



OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
SME (S/N 526110788)
 Component
Starboard Main Engine
 Fluid
MOBIL DELVAC 1640 (205 LTR)



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

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		WC0711972	---	---
Sample Date	Client Info		12 Dec 2023	---	---
Machine Age	hrs	Client Info	856	---	---
Oil Age	hrs	Client Info	373	---	---
Oil Changed		Client Info	N/A	---	---
Sample Status			NORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>4.0	<1.0	---	---
Water	WC Method	>0.1	NEG	---	---
Glycol	WC Method		NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >75	4	---	---
Chromium	ppm	ASTM D5185(m) >8	0	---	---
Nickel	ppm	ASTM D5185(m) >2	<1	---	---
Titanium	ppm	ASTM D5185(m) >3	0	---	---
Silver	ppm	ASTM D5185(m) >2	<1	---	---
Aluminum	ppm	ASTM D5185(m) >15	1	---	---
Lead	ppm	ASTM D5185(m) >18	<1	---	---
Copper	ppm	ASTM D5185(m) >80	4	---	---
Tin	ppm	ASTM D5185(m) >14	0	---	---
Antimony	ppm	ASTM D5185(m)	0	---	---
Vanadium	ppm	ASTM D5185(m)	0	---	---
Beryllium	ppm	ASTM D5185(m)	0	---	---
Cadmium	ppm	ASTM D5185(m)	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	5	---	---
Barium	ppm	ASTM D5185(m)	<1	---	---
Molybdenum	ppm	ASTM D5185(m)	1	---	---
Manganese	ppm	ASTM D5185(m)	0	---	---
Magnesium	ppm	ASTM D5185(m)	183	---	---
Calcium	ppm	ASTM D5185(m)	3916	---	---
Phosphorus	ppm	ASTM D5185(m)	922	---	---
Zinc	ppm	ASTM D5185(m)	1073	---	---
Sulfur	ppm	ASTM D5185(m)	7473	---	---
Lithium	ppm	ASTM D5185(m)	<1	---	---

CONTAMINANTS

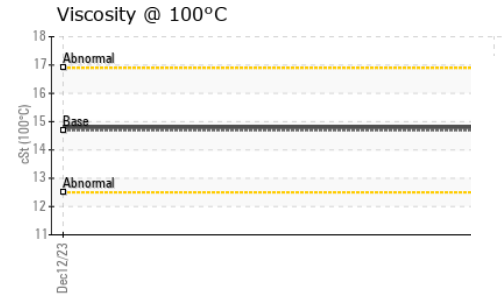
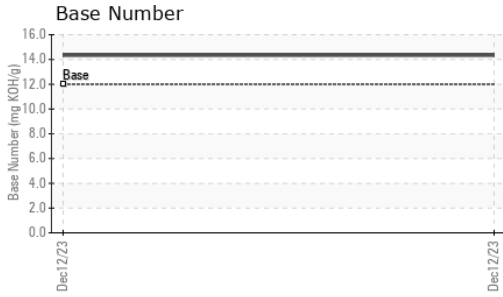
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >20	5	---	---
Sodium	ppm	ASTM D5185(m) >75	2	---	---
Potassium	ppm	ASTM D5185(m) >20	0	---	---

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	0	---	---
Nitration	Abs/cm	ASTM D7624* >20	8.7	---	---
Sulfation	Abs./1mm	ASTM D7415* >30	18.6	---	---



OIL ANALYSIS REPORT

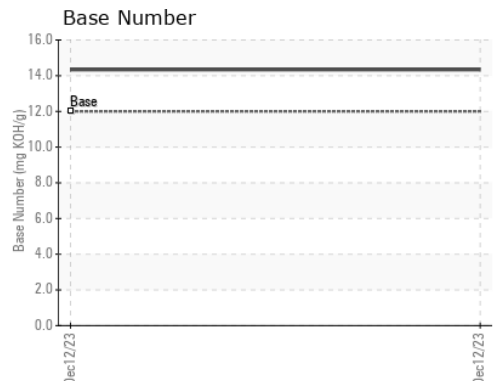
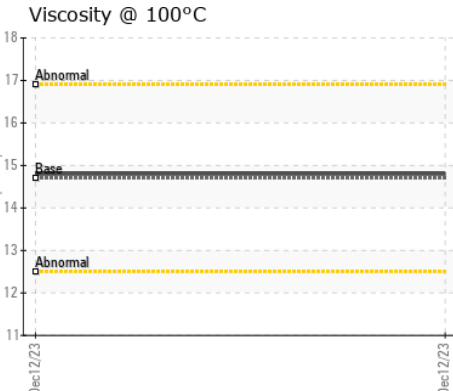
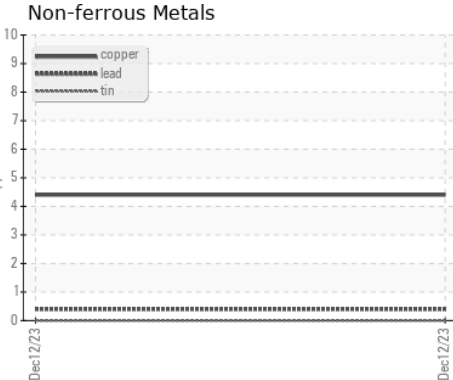
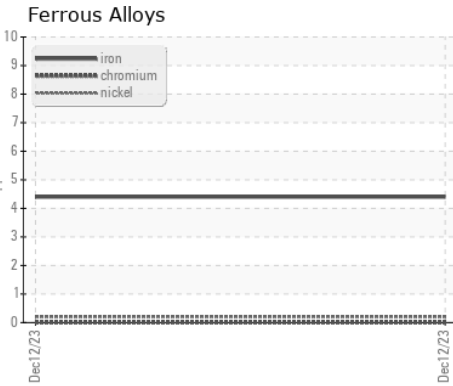


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	13.2	---	---
Base Number (BN)	mg KOH/g	ASTM D2896*	12	14.34	---	---

VISUAL		method	limit/base	current	history1	history2
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 D7279(m)	14.7	14.8	---	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Canadian Coast Guard - CCGS Constable Carriere
Sample No. : WC0711972 **Received** : 18 Dec 2023 867 Lakeshore Road
Lab Number : 02603686 **Diagnosed** : 20 Dec 2023 Burlington, ON
Unique Number : 5696771 **Diagnostician** : Wes Davis CA L7R 4A6
Test Package : MAR 2

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.

Contact: Chief Engineer
 constablecarriereCE@ccgs-ngcc.gc.ca
 T: (705)542-2737
 F: x: