



Machine Id  
**ARTCO MAIDEN**  
Component  
**Port Genset**  
Fluid  
**PETRO CANADA DURON MARINE SAE 40 (3 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MWM696910</b>	MWM696866	MWM696845
Sample Date		Client Info		<b>26 Apr 2024</b>	28 Mar 2024	16 Jan 2024
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>600</b>	600	600
Filter Age	hrs	Client Info		<b>0</b>	0	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>2</b>	7	3
Chromium	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	0
Aluminum	ppm	ASTM D5185m	>12	<b>1</b>	2	2
Lead	ppm	ASTM D5185m	>17	<b>2</b>	2	<1
Copper	ppm	ASTM D5185m	>70	<b>0</b>	<1	0
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	1	0
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.

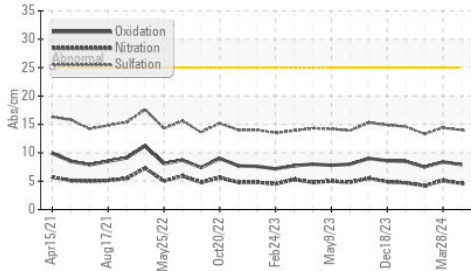
Silicon	ppm	ASTM D5185m	>25	<b>4</b>	8	4
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	2	<1
Fuel		WC Method	>4.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>4.6</b>	5.1	4.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>14.0</b>	14.4	13.3
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**

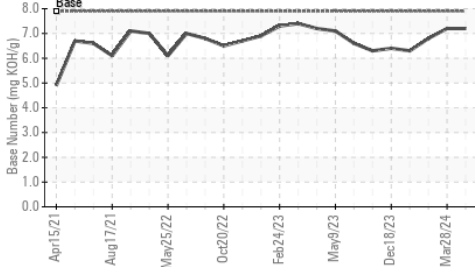
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>2</b>	0	0
Boron	ppm	ASTM D5185m	1.0	<b>20</b>	1	2
Barium	ppm	ASTM D5185m	1.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	1.0	<b>3</b>	5	4
Manganese	ppm	ASTM D5185m	1	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	15	<b>955</b>	934	890
Calcium	ppm	ASTM D5185m	2540	<b>1185</b>	1122	1022
Phosphorus	ppm	ASTM D5185m	1000	<b>1226</b>	1170	1089
Zinc	ppm	ASTM D5185m	1110	<b>1459</b>	1348	1264
Sulfur	ppm	ASTM D5185m	3700	<b>4172</b>	3394	3193
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>7.9</b>	8.4	7.5
Base Number (BN)	mg KOH/g	ASTM D2896	7.9	<b>7.2</b>	7.2	6.8
Visc @ 100°C	cSt	ASTM D445	14.6	<b>13.9</b>	13.7	13.6

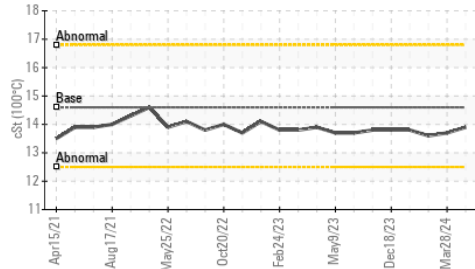
**FT-IR (Direct Trend)**



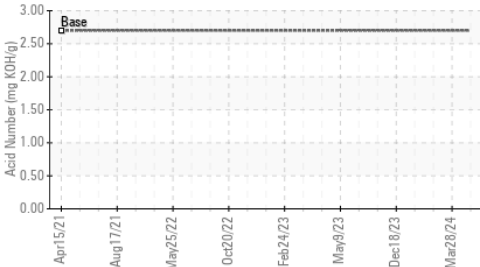
**Base Number**



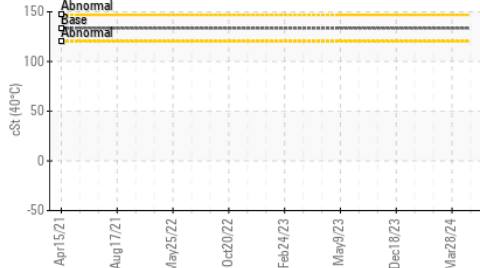
**Viscosity @ 100°C**



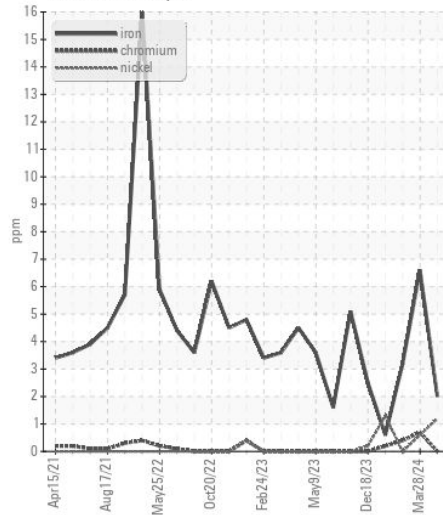
**Acid Number**



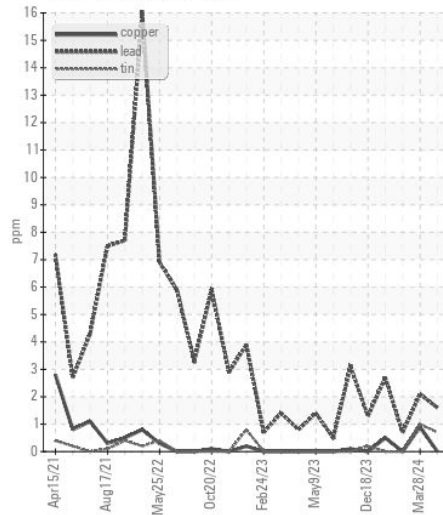
**Viscosity @ 40°C**



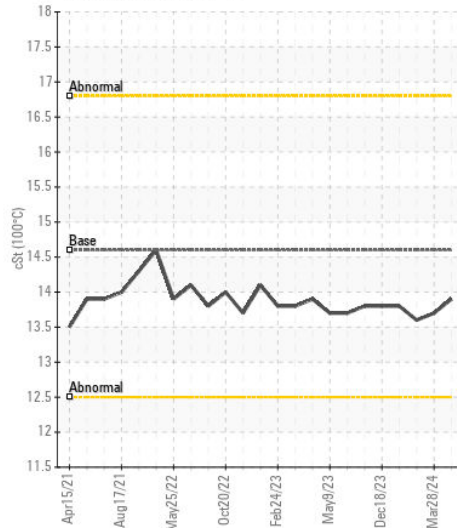
**Ferrous Alloys**



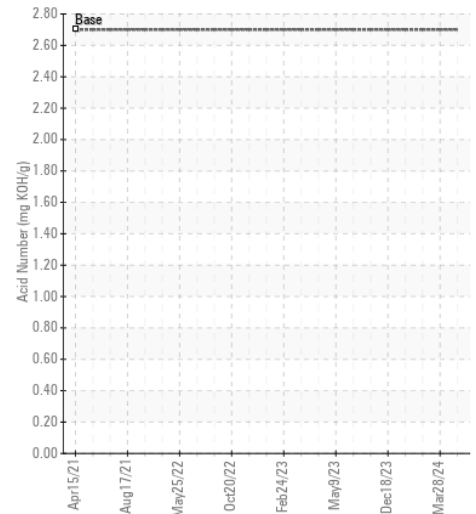
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Acid Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MWM696910 **Received** : 01 Jul 2024  
**Lab Number** : 06225443 **Tested** : 03 Jul 2024  
**Unique Number** : 11103640 **Diagnosed** : 03 Jul 2024 - Don Baldrige  
**Test Package** : MAR 2 ( Additional Tests: KV40, TAN Man )

**AMERICAN RIVER TRANS. CO. PEORIA**  
 534 WESLEY RD  
 CREVECOEUR, IL  
 US 61610  
 Contact: STEVE BUCCO

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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