



# FUEL REPORT

Sample Rating Trend

WATER



Machine Id  
**YFF200165**

Component  
**Diesel Fuel**  
Fluid  
**DIESEL FUEL No. 2 (--- GAL)**



## DIAGNOSIS

### ▲ Recommendation

We advise that you follow the water drain-off procedure for this component. We recommend you service and check the fuel filters for mucous-like deposits. Check with fuel supplier for biocides available to destroy the microorganisms in the fuel system. We were unable to perform a particle count due to a high concentration of particles present in this sample.

### Corrosion

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

### ▲ Contaminants

Moderate concentration of visible dirt/debris present in the fuel. Excessive free water present. There is a light concentration of Bacteria, Yeast and Fungus present in the sample.

### Fuel Condition

The fuel is no longer serviceable due to the presence of contaminants. 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		<b>KT0000475</b>	---	---
Sample Date	Client Info		<b>27 Feb 2023</b>	---	---
Machine Age	hrs	Client Info	<b>64</b>	---	---
Sample Status			<b>SEVERE</b>	---	---

## PHYSICAL PROPERTIES

	method	limit/base	current	history1	history2
Specific Gravity	*ASTM D1298		<b>0.839</b>	---	---
Fuel Color	text	*Visual Screen	<b>Yellow</b>	---	---
ASTM Color	scalar	*ASTM D1500	<b>L1.5</b>	---	---
Visc @ 40°C	cSt	ASTM D445 4.1	<b>2.72</b>	---	---

## SULFUR CONTENT

	method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m	<b>0</b>	---	---
Sulfur (UVF)	ppm	ASTM D5453	<b>8</b>	---	---

## DISTILLATION

	method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86	<b>160</b>	---	---
5% Distillation Point	°C	ASTM D86	<b>196</b>	---	---
10% Distill Point	°C	ASTM D86	<b>209</b>	---	---
15% Distillation Point	°C	ASTM D86	<b>218</b>	---	---
20% Distill Point	°C	ASTM D86	<b>225</b>	---	---
30% Distill Point	°C	ASTM D86	<b>240</b>	---	---
40% Distill Point	°C	ASTM D86	<b>253</b>	---	---
50% Distill Point	°C	ASTM D86	<b>266</b>	---	---
60% Distill Point	°C	ASTM D86	<b>279</b>	---	---
70% Distill Point	°C	ASTM D86	<b>292</b>	---	---
80% Distill Point	°C	ASTM D86	<b>307</b>	---	---
85% Distillation Point	°C	ASTM D86	<b>315</b>	---	---
90% Distill Point	°C	ASTM D86	<b>324</b>	---	---
95% Distillation Point	°C	ASTM D86	<b>336</b>	---	---
Final Boiling Point	°C	ASTM D86	<b>347</b>	---	---
Distillation Residue	%	ASTM D86	<b>1.4</b>	---	---
Distillation Loss	%	ASTM D86	<b>-0.3</b>	---	---

## IGNITION QUALITY

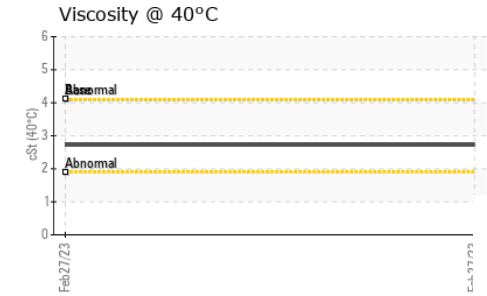
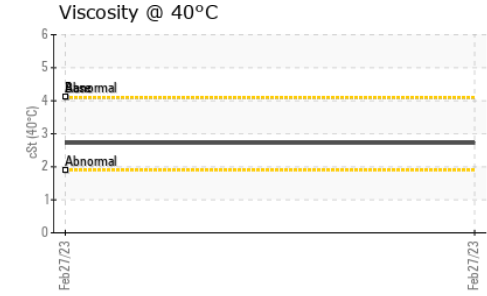
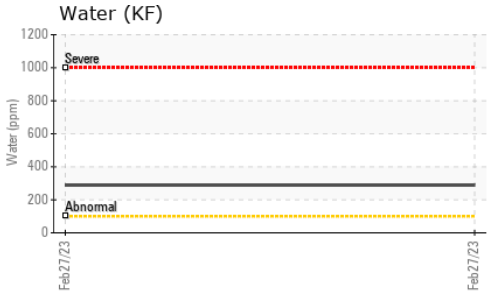
	method	limit/base	current	history1	history2
API Gravity	ASTM D7777		<b>37.2</b>	---	---
Cetane Index	ASTM D4737	<40.0	<b>50.2</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m <1.0	<b>&lt;1</b>	---	---
Sodium	ppm	ASTM D5185m <0.1	<b>&lt;1</b>	---	---
Potassium	ppm	ASTM D5185m <0.1	<b>&lt;1</b>	---	---
Water	%	ASTM D6304 <0.05	<b>0.028</b>	---	---
ppm Water	ppm	ASTM D6304 <500	<b>289.4</b>	---	---
% Gasoline	%	*In-House <0.50	<b>0.0</b>	---	---
% Biodiesel	%	*In-House <20.0	<b>5.2</b>	---	---



# FUEL REPORT

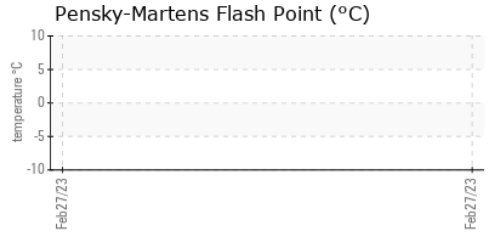
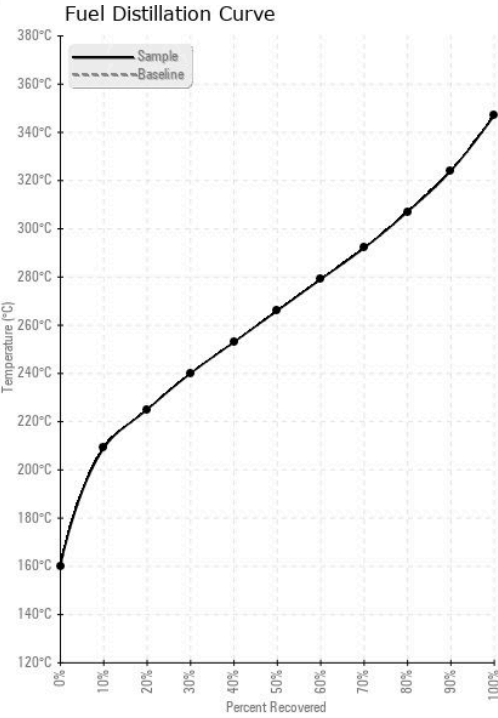


MICROBIAL	method	limit/base	current	history1	history2	
Bacteria	CFU/ml	WC-Method	>=100000	0	---	---
Yeast	CFU/ml	WC-Method	>=100000	▲ 100	---	---
Mold	Colonies	WC-Method	MODER	---	---	---

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	0	---	---
Magnesium	ppm	ASTM D5185m	<0.1	1	---	---
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

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KT0000475 **Received** : 12 Jun 2023  
**Lab Number** : 05871315 **Tested** : 22 Jun 2023  
**Unique Number** : 10511099 **Diagnosed** : 22 Jun 2023 - Doug Bogart  
**Test Package** : DF-2 ( Additional Tests: Bacteria, Screen )

**PANHANDLE IMPLEMENT INC**  
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 DUMAS, TX  
 US 79029  
 Contact: ADRIAN  
 adrian@panhandleimplement.com

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)