point	°C	ASTM D86		267	---	---
60% Distill Point	°C	ASTM D86		279	---	---
70% Distill Point	°C	ASTM D86		292	---	---
80% Distill Point	°C	ASTM D86		307	---	---
85% Distillation Point	°C	ASTM D86		316	---	---
90% Distill Point	°C	ASTM D86		327	---	---
95% Distillation Point	°C	ASTM D86		345	---	---
Final Boiling Point	°C	ASTM D86		355	---	---
Distillation Residue	%	ASTM D86		1.4	---	---
Distillation Loss	%	ASTM D86		1.0	---	---

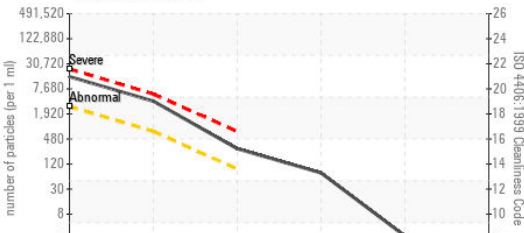
IGNITION QUALITY		method	limit/base	current	history1	history2
API Gravity		ASTM D7777		32.1	---	---
Cetane Index		ASTM D4737	<40.0	41.3	---	---

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	0	---	---
Water	%	ASTM D6304	<0.05	0.004	---	---
ppm Water	ppm	ASTM D6304	<500	47.6	---	---
% Gasoline	%	*In-House	<0.50	0.0	---	---
% Biodiesel	%	*In-House	<20.0	0.0	---	---

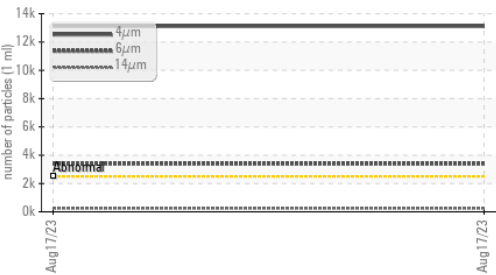


FUEL REPORT

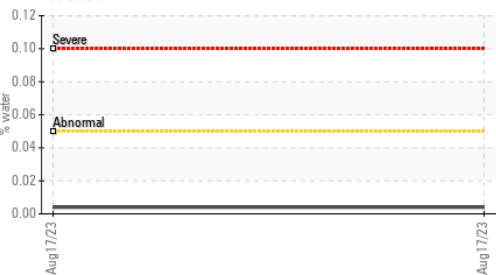
Particle Count



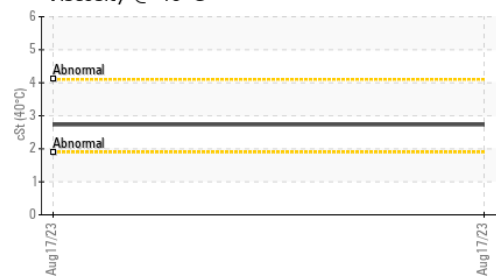
Particle Trend



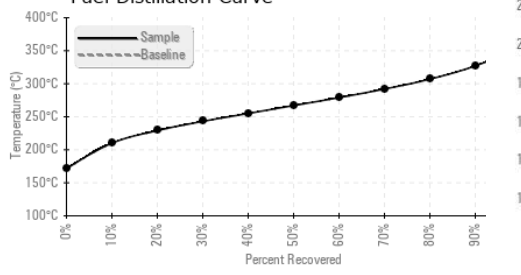
Water



Viscosity @ 40°C



Fuel Distillation Curve



FLUID CLEANLINESS

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	▲ 13115	---	---
Particles >6µm	ASTM D7647	>640	▲ 3397	---	---
Particles >14µm	ASTM D7647	>80	▲ 247	---	---
Particles >21µm	ASTM D7647	>20	▲ 65	---	---
Particles >38µm	ASTM D7647	>4	2	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	▲ 21/19/15	---	---

HEAVY METALS

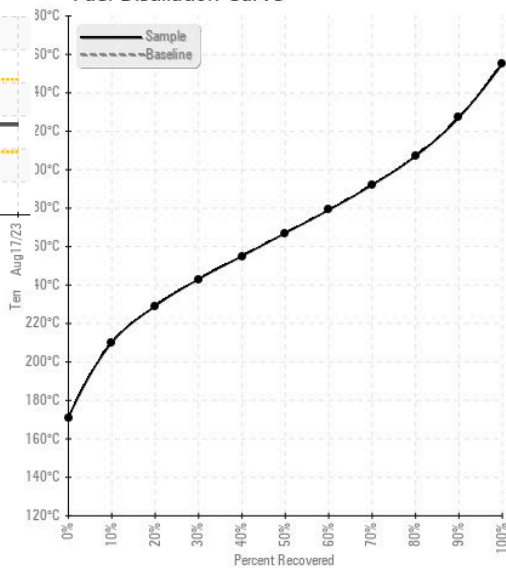
HEAVY METALS	method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m <0.1	0	---	---
Nickel	ppm	ASTM D5185m <0.1	0	---	---
Lead	ppm	ASTM D5185m <0.1	0	---	---
Vanadium	ppm	ASTM D5185m <0.1	0	---	---
Iron	ppm	ASTM D5185m <0.1	0	---	---
Calcium	ppm	ASTM D5185m <0.1	<1	---	---
Magnesium	ppm	ASTM D5185m <0.1	1	---	---
Phosphorus	ppm	ASTM D5185m <0.1	2	---	---
Zinc	ppm	ASTM D5185m <0.1	0	---	---

SAMPLE IMAGES

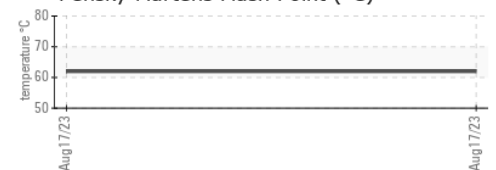
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image

GRAPHS

Fuel Distillation Curve



Pensky-Martens Flash Point (°C)



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC05927964 **Received** : 17 Aug 2023
Lab Number : 05927964 **Diagnosed** : 23 Aug 2023
Unique Number : 10607911 **Diagnostician** : Doug Bogart
Test Package : DF-2 (Additional Tests: Screen)

CALEDONIA FARMERS ELEVATOR
 2166 E CLINTON TRAIL
 CHARLOTTE, MI
 US 48813
 Contact: WILLIAM FISHER
 wfisher@cfeco.com
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 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)