



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

Area

**EVEY T**

Machine Id

**[EVEY T] 008 558474-8**

Component

**Starboard Genset**

Fluid

**CHEVRON DELO 400 XLE 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW0070776</b>	MW0070769	MW0068553
Sample Date		Client Info		<b>27 Jun 2024</b>	26 May 2024	29 Apr 2024
Machine Age	hrs	Client Info		<b>20576</b>	11574	11227
Oil Age	hrs	Client Info		<b>426</b>	351	360
Filter Age	hrs	Client Info		<b>426</b>	0	360
Oil Changed		Client Info		<b>Changed</b>	N/A	Changed
Filter Changed		Client Info		<b>Changed</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

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

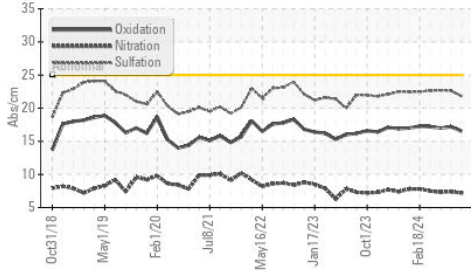
Silicon	ppm	ASTM D5185m	>25	<b>5</b>	5	6
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	2
Fuel		WC Method	>4.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.2</b>	7.4	7.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.8</b>	22.6	22.7
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**

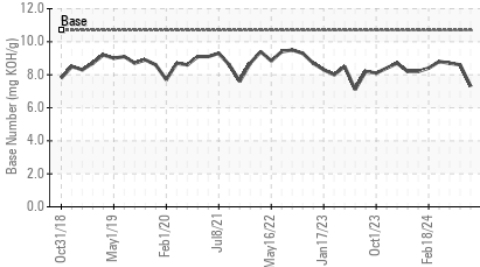
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	2	<1
Boron	ppm	ASTM D5185m		<b>307</b>	319	378
Barium	ppm	ASTM D5185m		<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m		<b>88</b>	124	139
Manganese	ppm	ASTM D5185m		<b>6</b>	3	3
Magnesium	ppm	ASTM D5185m		<b>446</b>	681	685
Calcium	ppm	ASTM D5185m		<b>1442</b>	1562	1622
Phosphorus	ppm	ASTM D5185m	760	<b>1006</b>	784	791
Zinc	ppm	ASTM D5185m	830	<b>1176</b>	900	873
Sulfur	ppm	ASTM D5185m	2770	<b>3713</b>	3001	3019
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.5</b>	17.2	17.0
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	<b>7.3</b>	8.6	8.7
Visc @ 100°C	cSt	ASTM D445	14.9	<b>12.4</b>	12.3	12.3

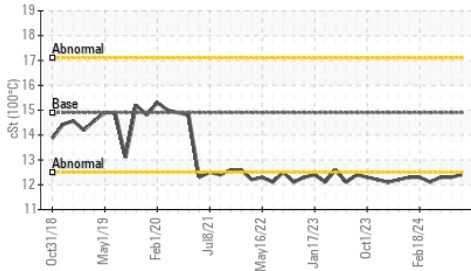
**FT-IR (Direct Trend)**



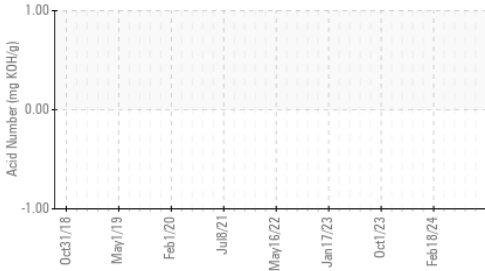
**Base Number**



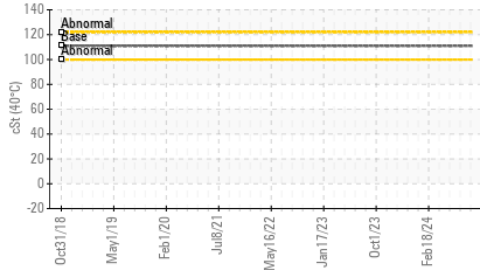
**Viscosity @ 100°C**



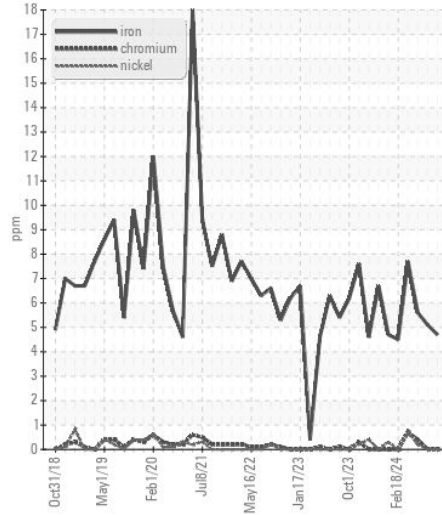
**Acid Number**



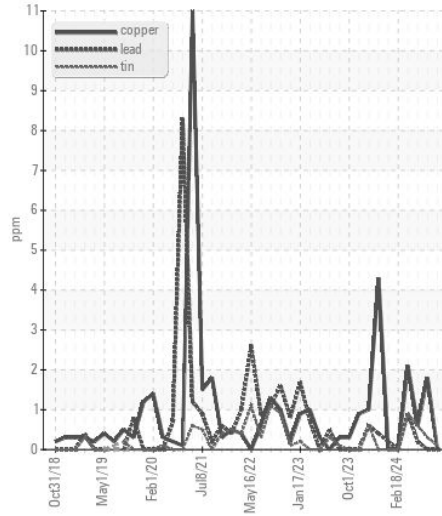
**Viscosity @ 40°C**



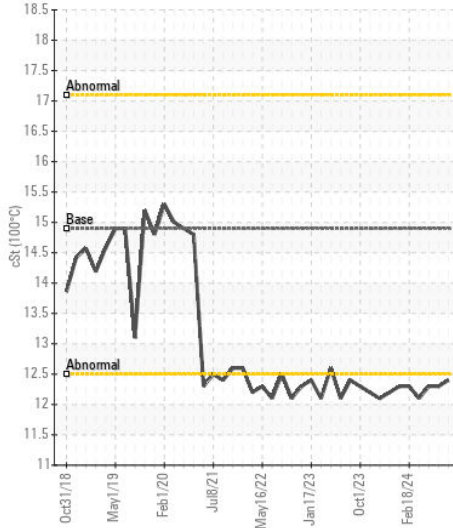
**Ferrous Alloys**



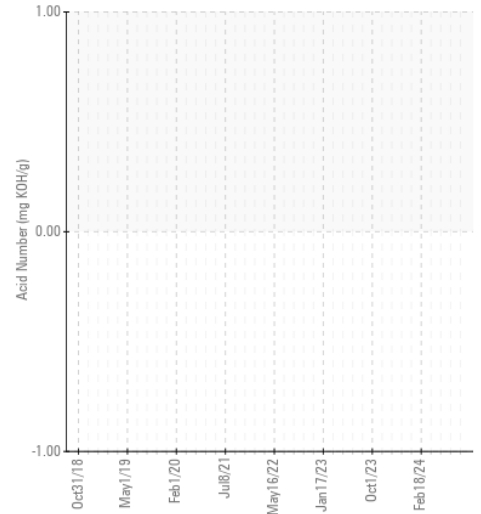
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Acid Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0070776 **Received** : 03 Jul 2024  
**Lab Number** : 06227259 **Tested** : 06 Jul 2024  
**Unique Number** : 11110752 **Diagnosed** : 06 Jul 2024 - Don Baldridge  
**Test Package** : MAR 2 ( Additional Tests: TAN Man, KV40 )

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)

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