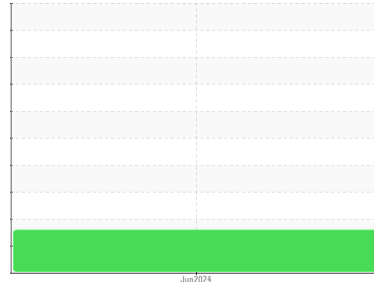




FUEL REPORT

Sample Rating Trend



ISO



Machine Id

DUKE CANCER CENTER DAY TANK

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. There is no indication of any contamination in the fuel.

Fuel Condition

Sulfur value derived by ASTM D5453 method for ULSD validation.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0949678	---	---
Sample Date	Client Info			07 Jun 2024	---	---
Machine Age	hrs	Client Info		0	---	---
Sample Status				ABNORMAL	---	---

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Fuel Color	text	*Visual Screen	Yellow	Red	---	---
ASTM Color	scalar	*ASTM D1500		L4.5	---	---
Visc @ 40°C	cSt	ASTM D445	3.0	2.53	---	---
Pensky-Martens Flash Point	°C	*PMCC Calculated	52	62.6	---	---

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m	10	143	---	---
Sulfur (UVF)	ppm	ASTM D5453		132	---	---

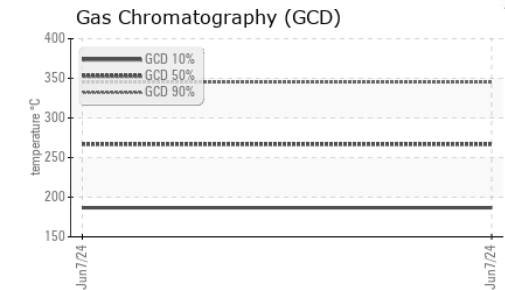
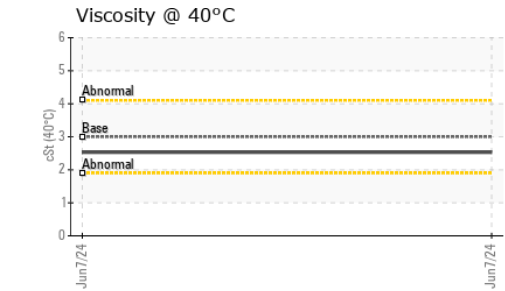
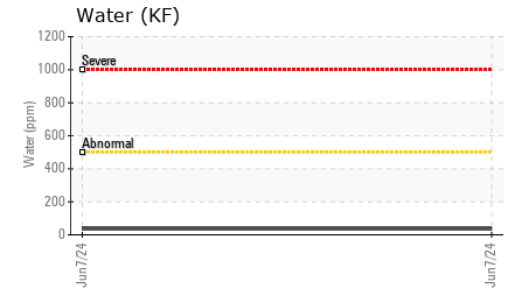
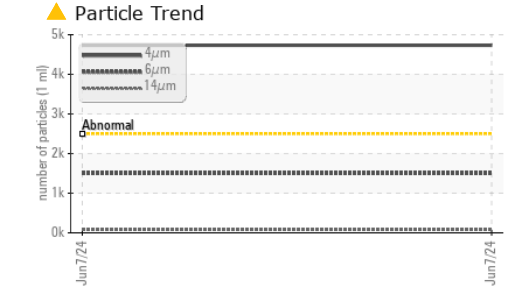
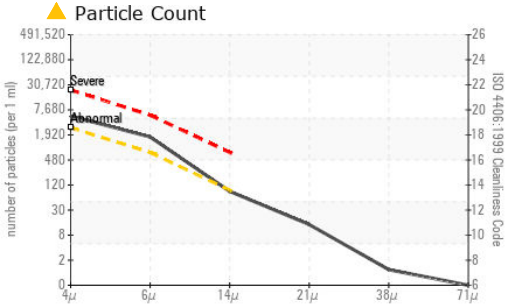
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86	165	174	---	---
5% Distillation Point	°C	ASTM D86		198	---	---
10% Distill Point	°C	ASTM D86	201	208	---	---
15% Distillation Point	°C	ASTM D86		216	---	---
20% Distill Point	°C	ASTM D86	216	224	---	---
30% Distill Point	°C	ASTM D86	230	238	---	---
40% Distill Point	°C	ASTM D86	243	251	---	---
50% Distill Point	°C	ASTM D86	255	264	---	---
60% Distill Point	°C	ASTM D86	267	277	---	---
70% Distill Point	°C	ASTM D86	280	290	---	---
80% Distill Point	°C	ASTM D86	295	304	---	---
85% Distillation Point	°C	ASTM D86		314	---	---
90% Distill Point	°C	ASTM D86	310	324	---	---
95% Distillation Point	°C	ASTM D86		341	---	---
Final Boiling Point	°C	ASTM D86	341	356	---	---

IGNITION QUALITY		method	limit/base	current	history1	history2
API Gravity		ASTM D7777	37.7	35	---	---
Cetane Index		ASTM D4737	<40.0	47	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	0	---	---
Sodium	ppm	ASTM D5185m	<0.1	1	---	---
Potassium	ppm	ASTM D5185m	<0.1	<1	---	---
Water	%	ASTM D6304	<0.05	0.003	---	---
ppm Water	ppm	ASTM D6304	<500	36	---	---
% Gasoline	%	*In-House	<0.50	0.0	---	---
% Biodiesel	%	*In-House	<20.0	0.0	---	---



FUEL REPORT

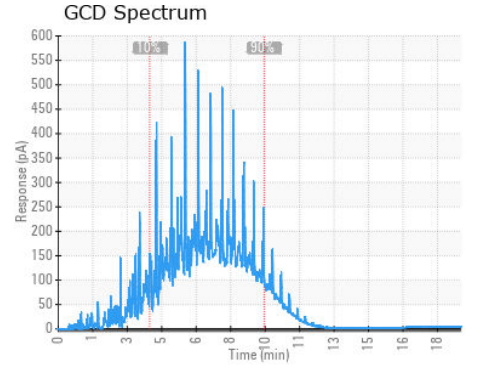
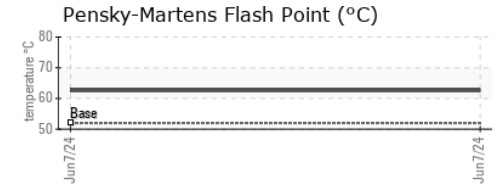
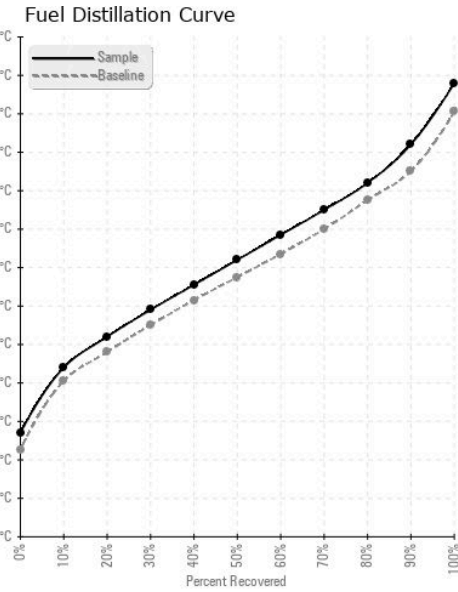


FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	▲ 4732	---	---
Particles >6µm	ASTM D7647	>640	▲ 1501	---	---
Particles >14µm	ASTM D7647	>80	▲ 75	---	---
Particles >21µm	ASTM D7647	>20	12	---	---
Particles >38µm	ASTM D7647	>4	1	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	▲ 19/18/13	---	---

HEAVY METALS	method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m	<0.1	0	---
Nickel	ppm	ASTM D5185m	<0.1	<1	---
Lead	ppm	ASTM D5185m	<0.1	0	---
Vanadium	ppm	ASTM D5185m	<0.1	0	---
Iron	ppm	ASTM D5185m	<0.1	0	---
Calcium	ppm	ASTM D5185m	<0.1	0	---
Magnesium	ppm	ASTM D5185m	<0.1	<1	---
Phosphorus	ppm	ASTM D5185m	<0.1	0	---
Zinc	ppm	ASTM D5185m	<0.1	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. : WC0949678 **Received** : 10 Jun 2024
Lab Number : 06205269 **Tested** : 19 Jun 2024
Unique Number : 11072730 **Diagnosed** : 19 Jun 2024 - Angela Borella
Test Package : DF-2 (Additional Tests: Fuel, Screen)

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 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)