



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

Area  
**STEPHEN P VENABLE**  
Machine Id  
[STEPHEN P VENABLE] 008 590046-8  
Component  
**Starboard Genset**  
Fluid  
**CHEVRON DELO 400 LE 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW0067988</b>	MW0067969	MW0062969
Sample Date		Client Info		<b>22 May 2024</b>	03 Apr 2024	01 Mar 2024
Machine Age	hrs	Client Info		<b>293</b>	7699	7845
Oil Age	hrs	Client Info		<b>293</b>	7699	372
Filter Age	hrs	Client Info		<b>293</b>	7699	372
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	N/A
Filter Changed		Client Info		<b>Not Changd</b>	Not Changd	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>6</b>	7	10
Chromium	ppm	ASTM D5185m	>4	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>12	<b>2</b>	3	4
Lead	ppm	ASTM D5185m	>17	<b>&lt;1</b>	0	1
Copper	ppm	ASTM D5185m	>70	<b>0</b>	<1	1
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>LIGHT</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

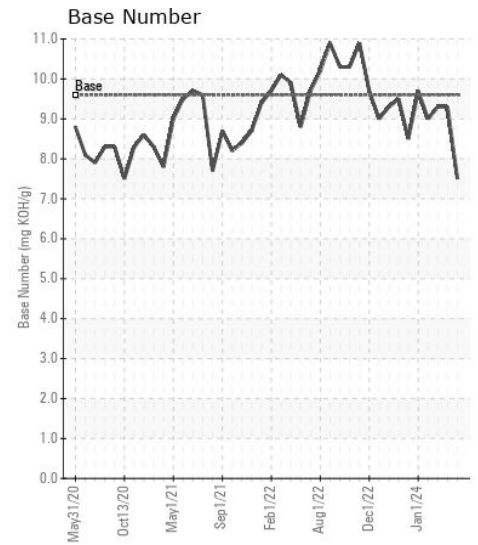
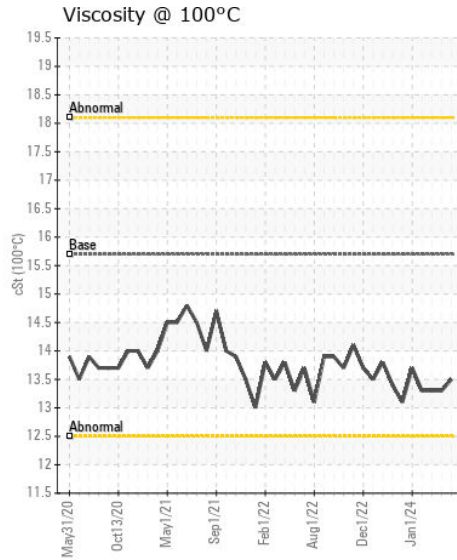
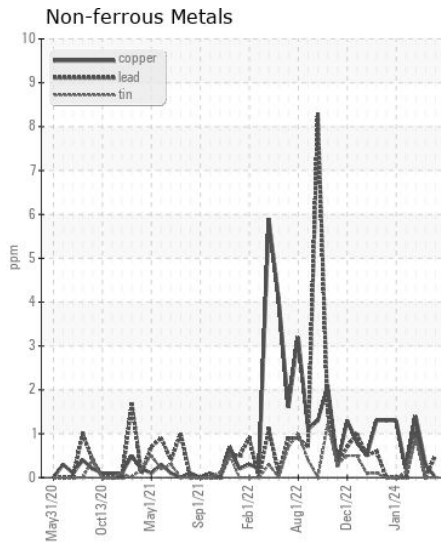
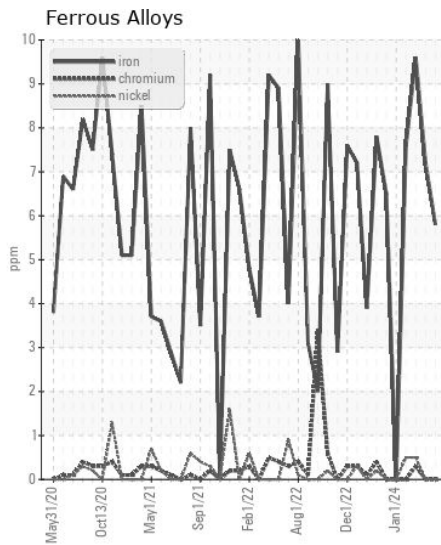
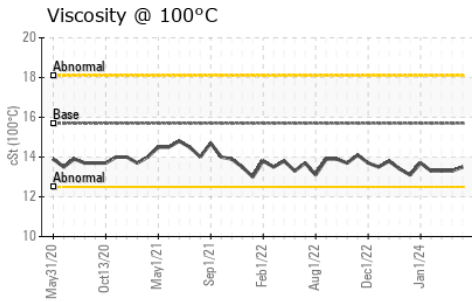
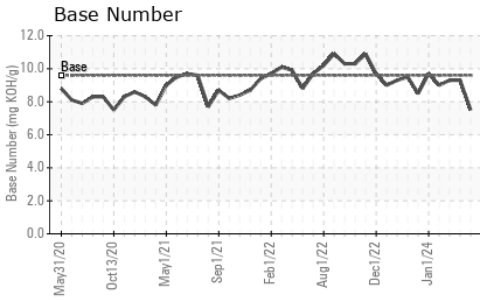
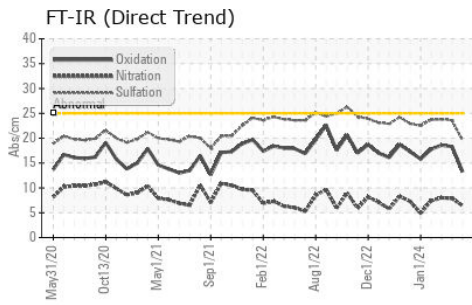
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	6	8
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	2
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>0.1</b>	0.2	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.4</b>	7.9	8.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.5</b>	23.6	23.8
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>0</b>	1	0
Boron	ppm	ASTM D5185m		<b>319</b>	316	429
Barium	ppm	ASTM D5185m		<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m		<b>92</b>	134	157
Manganese	ppm	ASTM D5185m		<b>2</b>	2	2
Magnesium	ppm	ASTM D5185m		<b>420</b>	724	734
Calcium	ppm	ASTM D5185m		<b>2282</b>	1773	1835
Phosphorus	ppm	ASTM D5185m	1200	<b>806</b>	755	764
Zinc	ppm	ASTM D5185m	1300	<b>977</b>	917	943
Sulfur	ppm	ASTM D5185m	3200	<b>3463</b>	3251	2909
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.2</b>	18.3	18.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.6	<b>7.5</b>	9.3	9.3
Visc @ 100°C	cSt	ASTM D445	15.7	<b>13.5</b>	13.3	13.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0067988  
**Lab Number** : 06193331  
**Unique Number** : 11050083  
**Test Package** : MAR 2  
**Received** : 28 May 2024  
**Tested** : 30 May 2024  
**Diagnosed** : 30 May 2024 - Sean Felton

**INGRAM BARGE**  
 900 S 3RD ST  
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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)