



FUEL REPORT

Sample Rating Trend

NORMAL



Machine Id
IDEM FOD 11

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

DIAGNOSIS

Recommendation

ASTM D240 result 19,540 BTU/lb. Test performed at subcontracted ISO 17025 laboratory. 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 no bacteria or fungus (yeast and/or mold) indicated in the sample. The water content is negligible. The amount and size of particulates present in the system are acceptable.

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			WC0790709	---	---
Sample Date	Client Info			15 Sep 2023	---	---
Machine Age	hrs	Client Info		0	---	---
Sample Status				NORMAL	---	---

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		*ASTM D1298		0.853	---	---
Fuel Color	text	*Visual Screen		Red	---	---
ASTM Color	scalar	*ASTM D1500		L4.0	---	---
Visc @ 40°C	cSt	ASTM D445	4.1	2.69	---	---
Pensky-Martens Flash Point	°C	*PMCC Calculated		59	---	---
Cloud Point	°C	ASTM D5771		-18	---	---
Pour Point	°C	ASTM D5950		-27	---	---

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m		0	---	---
Sulfur (UVF)	ppm	ASTM D5453		6	---	---

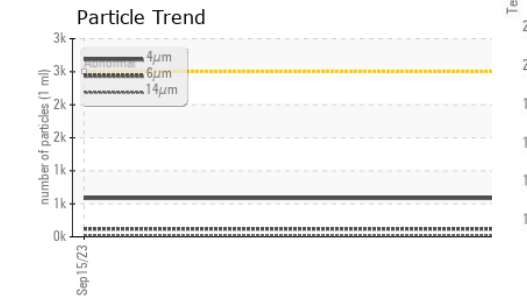
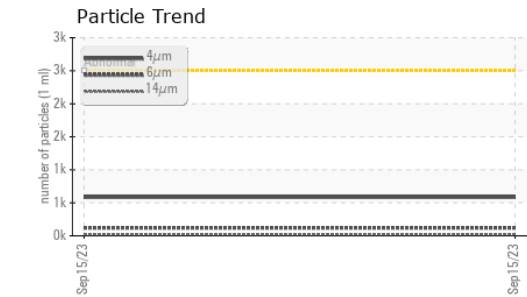
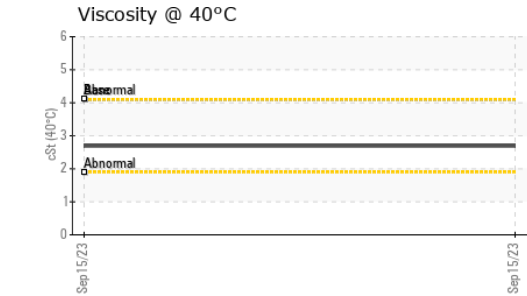
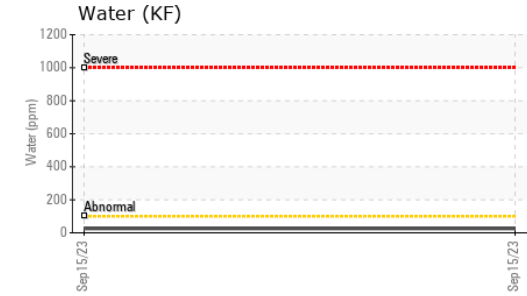
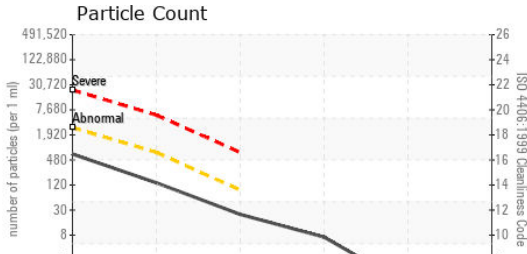
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86		165	---	---
5% Distillation Point	°C	ASTM D86		196	---	---
10% Distill Point	°C	ASTM D86		209	---	---
15% Distillation Point	°C	ASTM D86		219	---	---
20% Distill Point	°C	ASTM D86		227	---	---
30% Distill Point	°C	ASTM D86		240	---	---
40% Distill Point	°C	ASTM D86		251	---	---
50% Distill Point	°C	ASTM D86		263	---	---
60% Distill Point	°C	ASTM D86		275	---	---
70% Distill Point	°C	ASTM D86		287	---	---
80% Distill Point	°C	ASTM D86		301	---	---
85% Distillation Point	°C	ASTM D86		310	---	---
90% Distill Point	°C	ASTM D86		320	---	---
95% Distillation Point	°C	ASTM D86		336	---	---
Final Boiling Point	°C	ASTM D86		345	---	---
Distillation Residue	%	ASTM D86		1.4	---	---
Distillation Loss	%	ASTM D86		0.7	---	---

IGNITION QUALITY		method	limit/base	current	history1	history2
API Gravity		ASTM D7777		34.4	---	---
Cetane Index		ASTM D4737	<40.0	44.5	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	0	---	---
Sodium	ppm	ASTM D5185m	<0.1	2	---	---
Potassium	ppm	ASTM D5185m	<0.1	0	---	---
Water	%	ASTM D6304	<0.05	0.003	---	---
ppm Water	ppm	ASTM D6304	<500	25.7	---	---
% Gasoline	%	*In-House	<0.50	0.0	---	---
% Biodiesel	%	*In-House	<20.0	0.0	---	---



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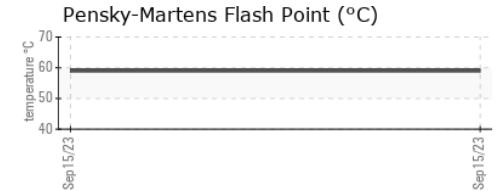
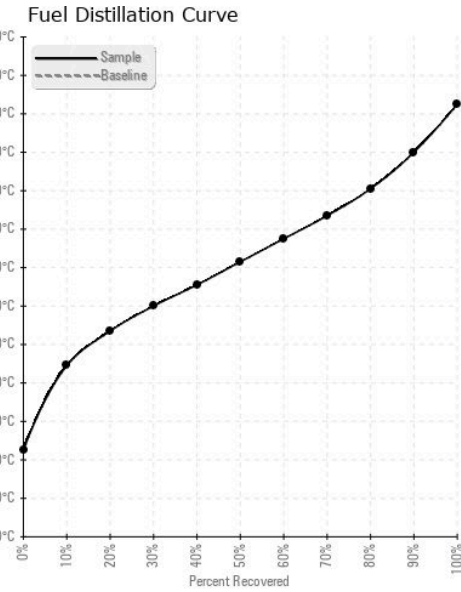


FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	585	---	---
Particles >6µm	ASTM D7647	>640	120	---	---
Particles >14µm	ASTM D7647	>80	21	---	---
Particles >21µm	ASTM D7647	>20	6	---	---
Particles >38µm	ASTM D7647	>4	0	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	16/14/12	---	---

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	0	---	---
Iron	ppm	ASTM D5185m	<0.1	0	---	---
Calcium	ppm	ASTM D5185m	<0.1	0	---	---
Magnesium	ppm	ASTM D5185m	<0.1	0	---	---
Phosphorus	ppm	ASTM D5185m	<0.1	1	---	---
Zinc	ppm	ASTM D5185m	<0.1	0	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0790709 **Received** : 25 Sep 2023
Lab Number : 05960260 **Diagnosed** : 02 Oct 2023
Unique Number : 10661473 **Diagnostician** : Doug Bogart
Test Package : DF-3 (Additional Tests: Screen)

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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)