



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

Area  
**RICH MCCARTY**

Machine Id  
**RICH MCCARTY**

Component  
**Starboard Genset**

Fluid  
**CHEVRON DELO 710 LS (6 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW0057721</b>	MW0057629	---
Sample Date		Client Info		<b>03 Mar 2024</b>	30 Dec 2023	---
Machine Age	hrs	Client Info		<b>43618</b>	42894	---
Oil Age	hrs	Client Info		<b>482</b>	281	---
Filter Age	hrs	Client Info		<b>482</b>	281	---
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>20</b>	2	---
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</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>8</b>	0	---
Copper	ppm	ASTM D5185m	>70	<b>&lt;1</b>	0	---
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

**CONTAMINATION**

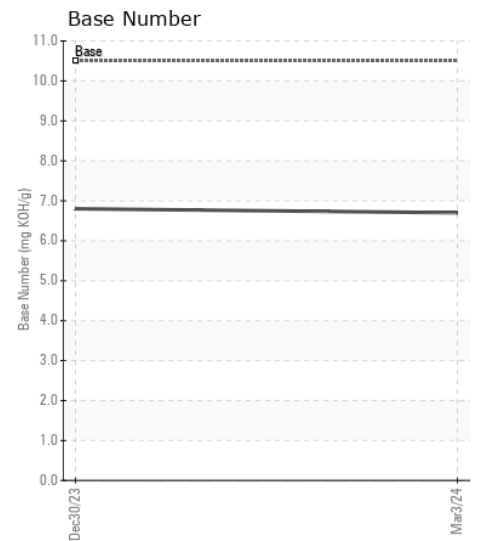
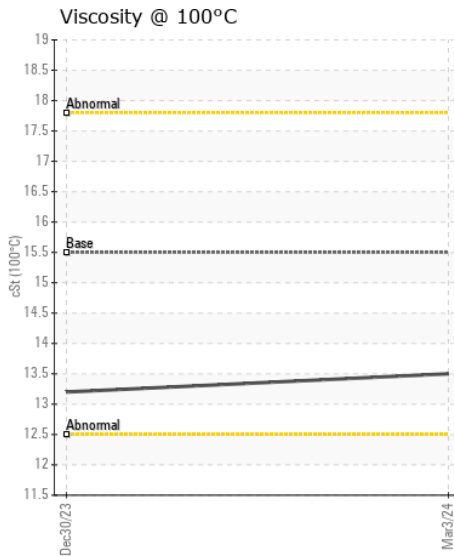
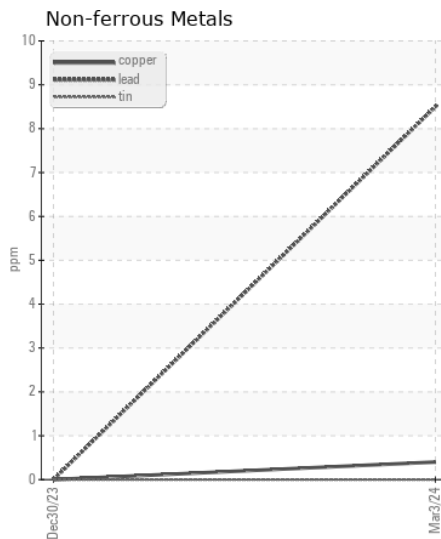
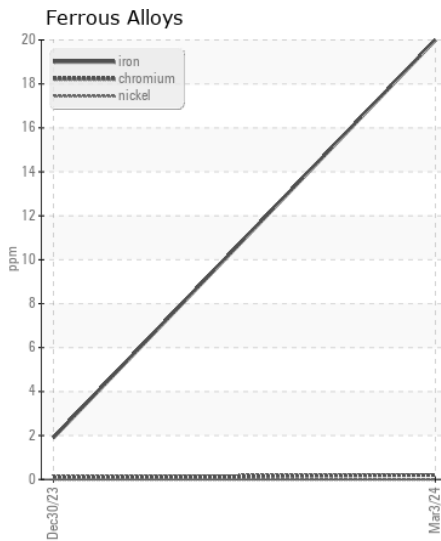
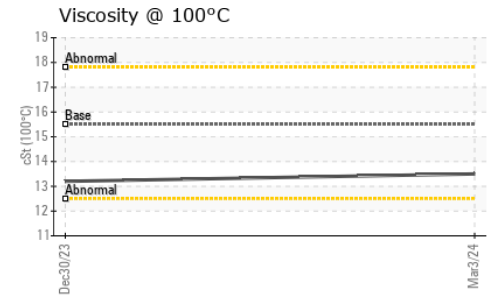
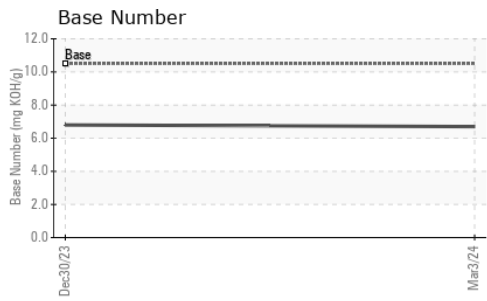
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>2</b>	2	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	---
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>0.2</b>	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.6</b>	9.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.6</b>	16.4	---
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>5</b>	0	---
Boron	ppm	ASTM D5185m		<b>41</b>	40	---
Barium	ppm	ASTM D5185m		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>47</b>	41	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m		<b>26</b>	12	---
Calcium	ppm	ASTM D5185m		<b>3642</b>	3145	---
Phosphorus	ppm	ASTM D5185m		<b>18</b>	1	---
Zinc	ppm	ASTM D5185m		<b>27</b>	7	---
Sulfur	ppm	ASTM D5185m		<b>2595</b>	1916	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.6</b>	11.6	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	<b>6.7</b>	6.8	---
Visc @ 100°C	cSt	ASTM D445	15.5	<b>13.5</b>	13.2	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : MW0057721  
 Lab Number : 06122902  
 Unique Number : 10937053  
 Test Package : MAR 2

Received : 19 Mar 2024  
 Tested : 20 Mar 2024  
 Diagnosed : 20 Mar 2024 - Wes Davis

AMERICAN RIVER TRANSPORTATION CO.  
 P.O. BOX 2889  
 ST. LOUIS, MO  
 US 63111

Contact: BRIAN GRIEWING  
 brian.griewing@adm.com

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)

T:  
 F: (314)481-5278