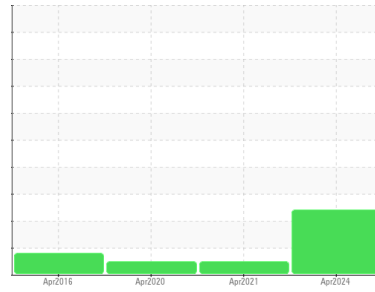




FUEL REPORT

Sample Rating Trend



ISO



Machine Id

RESIDENTIAL SERVICES

Component

Diesel Fuel

Fluid

No.2 DIESEL FUEL (LOW-SULPHUR) (--- QTS)

DIAGNOSIS

Recommendation

We advise that you filter this fluid before use. 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 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. Sulfur level is acceptable for ULSD specification.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	WC06141900	WC05226299	WC04962427
Sample Date	Client Info	05 Apr 2024	11 Apr 2021	23 Apr 2020
Machine Age	hrs	0	0	0
Sample Status		ABNORMAL	NORMAL	NORMAL

PHYSICAL PROPERTIES

method	limit/base	current	history1	history2		
Specific Gravity	*ASTM D1298	0.839	---	0.842	0.842	
Fuel Color	text	*Visual Screen	Yellow	Red	Red	Red
ASTM Color	scalar	*ASTM D1500		L4.5	L6.0	L5.0
Visc @ 40°C	cSt	ASTM D445	3.0	2.44	2.53	2.53
Pensky-Martens Flash Point	°C	*PMCC Calculated	52	60.3	63	64

SULFUR CONTENT

method	limit/base	current	history1	history2		
Sulfur	ppm	ASTM D5185m	250	0	13	18
Sulfur (UVF)	ppm	ASTM D5453		12	16	23

DISTILLATION

method	limit/base	current	history1	history2		
Initial Boiling Point	°C	ASTM D86	165	171	165	165
5% Distillation Point	°C	ASTM D86		193	192	193
10% Distill Point	°C	ASTM D86	201	203	203	204
15% Distillation Point	°C	ASTM D86		210	211	213
20% Distill Point	°C	ASTM D86	216	218	220	220
30% Distill Point	°C	ASTM D86	230	232	234	235
40% Distill Point	°C	ASTM D86	243	245	248	248
50% Distill Point	°C	ASTM D86	255	258	262	261
60% Distill Point	°C	ASTM D86	267	273	275	275
70% Distill Point	°C	ASTM D86	280	287	290	289
80% Distill Point	°C	ASTM D86	295	303	306	305
85% Distillation Point	°C	ASTM D86		314	315	314
90% Distill Point	°C	ASTM D86	310	324	326	325
95% Distillation Point	°C	ASTM D86		341	342	341
Final Boiling Point	°C	ASTM D86	341	354	349	350
Distillation Residue	%	ASTM D86	3.0	---	1.4	1.4
Distillation Loss	%	ASTM D86	3.0	---	0.8	0.8

IGNITION QUALITY

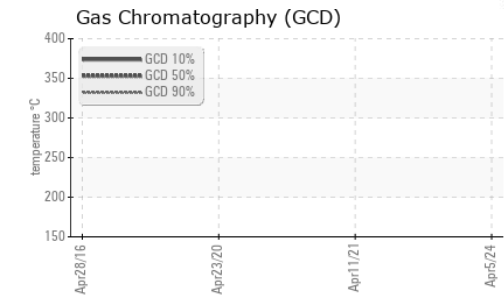
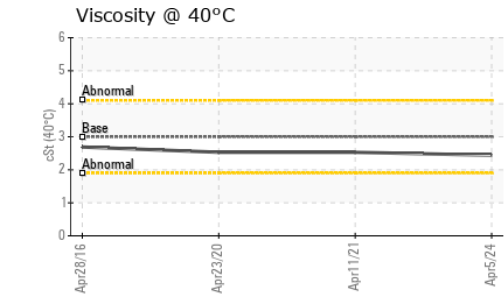
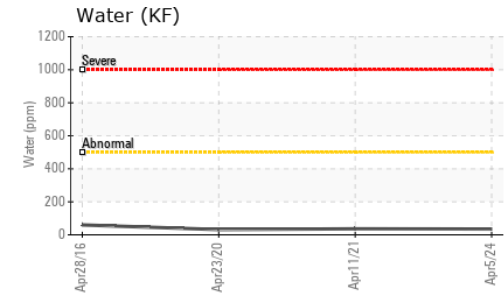
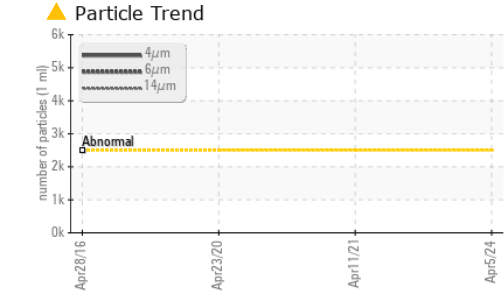
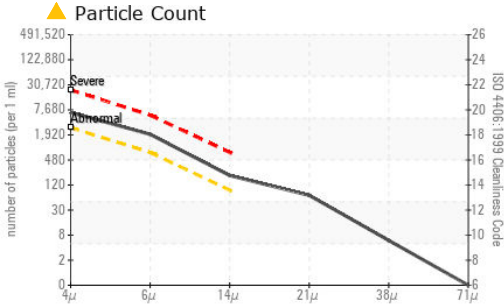
method	limit/base	current	history1	history2	
API Gravity	ASTM D7777	37.7	37	36.6	36.6
Cetane Index	ASTM D4737	<40.0	49	48.0	47.9

CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	<1.0	0	0	0
Sodium	ppm	ASTM D5185m	<0.1	2	<1	0
Potassium	ppm	ASTM D5185m	<0.1	0	0	0
Water	%	ASTM D6304	<0.05	0.003	0.003	0.003
ppm Water	ppm	ASTM D6304	<500	35	36.4	31.7
% Gasoline	%	*In-House	<0.50	0.0	0.0	0.0
% Biodiesel	%	*In-House	<20.0	1.4	1.2	0.0



FUEL REPORT

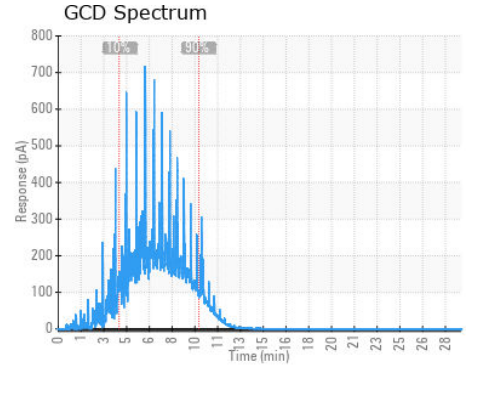
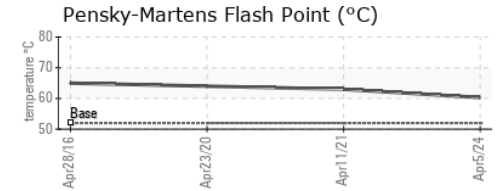
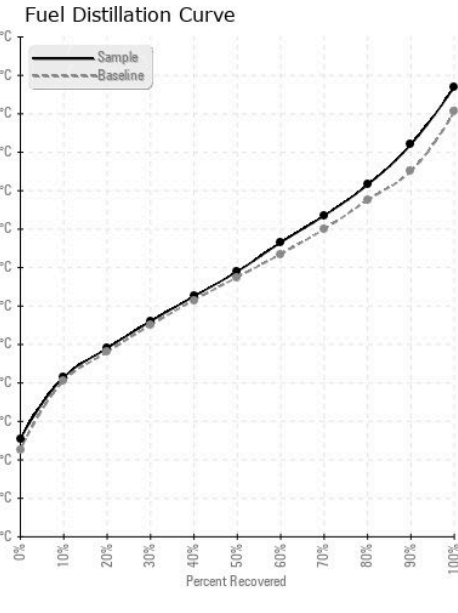


FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	▲ 5766	---	---
Particles >6µm	ASTM D7647	>640	▲ 1737	---	---
Particles >14µm	ASTM D7647	>80	▲ 179	---	---
Particles >21µm	ASTM D7647	>20	▲ 60	---	---
Particles >38µm	ASTM D7647	>4	▲ 5	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
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	<1
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	<1	<1
Calcium	ppm	ASTM D5185m <0.1	0	0	0
Magnesium	ppm	ASTM D5185m <0.1	0	0	0
Phosphorus	ppm	ASTM D5185m <0.1	0	<1	1
Zinc	ppm	ASTM D5185m <0.1	0	0	0

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC06141900 **Received** : 08 Apr 2024
Lab Number : 06141900 **Tested** : 16 Apr 2024
Unique Number : 10966708 **Diagnosed** : 16 Apr 2024 - Doug Bogart
Test Package : DF-2 (Additional Tests: Fuel, Screen)

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 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)