



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

Area  
**CEN**  
Machine Id  
**CEN**  
Component  
**Starboard Genset**  
Fluid  
**CHEVRON DELO 710 LS (7 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW0060727</b>	MW0060735	MW0060726
Sample Date		Client Info		<b>27 May 2024</b>	08 Feb 2024	08 Jan 2024
Machine Age	hrs	Client Info		<b>14499</b>	13834	13556
Oil Age	hrs	Client Info		<b>149</b>	292	300
Filter Age	hrs	Client Info		<b>149</b>	292	300
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>2</b>	4	6
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>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>12	<b>1</b>	2	2
Lead	ppm	ASTM D5185m	>17	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>70	<b>0</b>	0	0
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

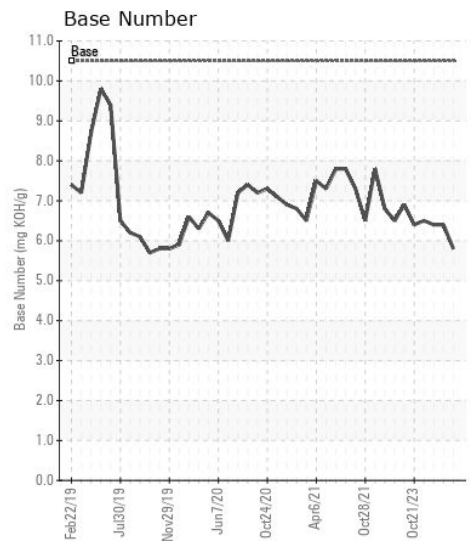
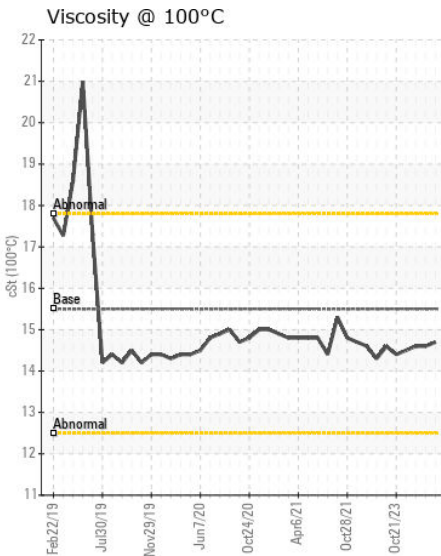
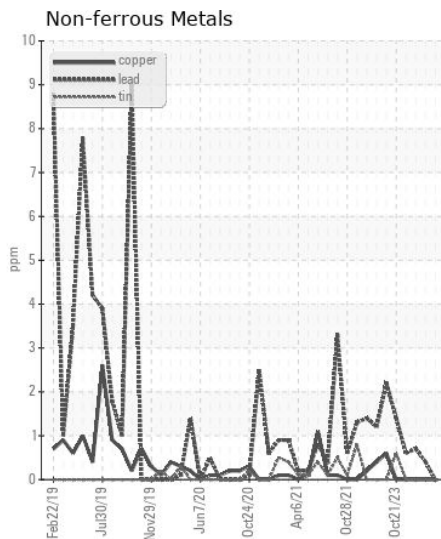
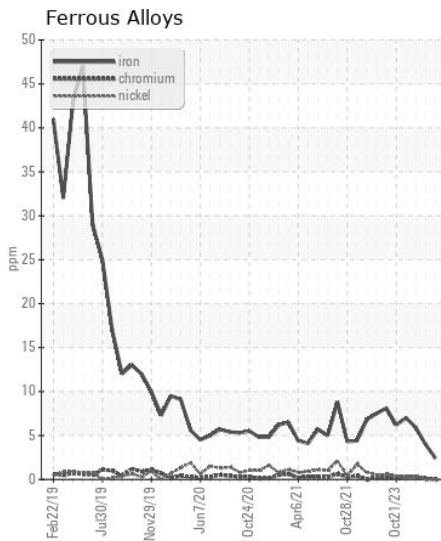
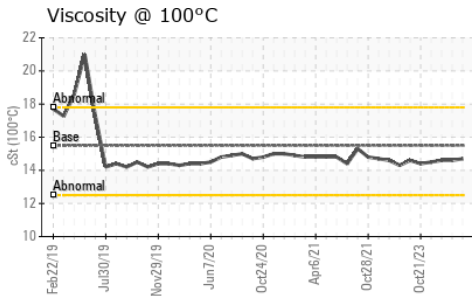
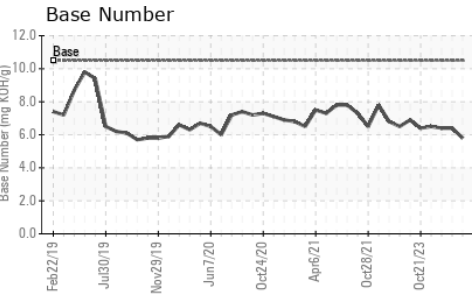
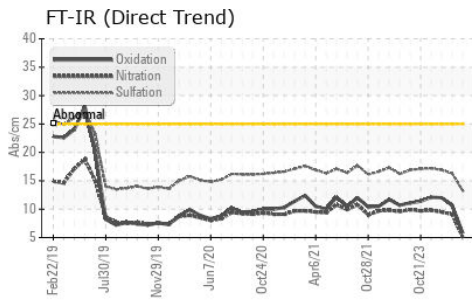
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	2	2
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	1
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>	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.1</b>	9.1	9.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>13.3</b>	16.3	16.9
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>	0	0
Boron	ppm	ASTM D5185m		<b>40</b>	35	40
Barium	ppm	ASTM D5185m		<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m		<b>42</b>	47	48
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>21</b>	13	6
Calcium	ppm	ASTM D5185m		<b>3380</b>	3330	3211
Phosphorus	ppm	ASTM D5185m		<b>8</b>	4	39
Zinc	ppm	ASTM D5185m		<b>13</b>	3	0
Sulfur	ppm	ASTM D5185m		<b>2553</b>	1967	2146
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>5.8</b>	10.7	12.0
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	<b>5.8</b>	6.4	6.4
Visc @ 100°C	cSt	ASTM D445	15.5	<b>14.7</b>	14.6	14.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0060727  
**Lab Number** : 06238881  
**Unique Number** : 11127715  
**Test Package** : MAR 2  
**Received** : 17 Jul 2024  
**Tested** : 18 Jul 2024  
**Diagnosed** : 18 Jul 2024 - Wes Davis

**AMERICAN RIVER TRANSPORTATION CO.**  
 P.O. BOX 2889  
 ST. LOUIS, MO  
 US 63111  
 Contact: BRIAN GRIEWING  
 brian.griewing@adm.com  
 T:  
 F: (314)481-5278

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)