



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

Machine Id  
**CGL STBD RED GEAR**  
Component  
**Starboard Genset**  
Fluid  
**CHEVRON DELO 710 LE (5 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW0043932</b>	MW0016718	---
Sample Date		Client Info		<b>08 Jan 2024</b>	05 May 2021	---
Machine Age	hrs	Client Info		<b>13467</b>	0	---
Oil Age	hrs	Client Info		<b>221</b>	232	---
Filter Age	hrs	Client Info		<b>221</b>	232	---
Oil Changed		Client Info		<b>Changed</b>	Changed	---
Filter Changed		Client Info		<b>Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	NORMAL	---

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>3</b>	6	---
Chromium	ppm	ASTM D5185m	>4	<b>0</b>	<1	---
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	---
Titanium	ppm	ASTM D5185m		<b>0</b>	0	---
Silver	ppm	ASTM D5185m	>5	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>12	<b>1</b>	<1	---
Lead	ppm	ASTM D5185m	>17	<b>&lt;1</b>	<1	---
Copper	ppm	ASTM D5185m	>70	<b>&lt;1</b>	<1	---
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

**CONTAMINATION**

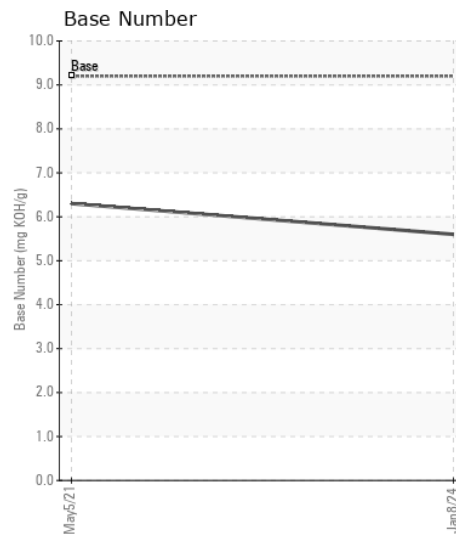
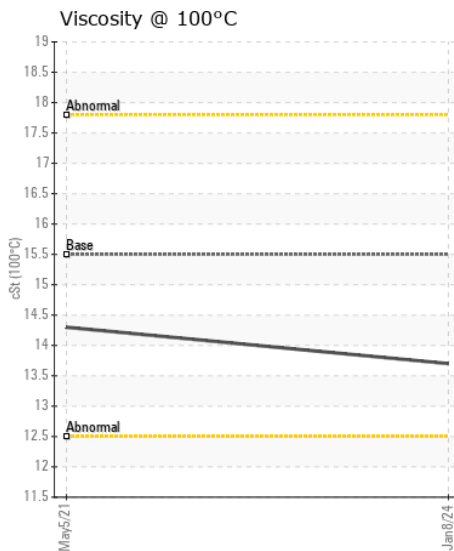
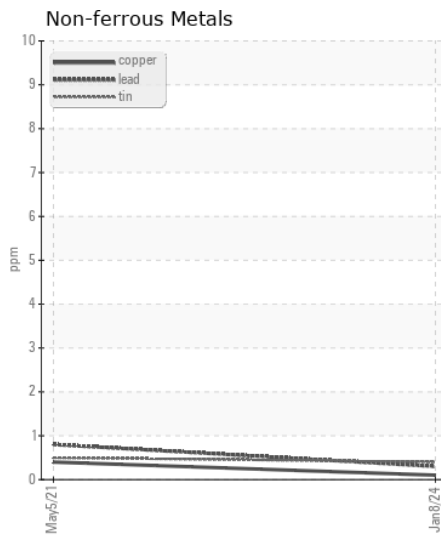
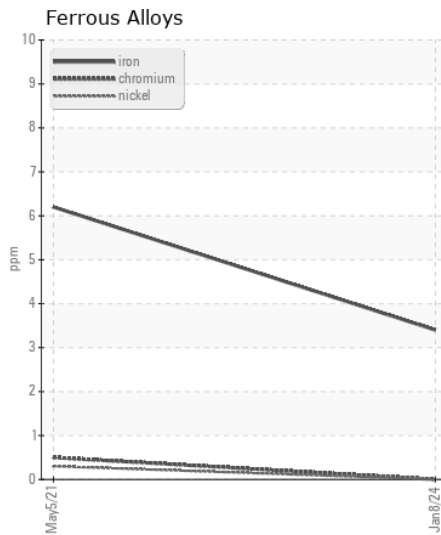
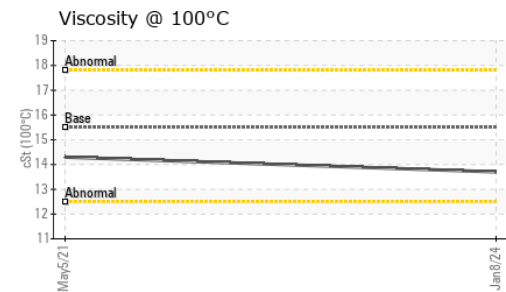
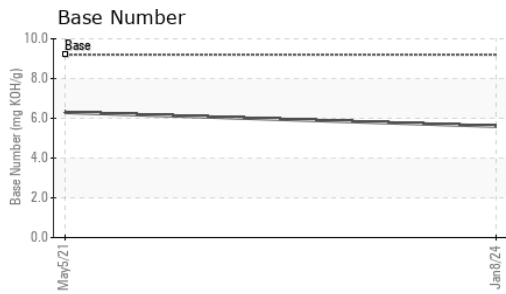
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>2</b>	1	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	1	---
Fuel		WC Method	>4.0	<b>&lt;1.0</b>	<1.0	---
Water		WC Method	>0.1	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844		<b>0.1</b>	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.8</b>	7.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>14.6</b>	15	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	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>	3	---
Boron	ppm	ASTM D5185m		<b>40</b>	39	---
Barium	ppm	ASTM D5185m		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>41</b>	41	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m		<b>24</b>	12	---
Calcium	ppm	ASTM D5185m		<b>3184</b>	3414	---
Phosphorus	ppm	ASTM D5185m		<b>7</b>	2	---
Zinc	ppm	ASTM D5185m	10	<b>12</b>	0	---
Sulfur	ppm	ASTM D5185m		<b>2079</b>	1771	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>9.2</b>	8.7	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.2	<b>5.6</b>	6.3	---
Visc @ 100°C	cSt	ASTM D445	15.5	<b>13.7</b>	14.3	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0043932 **Received** : 30 Jan 2024  
**Lab Number** : 06074562 **Diagnosed** : 31 Jan 2024  
**Unique Number** : 10856653 **Diagnostician** : Wes Davis  
**Test Package** : MAR 2

**AMERICAN RIVER TRANSPORTATION CO.**  
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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)