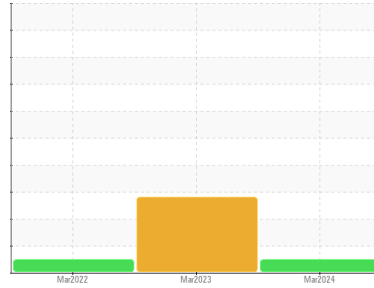




# FUEL REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**HRMC 30K**

Component  
**Diesel Fuel**  
Fluid

**No.2 DIESEL FUEL (ULTRALOW SULPHUR) (10000 GAL)**

## 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

There is no bacteria or fungus (yeast and/or mold) indicated in the sample. The water content is negligible. 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			<b>WCDF4529</b>	WCDF4371	WCDF04376
Sample Date	Client Info			<b>12 Mar 2024</b>	29 Mar 2023	07 Mar 2022
Machine Age	mls	Client Info		<b>0</b>	0	0
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		*ASTM D1298	0.839	---	0.833	0.833
Fuel Color	text	*Visual Screen	Yellow	<b>Red</b>	Red	Red
ASTM Color	scalar	*ASTM D1500		<b>L4.5</b>	L5.5	L5.0
Visc @ 40°C	cSt	ASTM D445	3.0	<b>2.54</b>	2.23	2.63
Pensky-Martens Flash Point	°C	*PMCC Calculated	52	<b>62.2</b>	61	64
Cloud Point	°C	ASTM D5771		<b>-11</b>	-11	-12

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m	10	<b>12</b>	0	3
Sulfur (UVF)	ppm	ASTM D5453		<b>7</b>	12	7

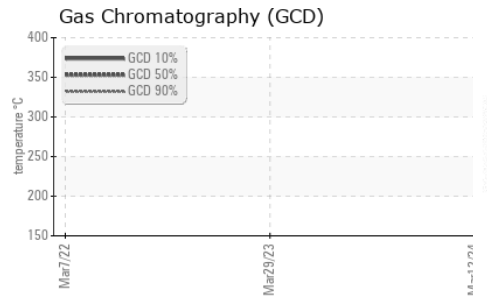
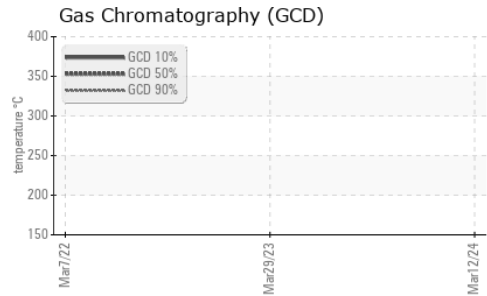
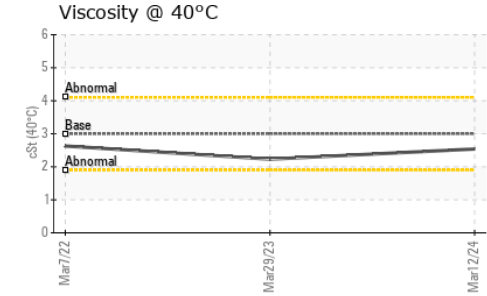
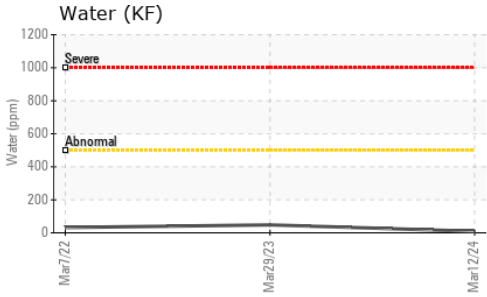
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86	165	<b>173</b>	169	153
5% Distillation Point	°C	ASTM D86		<b>196</b>	193	192
10% Distill Point	°C	ASTM D86	201	<b>207</b>	203	203
15% Distillation Point	°C	ASTM D86		<b>215</b>	212	212
20% Distill Point	°C	ASTM D86	216	<b>223</b>	220	220
30% Distill Point	°C	ASTM D86	230	<b>239</b>	236	235
40% Distill Point	°C	ASTM D86	243	<b>252</b>	250	250
50% Distill Point	°C	ASTM D86	255	<b>265</b>	264	264
60% Distill Point	°C	ASTM D86	267	<b>278</b>	277	277
70% Distill Point	°C	ASTM D86	280	<b>292</b>	291	291
80% Distill Point	°C	ASTM D86	295	<b>306</b>	307	306
85% Distillation Point	°C	ASTM D86		<b>317</b>	316	315
90% Distill Point	°C	ASTM D86	310	<b>327</b>	327	326
95% Distillation Point	°C	ASTM D86		<b>344</b>	342	341
Final Boiling Point	°C	ASTM D86	341	<b>357</b>	350	350
Distillation Residue	%	ASTM D86	3.0	---	1.4	1.4
Distillation Loss	%	ASTM D86	3.0	---	0.8	0.7

IGNITION QUALITY		method	limit/base	current	history1	history2
API Gravity		ASTM D7777	37.7	<b>38</b>	38.4	38.4
Cetane Index		ASTM D4737	<40.0	<b>52</b>	52.0	52.0



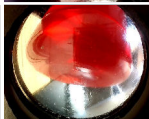
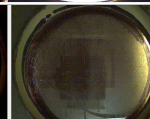
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	<b>0</b>	<1	0
Sodium	ppm	ASTM D5185m	<0.1	<b>&lt;1</b>	0	0
Potassium	ppm	ASTM D5185m	<0.1	<b>&lt;1</b>	<1	1
Water	%	ASTM D6304	<0.05	<b>0.001</b>	0.004	0.003
ppm Water	ppm	ASTM D6304	<500	<b>9</b>	48.3	32.2
% Gasoline	%	*In-House	<0.50	<b>0.0</b>	0.0	0.0
% Biodiesel	%	*In-House	<20.0	<b>0.0</b>	0.0	0.0



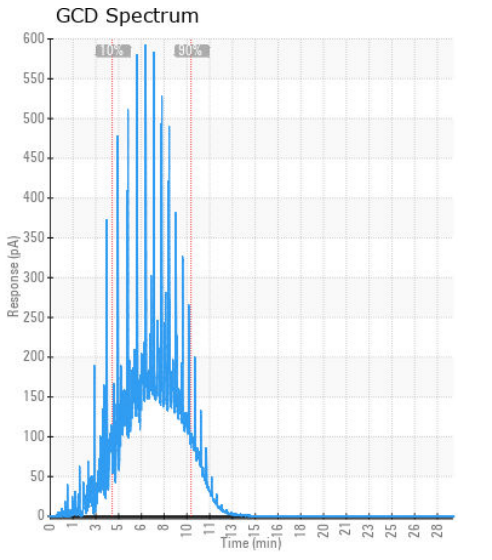
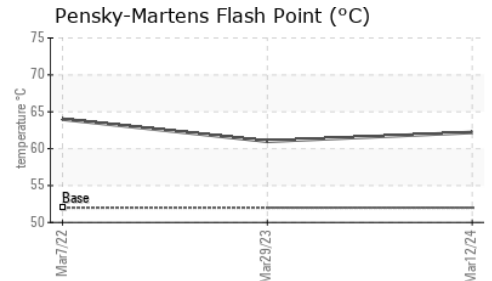
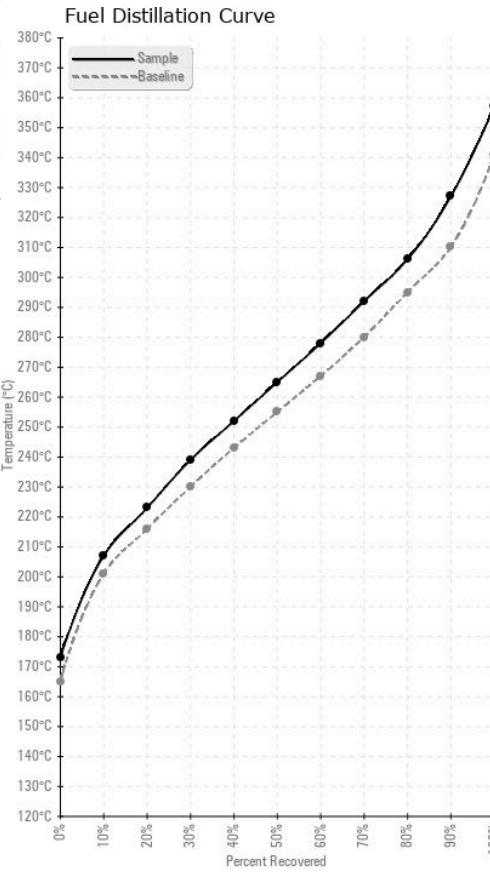
# FUEL REPORT



HEAVY METALS	method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m	<0.1	0	<1
Nickel	ppm	ASTM D5185m	<0.1	0	0
Lead	ppm	ASTM D5185m	<0.1	0	0
Vanadium	ppm	ASTM D5185m	<0.1	0	0
Iron	ppm	ASTM D5185m	<0.1	5	0
Calcium	ppm	ASTM D5185m	<0.1	3	0
Magnesium	ppm	ASTM D5185m	<0.1	0	0
Phosphorus	ppm	ASTM D5185m	<0.1	6	1
Zinc	ppm	ASTM D5185m	<0.1	0	0

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

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WCDF4529      **Received** : 18 Mar 2024  
**Lab Number** : 06121297      **Tested** : 01 Apr 2024  
**Unique Number** : 10930130      **Diagnosed** : 01 Apr 2024 - Doug Bogart  
**Test Package** : DF-2 ( Additional Tests: CldPt, Fuel, Screen )

**TANK WIZARDS**  
 1511 MASTERS RD NW  
 PALM BAY, FL  
 US 32907  
 Contact: WENDALL STRODERD  
 wendall@tankwizards.com  
 T: (321)427-5149  
 F: (321)574-4131

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)