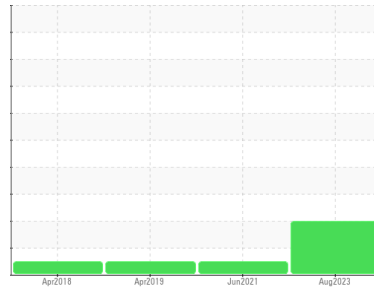




# FUEL REPORT

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. There is no bacteria or fungus (yeast and/or mold) indicated in the sample. The water content is negligible.

### 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>WC05925212</b>	WC05268977	WC04697403
Sample Date	Client Info	<b>15 Aug 2023</b>	01 Jun 2021	18 Apr 2019
Machine Age	hrs	<b>0</b>	0	0
Sample Status		<b>ATTENTION</b>	NORMAL	NORMAL

## PHYSICAL PROPERTIES

method	limit/base	current	history1	history2		
Specific Gravity	*ASTM D1298	0.839	<b>0.841</b>	0.843	0.843	
Fuel Color	text	*Visual Screen	Yllow	<b>Red</b>	Red	Red
ASTM Color	scalar	*ASTM D1500		<b>L4.0</b>	L5.0	L5.5
Visc @ 40°C	cSt	ASTM D445	3.0	<b>2.43</b>	2.55	2.49
Pensky-Martens Flash Point	°C	*PMCC Calculated	52	<b>60</b>	62	65

## SULFUR CONTENT

method	limit/base	current	history1	history2		
Sulfur	ppm	ASTM D5185m	10	<b>0</b>	65	28
Sulfur (UVF)	ppm	ASTM D5453		<b>20</b>	33	33

## DISTILLATION

method	limit/base	current	history1	history2		
Initial Boiling Point	°C	ASTM D86	165	<b>166</b>	165	165
5% Distillation Point	°C	ASTM D86		<b>189</b>	192	190
10% Distill Point	°C	ASTM D86	201	<b>199</b>	201	201
15% Distillation Point	°C	ASTM D86		<b>208</b>	210	209
20% Distill Point	°C	ASTM D86	216	<b>216</b>	218	217
30% Distill Point	°C	ASTM D86	230	<b>231</b>	233	232
40% Distill Point	°C	ASTM D86	243	<b>245</b>	247	246
50% Distill Point	°C	ASTM D86	255	<b>259</b>	261	260
60% Distill Point	°C	ASTM D86	267	<b>273</b>	275	274
70% Distill Point	°C	ASTM D86	280	<b>288</b>	290	288
80% Distill Point	°C	ASTM D86	295	<b>305</b>	306	304
85% Distillation Point	°C	ASTM D86		<b>314</b>	315	313
90% Distill Point	°C	ASTM D86	310	<b>326</b>	326	324
95% Distillation Point	°C	ASTM D86		<b>343</b>	343	341
Final Boiling Point	°C	ASTM D86	341	<b>350</b>	351	348
Distillation Residue	%	ASTM D86	3.0	<b>1.4</b>	1.4	1.4
Distillation Loss	%	ASTM D86	3.0	<b>0.7</b>	0.6	0.8

## IGNITION QUALITY

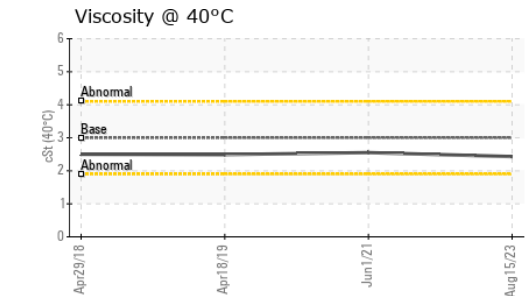
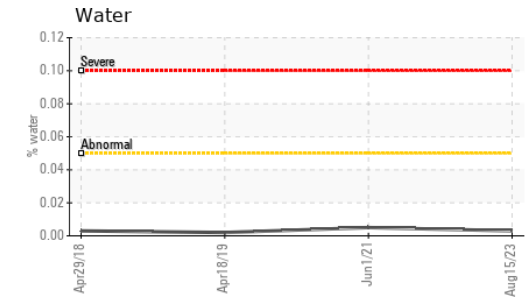
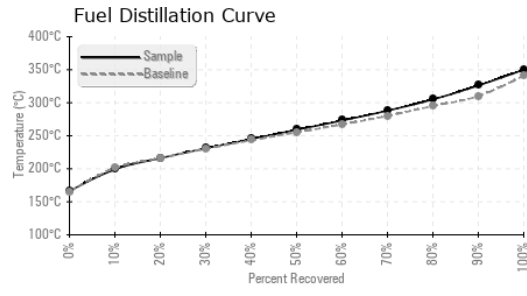
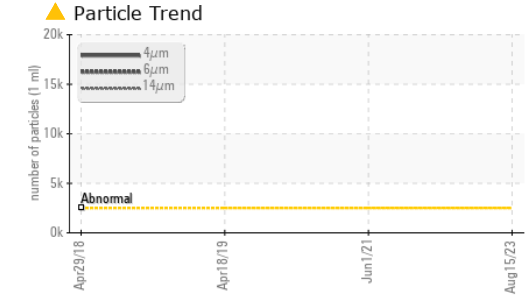
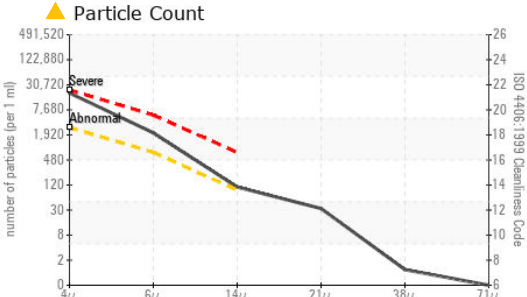
method	limit/base	current	history1	history2		
API Gravity		ASTM D7777	37.7	<b>36.8</b>	36.4	36.4
Cetane Index		ASTM D4737	<40.0	<b>47.8</b>	47.5	47.2

## CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	<1.0	<b>&lt;1</b>	0	<1
Sodium	ppm	ASTM D5185m	<0.1	<b>0</b>	0	0
Potassium	ppm	ASTM D5185m	<0.1	<b>&lt;1</b>	<1	0
Water	%	ASTM D6304	<0.05	<b>0.003</b>	0.005	0.002
ppm Water	ppm	ASTM D6304	<500	<b>34.4</b>	50.6	20
% Gasoline	%	*In-House	<0.50	<b>0.0</b>	0.0	0.0
% Biodiesel	%	*In-House	<20.0	<b>0.0</b>	1.3	0.9



# FUEL REPORT



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

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

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC05925212 **Received** : 15 Aug 2023  
**Lab Number** : 05925212 **Diagnosed** : 23 Aug 2023  
**Unique Number** : 10605159 **Diagnostician** : Doug Bogart  
**Test Package** : DF-2 ( Additional Tests: Screen )

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

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)