



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>MW0060735</b>	MW0060726	MW0060908
Sample Date		Client Info		<b>08 Feb 2024</b>	08 Jan 2024	11 Dec 2023
Machine Age	hrs	Client Info		<b>13834</b>	13556	13255
Oil Age	hrs	Client Info		<b>292</b>	300	299
Filter Age	hrs	Client Info		<b>292</b>	300	299
Oil Changed		Client Info		<b>N/A</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>4</b>	6	7
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>12	<b>2</b>	2	2
Lead	ppm	ASTM D5185m	>17	<b>&lt;1</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**

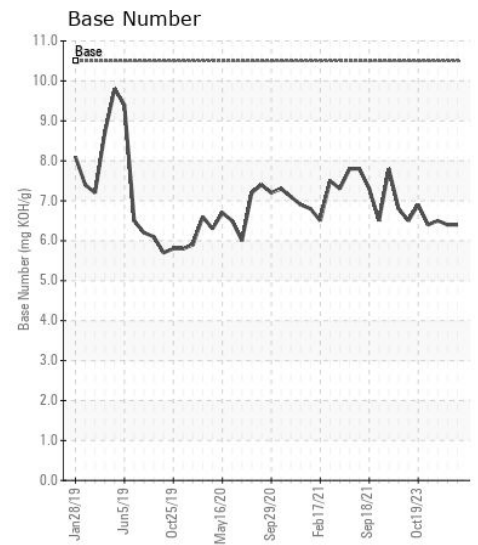
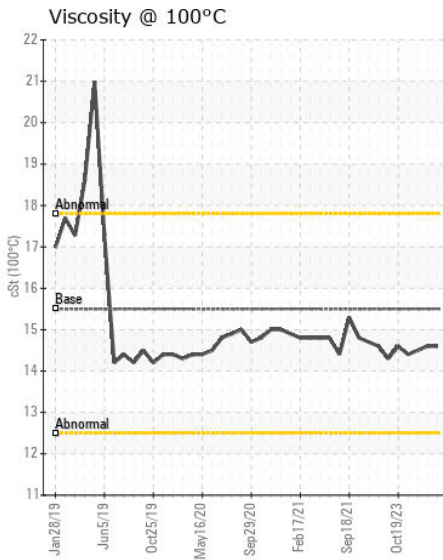
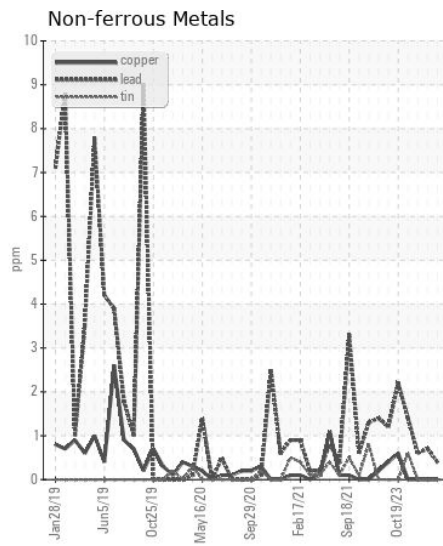
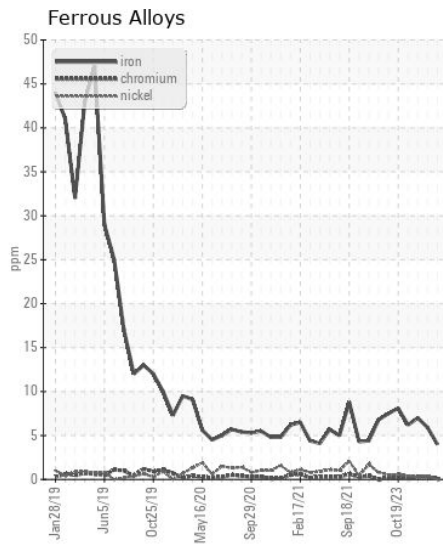
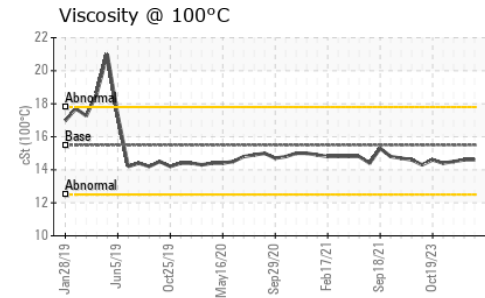
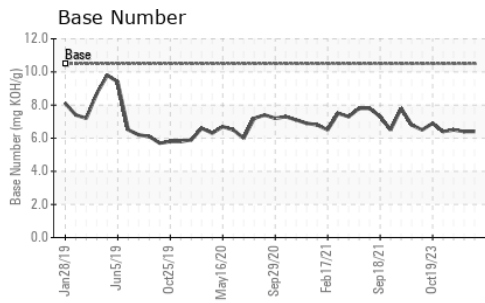
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>2</b>	2	2
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	1	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>0.4</b>	0.4	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.1</b>	9.5	9.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>16.3</b>	16.9	17.2
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>0</b>	0	0
Boron	ppm	ASTM D5185m		<b>35</b>	40	39
Barium	ppm	ASTM D5185m		<b>0</b>	2	2
Molybdenum	ppm	ASTM D5185m		<b>47</b>	48	50
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>13</b>	6	8
Calcium	ppm	ASTM D5185m		<b>3330</b>	3211	3209
Phosphorus	ppm	ASTM D5185m		<b>4</b>	39	39
Zinc	ppm	ASTM D5185m		<b>3</b>	0	0
Sulfur	ppm	ASTM D5185m		<b>1967</b>	2146	2044
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>10.7</b>	12.0	12.1
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	<b>6.4</b>	6.4	6.5
Visc @ 100°C	cSt	ASTM D445	15.5	<b>14.6</b>	14.6	14.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0060735  
**Lab Number** : 06099894  
**Unique Number** : 10898124  
**Test Package** : MAR 2

**Received** : 26 Feb 2024  
**Tested** : 28 Feb 2024  
**Diagnosed** : 28 Feb 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)

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