



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

Area  
**CHARLIE M EVERHART**  
Machine Id  
**[CHARLIE M EVERHART] 008 534782-8**  
Component  
**Starboard Genset**  
Fluid  
**CHEVRON DELO 400 LE 15W40 (5 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW0068147</b>	MW0062863	MW0064474
Sample Date		Client Info		<b>02 Jun 2024</b>	01 May 2024	01 Apr 2024
Machine Age	hrs	Client Info		<b>8916</b>	8568	8148
Oil Age	hrs	Client Info		<b>60</b>	384	400
Filter Age	hrs	Client Info		<b>60</b>	384	400
Oil Changed		Client Info		<b>N/A</b>	Changed	N/A
Filter Changed		Client Info		<b>N/A</b>	Changed	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

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

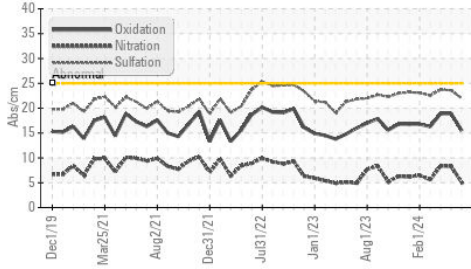
Silicon	ppm	ASTM D5185m	>25	<b>6</b>	10	6
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	3	2
Fuel		WC Method	>4.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0.1</b>	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.1</b>	8.3	8.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.0</b>	23.6	23.7
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**

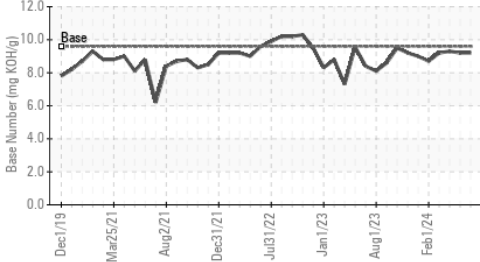
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>2</b>	0	3
Boron	ppm	ASTM D5185m		<b>371</b>	402	423
Barium	ppm	ASTM D5185m		<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m		<b>127</b>	136	131
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>688</b>	659	686
Calcium	ppm	ASTM D5185m		<b>1682</b>	1599	1572
Phosphorus	ppm	ASTM D5185m	1200	<b>770</b>	754	764
Zinc	ppm	ASTM D5185m	1300	<b>897</b>	918	873
Sulfur	ppm	ASTM D5185m	3200	<b>3044</b>	2982	2947
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.5</b>	18.9	18.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.6	<b>9.2</b>	9.2	9.3
Visc @ 100°C	cSt	ASTM D445	15.7	<b>13.6</b>	13.3	13.5

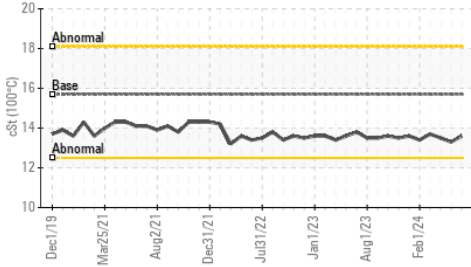
**FT-IR (Direct Trend)**



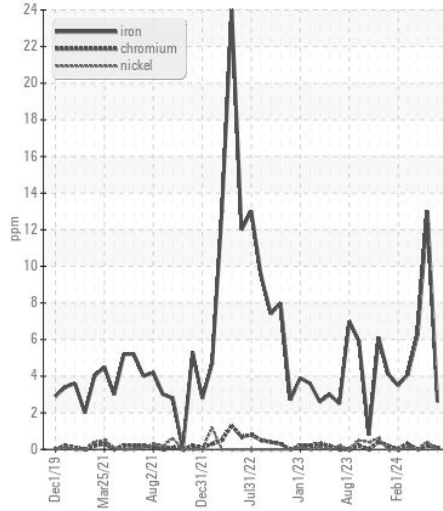
**Base Number**



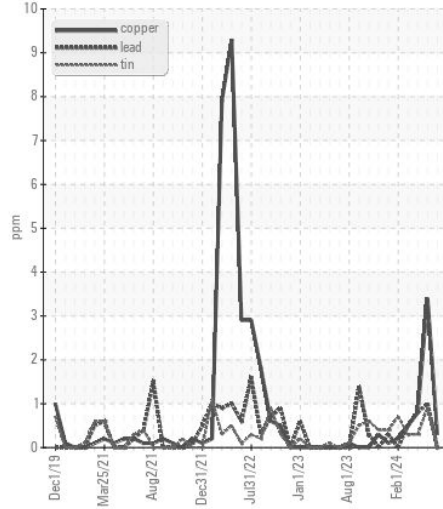
**Viscosity @ 100°C**



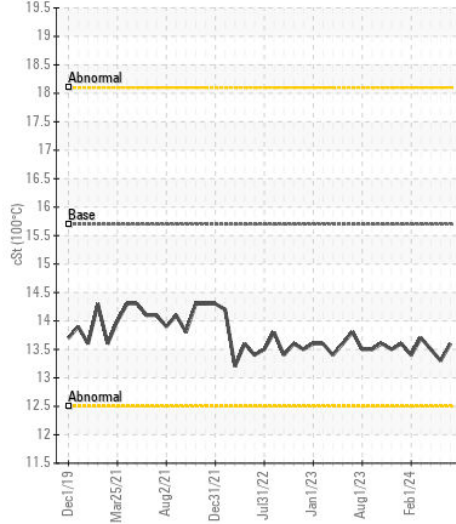
**Ferrous Alloys**



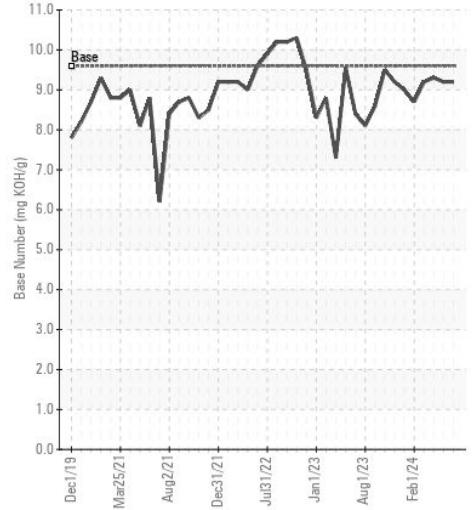
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0068147 **Received** : 14 Jun 2024  
**Lab Number** : 06211111 **Tested** : 18 Jun 2024  
**Unique Number** : 11083975 **Diagnosed** : 18 Jun 2024 - Wes Davis  
**Test Package** : MAR 2

**INGRAM BARGE**  
 900 S 3RD ST  
 PADUCAH, KY  
 US 42003

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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)