



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

Area  
**CAMILLE B BARRETT**  
Machine Id  
**[CAMILLE B BARRETT] 008 538801-8**  
Component  
**Starboard Genset**  
Fluid  
**CHEVRON DELO 400 XLE 15W40 (6 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW0068683</b>	MW0038617	MW0051089
Sample Date		Client Info		<b>17 Mar 2024</b>	03 Nov 2023	20 Mar 2023
Machine Age	hrs	Client Info		<b>33819</b>	32054	30241
Oil Age	hrs	Client Info		<b>470</b>	372	356
Filter Age	hrs	Client Info		<b>470</b>	372	356
Oil Changed		Client Info		<b>Changed</b>	Changed	N/A
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>12</b>	10	9
Chromium	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>6</b>	6	12
Silver	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>12	<b>3</b>	2	2
Lead	ppm	ASTM D5185m	>17	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>70	<b>0</b>	0	<1
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	0
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.

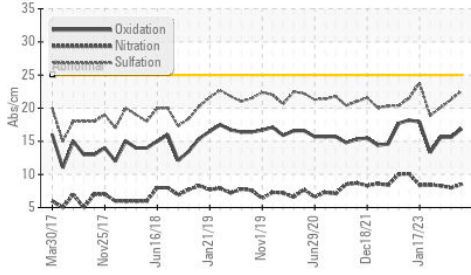
Silicon	ppm	ASTM D5185m	>25	<b>6</b>	6	5
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	2	2
Fuel		WC Method	>4.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0.2</b>	0.2	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.5</b>	8.0	8.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.6</b>	21.3	20.1
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**

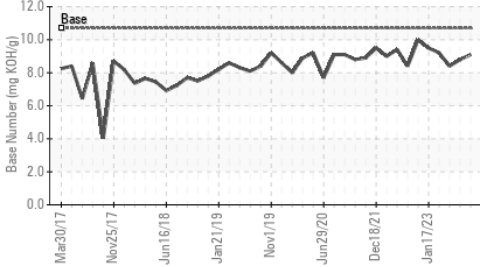
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>1</b>	0	1
Boron	ppm	ASTM D5185m		<b>228</b>	223	145
Barium	ppm	ASTM D5185m		<b>0</b>	2	2
Molybdenum	ppm	ASTM D5185m		<b>98</b>	90	61
Manganese	ppm	ASTM D5185m		<b>2</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>801</b>	649	690
Calcium	ppm	ASTM D5185m		<b>1798</b>	1631	1637
Phosphorus	ppm	ASTM D5185m	760	<b>800</b>	691	708
Zinc	ppm	ASTM D5185m	830	<b>940</b>	822	863
Sulfur	ppm	ASTM D5185m	2770	<b>3477</b>	2834	3084
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.9</b>	15.6	15.6
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	<b>9.1</b>	8.8	8.4
Visc @ 100°C	cSt	ASTM D445	14.9	<b>13.8</b>	13.5	13.4

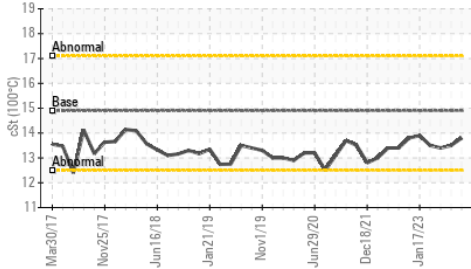
**FT-IR (Direct Trend)**



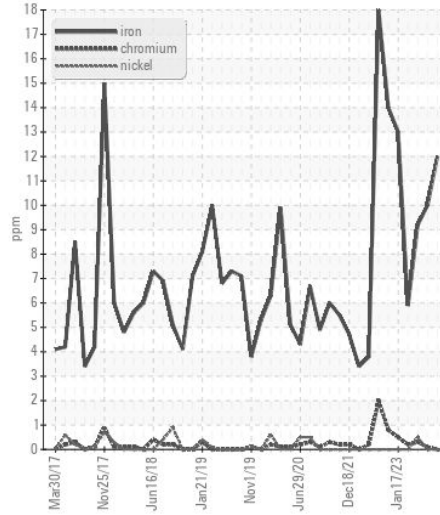
**Base Number**



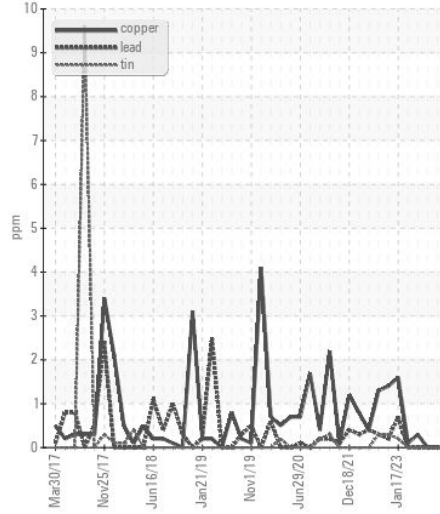
**Viscosity @ 100°C**



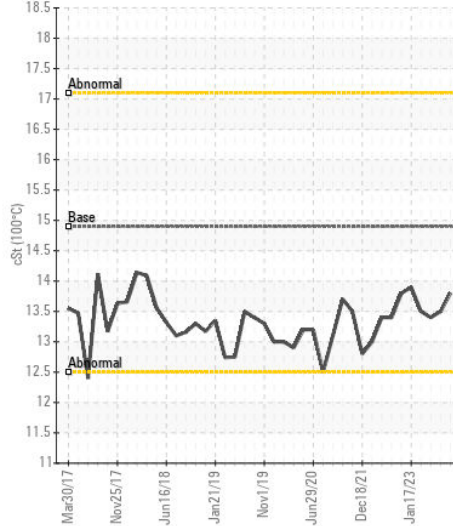
**Ferrous Alloys**



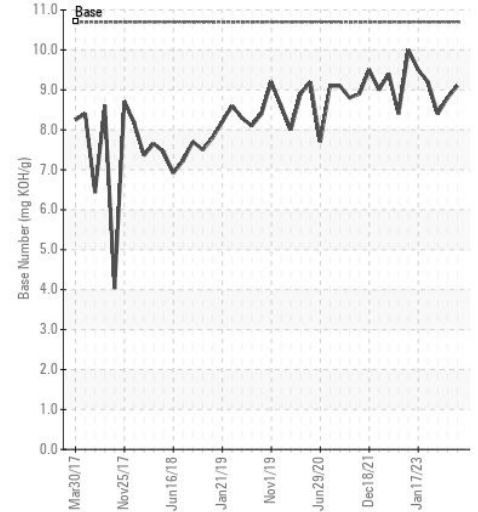
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : MW0068683

**Lab Number** : 06159757

**Unique Number** : 10995180

**Test Package** : MAR 2

**Received** : 24 Apr 2024

**Tested** : 25 Apr 2024

**Diagnosed** : 25 Apr 2024 - Wes Davis

**INGRAM BARGE**

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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)