



# FUEL REPORT

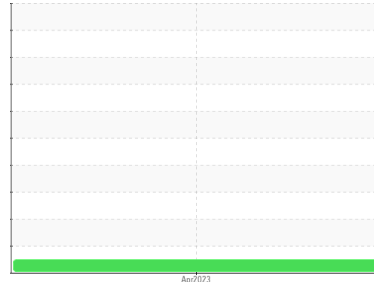
Sample Rating Trend

**NORMAL**



Machine Id  
**WFBH TANK 2 50K A**

Component  
**Diesel Fuel**  
Fluid  
**NOT GIVEN (--- 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

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.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC05830569</b>	---	---
Sample Date	Client Info		<b>26 Apr 2023</b>	---	---
Machine Age	hrs	Client Info	<b>0</b>	---	---
Sample Status			<b>NORMAL</b>	---	---

## PHYSICAL PROPERTIES

	method	limit/base	current	history1	history2
Specific Gravity	*ASTM D1298		<b>0.842</b>	---	---
Fuel Color	text	*Visual Screen	<b>Red</b>	---	---
ASTM Color	scalar	*ASTM D1500	<b>L4.0</b>	---	---
Visc @ 40°C	cSt	ASTM D445	<b>2.53</b>	---	---
Pensky-Martens Flash Point	°C	*PMCC Calculated	<b>58</b>	---	---

## SULFUR CONTENT

	method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m	<b>0</b>	---	---
Sulfur (UVF)	ppm	ASTM D5453	<b>107</b>	---	---

## DISTILLATION

	method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86	<b>162</b>	---	---
5% Distillation Point	°C	ASTM D86	<b>187</b>	---	---
10% Distill Point	°C	ASTM D86	<b>200</b>	---	---
15% Distillation Point	°C	ASTM D86	<b>210</b>	---	---
20% Distill Point	°C	ASTM D86	<b>219</b>	---	---
30% Distill Point	°C	ASTM D86	<b>233</b>	---	---
40% Distill Point	°C	ASTM D86	<b>247</b>	---	---
50% Distill Point	°C	ASTM D86	<b>260</b>	---	---
60% Distill Point	°C	ASTM D86	<b>274</b>	---	---
70% Distill Point	°C	ASTM D86	<b>290</b>	---	---
80% Distill Point	°C	ASTM D86	<b>306</b>	---	---
85% Distillation Point	°C	ASTM D86	<b>317</b>	---	---
90% Distill Point	°C	ASTM D86	<b>329</b>	---	---
95% Distillation Point	°C	ASTM D86	<b>349</b>	---	---
Final Boiling Point	°C	ASTM D86	<b>356</b>	---	---
Distillation Residue	%	ASTM D86	<b>1.4</b>	---	---
Distillation Loss	%	ASTM D86	<b>0.7</b>	---	---

## IGNITION QUALITY

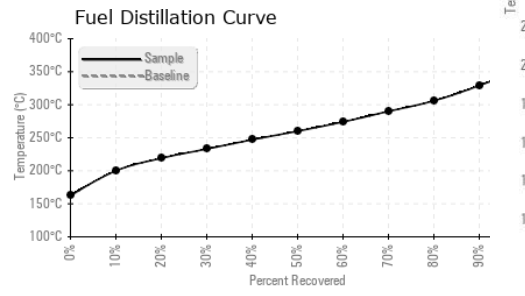
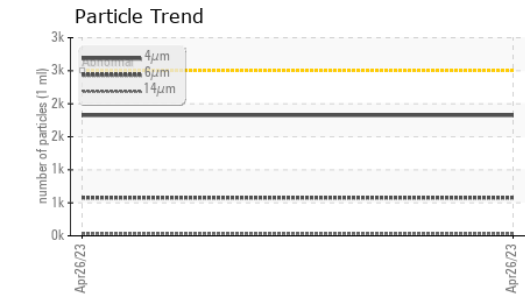
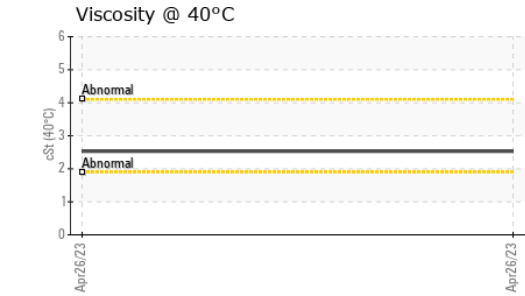
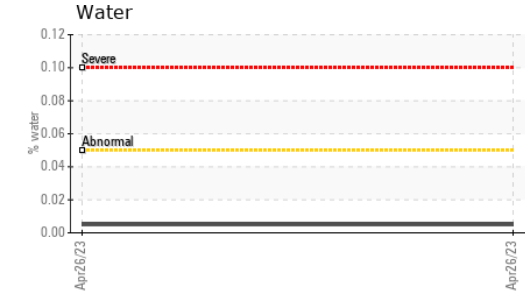
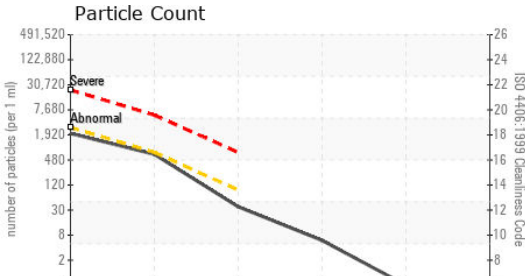
	method	limit/base	current	history1	history2
API Gravity	ASTM D7777		<b>36.6</b>	---	---
Cetane Index	ASTM D4737	<40.0	<b>47.7</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	<b>0</b>	---
Sodium	ppm	ASTM D5185m	<0.1	<b>0</b>	---
Potassium	ppm	ASTM D5185m	<0.1	<b>0</b>	---
Water	%	ASTM D6304	<0.05	<b>0.005</b>	---
ppm Water	ppm	ASTM D6304	<500	<b>54.3</b>	---
% Gasoline	%	*In-House	<0.50	<b>0.0</b>	---
% Biodiesel	%	*In-House	<20.0	<b>0.0</b>	---



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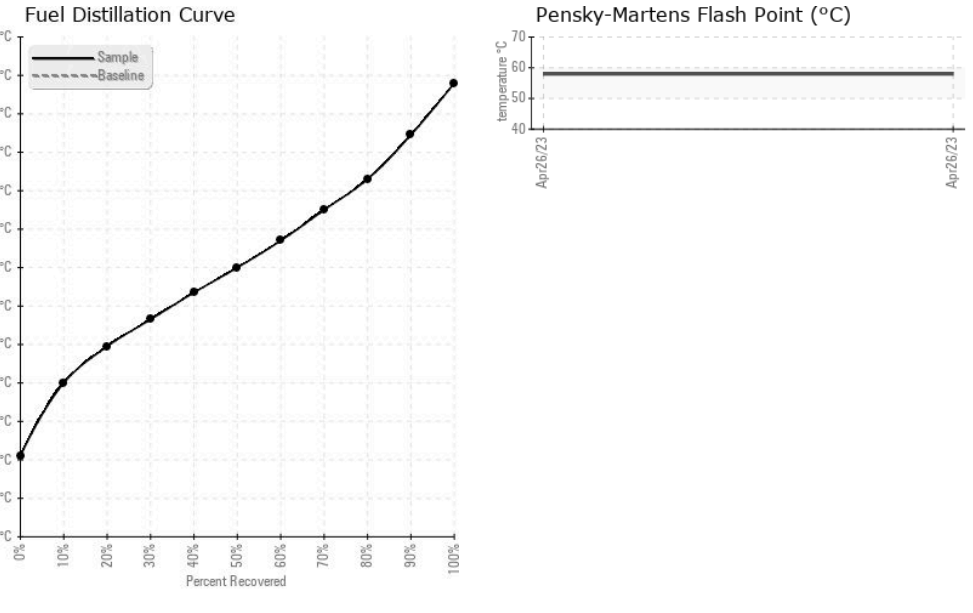


FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	<b>1825</b>	---	---
Particles >6µm	ASTM D7647	>640	<b>577</b>	---	---
Particles >14µm	ASTM D7647	>80	<b>32</b>	---	---
Particles >21µm	ASTM D7647	>20	<b>5</b>	---	---
Particles >38µm	ASTM D7647	>4	<b>0</b>	---	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	<b>18/16/12</b>	---	---

HEAVY METALS	method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m <0.1	<b>&lt;1</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>1</b>	---	---
Phosphorus	ppm	ASTM D5185m <0.1	<b>2</b>	---	---
Zinc	ppm	ASTM D5185m <0.1	<b>0</b>	---	---

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

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC05830569 **Received** : 26 Apr 2023  
**Lab Number** : **05830569** **Diagnosed** : 04 May 2023  
**Unique Number** : 10444062 **Diagnostician** : Doug Bogart  
**Test Package** : DF-2 ( Additional Tests: Screen )

**GAINES OIL COMPANY**  
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 GOLDSTON, NC  
 US 27252  
 Contact: RJ JOHANSEN  
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 T: (732)779-1331  
 F: (919)898-2981

Certificate L2367  
 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)