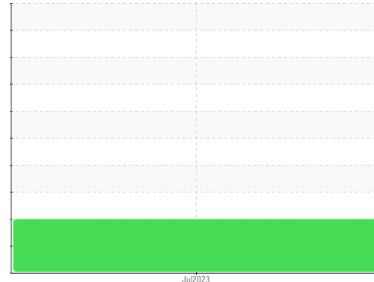




FUEL REPORT

Sample Rating Trend



ISO



Machine Id
UNC ROCKINGHAM - GEN 2

Component
Diesel Fuel
Fluid
DIESEL FUEL No. 2 (--- GAL)

DIAGNOSIS

▲ Recommendation

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

Corrosion

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

▲ Contaminants

There is a moderate 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			WC0787037	---	---
Sample Date	Client Info			14 Jul 2023	---	---
Machine Age	hrs	Client Info		0	---	---
Sample Status				ABNORMAL	---	---

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		*ASTM D1298		0.849	---	---
Fuel Color	text	*Visual Screen		Red	---	---
ASTM Color	scalar	*ASTM D1500		L4.5	---	---
Visc @ 40°C	cSt	ASTM D445	4.1	2.46	---	---
Pensky-Martens Flash Point	°C	*PMCC Calculated		59	---	---

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m		1092	---	---
Sulfur (UVF)	ppm	ASTM D5453		916	---	---

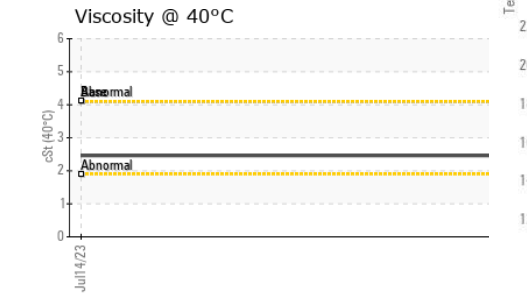
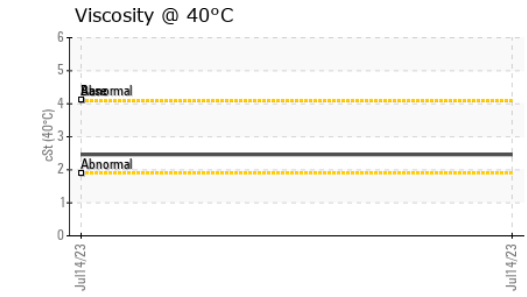
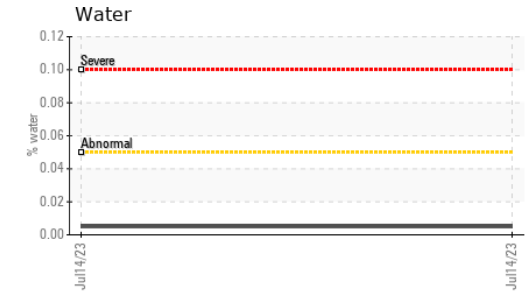
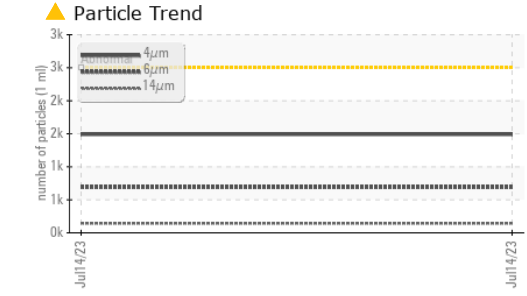
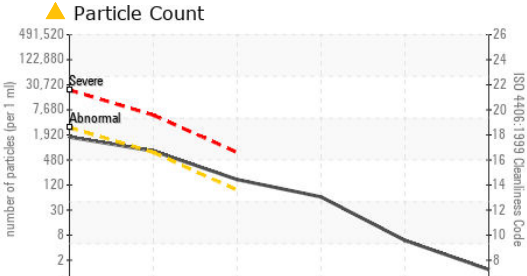
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86		164	---	---
5% Distillation Point	°C	ASTM D86		194	---	---
10% Distill Point	°C	ASTM D86		206	---	---
15% Distillation Point	°C	ASTM D86		215	---	---
20% Distill Point	°C	ASTM D86		222	---	---
30% Distill Point	°C	ASTM D86		237	---	---
40% Distill Point	°C	ASTM D86		249	---	---
50% Distill Point	°C	ASTM D86		261	---	---
60% Distill Point	°C	ASTM D86		274	---	---
70% Distill Point	°C	ASTM D86		287	---	---
80% Distill Point	°C	ASTM D86		302	---	---
85% Distillation Point	°C	ASTM D86		312	---	---
90% Distill Point	°C	ASTM D86		323	---	---
95% Distillation Point	°C	ASTM D86		341	---	---
Final Boiling Point	°C	ASTM D86		350	---	---
Distillation Residue	%	ASTM D86		1.4	---	---
Distillation Loss	%	ASTM D86		0.7	---	---

IGNITION QUALITY		method	limit/base	current	history1	history2
API Gravity		ASTM D7777		35.2	---	---
Cetane Index		ASTM D4737	<40.0	43.4	---	---

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	0	---	---
Water	%	ASTM D6304	<0.05	0.005	---	---
ppm Water	ppm	ASTM D6304	<500	58.8	---	---
% Gasoline	%	*In-House	<0.50	0.0	---	---
% Biodiesel	%	*In-House	<20.0	0.0	---	---



FUEL REPORT

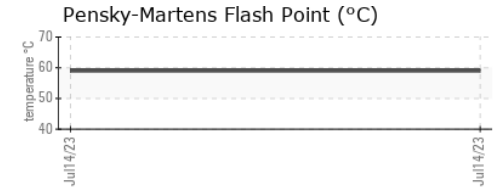
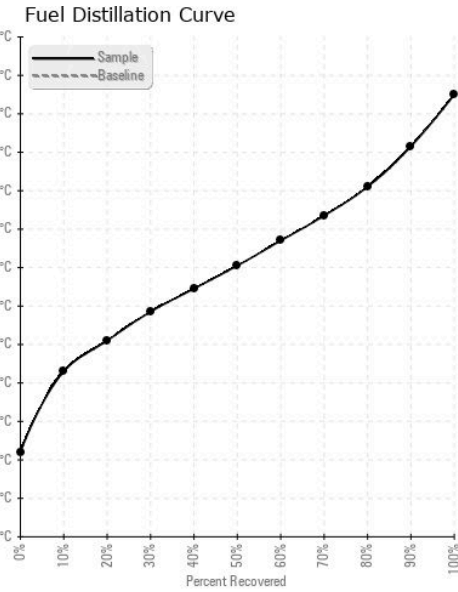


FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	1491	---	---
Particles >6µm	ASTM D7647	>640	▲ 691	---	---
Particles >14µm	ASTM D7647	>80	▲ 143	---	---
Particles >21µm	ASTM D7647	>20	▲ 55	---	---
Particles >38µm	ASTM D7647	>4	▲ 5	---	---
Particles >71µm	ASTM D7647	>3	1	---	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	▲ 18/17/14	---	---

HEAVY METALS	method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m <0.1	<1	---	---
Nickel	ppm	ASTM D5185m <0.1	0	---	---
Lead	ppm	ASTM D5185m <0.1	0	---	---
Vanadium	ppm	ASTM D5185m <0.1	<1	---	---
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. : WC0787037 **Received** : 19 Jul 2023
Lab Number : **05902711** **Diagnosed** : 26 Jul 2023
Unique Number : 10564067 **Diagnostician** : Doug Bogart
Test Package : DF-2 (Additional Tests: Screen)

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 1076 CLASSIC RD
 APEX, NC
 US 27539
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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)