



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

Area  
**GEORGE N**  
Machine Id  
[**GEORGE N**] 008 571099-8  
Component  
**Starboard Genset**  
Fluid  
**CHEVRON DELO 400 LE 15W40 (4 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW0072172</b>	MW0072178	MW0068098
Sample Date		Client Info		<b>01 Jul 2024</b>	01 Jun 2024	01 May 2024
Machine Age	hrs	Client Info		<b>46379</b>	46047	45744
Oil Age	hrs	Client Info		<b>284</b>	0	48
Filter Age	hrs	Client Info		<b>284</b>	312	48
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	4
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<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>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>12	<b>2</b>	4	3
Lead	ppm	ASTM D5185m	>17	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>70	<b>0</b>	<1	<1
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

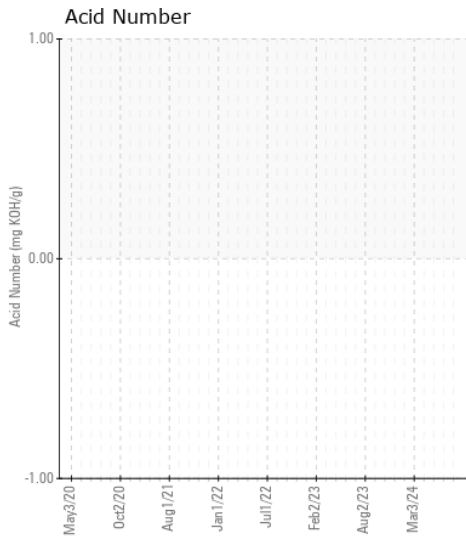
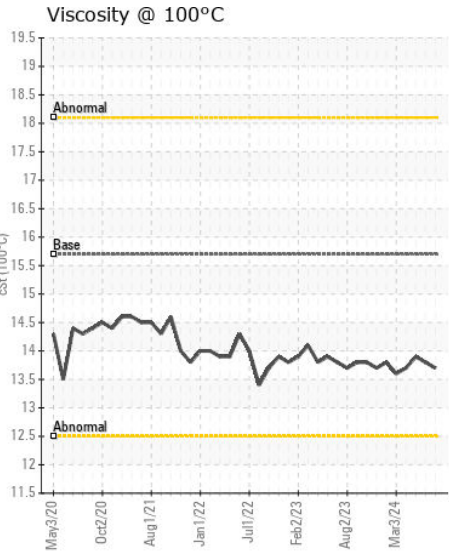
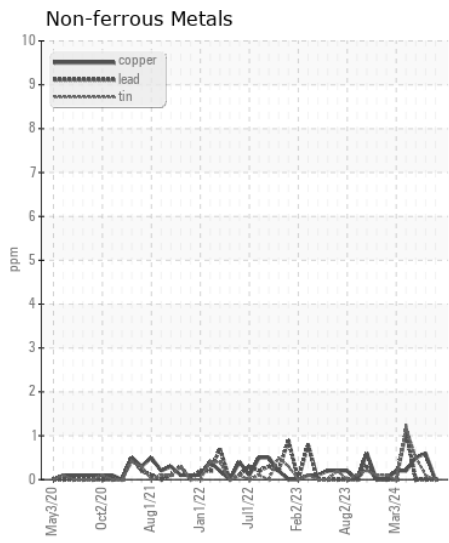
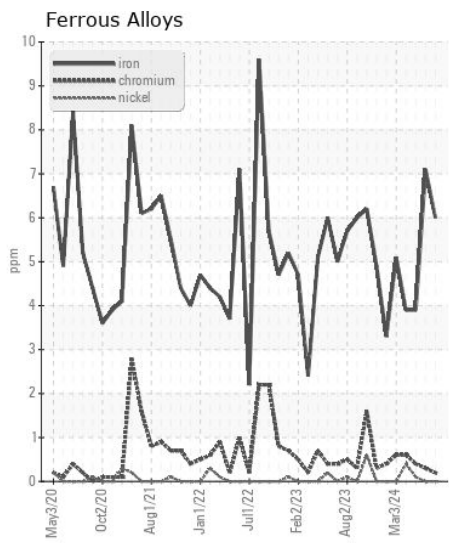
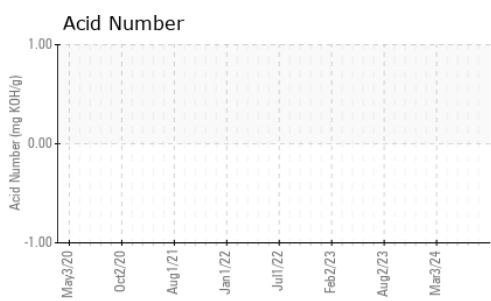
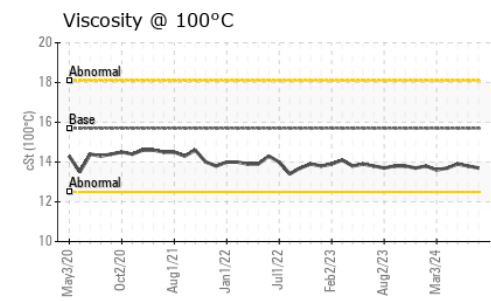
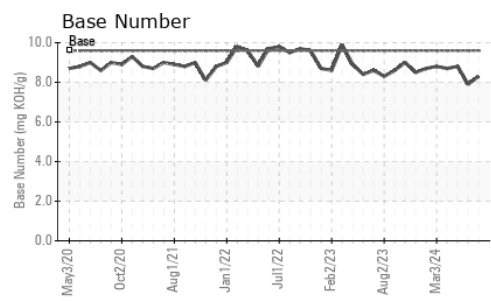
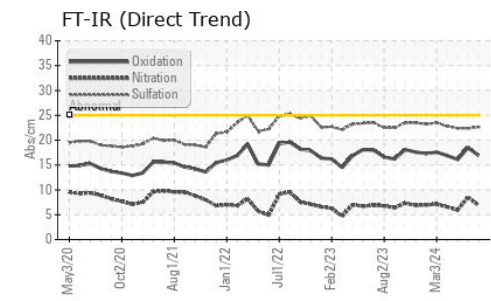
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	7	7
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	3	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>	0.3	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.9</b>	8.5	5.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.6</b>	22.4	22.4
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>1</b>	0	0
Boron	ppm	ASTM D5185m		<b>324</b>	371	460
Barium	ppm	ASTM D5185m		<b>0</b>	2	2
Molybdenum	ppm	ASTM D5185m		<b>118</b>	133	128
Manganese	ppm	ASTM D5185m		<b>3</b>	2	<1
Magnesium	ppm	ASTM D5185m		<b>618</b>	610	609
Calcium	ppm	ASTM D5185m		<b>1679</b>	1590	1544
Phosphorus	ppm	ASTM D5185m	1200	<b>864</b>	761	855
Zinc	ppm	ASTM D5185m	1300	<b>1022</b>	967	947
Sulfur	ppm	ASTM D5185m	3200	<b>3232</b>	2817	3065
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.9</b>	18.5	16.1
Base Number (BN)	mg KOH/g	ASTM D2896	9.6	<b>8.3</b>	7.9	8.8
Visc @ 100°C	cSt	ASTM D445	15.7	<b>13.7</b>	13.8	13.9



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0072172 **Received** : 05 Jul 2024  
**Lab Number** : 06229547 **Tested** : 09 Jul 2024  
**Unique Number** : 11113040 **Diagnosed** : 09 Jul 2024 - Don Baldrige  
**Test Package** : MAR 2 ( Additional Tests: TAN Man )

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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)