



OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
[] NOT GIVEN WC0874799
 Component
Starboard Main Engine
 Fluid
{not provided} (--- GAL)

DIAGNOSIS

- Recommendation**
Resample at the next service interval to monitor.
- Wear**
All component wear rates are normal.
- Contamination**
There is no indication of any contamination in the oil.
- Fluid Condition**
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	WC0874799	---	---
Sample Date	Client Info	22 Apr 2024	---	---
Machine Age	hrs Client Info	0	---	---
Oil Age	hrs Client Info	0	---	---
Oil Changed	Client Info	N/A	---	---
Sample Status		NORMAL	---	---

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >4.0	<1.0	---	---
Glycol	WC Method	NEG	---	---

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >75	5	---	---
Chromium	ppm ASTM D5185m >8	<1	---	---
Nickel	ppm ASTM D5185m >2	0	---	---
Titanium	ppm ASTM D5185m >3	<1	---	---
Silver	ppm ASTM D5185m >2	0	---	---
Aluminum	ppm ASTM D5185m >15	2	---	---
Lead	ppm ASTM D5185m >18	0	---	---
Copper	ppm ASTM D5185m >80	3	---	---
Tin	ppm ASTM D5185m >14	<1	---	---
Vanadium	ppm ASTM D5185m	0	---	---
Cadmium	ppm ASTM D5185m	0	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	28	---	---
Barium	ppm ASTM D5185m	0	---	---
Molybdenum	ppm ASTM D5185m	59	---	---
Manganese	ppm ASTM D5185m	<1	---	---
Magnesium	ppm ASTM D5185m	1395	---	---
Calcium	ppm ASTM D5185m	1120	---	---
Phosphorus	ppm ASTM D5185m	1035	---	---
Zinc	ppm ASTM D5185m	1203	---	---
Sulfur	ppm ASTM D5185m	3730	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	4	---	---
Sodium	ppm ASTM D5185m >75	2	---	---
Potassium	ppm ASTM D5185m >20	2	---	---
Water	% ASTM D6304 >0.1	NEG	---	---

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	0	---	---
Nitration	Abs/cm *ASTM D7624 >20	6.3	---	---
Sulfation	Abs/.1mm *ASTM D7415 >30	18.4	---	---

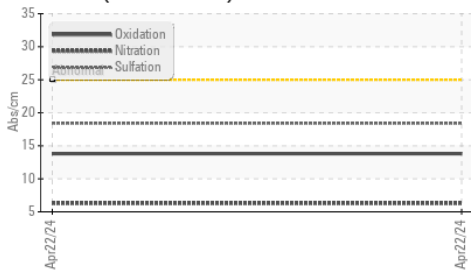
FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	13.8	---	---
Base Number (BN)	mg KOH/g ASTM D2896	12.47	---	---

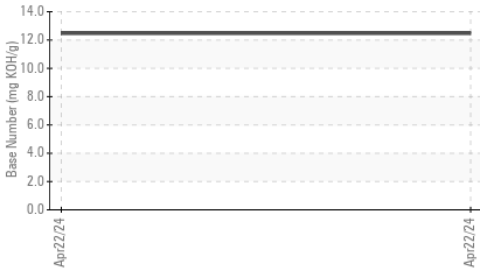


OIL ANALYSIS REPORT

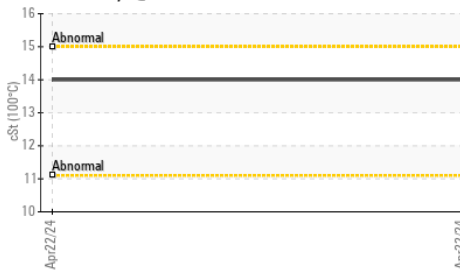
FT-IR (Direct Trend)



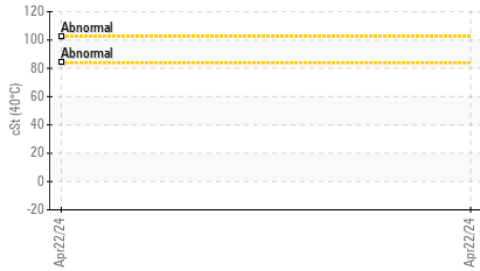
Base Number



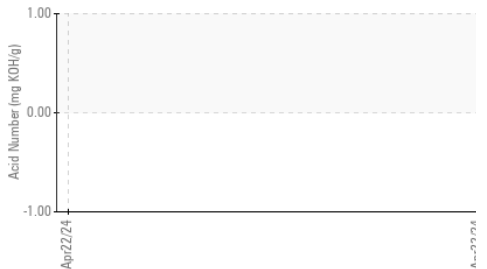
Viscosity @ 100°C



Viscosity @ 40°C



Acid Number



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---
Free Water	scalar	*Visual		NEG	---

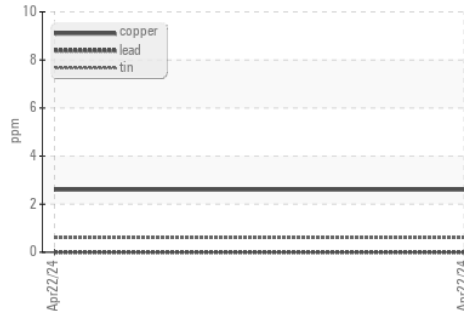
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.0	---	---

GRAPHS

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WC0874799

Lab Number : 06157893

Unique Number : 10993316

Test Package : IND 2 (Additional Tests: KF, KV40, TAN Man)

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)

Received : 23 Apr 2024

Tested : 25 Apr 2024

Diagnosed : 25 Apr 2024 - Sean Felton

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