



Machine Id
PRAIRIE MOON
Component
Port Main Engine
Fluid
PETRO CANADA DURON MARINE SAE 40 (19 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MWM667198	MWM696855	MWM667138
Sample Date		Client Info		22 May 2024	22 Feb 2024	05 Jan 2024
Machine Age	hrs	Client Info		800	0	0
Oil Age	hrs	Client Info		800	800	800
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	2	4	0
Chromium	ppm	ASTM D5185m	>8	0	<1	0
Nickel	ppm	ASTM D5185m	>2	1	<1	1
Titanium	ppm	ASTM D5185m	>3	0	<1	0
Silver	ppm	ASTM D5185m	>2	<1	<1	<1
Aluminum	ppm	ASTM D5185m	>15	1	2	<1
Lead	ppm	ASTM D5185m	>18	<1	<1	<1
Copper	ppm	ASTM D5185m	>80	1	2	1
Tin	ppm	ASTM D5185m	>14	<1	1	0
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

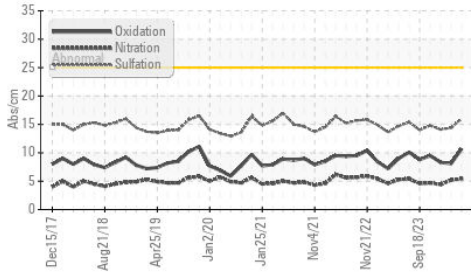
Silicon	ppm	ASTM D5185m	>20	2	4	2
Potassium	ppm	ASTM D5185m	>20	4	2	0
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844		0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	5.4	5.2	4.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	16.0	14.4	14.1
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG

FLUID CONDITION

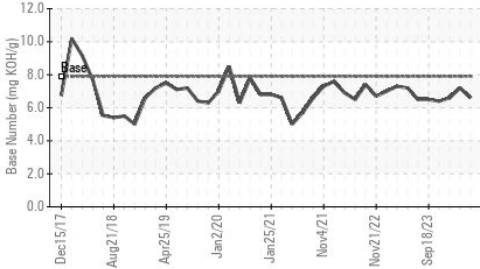
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>75	2	0	0
Boron	ppm	ASTM D5185m	1.0	2	<1	0
Barium	ppm	ASTM D5185m	1.0	0	0	0
Molybdenum	ppm	ASTM D5185m	1.0	2	4	2
Manganese	ppm	ASTM D5185m	1	<1	<1	<1
Magnesium	ppm	ASTM D5185m	15	959	889	912
Calcium	ppm	ASTM D5185m	2540	1048	1067	983
Phosphorus	ppm	ASTM D5185m	1000	1245	1149	1116
Zinc	ppm	ASTM D5185m	1110	1453	1300	1368
Sulfur	ppm	ASTM D5185m	3700	4141	3400	3328
Oxidation	Abs/.1mm	*ASTM D7414	>25	10.7	8.1	8.3
Base Number (BN)	mg KOH/g	ASTM D2896	7.9	6.6	7.2	6.6
Visc @ 100°C	cSt	ASTM D445	14.6	12.9	13.1	13.1

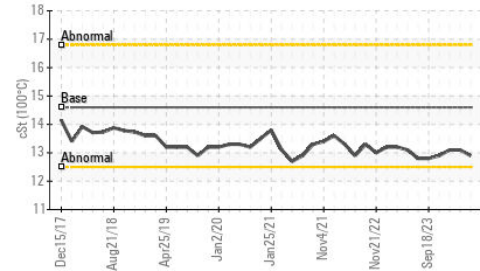
FT-IR (Direct Trend)



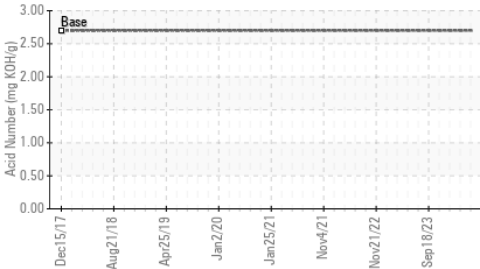
Base Number



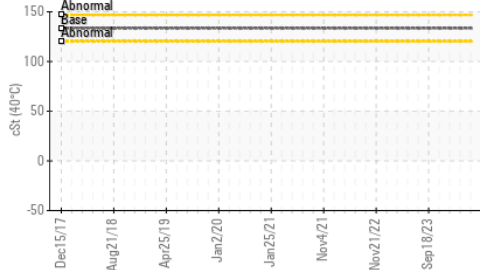
Viscosity @ 100°C



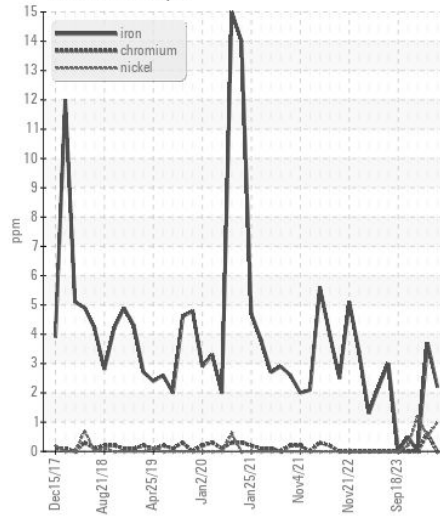
Acid Number



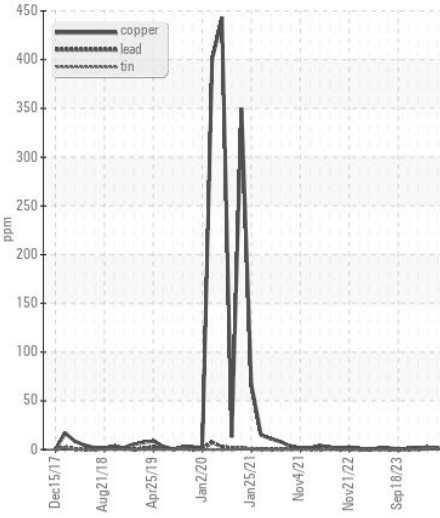
Viscosity @ 40°C



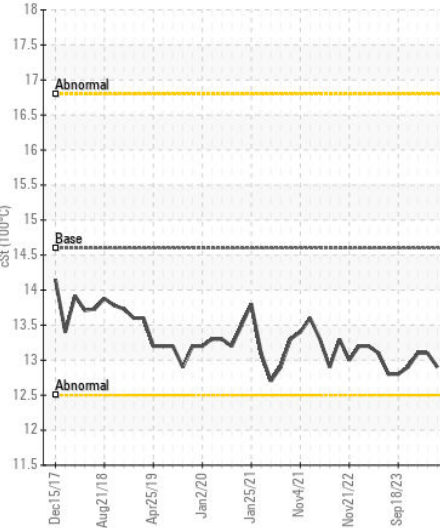
Ferrous Alloys



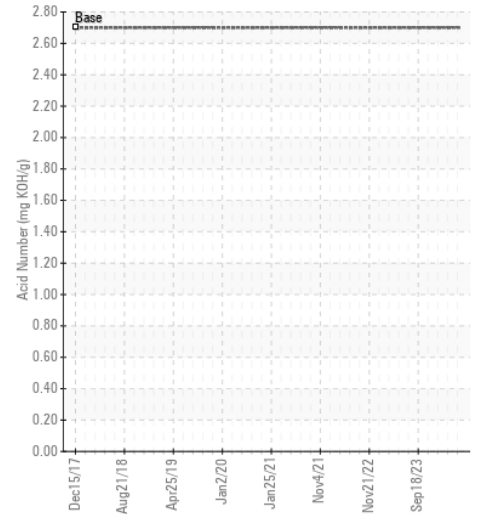
Non-ferrous Metals



Viscosity @ 100°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : MWM667198

Lab Number : 06225447

Unique Number : 11103644

Test Package : MAR 2 (Additional Tests: KV40, TAN Man)

Received : 01 Jul 2024

Tested : 03 Jul 2024

Diagnosed : 03 Jul 2024 - Don Baldrige

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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