



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

Machine Id  
**LOUISIANA PARADISE**

Component  
**Starboard Genset**

Fluid  
**CHEVRON DELO 400 MULTIGRADE 15W40 (4 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW0057338</b>	MW0052247	MW0042784
Sample Date		Client Info		<b>21 Feb 2024</b>	27 Dec 2023	09 Oct 2023
Machine Age	hrs	Client Info		<b>31849</b>	31171	30282
Oil Age	hrs	Client Info		<b>1076</b>	928	1219
Filter Age	hrs	Client Info		<b>674</b>	928	1750
Oil Changed		Client Info		<b>Changed</b>	Not Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>17</b>	6	9
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>10</b>	10	11
Silver	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>12	<b>2</b>	1	1
Lead	ppm	ASTM D5185m	>17	<b>2</b>	3	10
Copper	ppm	ASTM D5185m	>70	<b>0</b>	1	0
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

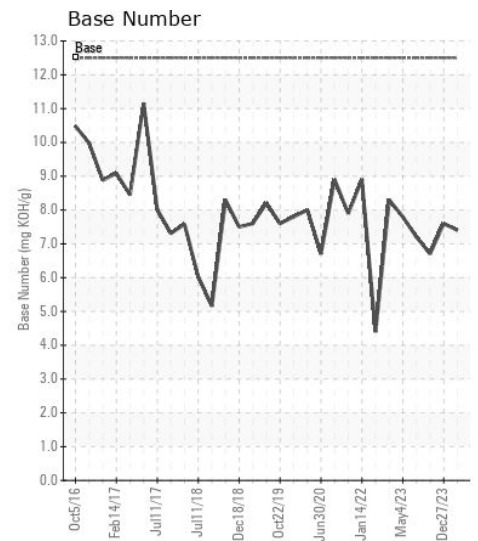
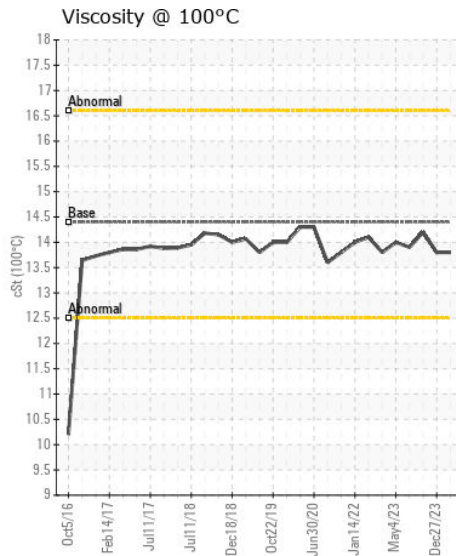
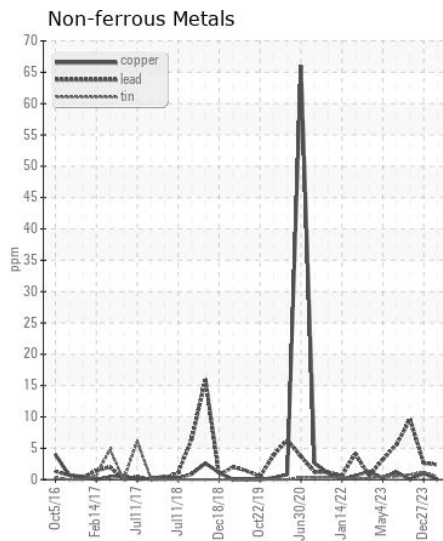
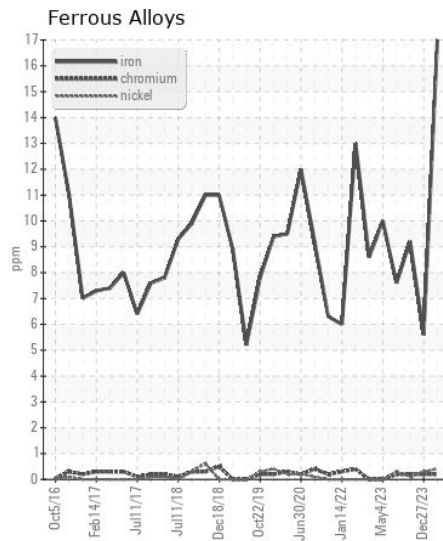
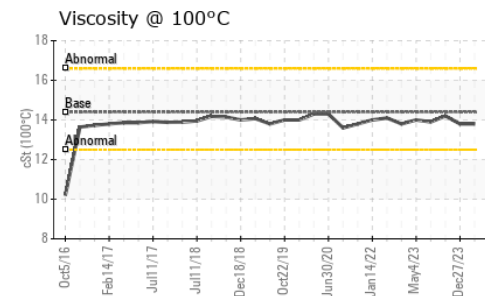
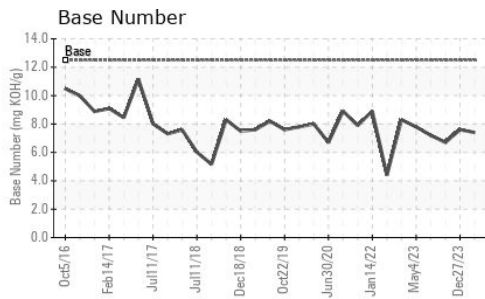
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	4	3
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	3	4
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>0.2</b>	0.1	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.9</b>	8.5	9.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.9</b>	19.3	20.0
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>5</b>	5	4
Boron	ppm	ASTM D5185m	151	<b>64</b>	78	45
Barium	ppm	ASTM D5185m	0.4	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	250	<b>26</b>	25	23
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	0	<b>657</b>	583	513
Calcium	ppm	ASTM D5185m	2046	<b>2103</b>	1974	1786
Phosphorus	ppm	ASTM D5185m	1043	<b>886</b>	882	792
Zinc	ppm	ASTM D5185m	943	<b>1156</b>	1101	950
Sulfur	ppm	ASTM D5185m	5012	<b>3775</b>	3840	3183
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.7</b>	14.7	15.8
Base Number (BN)	mg KOH/g	ASTM D2896	12.5	<b>7.4</b>	7.6	6.7
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.8</b>	13.8	14.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0057338  
**Lab Number** : 06104138  
**Unique Number** : 10902368  
**Test Package** : MAR 2

**Received** : 29 Feb 2024  
**Tested** : 29 Feb 2024  
**Diagnosed** : 02 Mar 2024 - Don Baldrige

**AMERICAN RIVER TRANSPORTATION CO**  
 8400 RIVER RD, PO BOX 656  
 WESTWEGO, LA  
 US 70094-2317  
 Contact: KEVIN CHIASSON  
 kevin.chiasson@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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F: