



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
MWL
Component
Starboard Reduction Gear
Fluid
PETRO CANADA DURON MARINE SAE 40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW05749646	MW05663530	MW05521259
Sample Date		Client Info		24 Jan 2023	10 Oct 2022	14 Apr 2022
Machine Age	hrs	Client Info		33089	32713	32130
Oil Age	hrs	Client Info		376	377	405
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	26	39	33
Chromium	ppm	ASTM D5185m	>10	<1	<1	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	1	3
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>25	<1	<1	<1
Lead	ppm	ASTM D5185m	>100	<1	0	0
Copper	ppm	ASTM D5185m	>50	7	6	6
Tin	ppm	ASTM D5185m	>10	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	VLITE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

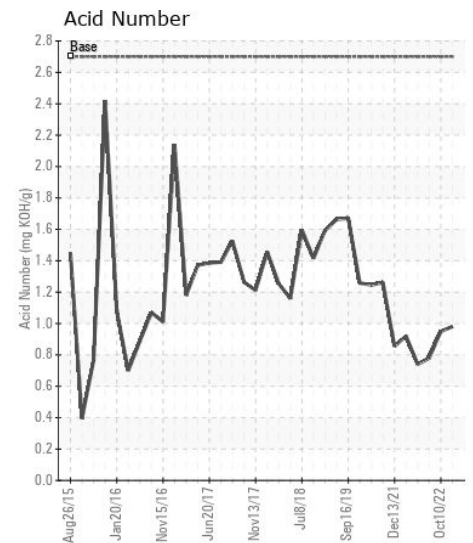
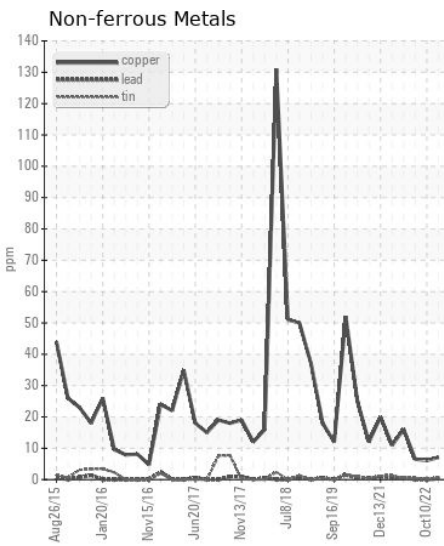
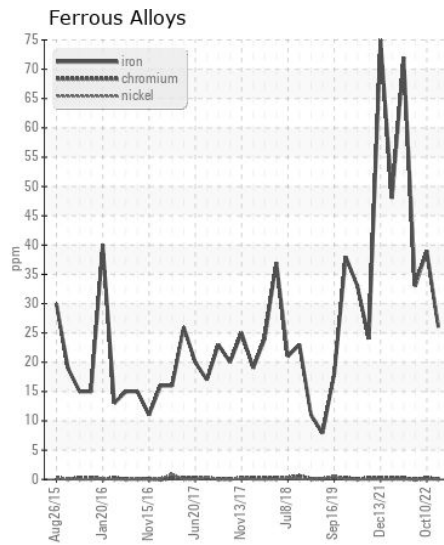
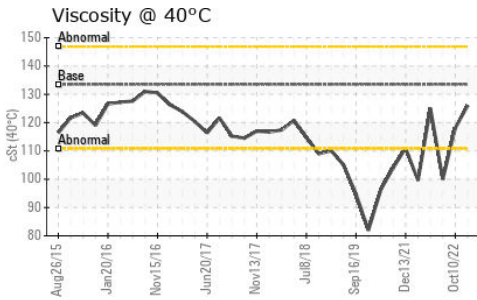
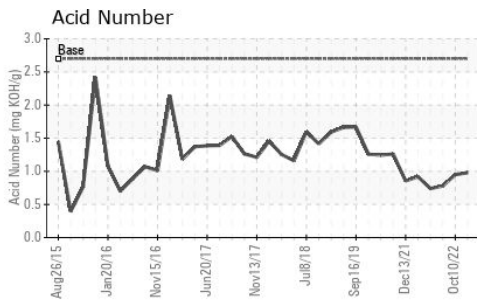
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	4	4	4
Potassium	ppm	ASTM D5185m	>20	0	2	0
Water		WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	VLITE
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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		2	2	<1
Boron	ppm	ASTM D5185m	1.0	240	247	220
Barium	ppm	ASTM D5185m	1.0	2	2	0
Molybdenum	ppm	ASTM D5185m	1.0	29	36	35
Manganese	ppm	ASTM D5185m	1	<1	<1	<1
Magnesium	ppm	ASTM D5185m	15	73	135	243
Calcium	ppm	ASTM D5185m	2540	2009	2203	1901
Phosphorus	ppm	ASTM D5185m	1000	609	696	662
Zinc	ppm	ASTM D5185m	1110	712	830	746
Sulfur	ppm	ASTM D5185m	3700	2769	3039	2358
Acid Number (AN)	mg KOH/g	ASTM D8045	2.7	0.98	0.95	0.78
Visc @ 40°C	cSt	ASTM D445	133.5	126	118	100



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW05749646
Lab Number : 05749646
Unique Number : 10309250
Test Package : MAR 2
Received : 25 Jan 2023
Tested : 26 Jan 2023
Diagnosed : 26 Jan 2023 - Jonathan Hester

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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)