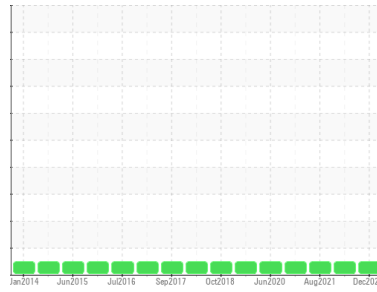




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
PME (S/N 526105492)
 Component
Port Main Engine
 Fluid
MOBIL DELVAC 1640 (205 LTR)

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			WC0711971	WC0611577	WC0537904
Sample Date	Client Info			12 Dec 2023	08 Feb 2022	28 Aug 2021
Machine Age	hrs	Client Info		8473	7175	6744
Oil Age	hrs	Client Info		352	0	469
Oil Changed	Client Info			N/A	Changed	Not Chngd
Sample Status				NORMAL	NORMAL	NORMAL

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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>75	5	6	4
Chromium	ppm	ASTM D5185(m)	>8	0	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	>3	0	0	0
Silver	ppm	ASTM D5185(m)	>2	<1	0	<1
Aluminum	ppm	ASTM D5185(m)	>15	1	2	1
Lead	ppm	ASTM D5185(m)	>18	<1	<1	0
Copper	ppm	ASTM D5185(m)	>80	1	2	2
Tin	ppm	ASTM D5185(m)	>14	0	0	<1
Antimony	ppm	ASTM D5185(m)		0	<1	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		2	1	2
Barium	ppm	ASTM D5185(m)		<1	0	0
Molybdenum	ppm	ASTM D5185(m)		0	<1	<1
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)		202	247	246
Calcium	ppm	ASTM D5185(m)		3968	3880	3736
Phosphorus	ppm	ASTM D5185(m)		924	977	971
Zinc	ppm	ASTM D5185(m)		1074	1112	1070
Sulfur	ppm	ASTM D5185(m)		7701	7920	7886
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

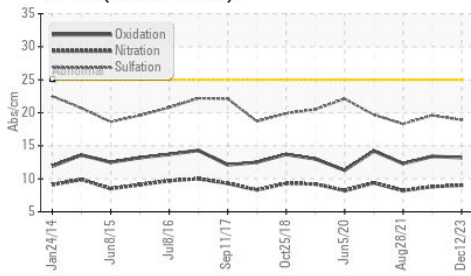
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>20	6	8	8
Sodium	ppm	ASTM D5185(m)	>75	2	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	0	<1	<1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		0.1	0	0
Nitration	Abs/cm	ASTM D7624*	>20	9.0	8.8	8.2
Sulfation	Abs./1mm	ASTM D7415*	>30	18.9	19.6	18.3

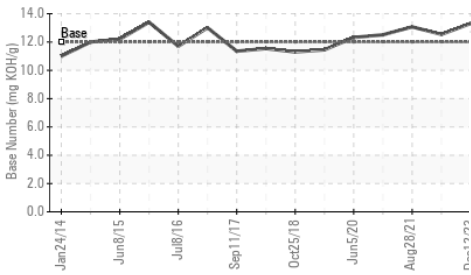


OIL ANALYSIS REPORT

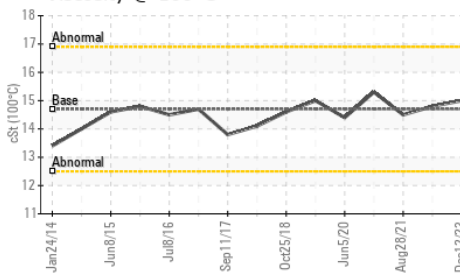
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C



FLUID DEGRADATION method limit/base current history1 history2

Oxidation	Abs./1mm	ASTM D7414*	>25	13.2	13.4	12.3
Base Number (BN)	mg KOH/g	ASTM D2896*	12	13.31	12.54	13.07

VISUAL method limit/base current history1 history2

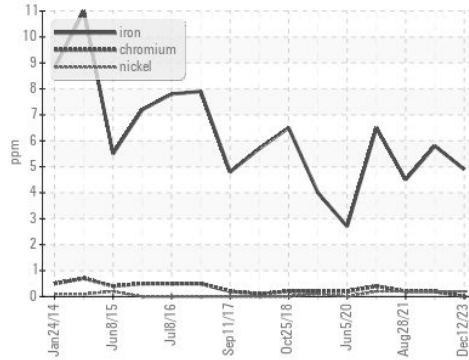
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES method limit/base current history1 history2

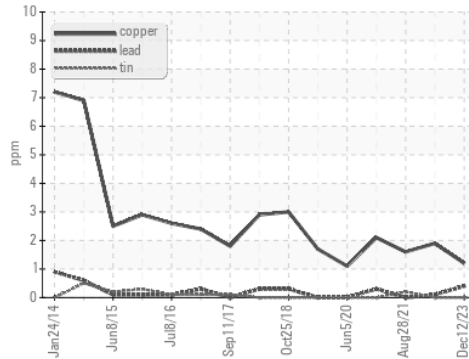
Visc @ 100°C	cSt	ASTM D7279(m)	14.7	15.0	14.8	14.5
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GRAPHS

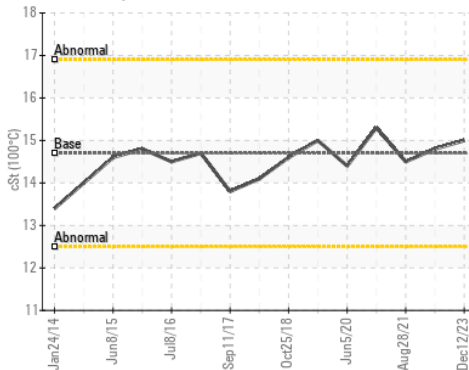
Ferrous Alloys



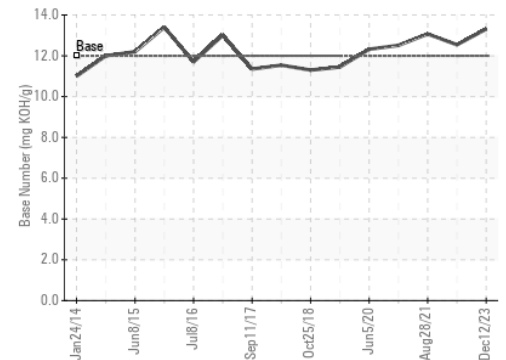
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **Canadian Coast Guard - CCGS Constable Carriere**
Sample No. : WC0711971 **Received** : 18 Dec 2023 867 Lakeshore Road
Lab Number : **02603685** **Tested** : 22 Dec 2023 Burlington, ON
Unique Number : 5696770 **Diagnosed** : 22 Dec 2023 - Wes Davis CA L7R 4A6
Test Package : MAR 2 **Contact:** Chief Engineer

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. T: (705)542-2737
 F: x: