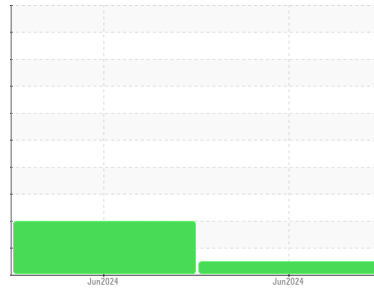




# FUEL REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**LIFE FLIGHT JET TANK**  
 Component  
**Jet Fuel**  
 Fluid  
**JET FUEL Type A (--- QTS)**

### DIAGNOSIS

#### Recommendation

All laboratory tests indicate that this sample meets ASTM D1655 specifications for Jet A fuel.

#### Wear

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

#### Contamination

There is no bacteria or fungus (yeast and/or mold) indicated in the sample. The water content is negligible. The amount and size of particulates present in the system are acceptable.

#### Fluid Condition

The sulfur level is acceptable for this fluid. The AN level is acceptable for this fluid. The condition of the fuel is suitable for further service. ASTM D5453 method for ULSD validation not applicable.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>WC06209011</b>	WC06198649	---
Sample Date	Client Info			<b>13 Jun 2024</b>	02 Jun 2024	---
Machine Age	hrs	Client Info		<b>0</b>	0	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>N/A</b>	N/A	---
Sample Status				<b>NORMAL</b>	ABNORMAL	---

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		*ASTM D1298		<b>0.804</b>	0.801	---
Fuel Color	text	*Visual Screen		<b>Clear</b>	Clear	---
ASTM Color	scalar	*ASTM D1500		<b>L0.5</b>	L0.5	---
Visc @ 40°C	cSt	ASTM D445	<8.0	<b>1.33</b>	1.33	---
Pensky-Martens Flash Point	°C	*PMCC Calculated	38	<b>44.4</b>	43.5	---

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m	<3000	<b>356</b>	414	---
Sulfur (UVF)	ppm	ASTM D5453		<b>283</b>	308	---

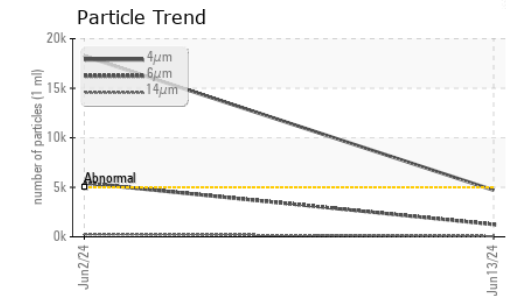
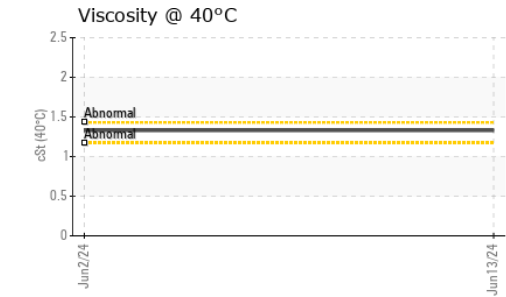
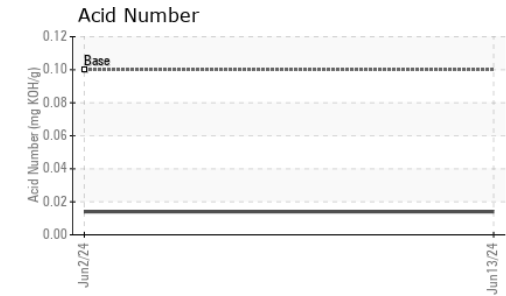
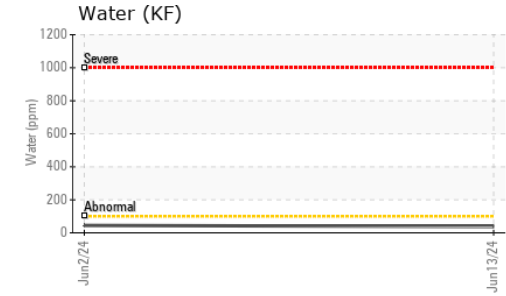
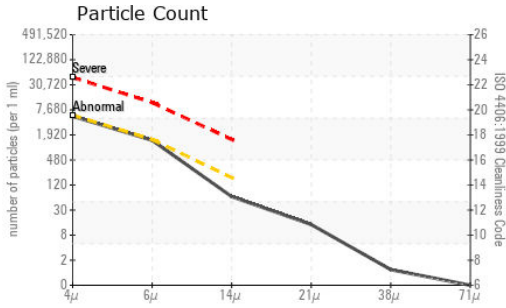
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86		<b>153</b>	154	---
5% Distillation Point	°C	ASTM D86		<b>170</b>	167	---
10% Distill Point	°C	ASTM D86	205	<b>173</b>	172	---
15% Distillation Point	°C	ASTM D86		<b>177</b>	176	---
20% Distill Point	°C	ASTM D86		<b>181</b>	180	---
30% Distill Point	°C	ASTM D86		<b>188</b>	186	---
40% Distill Point	°C	ASTM D86		<b>195</b>	194	---
50% Distill Point	°C	ASTM D86		<b>203</b>	202	---
60% Distill Point	°C	ASTM D86		<b>212</b>	212	---
70% Distill Point	°C	ASTM D86		<b>222</b>	222	---
80% Distill Point	°C	ASTM D86		<b>234</b>	234	---
85% Distillation Point	°C	ASTM D86		<b>242</b>	241	---
90% Distill Point	°C	ASTM D86		<b>251</b>	249	---
95% Distillation Point	°C	ASTM D86		<b>265</b>	262	---
Final Boiling Point	°C	ASTM D86	300	<b>279</b>	278	---
Distillation Residue	%	ASTM D86	1.5	<b>1.2</b>	1.2	---
Distillation Loss	%	ASTM D86	1.5	<b>0.7</b>	0.7	---

IGNITION QUALITY		method	limit/base	current	history1	history2
API Gravity		ASTM D7777	44	<b>44.5</b>	45.2	---
Cetane Index		ASTM D4737	<40.0	<b>46.0</b>	46.9	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	<b>&lt;1</b>	<1	---
Sodium	ppm	ASTM D5185m	<0.1	<b>2</b>	0	---
Potassium	ppm	ASTM D5185m	<0.1	<b>3</b>	2	---
Water	%	ASTM D6304	<0.05	<b>0.003</b>	0.004	---
ppm Water	ppm	ASTM D6304	<500	<b>38</b>	45	---
% Gasoline	%	*In-House	<0.50	<b>0.0</b>	0.0	---
% Biodiesel	%	*In-House	<20.0	<b>0.0</b>	0.0	---



# FUEL REPORT

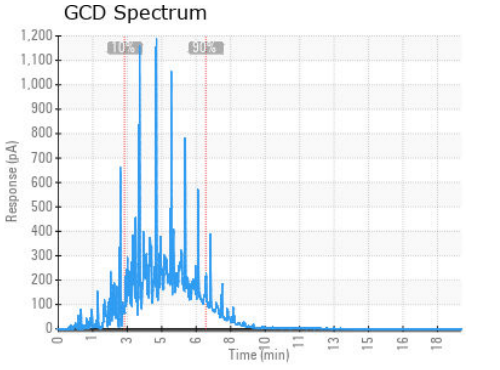
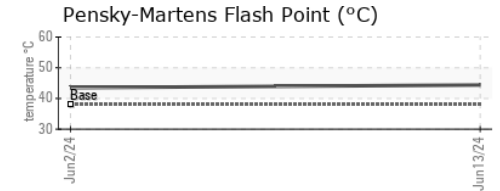
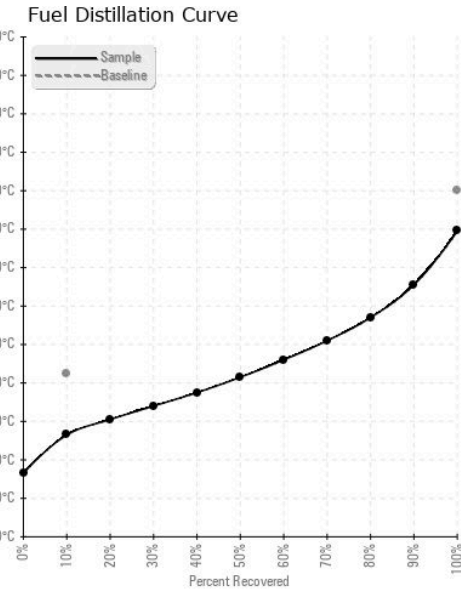


FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>4710</b>	▲ 18255	---
Particles >6µm	ASTM D7647	>1300	<b>1248</b>	▲ 5436	---
Particles >14µm	ASTM D7647	>160	<b>56</b>	▲ 263	---
Particles >21µm	ASTM D7647	>40	<b>12</b>	▲ 54	---
Particles >38µm	ASTM D7647	>10	<b>1</b>	1	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>19/17/13</b>	▲ 21/20/15	---

HEAVY METALS	method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m <0.1	<b>0</b>	0	---
Nickel	ppm	ASTM D5185m <0.1	<b>&lt;1</b>	0	---
Lead	ppm	ASTM D5185m <0.1	<b>0</b>	<1	---
Vanadium	ppm	ASTM D5185m <0.1	<b>0</b>	<1	---
Iron	ppm	ASTM D5185m <0.1	<b>0</b>	0	---
Calcium	ppm	ASTM D5185m <0.1	<b>0</b>	0	---
Magnesium	ppm	ASTM D5185m <0.1	<b>&lt;1</b>	1	---
Phosphorus	ppm	ASTM D5185m <0.1	<b>0</b>	<1	---
Zinc	ppm	ASTM D5185m <0.1	<b>&lt;1</b>	<1	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC06209011      **Received** : 13 Jun 2024  
**Lab Number** : **06209110**      **Tested** : 20 Jun 2024  
**Unique Number** : 11076571      **Diagnosed** : 20 Jun 2024 - Elizabeth Valachovic  
**Test Package** : DF-2 ( Additional Tests: API, CC FLASH, Cetane, Color-ASTM, Fuel, GC-PercFuel, GCD, ICP, KF, Oxidant)

**COUCH OIL COMPANY**  
 2907 HILLSBOROUGH RD  
 DURHAM, NC  
 US 27705  
**Contact:** JESSE BROWN  
 jesse@couchoilcompany.com  
 T: (919)285-5408  
 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)