



Machine Id  
**BECKY ANN**  
Component  
**Starboard Genset**  
Fluid  
**PETRO CANADA DURON MARINE SAE 40 (4 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW0036003</b>	MW0036024	MWM729699
Sample Date		Client Info		<b>15 May 2024</b>	06 Dec 2023	12 May 2020
Machine Age	hrs	Client Info		<b>1140</b>	619	910
Oil Age	hrs	Client Info		<b>521</b>	619	462
Filter Age	hrs	Client Info		<b>521</b>	619	0
Oil Changed		Client Info		<b>Changed</b>	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>12</b>	17	6
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m	>12	<b>1</b>	1	<1
Lead	ppm	ASTM D5185m	>17	<b>3</b>	2	1
Copper	ppm	ASTM D5185m	>70	<b>&lt;1</b>	3	4
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

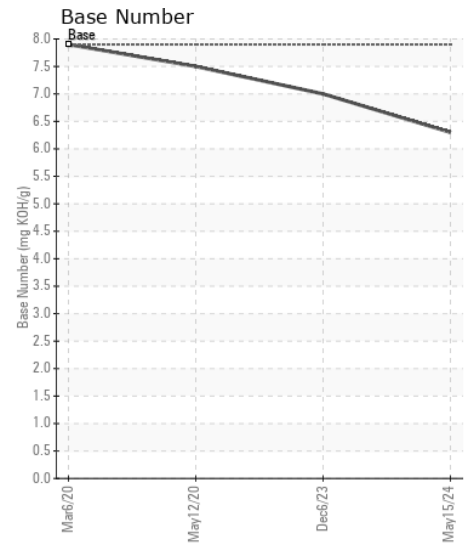
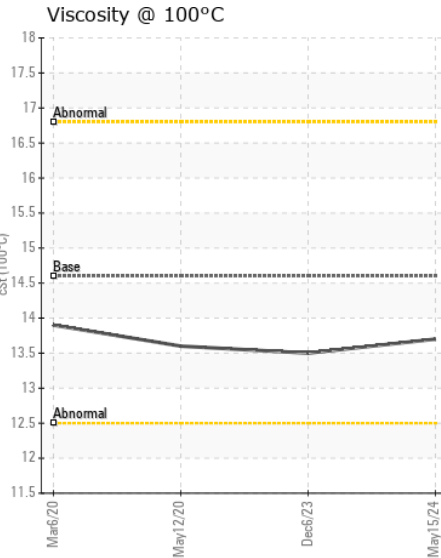
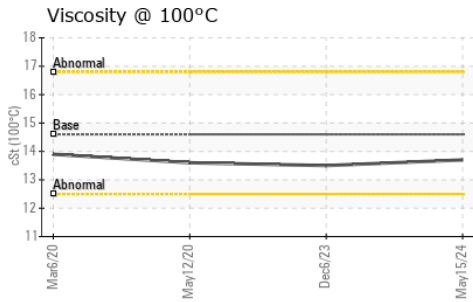
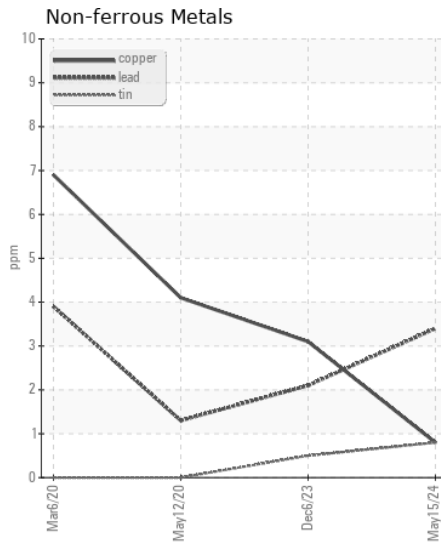
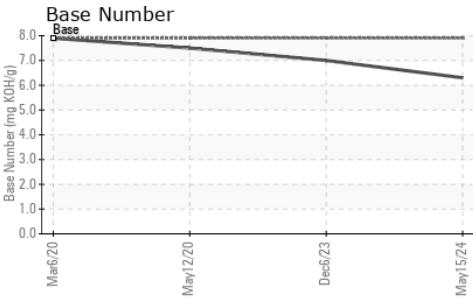
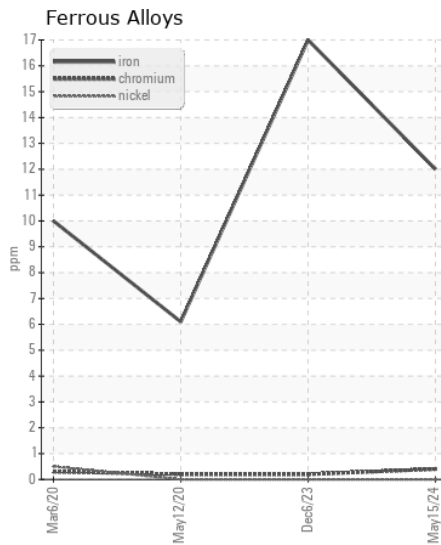
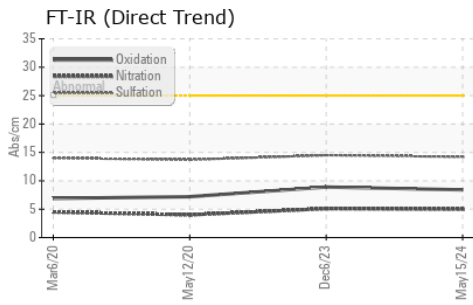
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	4	3
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	<1	2
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>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.0</b>	5.1	4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>14.2</b>	14.5	13.7
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>2</b>	1	33
Boron	ppm	ASTM D5185m	1.0	<b>16</b>	21	40
Barium	ppm	ASTM D5185m	1.0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m	1.0	<b>7</b>	19	13
Manganese	ppm	ASTM D5185m	1	<b>&lt;1</b>	2	<1
Magnesium	ppm	ASTM D5185m	15	<b>923</b>	897	759
Calcium	ppm	ASTM D5185m	2540	<b>1238</b>	1039	1222
Phosphorus	ppm	ASTM D5185m	1000	<b>1170</b>	992	962
Zinc	ppm	ASTM D5185m	1110	<b>1342</b>	1282	1097
Sulfur	ppm	ASTM D5185m	3700	<b>3687</b>	2806	2229
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>8.4</b>	8.9	7.2
Base Number (BN)	mg KOH/g	ASTM D2896	7.9	<b>6.3</b>	7.0	7.5
Visc @ 100°C	cSt	ASTM D445	14.6	<b>13.7</b>	13.5	13.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0036003  
**Lab Number** : 06195036  
**Unique Number** : 11057159  
**Test Package** : MAR 2

**Received** : 30 May 2024  
**Tested** : 31 May 2024  
**Diagnosed** : 31 May 2024 - Wes Davis

**AMERICAN RIVER TRANSPORTATION**  
 1495 EAST ILLINOIS RT 71  
 OTTAWA, IL  
 US 61350

Contact: Jackson Hayes  
 jackson.hayes@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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