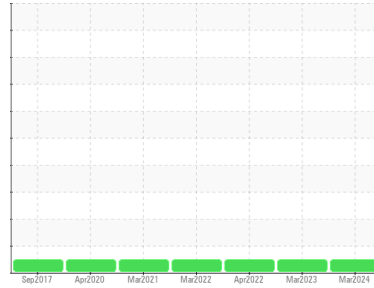




# FUEL REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**VIERA HOSPITAL UST 3**

Component  
**Diesel Fuel**  
Fluid

**No.2 DIESEL FUEL (ULTRALOW SULPHUR) (20000 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

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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>WCDF4542</b>	WCDF4345	WCDF04626
Sample Date	Client Info			<b>12 Mar 2024</b>	16 Mar 2023	12 Apr 2022
Machine Age	mls	Client Info		<b>0</b>	0	0
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		*ASTM D1298	0.839	---	0.842	---
Fuel Color	text	*Visual Screen	Yllow	<b>Red</b>	Red	---
ASTM Color	scalar	*ASTM D1500		<b>L4.5</b>	L4.0	L4.5
Visc @ 40°C	cSt	ASTM D445	3.0	<b>2.66</b>	2.46	2.73
Pensky-Martens Flash Point	°C	*PMCC Calculated	52	<b>65.1</b>	58	---
Cloud Point	°C	ASTM D5771		<b>-11</b>	-13	---

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m	10	<b>20</b>	0	10
Sulfur (UVF)	ppm	ASTM D5453		<b>17</b>	10	20

DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86	165	<b>177</b>	16187	---
5% Distillation Point	°C	ASTM D86		<b>201</b>	187	---
10% Distill Point	°C	ASTM D86	201	<b>211</b>	196	---
15% Distillation Point	°C	ASTM D86		<b>219</b>	206	---
20% Distill Point	°C	ASTM D86	216	<b>226</b>	215	---
30% Distill Point	°C	ASTM D86	230	<b>241</b>	231	---
40% Distill Point	°C	ASTM D86	243	<b>253</b>	246	---
50% Distill Point	°C	ASTM D86	255	<b>265</b>	261	---
60% Distill Point	°C	ASTM D86	267	<b>278</b>	275	---
70% Distill Point	°C	ASTM D86	280	<b>291</b>	289	---
80% Distill Point	°C	ASTM D86	295	<b>305</b>	305	---
85% Distillation Point	°C	ASTM D86		<b>316</b>	314	---
90% Distill Point	°C	ASTM D86	310	<b>326</b>	326	---
95% Distillation Point	°C	ASTM D86		<b>343</b>	343	---
Final Boiling Point	°C	ASTM D86	341	<b>357</b>	353	---
Distillation Residue	%	ASTM D86	3.0	---	1.4	---
Distillation Loss	%	ASTM D86	3.0	---	0.6	---

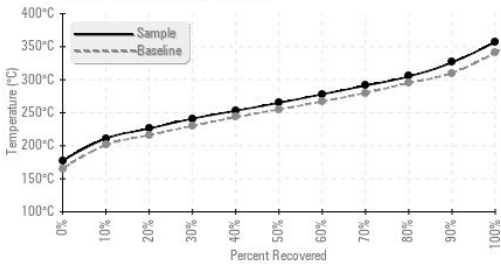
IGNITION QUALITY		method	limit/base	current	history1	history2
API Gravity		ASTM D7777	37.7	<b>36.1</b>	36.6	---
Cetane Index		ASTM D4737	<40.0	<b>48</b>	47.6	---

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>	<1	<1
Potassium	ppm	ASTM D5185m	<0.1	<b>&lt;1</b>	0	0
Water	%	ASTM D6304	<0.05	<b>0.006</b>	0.003	0.013
ppm Water	ppm	ASTM D6304	<500	<b>61</b>	30.9	130.9
% 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

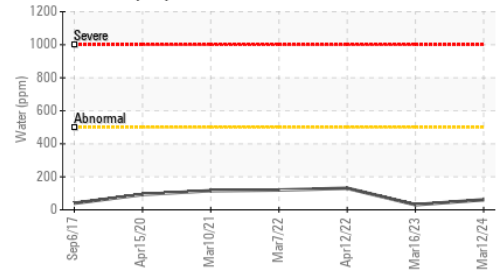


# FUEL REPORT

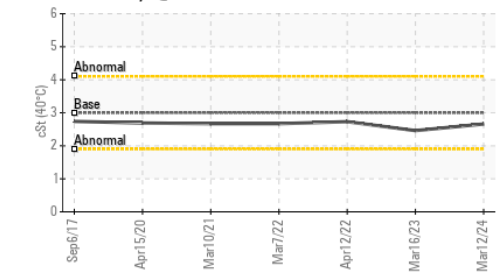
Fuel Distillation Curve



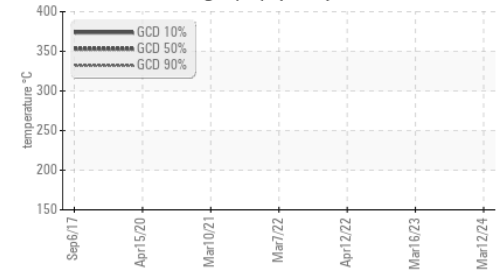
Water (KF)



Viscosity @ 40°C



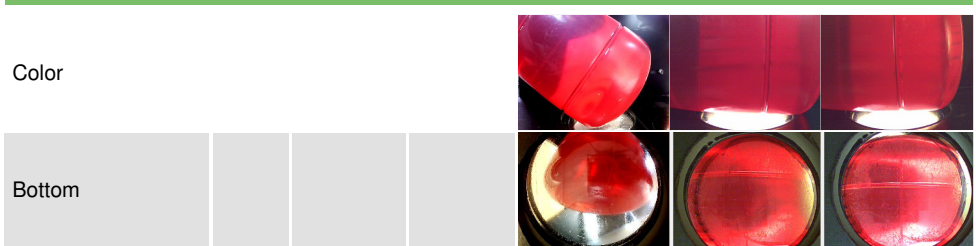
Gas Chromatography (GCD)



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	---	---	1452
Particles >6µm	ASTM D7647	>640	---	---	351
Particles >14µm	ASTM D7647	>80	---	---	34
Particles >21µm	ASTM D7647	>20	---	---	8
Particles >38µm	ASTM D7647	>4	---	---	0
Particles >71µm	ASTM D7647	>3	---	---	0
Oil Cleanliness	ISO 4406 (c)	>18/16/13	---	---	18/16/12

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

SAMPLE IMAGES



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : WCDF4542  
 Lab Number : 06121312  
 Unique Number : 10930145  
 Test Package : DF-2 ( Additional Tests: CldPt, Fuel, Screen )

Received : 18 Mar 2024  
 Tested : 01 Apr 2024  
 Diagnosed : 01 Apr 2024 - Doug Bogart

**TANK WIZARDS**  
 1511 MASTERS RD NW  
 PALM BAY, FL  
 US 32907

Contact: WENDALL STRODERD  
 wendall@tankwizards.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)

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