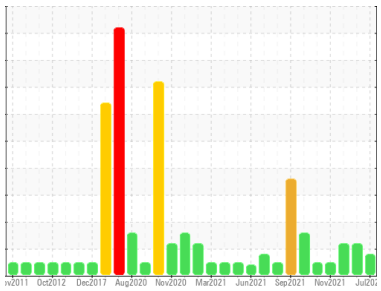
FUEL REPORT

Sample Rating Trend



ISO

Area
[450183052]
Machine Id
TB-71001B
Component
Diesel Fuel
Fluid
MARINE DIESEL DMA (--- GAL)

DIAGNOSIS

Recommendation

Laboratory test indicate that this fuel is suitable for use and meets all test requirements. We advise that you filter this fluid before use. We recommend you service the filters on this component. Resample at the next service interval to monitor.

Corrosion

{not applicable}

Contaminants

There is a light amount of silt (particulates < 14 microns in size) present in the fuel. The water content is negligible.

Fuel Condition

The fuel is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PC**	PC	PC
Sample Date		Client Info		**31 Jul 2023**	17 Jul 2023	14 Mar 2023
Machine Age	hrs	Client Info		**0**	0	0
Sample Status				**ATTENTION**	ABNORMAL	ABNORMAL

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		ASTM D1298*	0.869	**0.853**	0.856	0.859
Fuel Color	text	Visual Screen*	Clear	**Red**	Orang	Purpl
Visc @ 40°C	cSt	ASTM D7279(m)	5.74	**3.7**	3.7	4.2
Pensky-Martens Flash Point	°C	ASTM D7215*	73.0	**66.8**	66.1	69

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185(m)	730	**271**	327	416

DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D2887*	171	**177**	176	180
5% Distillation Point	°C	ASTM D2887*		**202**	200	207
10% Distill Point	°C	ASTM D2887*	214	**216**	214	221
15% Distillation Point	°C	ASTM D2887*		**227**	224	233
20% Distill Point	°C	ASTM D2887*		**237**	234	244
30% Distill Point	°C	ASTM D2887*		**257**	253	266
40% Distill Point	°C	ASTM D2887*		**273**	269	284
50% Distill Point	°C	ASTM D2887*	323	**289**	286	302
60% Distill Point	°C	ASTM D2887*		**307**	304	322
70% Distill Point	°C	ASTM D2887*		**325**	322	341
80% Distill Point	°C	ASTM D2887*		**346**	344	362
85% Distillation Point	°C	ASTM D2887*		**360**	359	375
90% Distill Point	°C	ASTM D2887*	398	**374**	374	387
95% Distillation Point	°C	ASTM D2887*		**397**	398	407
Final Boiling Point	°C	ASTM D2887*	415	**412**	415	420

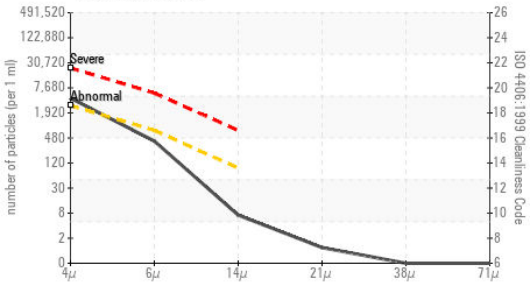
IGNITION QUALITY		method	limit/base	current	history1	history2
API Gravity		ASTM D1298*		**34**	33	33
Cetane Index		ASTM D4737*	<40.0	**49**	47	48

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	<1.0	**0**	0	0
Sodium	ppm	ASTM D5185(m)	<0.1	**0**	0	0
Potassium	ppm	ASTM D5185(m)	<0.1	**<1**	0	0
Water	%	ASTM D6304*	<0.05	**0.003**	0.005	0.004
ppm Water	ppm	ASTM D6304*	<500	**38.0**	52.9	44.8

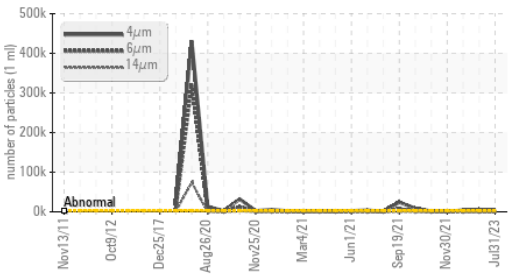
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>2500	▲ **3807**	▲ 6037	▲ 4583
Particles >6µm		ASTM D7647	>640	**356**	▲ 1309	▲ 1360
Particles >14µm		ASTM D7647	>80	**6**	34	65
Particles >21µm		ASTM D7647	>20	**1**	6	17
Particles >38µm		ASTM D7647	>4	**0**	0	1
Particles >71µm		ASTM D7647	>3	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>18/16/13	▲ **19/16/10**	▲ 20/18/12	▲ 19/18/13

FUEL REPORT

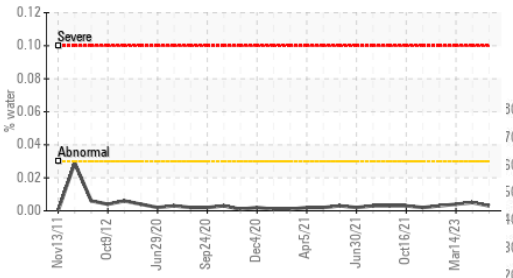
Particle Count



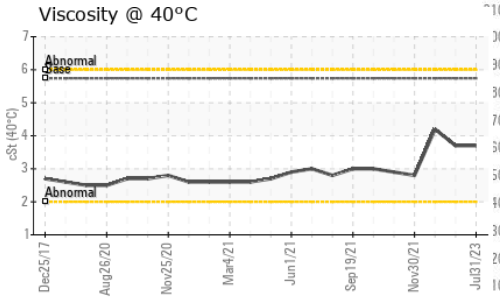
Particle Trend



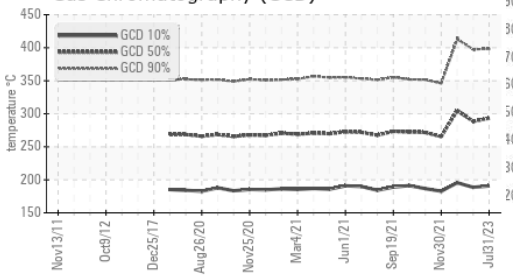
Water



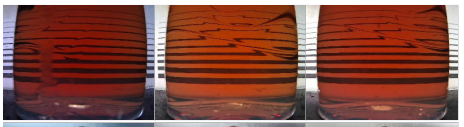
Viscosity @ 40°C



Gas Chromatography (GCD)

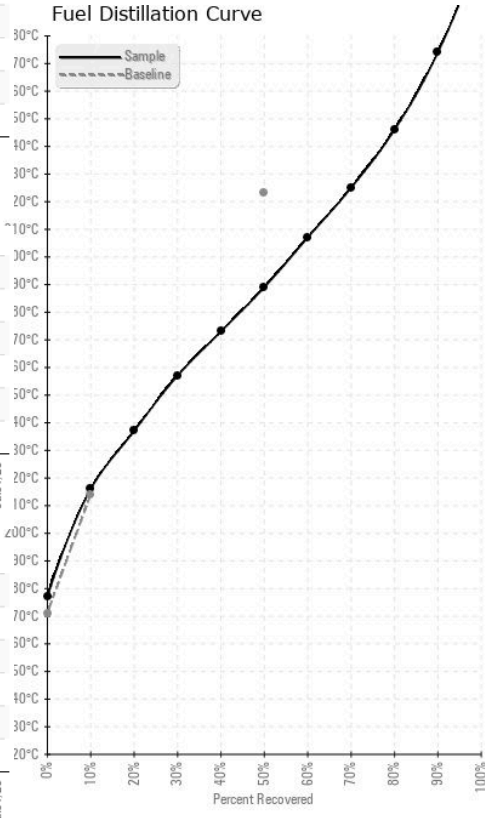


HEAVY METALS		method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185(m)	<0.1	**0**	0	0
Nickel	ppm	ASTM D5185(m)	<0.1	**0**	0	0
Lead	ppm	ASTM D5185(m)	<0.1	**0**	0	0
Vanadium	ppm	ASTM D5185(m)	<0.1	**0**	0	0
Iron	ppm	ASTM D5185(m)	<0.1	**<1**	<1	<1
Calcium	ppm	ASTM D5185(m)	<0.1	**0**	0	<1
Magnesium	ppm	ASTM D5185(m)	<0.1	**0**	0	<1
Phosphorus	ppm	ASTM D5185(m)	<0.1	**0**	0	0
Zinc	ppm	ASTM D5185(m)	<0.1	**0**	0	<1

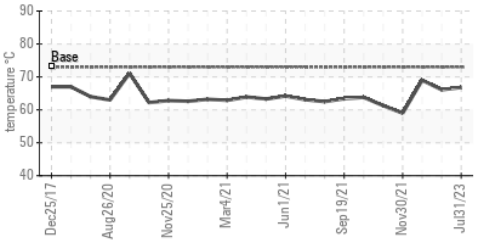
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

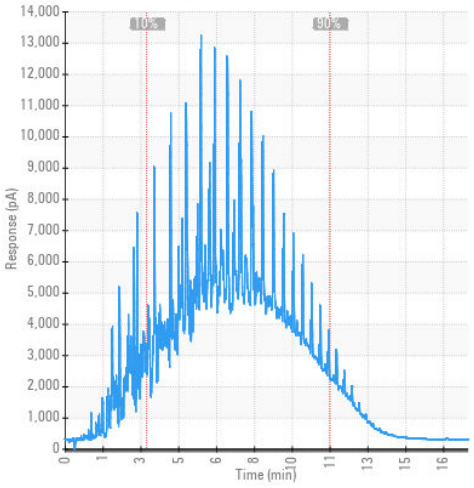
Fuel Distillation Curve



Pensky-Martens Flash Point (°C)



GCD Spectrum



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC **Received** : 16 Aug 2023
Lab Number : 02576305 **Diagnosed** : 18 Aug 2023
Unique Number : 5629365 **Diagnostician** : Kevin Marson
Test Package : FUEL (Additional Tests: CC Flash, GC-PercFuel, PrtCount)

To discuss this sample report, contact Customer Service at 1-800-268-2131.
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
Validity of results and interpretation are based on the sample and information as supplied.

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