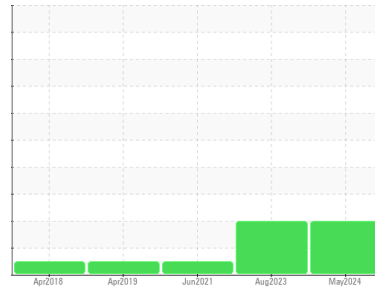




# FUEL REPORT

## Sample Rating Trend



ISO



Machine Id

## WALTONWOOD MGMT

Component

### Diesel Fuel

Fluid

### No.2 DIESEL FUEL (ULTRALOW SULPHUR) (--- GAL)

#### DIAGNOSIS

##### Recommendation

We advise that you filter this fluid before use. 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 high amount of particulates 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>WC0949580</b>	WC05925212	WC05268977
Sample Date	Client Info			<b>31 May 2024</b>	15 Aug 2023	01 Jun 2021
Machine Age	hrs	Client Info		<b>0</b>	0	0
Sample Status				<b>ABNORMAL</b>	ATTENTION	NORMAL

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		*ASTM D1298	0.839	---	0.841	0.843
Fuel Color	text	*Visual Screen	Yllow	<b>Red</b>	Red	Red
ASTM Color	scalar	*ASTM D1500		<b>L4.5</b>	L4.0	L5.0
Visc @ 40°C	cSt	ASTM D445	3.0	<b>2.37</b>	2.43	2.55
Pensky-Martens Flash Point	°C	*PMCC Calculated	52	<b>60.5</b>	60	62

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m	10	<b>1</b>	0	65
Sulfur (UVF)	ppm	ASTM D5453		<b>20</b>	20	33

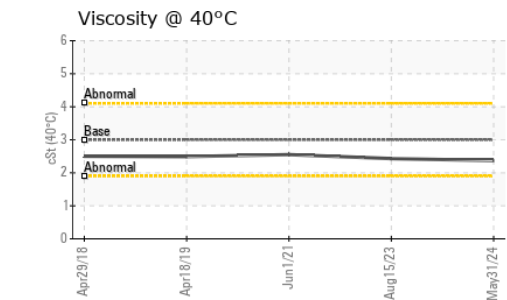
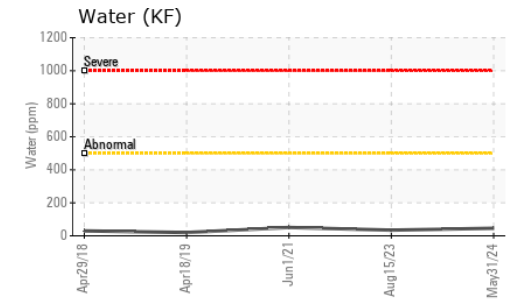
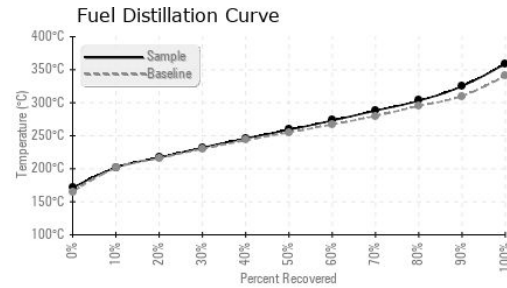
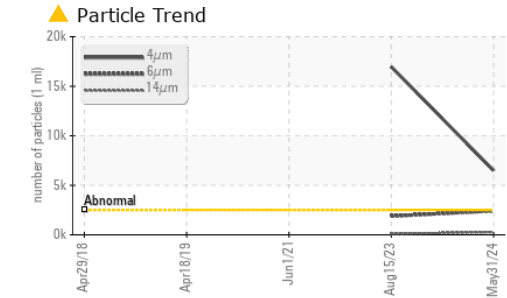
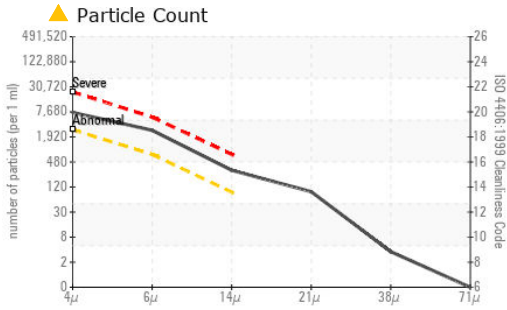
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86	165	<b>171</b>	166	165
5% Distillation Point	°C	ASTM D86		<b>193</b>	189	192
10% Distill Point	°C	ASTM D86	201	<b>202</b>	199	201
15% Distillation Point	°C	ASTM D86		<b>209</b>	208	210
20% Distill Point	°C	ASTM D86	216	<b>217</b>	216	218
30% Distill Point	°C	ASTM D86	230	<b>232</b>	231	233
40% Distill Point	°C	ASTM D86	243	<b>246</b>	245	247
50% Distill Point	°C	ASTM D86	255	<b>259</b>	259	261
60% Distill Point	°C	ASTM D86	267	<b>273</b>	273	275
70% Distill Point	°C	ASTM D86	280	<b>288</b>	288	290
80% Distill Point	°C	ASTM D86	295	<b>303</b>	305	306
85% Distillation Point	°C	ASTM D86		<b>314</b>	314	315
90% Distill Point	°C	ASTM D86	310	<b>325</b>	326	326
95% Distillation Point	°C	ASTM D86		<b>343</b>	343	343
Final Boiling Point	°C	ASTM D86	341	<b>359</b>	350	351
Distillation Residue	%	ASTM D86	3.0	---	1.4	1.4
Distillation Loss	%	ASTM D86	3.0	---	0.7	0.6

IGNITION QUALITY		method	limit/base	current	history1	history2
API Gravity		ASTM D7777	37.7	<b>36</b>	36.8	36.4
Cetane Index		ASTM D4737	<40.0	<b>48</b>	47.8	47.5

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	<b>&lt;1</b>	<1	0
Sodium	ppm	ASTM D5185m	<0.1	<b>&lt;1</b>	0	0
Potassium	ppm	ASTM D5185m	<0.1	<b>1</b>	<1	<1
Water	%	ASTM D6304	<0.05	<b>0.004</b>	0.003	0.005
ppm Water	ppm	ASTM D6304	<500	<b>46</b>	34.4	50.6
% Gasoline	%	*In-House	<0.50	<b>0.0</b>	0.0	0.0
% Biodiesel	%	*In-House	<20.0	<b>0.0</b>	0.0	1.3



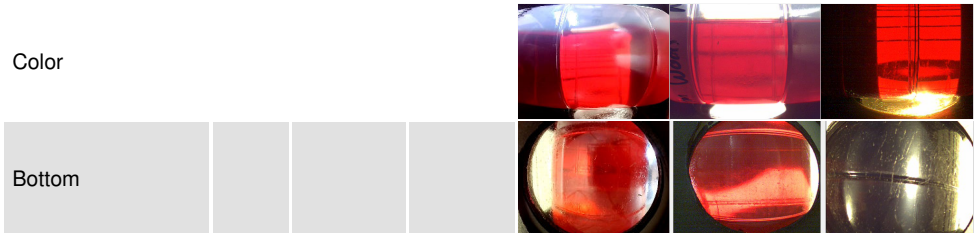
# FUEL REPORT



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	▲ 6481	● 16954	---
Particles >6µm	ASTM D7647	>640	▲ 2420	● 1884	---
Particles >14µm	ASTM D7647	>80	▲ 267	● 95	---
Particles >21µm	ASTM D7647	>20	▲ 82	● 29	---
Particles >38µm	ASTM D7647	>4	3	1	---
Particles >71µm	ASTM D7647	>3	0	0	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	▲ 20/18/15	● 21/18/14	---

HEAVY METALS	method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m <0.1	0	<1	0
Nickel	ppm	ASTM D5185m <0.1	0	0	0
Lead	ppm	ASTM D5185m <0.1	<1	0	0
Vanadium	ppm	ASTM D5185m <0.1	<1	0	0
Iron	ppm	ASTM D5185m <0.1	0	0	0
Calcium	ppm	ASTM D5185m <0.1	5	3	6
Magnesium	ppm	ASTM D5185m <0.1	<1	2	<1
Phosphorus	ppm	ASTM D5185m <0.1	4	3	5
Zinc	ppm	ASTM D5185m <0.1	4	1	0

## SAMPLE IMAGES



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0949580 **Received** : 03 Jun 2024  
**Lab Number** : 06198146 **Tested** : 11 Jun 2024  
**Unique Number** : 11060269 **Diagnosed** : 11 Jun 2024 - Doug Bogart  
**Test Package** : DF-2 ( Additional Tests: Fuel, Screen )

**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)