



# FUEL REPORT

Sample Rating Trend



VIS DEBRIS



Area

**QTS SUWANEE DC2 [17760]**

Machine Id

**[QTS SUWANEE DC2] G2-4**

Component

**Diesel Fuel**

Fluid

**No.2 DIESEL FUEL (ULTRALOW SULPHUR) (8000 GAL)**

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component if applicable. 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 a moderate amount of particulates present in the fuel. Moderate concentration of visible dirt/debris present in the fuel. The water content is negligible. There is no bacteria or fungus (yeast and/or mold) indicated in the sample.

### 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>WC0953861</b>	---	---
Sample Date		Client Info		<b>20 May 2024</b>	---	---
Machine Age	hrs	Client Info		<b>0</b>	---	---
Sample Status				<b>ABNORMAL</b>	---	---

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Fuel Color	text	*Visual Screen	Yellow	<b>Red</b>	---	---
ASTM Color	scalar	*ASTM D1500		<b>L4.5</b>	---	---
Visc @ 40°C	cSt	ASTM D445	3.0	<b>2.5</b>	---	---
Pensky-Martens Flash Point	°C	*PMCC Calculated	52	<b>65.5</b>	---	---

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m	10	<b>0</b>	---	---
Sulfur (UVF)	ppm	ASTM D5453		<b>48</b>	---	---

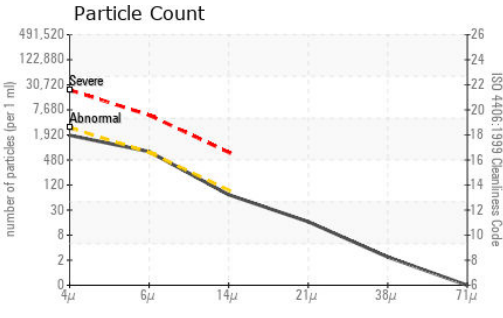
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86	165	<b>177</b>	---	---
5% Distillation Point	°C	ASTM D86		<b>200</b>	---	---
10% Distill Point	°C	ASTM D86	201	<b>209</b>	---	---
15% Distillation Point	°C	ASTM D86		<b>217</b>	---	---
20% Distill Point	°C	ASTM D86	216	<b>224</b>	---	---
30% Distill Point	°C	ASTM D86	230	<b>238</b>	---	---
40% Distill Point	°C	ASTM D86	243	<b>251</b>	---	---
50% Distill Point	°C	ASTM D86	255	<b>263</b>	---	---
60% Distill Point	°C	ASTM D86	267	<b>276</b>	---	---
70% Distill Point	°C	ASTM D86	280	<b>289</b>	---	---
80% Distill Point	°C	ASTM D86	295	<b>303</b>	---	---
85% Distillation Point	°C	ASTM D86		<b>313</b>	---	---
90% Distill Point	°C	ASTM D86	310	<b>323</b>	---	---
95% Distillation Point	°C	ASTM D86		<b>340</b>	---	---
Final Boiling Point	°C	ASTM D86	341	<b>355</b>	---	---

IGNITION QUALITY		method	limit/base	current	history1	history2
API Gravity		ASTM D7777	37.7	<b>35</b>	---	---
Cetane Index		ASTM D4737	<40.0	<b>46</b>	---	---

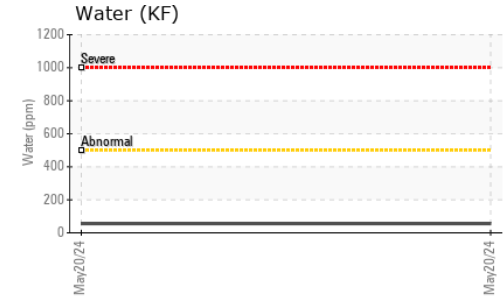
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	<b>0</b>	---	---
Sodium	ppm	ASTM D5185m	<0.1	<b>1</b>	---	---
Potassium	ppm	ASTM D5185m	<0.1	<b>1</b>	---	---
Water	%	ASTM D6304	<0.05	<b>0.005</b>	---	---
ppm Water	ppm	ASTM D6304	<500	<b>56</b>	---	---
% Gasoline	%	*In-House	<0.50	<b>0.0</b>	---	---
% Biodiesel	%	*In-House	<20.0	<b>0.0</b>	---	---



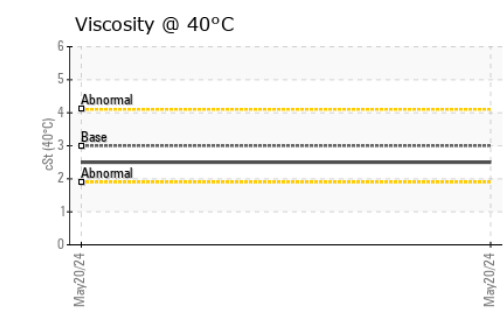
# FUEL REPORT



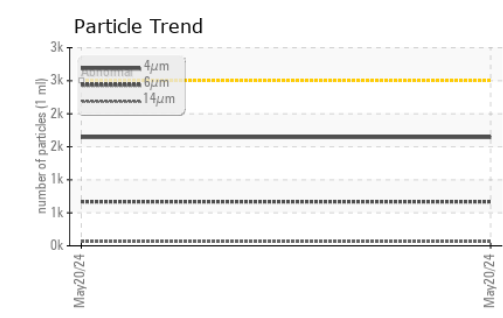
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	<b>1644</b>	---	---
Particles >6µm	ASTM D7647	>640	<b>668</b>	---	---
Particles >14µm	ASTM D7647	>80	<b>62</b>	---	---
Particles >21µm	ASTM D7647	>20	<b>14</b>	---	---
Particles >38µm	ASTM D7647	>4	<b>2</b>	---	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	<b>18/17/13</b>	---	---



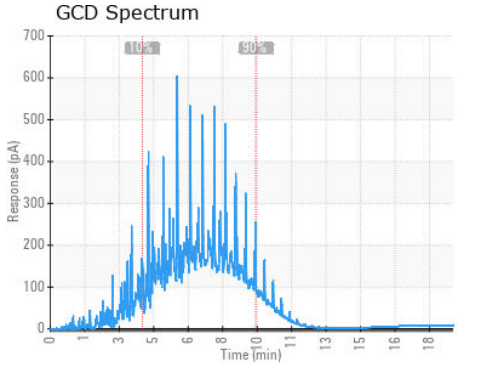
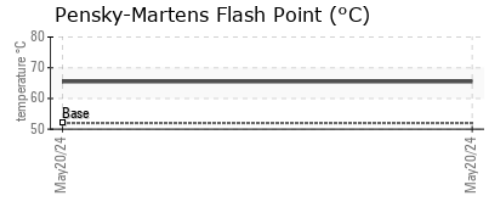
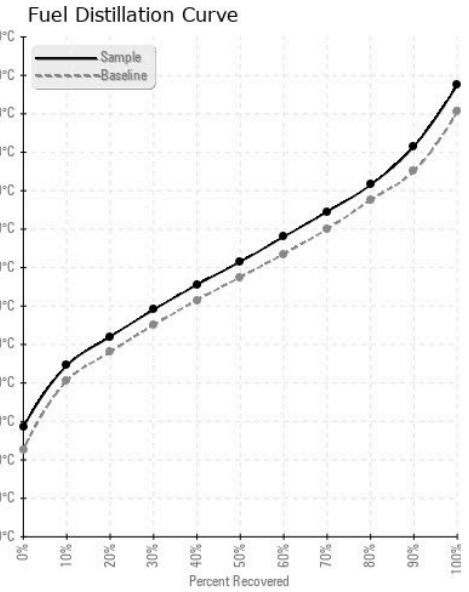
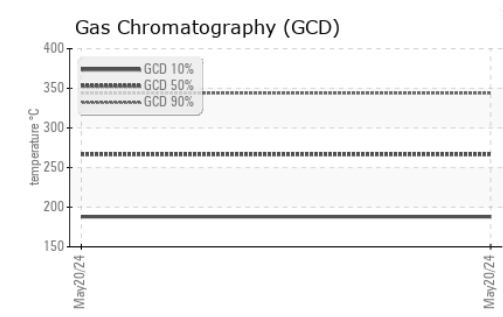
HEAVY METALS	method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m <0.1	<b>0</b>	---	---
Nickel	ppm	ASTM D5185m <0.1	<b>&lt;1</b>	---	---
Lead	ppm	ASTM D5185m <0.1	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m <0.1	<b>0</b>	---	---
Iron	ppm	ASTM D5185m <0.1	<b>0</b>	---	---
Calcium	ppm	ASTM D5185m <0.1	<b>0</b>	---	---
Magnesium	ppm	ASTM D5185m <0.1	<b>&lt;1</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				no image	no image
Bottom				no image	no image



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0953861      **Received** : 10 Jun 2024  
**Lab Number** : 06205285      **Tested** : 18 Jun 2024  
**Unique Number** : 11072746      **Diagnosed** : 18 Jun 2024 - Elizabeth Valachovic  
**Test Package** : DF-2 ( Additional Tests: Fuel, Screen )

**PETROLEUM RECOVERY SERVICES**  
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 F:

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)