



# FUEL REPORT

Sample Rating Trend



ISO



Machine Id

## MATRIX-GODLEY 2K FLINT HILLS

Component

Diesel Fuel

Fluid

DIESEL FUEL No. 2 (--- GAL)

### DIAGNOSIS

#### Recommendation

We advise that you filter this fluid before use. All other 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			WC0664021	---	---
Sample Date	Client Info			03 Apr 2024	---	---
Machine Age	hrs	Client Info		0	---	---
Sample Status				ABNORMAL	---	---

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Fuel Color	text	*Visual Screen		Red	---	---
ASTM Color	scalar	*ASTM D1500		L4.0	---	---
Visc @ 40°C	cSt	ASTM D445	4.1	2.54	---	---
Pensky-Martens Flash Point	°C	*PMCC Calculated		61.5	---	---
Cloud Point	°C	ASTM D5771		-11	---	---
Pour Point	°C	ASTM D5950		-15	---	---

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m		0	---	---
Sulfur (UVF)	ppm	ASTM D5453		5	---	---

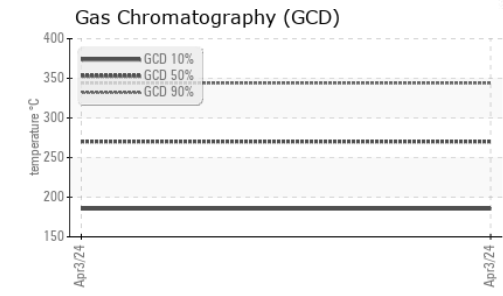
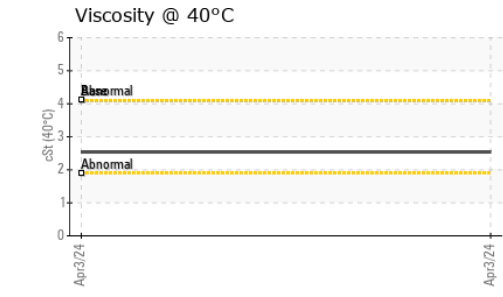
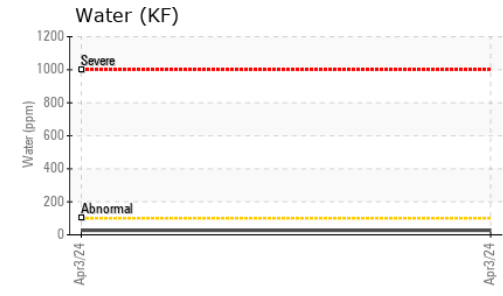
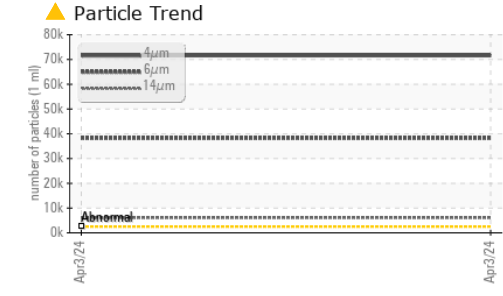
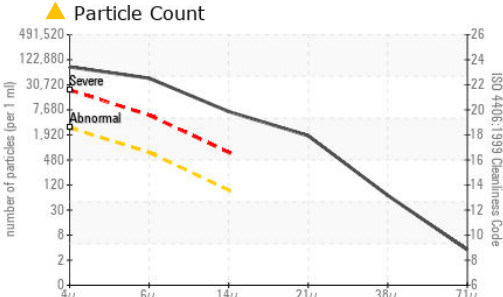
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86		173	---	---
5% Distillation Point	°C	ASTM D86		197	---	---
10% Distill Point	°C	ASTM D86		208	---	---
15% Distillation Point	°C	ASTM D86		217	---	---
20% Distill Point	°C	ASTM D86		225	---	---
30% Distill Point	°C	ASTM D86		240	---	---
40% Distill Point	°C	ASTM D86		253	---	---
50% Distill Point	°C	ASTM D86		266	---	---
60% Distill Point	°C	ASTM D86		278	---	---
70% Distill Point	°C	ASTM D86		290	---	---
80% Distill Point	°C	ASTM D86		304	---	---
85% Distillation Point	°C	ASTM D86		313	---	---
90% Distill Point	°C	ASTM D86		323	---	---
95% Distillation Point	°C	ASTM D86		339	---	---
Final Boiling Point	°C	ASTM D86		352	---	---

IGNITION QUALITY		method	limit/base	current	history1	history2
API Gravity		ASTM D7777		39	---	---
Cetane Index		ASTM D4737	<40.0	55	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	0	---	---
Sodium	ppm	ASTM D5185m	<0.1	2	---	---
Potassium	ppm	ASTM D5185m	<0.1	0	---	---
Water	%	ASTM D6304	<0.05	0.003	---	---
ppm Water	ppm	ASTM D6304	<500	27	---	---
% Gasoline	%	*In-House	<0.50	0.0	---	---
% Biodiesel	%	*In-House	<20.0	0.0	---	---



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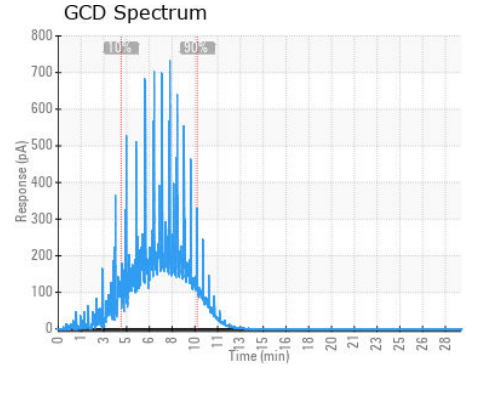
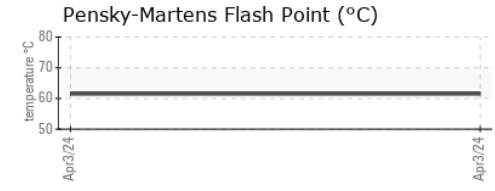
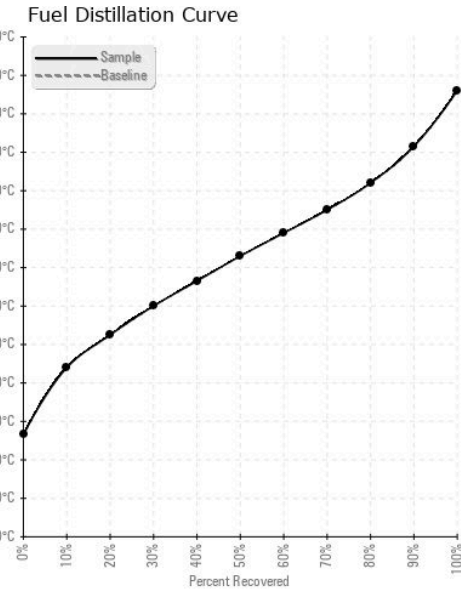


FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	<span style="color: red;">▲</span> <b>71561</b>	---	---
Particles >6µm	ASTM D7647	>640	<span style="color: red;">▲</span> <b>38249</b>	---	---
Particles >14µm	ASTM D7647	>80	<span style="color: red;">▲</span> <b>6080</b>	---	---
Particles >21µm	ASTM D7647	>20	<span style="color: red;">▲</span> <b>1609</b>	---	---
Particles >38µm	ASTM D7647	>4	<span style="color: red;">▲</span> <b>60</b>	---	---
Particles >71µm	ASTM D7647	>3	<b>3</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	<span style="color: red;">▲</span> <b>23/22/20</b>	---	---

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

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

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0664021      **Received** : 09 Apr 2024  
**Lab Number** : 06143491      **Tested** : 18 Apr 2024  
**Unique Number** : 10968299      **Diagnosed** : 18 Apr 2024 - Doug Bogart  
**Test Package** : DF-3 ( Additional Tests: Fuel, Screen )

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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)