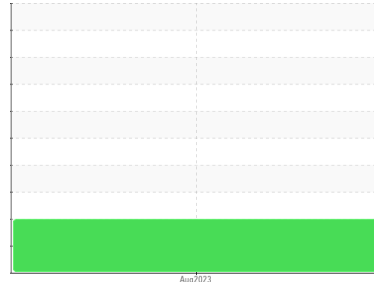




FUEL REPORT

Sample Rating Trend



ISO



Area

[14576]

Machine Id

RI-2 - OFF-ROAD DIESEL

Component

Tank Diesel Fuel

Fluid

BIO DIESEL (--- GAL)

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			WC0850861	---	---
Sample Date	Client Info			15 Aug 2023	---	---
Machine Age	hrs	Client Info		0	---	---
Sample Status				ATTENTION	---	---

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		*ASTM D1298		0.838	---	---
Fuel Color	text	*Visual Screen		Red	---	---
ASTM Color	scalar	*ASTM D1500		L4.5	---	---
Visc @ 40°C	cSt	ASTM D445		2.34	---	---
Pensky-Martens Flash Point	°C	*PMCC Calculated		59	---	---

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m		14	---	---
Sulfur (UVF)	ppm	ASTM D5453		8	---	---

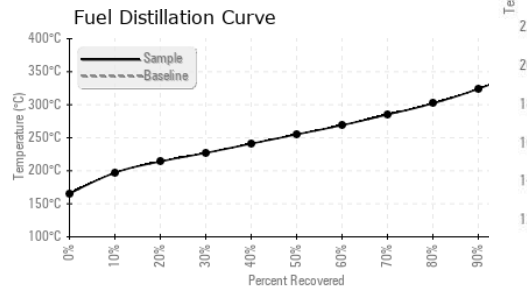
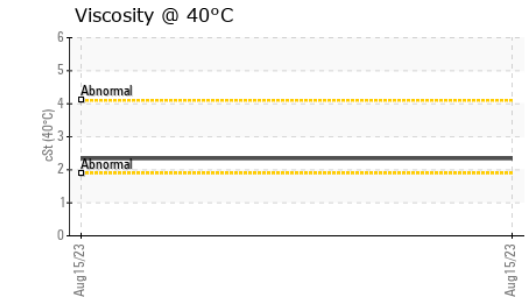
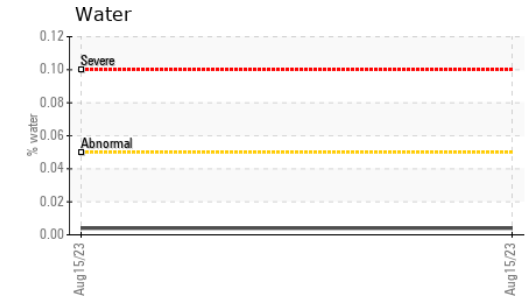
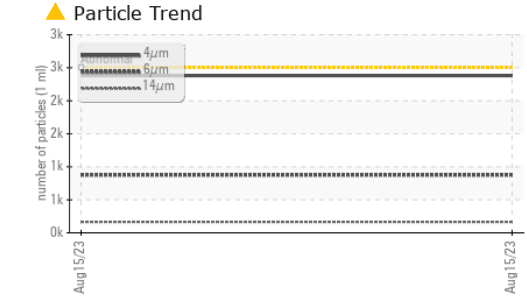
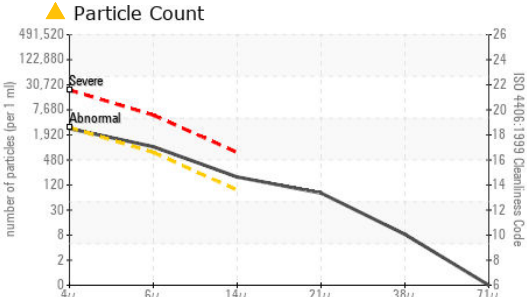
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86		165	---	---
5% Distillation Point	°C	ASTM D86		188	---	---
10% Distill Point	°C	ASTM D86		197	---	---
15% Distillation Point	°C	ASTM D86		206	---	---
20% Distill Point	°C	ASTM D86		214	---	---
30% Distill Point	°C	ASTM D86		227	---	---
40% Distill Point	°C	ASTM D86		241	---	---
50% Distill Point	°C	ASTM D86		255	---	---
60% Distill Point	°C	ASTM D86		269	---	---
70% Distill Point	°C	ASTM D86		285	---	---
80% Distill Point	°C	ASTM D86		302	---	---
85% Distillation Point	°C	ASTM D86		312	---	---
90% Distill Point	°C	ASTM D86		324	---	---
95% Distillation Point	°C	ASTM D86		342	---	---
Final Boiling Point	°C	ASTM D86		351	---	---
Distillation Residue	%	ASTM D86		1.4	---	---
Distillation Loss	%	ASTM D86		0.7	---	---

IGNITION QUALITY		method	limit/base	current	history1	history2
API Gravity		ASTM D7777		37.4	---	---
Cetane Index		ASTM D4737	<40.0	47.9	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	0	---	---
Sodium	ppm	ASTM D5185m	<0.1	0	---	---
Potassium	ppm	ASTM D5185m	<0.1	0	---	---
Water	%	ASTM D6304	<0.05	0.004	---	---
ppm Water	ppm	ASTM D6304	<500	43.6	---	---
% Gasoline	%	*In-House	<0.50	0.0	---	---
% Biodiesel	%	*In-House	<20.0	0.0	---	---



FUEL REPORT

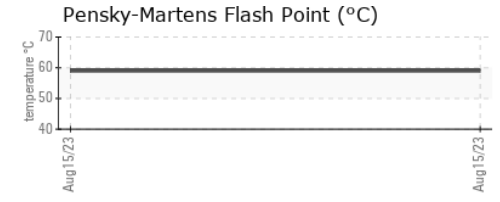
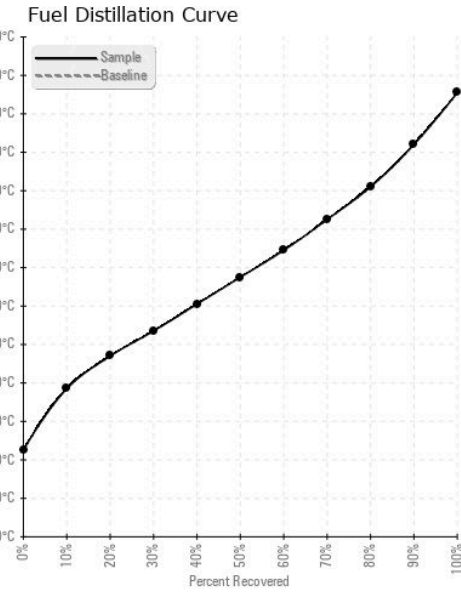


FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	2381	---	---
Particles >6µm	ASTM D7647	>640	▲ 877	---	---
Particles >14µm	ASTM D7647	>80	▲ 165	---	---
Particles >21µm	ASTM D7647	>20	▲ 68	---	---
Particles >38µm	ASTM D7647	>4	▲ 7	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	▲ 18/17/15	---	---

HEAVY METALS	method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m <0.1	0	---	---
Nickel	ppm	ASTM D5185m <0.1	0	---	---
Lead	ppm	ASTM D5185m <0.1	0	---	---
Vanadium	ppm	ASTM D5185m <0.1	0	---	---
Iron	ppm	ASTM D5185m <0.1	2	---	---
Calcium	ppm	ASTM D5185m <0.1	0	---	---
Magnesium	ppm	ASTM D5185m <0.1	2	---	---
Phosphorus	ppm	ASTM D5185m <0.1	1	---	---
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. : WC0850861 **Received** : 18 Aug 2023
Lab Number : **05928542** **Diagnosed** : 23 Aug 2023
Unique Number : 10608489 **Diagnostician** : Doug Bogart
Test Package : DF-2 (Additional Tests: Screen)

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 296 COMMERCE CENTER DRIVE
 FLOYD, VA
 US 24091
 Contact: JULIE WADE
 julie@thomasindfab.com
 T: (276)930-2422
 F:

Certificate L2367
 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)