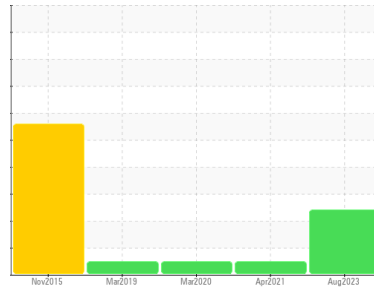




FUEL REPORT

Sample Rating Trend



ISO



Machine Id
LORD CORP

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	WC05925214	WC05223440	WC04933049
Sample Date	Client Info	15 Aug 2023	06 Apr 2021	12 Mar 2020
Machine Age	mls	0	0	0
Sample Status		ATTENTION	NORMAL	NORMAL

PHYSICAL PROPERTIES

method	limit/base	current	history1	history2		
Specific Gravity	*ASTM D1298	0.839	0.844	0.844	0.844	
Fuel Color	text	*Visual Screen	Yllow	Red	Red	Red
ASTM Color	scalar	*ASTM D1500		L4.0	L5.5	L5.5
Visc @ 40°C	cSt	ASTM D445	3.0	2.53	2.56	2.58
Pensky-Martens Flash Point	°C	*PMCC Calculated	52	55	66	65

SULFUR CONTENT

method	limit/base	current	history1	history2		
Sulfur	ppm	ASTM D5185m	10	0	13	2
Sulfur (UVF)	ppm	ASTM D5453		17	15	14

DISTILLATION

method	limit/base	current	history1	history2		
Initial Boiling Point	°C	ASTM D86	165	154	168	163
5% Distillation Point	°C	ASTM D86		188	193	188
10% Distill Point	°C	ASTM D86	201	201	204	201
15% Distillation Point	°C	ASTM D86		209	212	211
20% Distill Point	°C	ASTM D86	216	218	220	219
30% Distill Point	°C	ASTM D86	230	233	235	234
40% Distill Point	°C	ASTM D86	243	247	249	248
50% Distill Point	°C	ASTM D86	255	261	263	261
60% Distill Point	°C	ASTM D86	267	275	276	275
70% Distill Point	°C	ASTM D86	280	289	290	289
80% Distill Point	°C	ASTM D86	295	305	306	305
85% Distillation Point	°C	ASTM D86		314	315	314
90% Distill Point	°C	ASTM D86	310	325	326	325
95% Distillation Point	°C	ASTM D86		342	342	341
Final Boiling Point	°C	ASTM D86	341	348	349	348
Distillation Residue	%	ASTM D86	3.0	1.4	1.4	1.4
Distillation Loss	%	ASTM D86	3.0	0.5	0.7	0.8

IGNITION QUALITY

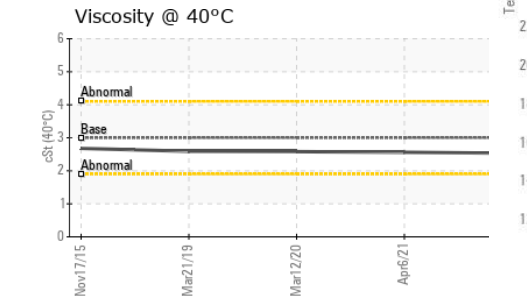
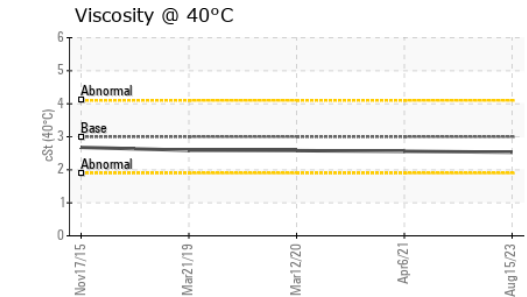
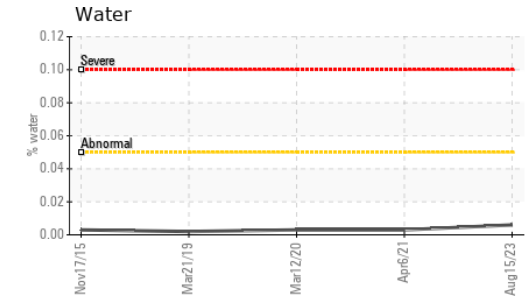
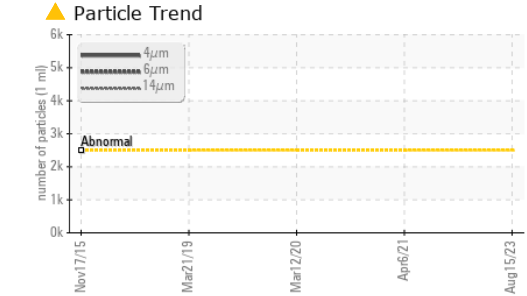
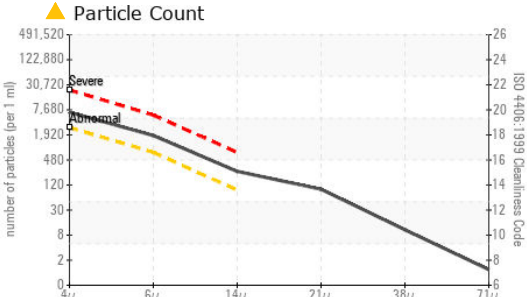
method	limit/base	current	history1	history2	
API Gravity	ASTM D7777	37.7	36.2	36.2	36.2
Cetane Index	ASTM D4737	<40.0	47.0	47.4	47.2

CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	<1.0	<1	0	<1
Sodium	ppm	ASTM D5185m	<0.1	0	0	0
Potassium	ppm	ASTM D5185m	<0.1	<1	0	0
Water	%	ASTM D6304	<0.05	0.006	0.003	0.003
ppm Water	ppm	ASTM D6304	<500	61.9	39.2	38.5
% Gasoline	%	*In-House	<0.50	0.0	0.0	0.0
% Biodiesel	%	*In-House	<20.0	0.0	0.6	0.6



FUEL REPORT



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	▲ 5845	---	---
Particles >6µm	ASTM D7647	>640	▲ 1623	---	---
Particles >14µm	ASTM D7647	>80	▲ 225	---	---
Particles >21µm	ASTM D7647	>20	▲ 84	---	---
Particles >38µm	ASTM D7647	>4	▲ 9	---	---
Particles >71µm	ASTM D7647	>3	▲ 1	---	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	▲ 20/18/15	---	---

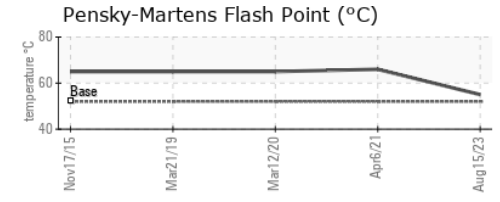
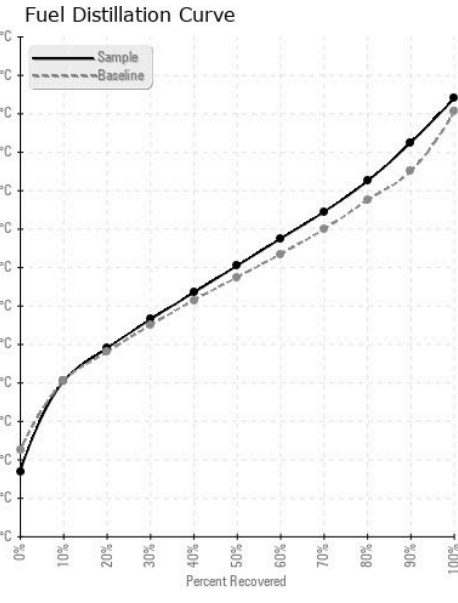
HEAVY METALS	method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m <0.1	0	0	0
Nickel	ppm	ASTM D5185m <0.1	0	0	0
Lead	ppm	ASTM D5185m <0.1	0	0	1
Vanadium	ppm	ASTM D5185m <0.1	0	1	0
Iron	ppm	ASTM D5185m <0.1	0	<1	0
Calcium	ppm	ASTM D5185m <0.1	0	0	0
Magnesium	ppm	ASTM D5185m <0.1	0	<1	0
Phosphorus	ppm	ASTM D5185m <0.1	<1	0	0
Zinc	ppm	ASTM D5185m <0.1	0	2	<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. : WC05925214 **Received** : 15 Aug 2023
Lab Number : 05925214 **Diagnosed** : 23 Aug 2023
Unique Number : 10605161 **Diagnostician** : Doug Bogart
Test Package : DF-2 (Additional Tests: Screen)

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 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)