



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

Machine Id  
**NEWPORT**  
Component  
**Starboard Genset**  
Fluid  
**CHEVRON DELO 400 XLE 15W40 (5 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW0062675</b>	MW0045730	MW0039061
Sample Date		Client Info		<b>11 May 2024</b>	12 Sep 2023	21 May 2023
Machine Age	hrs	Client Info		<b>16750</b>	15866	15374
Oil Age	hrs	Client Info		<b>884</b>	500	500
Filter Age	hrs	Client Info		<b>884</b>	500	500
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>15</b>	8	5
Chromium	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	11	1
Silver	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>12	<b>5</b>	<1	4
Lead	ppm	ASTM D5185m	>17	<b>3</b>	<1	0
Copper	ppm	ASTM D5185m	>70	<b>&lt;1</b>	<1	0
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

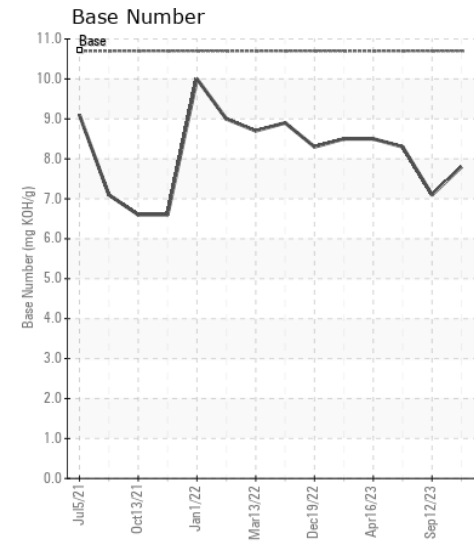
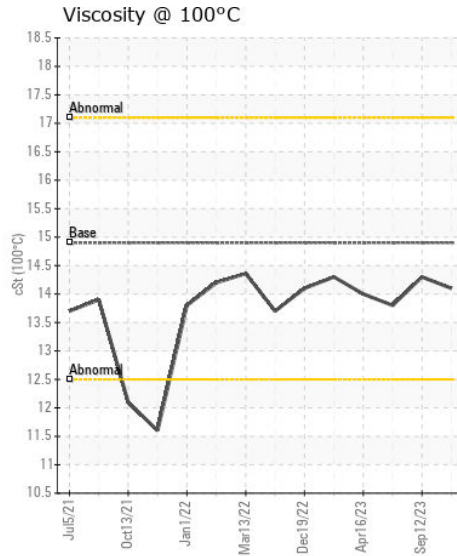
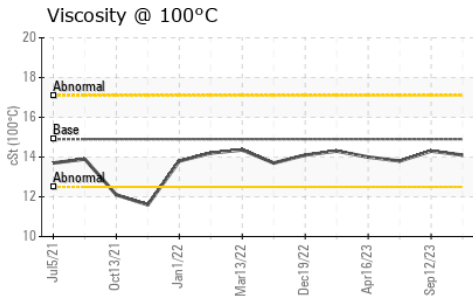
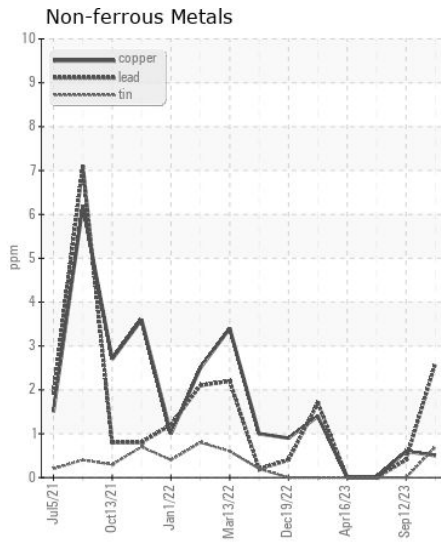
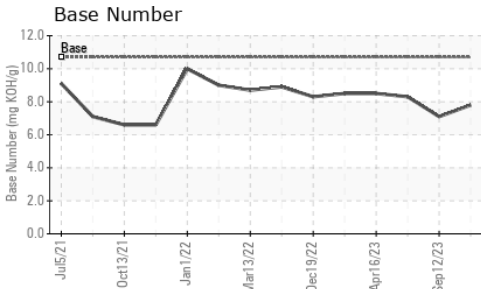
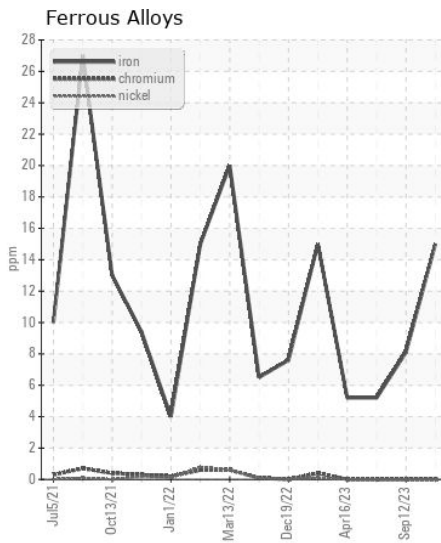
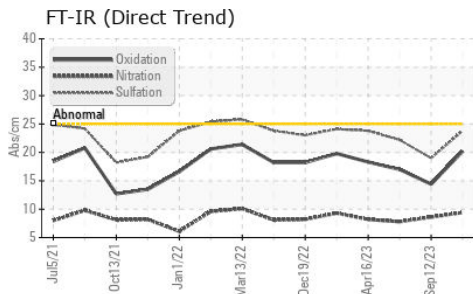
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	4	3
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	3	<1
Fuel		WC Method	>4.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0.3</b>	0.2	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.4</b>	8.6	7.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.8</b>	19.0	22.2
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>&lt;1</b>	4	<1
Boron	ppm	ASTM D5185m		<b>330</b>	109	262
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>138</b>	49	107
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>774</b>	752	720
Calcium	ppm	ASTM D5185m		<b>1656</b>	1719	1600
Phosphorus	ppm	ASTM D5185m	760	<b>761</b>	766	737
Zinc	ppm	ASTM D5185m	830	<b>901</b>	936	914
Sulfur	ppm	ASTM D5185m	2770	<b>2851</b>	3870	3187
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>20.2</b>	14.4	17.0
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	<b>7.8</b>	7.1	8.3
Visc @ 100°C	cSt	ASTM D445	14.9	<b>14.1</b>	14.3	13.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0062675  
**Lab Number** : 06187119  
**Unique Number** : 11043871  
**Test Package** : MAR 2  
**Received** : 21 May 2024  
**Tested** : 23 May 2024  
**Diagnosed** : 23 May 2024 - Wes Davis

**C & B MARINE**  
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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)