

Area
[R100-22228]
Machine Id
YANMAR 2123170

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. Resample at the next service interval to monitor.

Corrosion

{not applicable}

Contaminants

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. There is no indication of any contamination in the diesel fuel.

Fuel Condition

The condition of the fuel is suitable for further service.

SAMPLE INFORMATION method limit/base current history1 history2

Sample Number	Client Info	VPA045961	---	---
Sample Date	Client Info	11 Aug 2023	---	---
Machine Age	hrs Client Info	2609	---	---
Sample Status		NORMAL	---	---

PHYSICAL PROPERTIES method limit/base current history1 history2

Specific Gravity	ASTM D1298*	0.869	0.853	---	---
Fuel Color	text Visual Screen*	Clear	Yellow	---	---
Visc @ 40°C	cSt ASTM D7279(m)	5.74	3.6	---	---
Pensky-Martens Flash Point	°C ASTM D7215*	73.0	70	---	---

SULFUR CONTENT method limit/base current history1 history2

Sulfur	ppm ASTM D5185(m)	730	6	---	---
--------	-------------------	-----	----------	-----	-----

DISTILLATION method limit/base current history1 history2

Initial Boiling Point	°C ASTM D2887*	171	184	---	---
5% Distillation Point	°C ASTM D2887*		220	---	---
10% Distill Point	°C ASTM D2887*	214	235	---	---
15% Distillation Point	°C ASTM D2887*		245	---	---
20% Distill Point	°C ASTM D2887*		255	---	---
30% Distill Point	°C ASTM D2887*		271	---	---
40% Distill Point	°C ASTM D2887*		282	---	---
50% Distill Point	°C ASTM D2887*	323	293	---	---
60% Distill Point	°C ASTM D2887*		304	---	---
70% Distill Point	°C ASTM D2887*		316	---	---
80% Distill Point	°C ASTM D2887*		327	---	---
85% Distillation Point	°C ASTM D2887*		336	---	---
90% Distill Point	°C ASTM D2887*	398	345	---	---
95% Distillation Point	°C ASTM D2887*		361	---	---
Final Boiling Point	°C ASTM D2887*	415	377	---	---

IGNITION QUALITY method limit/base current history1 history2

API Gravity	ASTM D1298*		34	---	---
Cetane Index	ASTM D4737*	<40.0	51	---	---

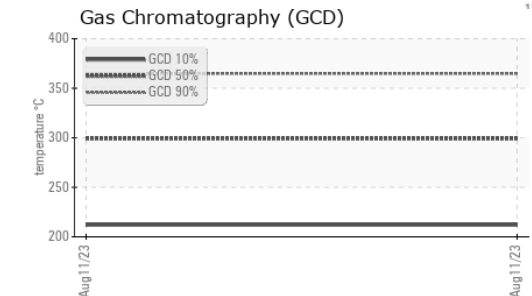
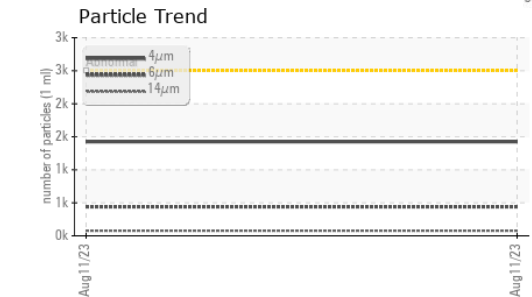
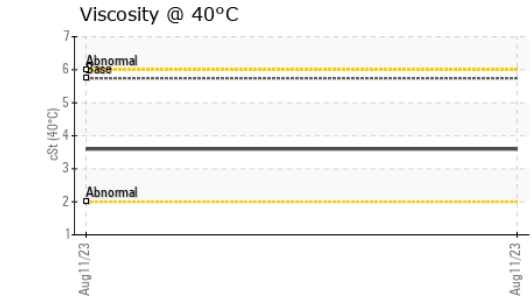
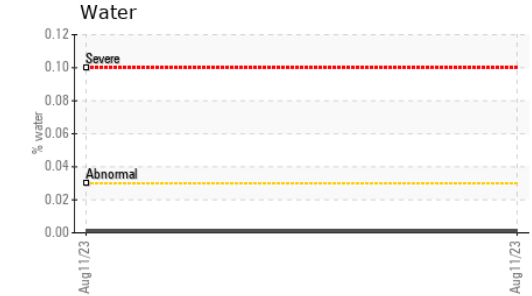
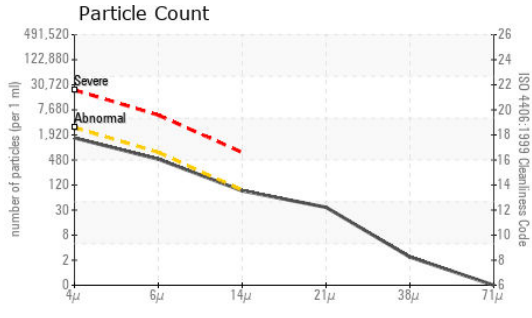
CONTAMINANTS method limit/base current history1 history2

Silicon	ppm ASTM D5185(m)	<1.0	<1	---	---
Sodium	ppm ASTM D5185(m)	<0.1	0	---	---
Potassium	ppm ASTM D5185(m)	<0.1	<1	---	---
Water	% ASTM D6304*	<0.05	0.001	---	---
ppm Water	ppm ASTM D6304*	<500	8.0	---	---

FLUID CLEANLINESS method limit/base current history1 history2

Particles >4µm	ASTM D7647	>2500	1425	---	---
Particles >6µm	ASTM D7647	>640	440	---	---
Particles >14µm	ASTM D7647	>80	77	---	---
Particles >21µm	ASTM D7647	>20	31	---	---
Particles >38µm	ASTM D7647	>4	2	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	18/16/13	---	---

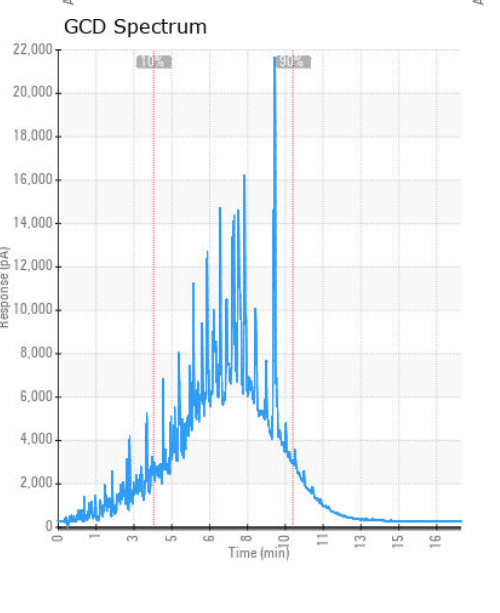
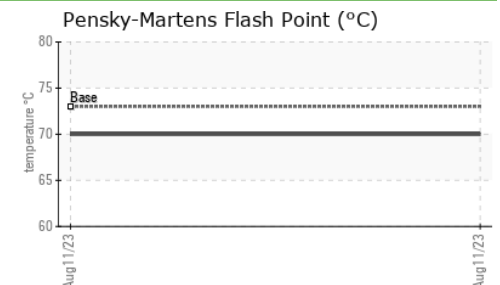
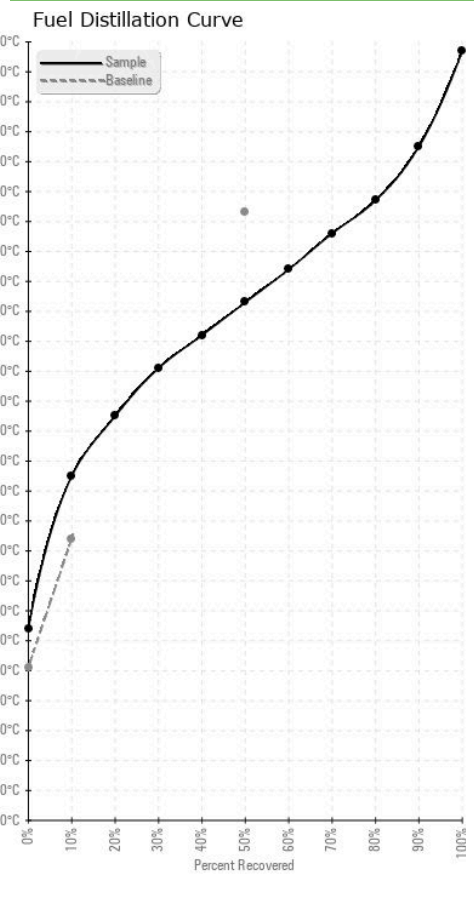
FUEL REPORT



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

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : VPA045961
Lab Number : 02577833
Unique Number : 5630893
Test Package : FUEL (Additional Tests: CC Flash, GC-PercFuel, PrtCount)
Received : 23 Aug 2023
Diagnosed : 30 Aug 2023
Diagnostician : Kevin Marson
 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.

CULLEN DIESEL POWER - 695335
 9300 192 ST
 SURREY, BC
 CA V4N 3R8
 Contact: Venu Iyer
 vgi@cullendiesel.com
 T: (604)455-2207
 F: