



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

**RECOMMENDATION**

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW06017189</b>	MW05981760	MW05904209
Sample Date		Client Info		<b>23 Nov 2023</b>	16 Oct 2023	20 Jul 2023
Machine Age	hrs	Client Info		<b>26386</b>	25882	25346
Oil Age	hrs	Client Info		<b>504</b>	536	800
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>ATTENTION</b>	ATTENTION	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>13</b>	6	6
Chromium	ppm	ASTM D5185m	>4	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>2</b>	1	2
Silver	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>12	<b>2</b>	3	1
Lead	ppm	ASTM D5185m	>17	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>70	<b>&lt;1</b>	1	0
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
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.

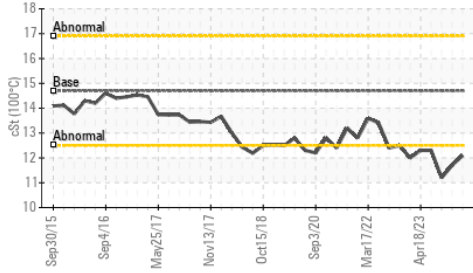
Silicon	ppm	ASTM D5185m	>25	<b>6</b>	4	3
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	0
Fuel	%	ASTM D3524	>4.0	<b>&lt;1.0</b>	<1.0	0.5
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.7</b>	5.8	6.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.3</b>	21.1	18.4
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**

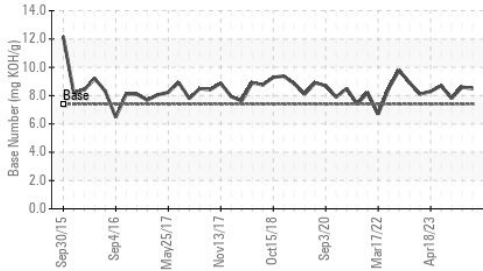
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	0	1
Boron	ppm	ASTM D5185m		<b>313</b>	336	152
Barium	ppm	ASTM D5185m		<b>0</b>	10	0
Molybdenum	ppm	ASTM D5185m		<b>107</b>	108	48
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>570</b>	558	430
Calcium	ppm	ASTM D5185m		<b>1462</b>	1489	2023
Phosphorus	ppm	ASTM D5185m	1000	<b>660</b>	759	900
Zinc	ppm	ASTM D5185m	1090	<b>891</b>	897	1078
Sulfur	ppm	ASTM D5185m		<b>2868</b>	2807	4016
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.4</b>	15.6	13.1
Base Number (BN)	mg KOH/g	ASTM D2896	7.4	<b>8.5</b>	8.6	7.8
Visc @ 100°C	cSt	ASTM D445	14.7	<b>12.1</b>	11.7	11.2

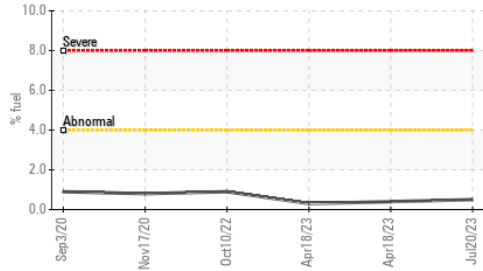
● Viscosity @ 100°C



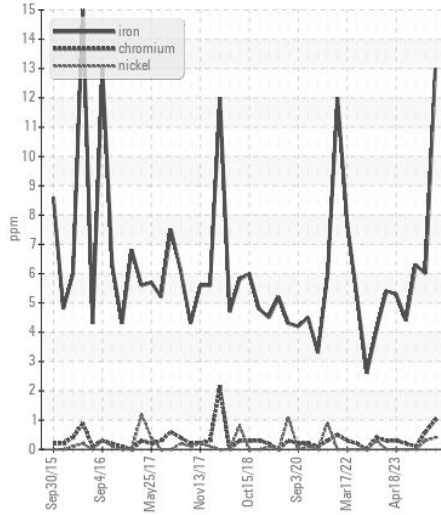
Base Number



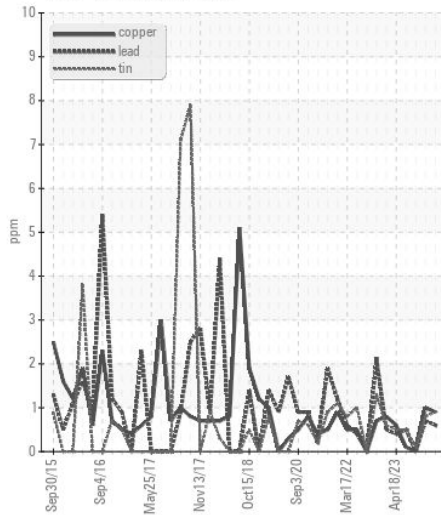
Fuel Dilution



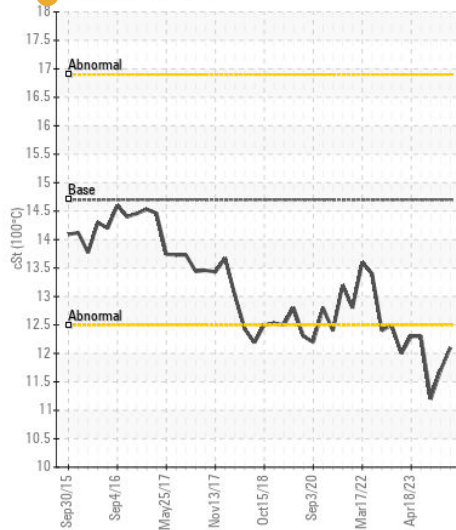
Ferrous Alloys



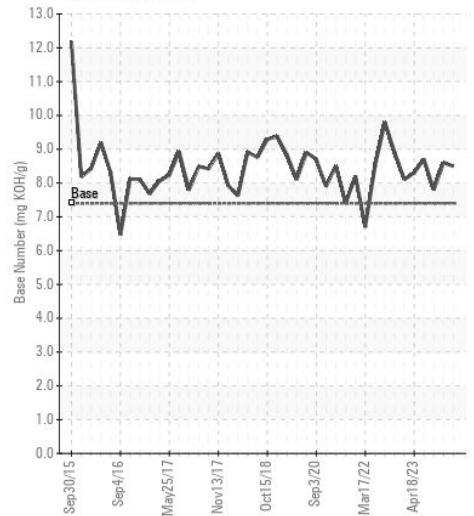
Non-ferrous Metals



● Viscosity @ 100°C



Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW06017189 **Received** : 24 Nov 2023  
**Lab Number** : 06017189 **Tested** : 28 Nov 2023  
**Unique Number** : 10756333 **Diagnosed** : 28 Nov 2023 - Sean Felton  
**Test Package** : MAR 2 ( Additional Tests: FuelDilution, PercentFuel )

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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)