



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area  
**ROBIN B INGRAM**  
Machine Id  
**[ROBIN B INGRAM] 008 617985-8**  
Component  
**Starboard Genset**  
Fluid  
**CHEVRON DELO 400 XLE 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW06221935</b>	MW06159620	MW06159619
Sample Date		Client Info		<b>02 Jun 2024</b>	01 Apr 2024	22 Feb 2024
Machine Age	hrs	Client Info		<b>3190</b>	2414	2006
Oil Age	hrs	Client Info		<b>3190</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>6</b>	6	8
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>12	<b>2</b>	2	2
Lead	ppm	ASTM D5185m	>17	<b>1</b>	<1	<1
Copper	ppm	ASTM D5185m	>70	<b>20</b>	65	48
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

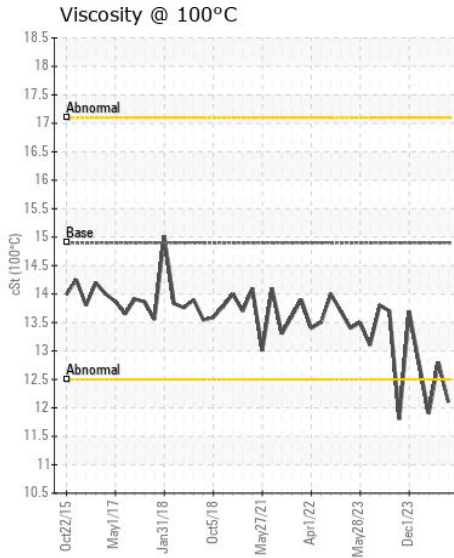
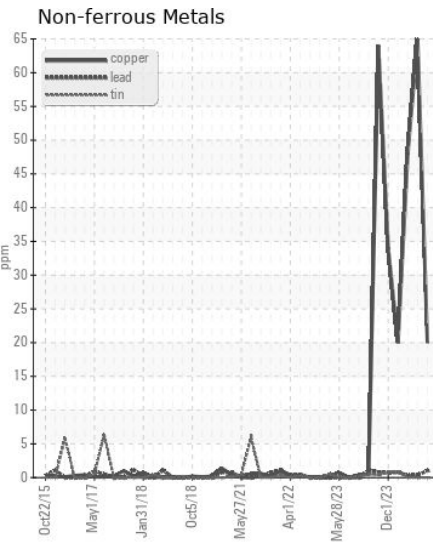
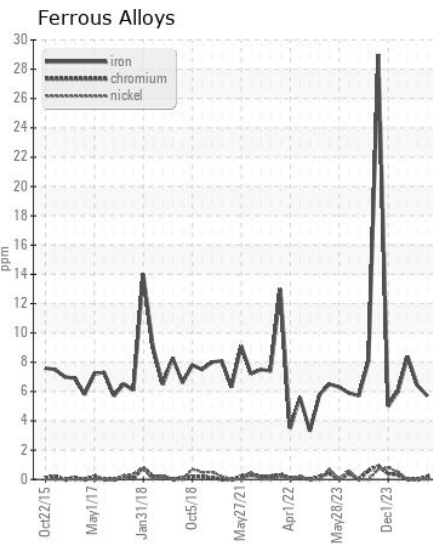
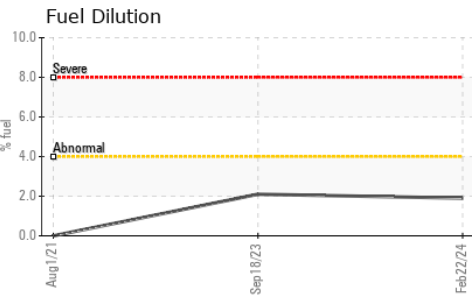
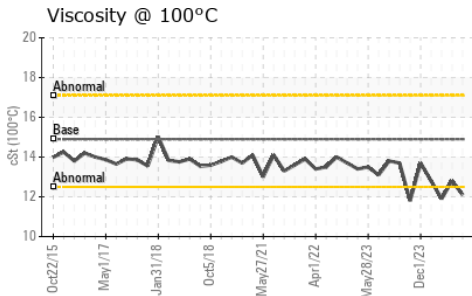
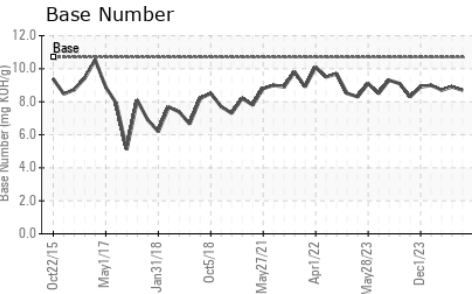
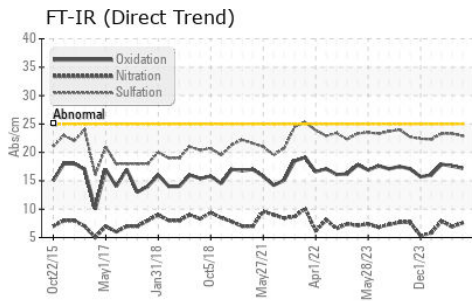
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	6	6
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	0	0
Fuel	%	ASTM D3524	>4.0	<b>&lt;1.0</b>	<1.0	1.9
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.6</b>	6.9	7.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.9</b>	23.3	23.3
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG

**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.

Sodium	ppm	ASTM D5185m		<b>2</b>	0	<1
Boron	ppm	ASTM D5185m		<b>267</b>	308	311
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>124</b>	123	126
Manganese	ppm	ASTM D5185m		<b>3</b>	2	3
Magnesium	ppm	ASTM D5185m		<b>660</b>	689	669
Calcium	ppm	ASTM D5185m		<b>1678</b>	1630	1650
Phosphorus	ppm	ASTM D5185m	760	<b>746</b>	709	718
Zinc	ppm	ASTM D5185m	830	<b>847</b>	941	902
Sulfur	ppm	ASTM D5185m	2770	<b>2893</b>	3179	3137
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.2</b>	17.6	17.9
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	<b>8.7</b>	8.9	8.7
Visc @ 100°C	cSt	ASTM D445	14.9	<b>12.1</b>	12.8	11.9



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW06221935 **Received** : 26 Jun 2024  
**Lab Number** : 06221935 **Tested** : 28 Jun 2024  
**Unique Number** : 11100132 **Diagnosed** : 28 Jun 2024 - Jonathan Hester  
**Test Package** : MAR 2 ( Additional Tests: FuelDilution )

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)

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