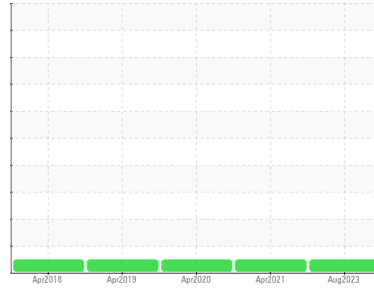




FUEL REPORT

Sample Rating Trend

NORMAL



Machine Id
EXTREME NETWORKS

Component
Diesel Fuel
Fluid

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

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. All laboratory tests indicate that this sample meets specifications for No.2 ultra-low-sulfur diesel fuel.

Corrosion

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

Contaminants

There is a moderate amount of silt (particulates < 14 microns in size) 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. Sulfur level is acceptable for ULSD specification.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC05925211	WC05223439	WC04952684
Sample Date	Client Info		15 Aug 2023	06 Apr 2021	09 Apr 2020
Machine Age	hrs	Client Info	0	0	0
Sample Status			NORMAL	NORMAL	NORMAL

PHYSICAL PROPERTIES

	method	limit/base	current	history1	history2
Specific Gravity	*ASTM D1298	0.839	0.840	0.840	0.842
Fuel Color	text	*Visual Screen	Yellow	Red	Red
ASTM Color	scalar	*ASTM D1500	L4.0	L5.0	L5.0
Visc @ 40°C	cSt	ASTM D445	3.0	2.46	2.61
Pensky-Martens Flash Point	°C	*PMCC Calculated	52	57	60

SULFUR CONTENT

	method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m	10	9	11
Sulfur (UVF)	ppm	ASTM D5453	8	10	11

DISTILLATION

	method	limit/base	current	history1	history2	
Initial Boiling Point	°C	ASTM D86	165	173	161	160
5% Distillation Point	°C	ASTM D86		192	189	188
10% Distill Point	°C	ASTM D86	201	200	199	198
15% Distillation Point	°C	ASTM D86		207	208	208
20% Distill Point	°C	ASTM D86	216	214	216	217
30% Distill Point	°C	ASTM D86	230	227	231	232
40% Distill Point	°C	ASTM D86	243	241	245	246
50% Distill Point	°C	ASTM D86	255	255	260	261
60% Distill Point	°C	ASTM D86	267	270	275	276
70% Distill Point	°C	ASTM D86	280	285	290	291
80% Distill Point	°C	ASTM D86	295	303	306	308
85% Distillation Point	°C	ASTM D86		312	316	317
90% Distill Point	°C	ASTM D86	310	324	327	328
95% Distillation Point	°C	ASTM D86		341	342	343
Final Boiling Point	°C	ASTM D86	341	348	349	350
Distillation Residue	%	ASTM D86	3.0	1.4	1.4	1.4
Distillation Loss	%	ASTM D86	3.0	0.9	0.7	0.6

IGNITION QUALITY

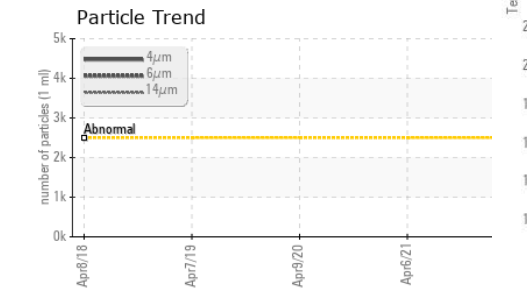
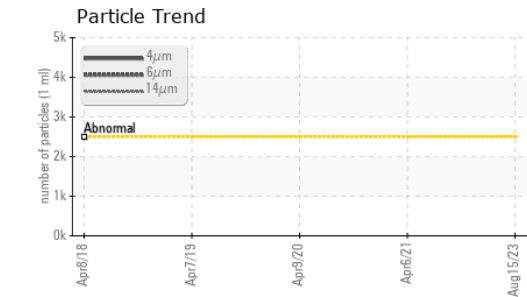
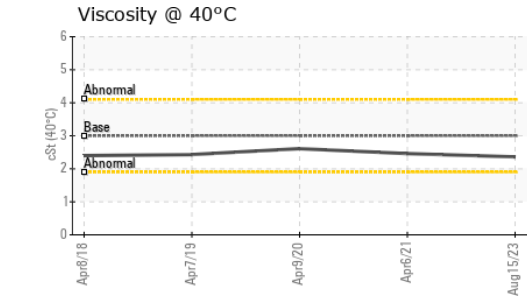
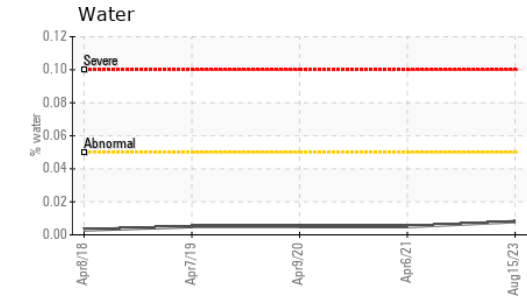
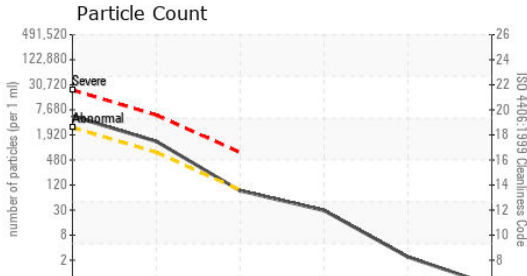
	method	limit/base	current	history1	history2
API Gravity	ASTM D7777	37.7	37.0	37.0	36.6
Cetane Index	ASTM D4737	<40.0	47.7	48.4	47.5

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	<1.0	<1	0	0
Sodium	ppm	ASTM D5185m	<0.1	0	0	<1
Potassium	ppm	ASTM D5185m	<0.1	<1	1	0
Water	%	ASTM D6304	<0.05	0.008	0.005	0.005
ppm Water	ppm	ASTM D6304	<500	81.7	50.0	57.8
% Gasoline	%	*In-House	<0.50	0.0	0.0	0.0
% Biodiesel	%	*In-House	<20.0	0.0	2.4	2.0



FUEL REPORT



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	4721	---	---
Particles >6µm	ASTM D7647	>640	1173	---	---
Particles >14µm	ASTM D7647	>80	77	---	---
Particles >21µm	ASTM D7647	>20	26	---	---
Particles >38µm	ASTM D7647	>4	2	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	19/17/13	---	---

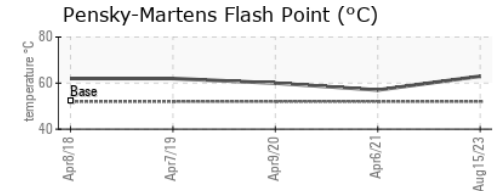
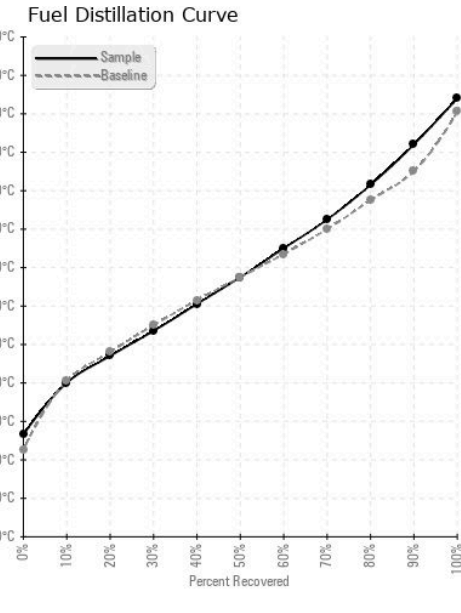
HEAVY METALS	method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m <0.1	<1	0	0
Nickel	ppm	ASTM D5185m <0.1	0	<1	0
Lead	ppm	ASTM D5185m <0.1	0	0	<1
Vanadium	ppm	ASTM D5185m <0.1	0	<1	<1
Iron	ppm	ASTM D5185m <0.1	0	0	<1
Calcium	ppm	ASTM D5185m <0.1	0	<1	<1
Magnesium	ppm	ASTM D5185m <0.1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

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

no image

no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC05925211 **Received** : 15 Aug 2023
Lab Number : **05925211** **Diagnosed** : 23 Aug 2023
Unique Number : 10605158 **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:

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)