



FUEL REPORT

Sample Rating Trend

WATER



Machine Id
DETROIT MARINE DETROIT PORT/STARBOARD

Component
Diesel Fuel
Fluid
{not provided} (--- GAL)

DIAGNOSIS

Recommendation

We advise that you follow the water drain-off procedure for this component. All other 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

Free water present. Moderate concentration of visible dirt/debris present in the fuel. There is no bacteria or fungus (yeast and/or mold) present in the sample.

Fuel Condition

Cetane level is normal. 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			TR05759001	---	---
Sample Date	Client Info			15 Jan 2023	---	---
Machine Age	hrs	Client Info		0	---	---
Sample Status				ABNORMAL	---	---

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		*ASTM D1298		0.844	---	---
Fuel Color	text	*Visual Screen		Red	---	---
ASTM Color	scalar	*ASTM D1500		L4.5	---	---
Visc @ 40°C	cSt	ASTM D445		2.48	---	---
Pensky-Martens Flash Point	°C	*PMCC Calculated		54	---	---

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m		12	---	---
Sulfur (UVF)	ppm	ASTM D5453		10	---	---

DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86		148	---	---
5% Distillation Point	°C	ASTM D86		182	---	---
10% Distill Point	°C	ASTM D86		194	---	---
15% Distillation Point	°C	ASTM D86		205	---	---
20% Distill Point	°C	ASTM D86		215	---	---
30% Distill Point	°C	ASTM D86		232	---	---
40% Distill Point	°C	ASTM D86		248	---	---
50% Distill Point	°C	ASTM D86		264	---	---
60% Distill Point	°C	ASTM D86		281	---	---
70% Distill Point	°C	ASTM D86		297	---	---
80% Distill Point	°C	ASTM D86		312	---	---
85% Distillation Point	°C	ASTM D86		321	---	---
90% Distill Point	°C	ASTM D86		331	---	---
95% Distillation Point	°C	ASTM D86		345	---	---
Final Boiling Point	°C	ASTM D86		353	---	---
Distillation Residue	%	ASTM D86		1.4	---	---
Distillation Loss	%	ASTM D86		0.6	---	---

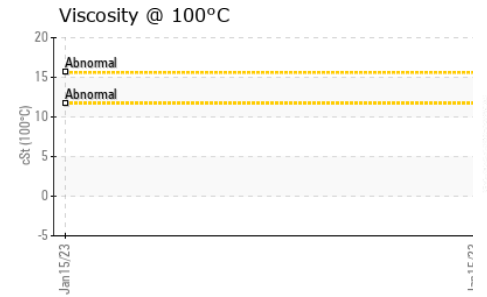
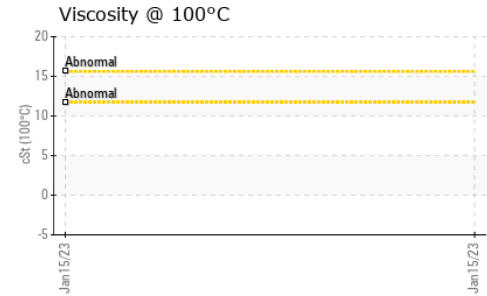
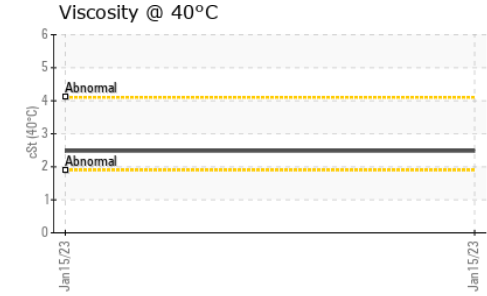
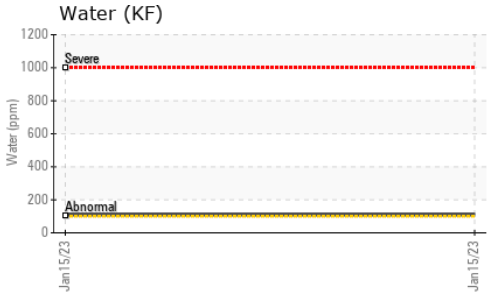
IGNITION QUALITY		method	limit/base	current	history1	history2
API Gravity		ASTM D7777		36.2	---	---
Cetane Index		ASTM D4737	<40.0	47.4	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	<1	---	---
Sodium	ppm	ASTM D5185m	<0.1	<1	---	---
Potassium	ppm	ASTM D5185m	<0.1	0	---	---
Water	%	ASTM D6304	<0.05	0.010	---	---
ppm Water	ppm	ASTM D6304	<500	108.9	---	---

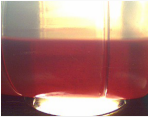

MICROBIAL		method	limit/base	current	history1	history2
Bacteria	CFU/ml	WC-Method	>=100000	0	---	---
Yeast	CFU/ml	WC-Method	>=100000	0	---	---
Mold	Colonies	WC-Method	MODER	---	---	---



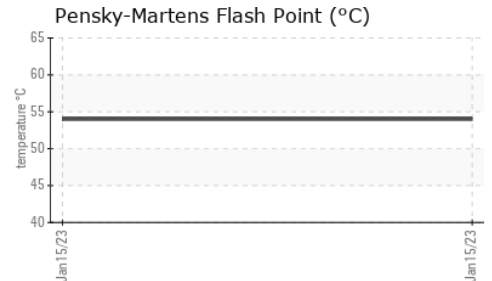
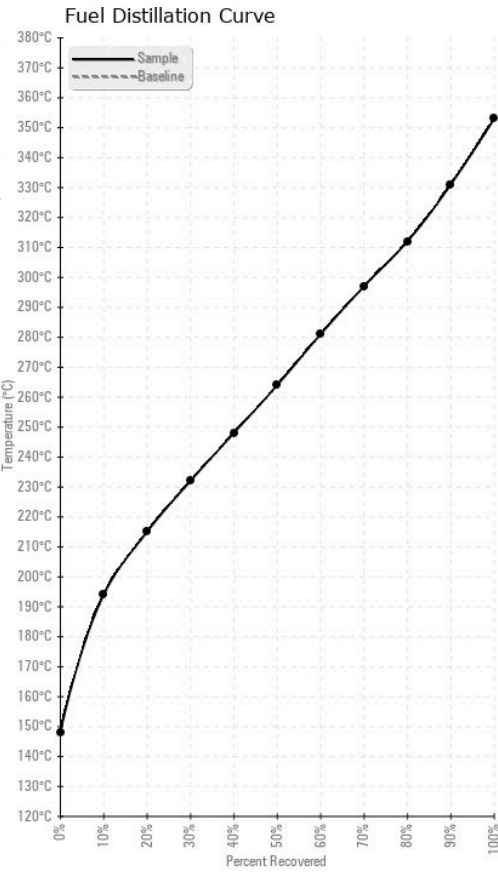
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HEAVY METALS		method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m	<0.1	0	---	---
Nickel	ppm	ASTM D5185m	<0.1	0	---	---
Lead	ppm	ASTM D5185m	<0.1	0	---	---
Vanadium	ppm	ASTM D5185m	<0.1	0	---	---
Iron	ppm	ASTM D5185m	<0.1	0	---	---
Calcium	ppm	ASTM D5185m	<0.1	<1	---	---
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				no image	no image	
Bottom				no image	no image	

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR05759001 **Received** : 03 Feb 2023
Lab Number : 05759001 **Tested** : 13 Feb 2023
Unique Number : 10323608 **Diagnosed** : 13 Feb 2023 - Doug Bogart
Test Package : DF-2 (Additional Tests: Bacteria, KV100, Screen)

BRIAN LYDON
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 PEMBROKE, MA
 US 02359
 Contact: BRIAN LYDON

To discuss this sample report, contact Customer Service at 1-800-827-0711.
 * - 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)