



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

Machine Id  
**MRC**  
Component  
**Starboard Genset**  
Fluid  
**CHEVRON URSA SUPER PLUS 40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW05843063</b>	MW05823780	MW05765709
Sample Date		Client Info		<b>09 May 2023</b>	18 Apr 2023	12 Feb 2023
Machine Age	hrs	Client Info		<b>4594</b>	4201	3800
Oil Age	hrs	Client Info		<b>393</b>	401	407
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	>25	<b>2</b>	6	7
Chromium	ppm	ASTM D5185m	>5	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>5</b>	0	2
Lead	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Tin	ppm	ASTM D5185m	>5	<b>0</b>	<1	<1
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**

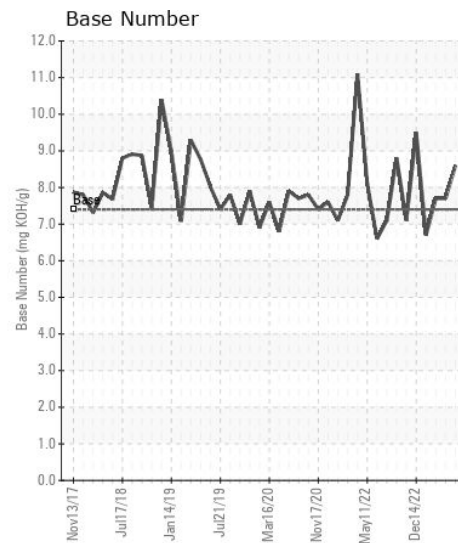
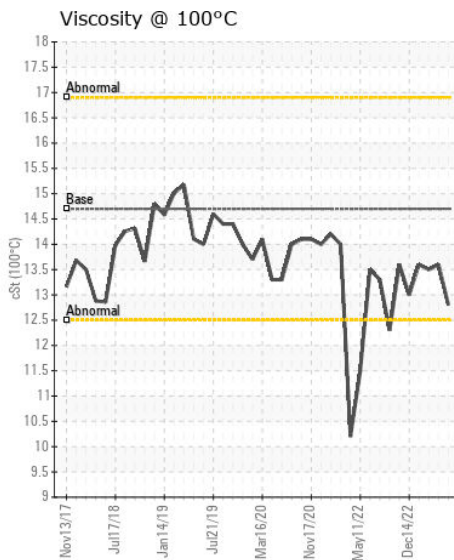
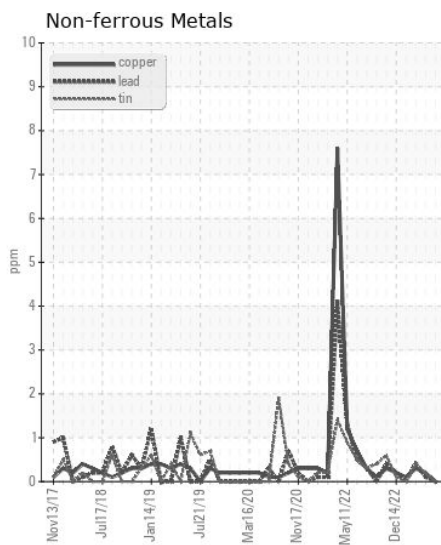
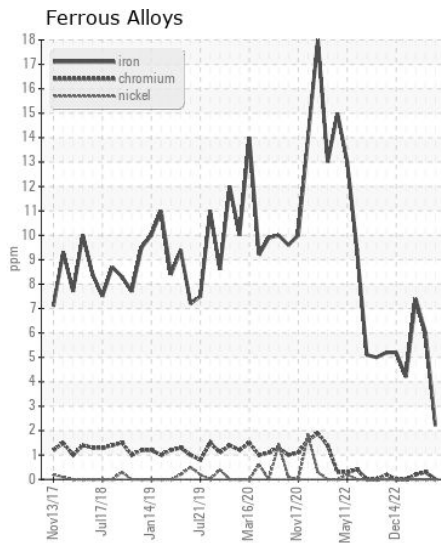
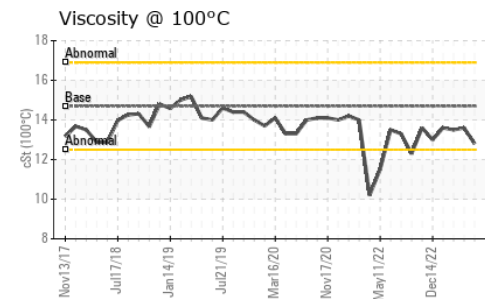
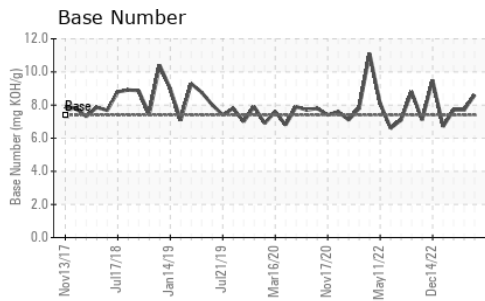
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	5	4
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	0
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>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.8</b>	5.1	5.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.6</b>	18.2	20.6
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>	<1	1
Boron	ppm	ASTM D5185m		<b>318</b>	405	382
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>102</b>	68	85
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>553</b>	221	407
Calcium	ppm	ASTM D5185m		<b>1748</b>	2596	1547
Phosphorus	ppm	ASTM D5185m	1000	<b>779</b>	841	792
Zinc	ppm	ASTM D5185m	1090	<b>953</b>	1025	946
Sulfur	ppm	ASTM D5185m		<b>2962</b>	3229	3198
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.2</b>	11.3	14.4
Base Number (BN)	mg KOH/g	ASTM D2896	7.4	<b>8.6</b>	7.7	7.7
Visc @ 100°C	cSt	ASTM D445	14.7	<b>12.8</b>	13.6	13.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW05843063  
**Lab Number** : 05843063  
**Unique Number** : 10467170  
**Test Package** : MAR 2  
**Received** : 10 May 2023  
**Tested** : 12 May 2023  
**Diagnosed** : 12 May 2023 - Don Baldrige

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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)