



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

Machine Id  
**MWP**  
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>MW05981742</b>	MW05745141	MW05718169
Sample Date		Client Info		<b>16 Oct 2023</b>	19 Jan 2023	14 Dec 2022
Machine Age	hrs	Client Info		<b>22265</b>	22123	21767
Oil Age	hrs	Client Info		<b>162</b>	356	491
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>4</b>	1	5
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>5	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>12	<b>3</b>	2	2
Lead	ppm	ASTM D5185m	>17	<b>&lt;1</b>	0	1
Copper	ppm	ASTM D5185m	>70	<b>&lt;1</b>	0	<1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

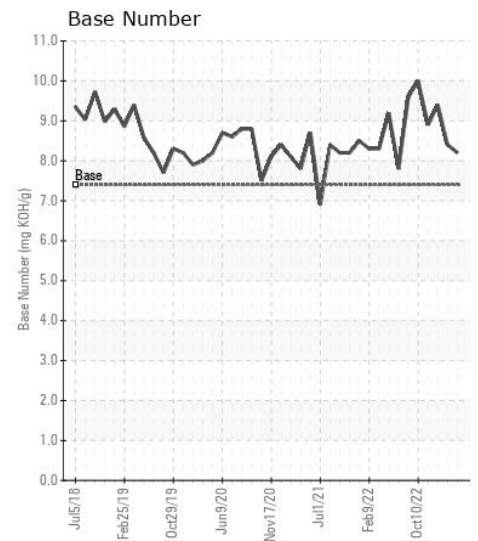
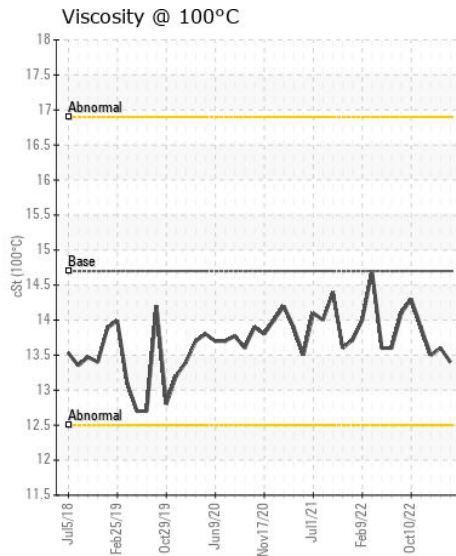
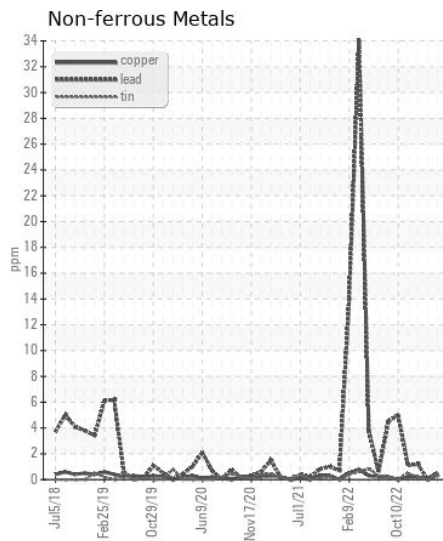
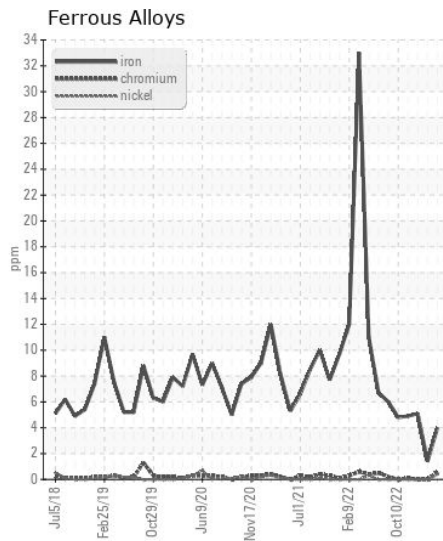
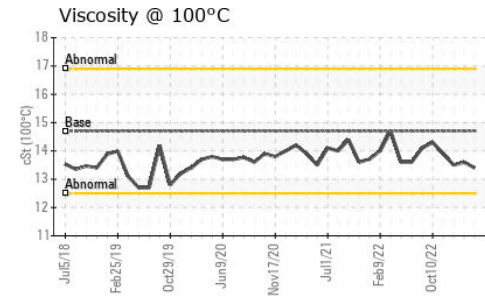
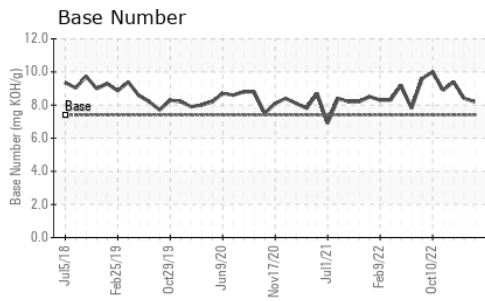
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	3	1
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	0	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>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.7</b>	6.7	7.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.3</b>	22.0	22.8
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>	0	0
Boron	ppm	ASTM D5185m		<b>399</b>	361	286
Barium	ppm	ASTM D5185m		<b>10</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>103</b>	92	95
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>488</b>	451	454
Calcium	ppm	ASTM D5185m		<b>1374</b>	1350	1638
Phosphorus	ppm	ASTM D5185m	1000	<b>779</b>	726	854
Zinc	ppm	ASTM D5185m	1090	<b>960</b>	839	1028
Sulfur	ppm	ASTM D5185m		<b>2890</b>	2798	3209
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.5</b>	16.4	17.0
Base Number (BN)	mg KOH/g	ASTM D2896	7.4	<b>8.2</b>	8.4	9.4
Visc @ 100°C	cSt	ASTM D445	14.7	<b>13.4</b>	13.6	13.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW05981742  
**Lab Number** : 05981742  
**Unique Number** : 10699037  
**Test Package** : MAR 2

**Received** : 17 Oct 2023  
**Tested** : 18 Oct 2023  
**Diagnosed** : 19 Oct 2023 - Don Baldrige

**ILLINOIS MARINE TOWING**  
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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)