



Machine Id
HBR
Component
Port Reduction Gear
Fluid
PETRO CANADA DURON MARINE SAE 40 (7 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW05981980	MW05934936	MW05904497
Sample Date		Client Info		16 Oct 2023	24 Aug 2023	20 Jul 2023
Machine Age	hrs	Client Info		25698	25479	25264
Oil Age	hrs	Client Info		435	215	768
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	3	4	10
Chromium	ppm	ASTM D5185m	>10	0	0	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	2	1	2
Lead	ppm	ASTM D5185m	>100	<1	0	<1
Copper	ppm	ASTM D5185m	>50	0	<1	<1
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

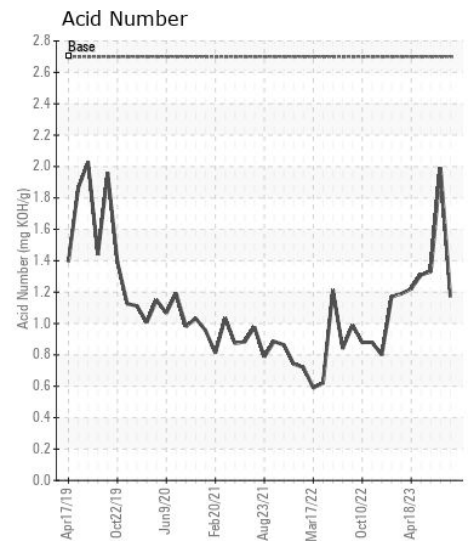
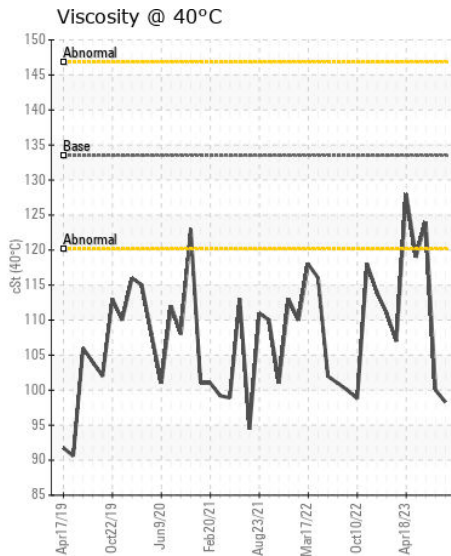
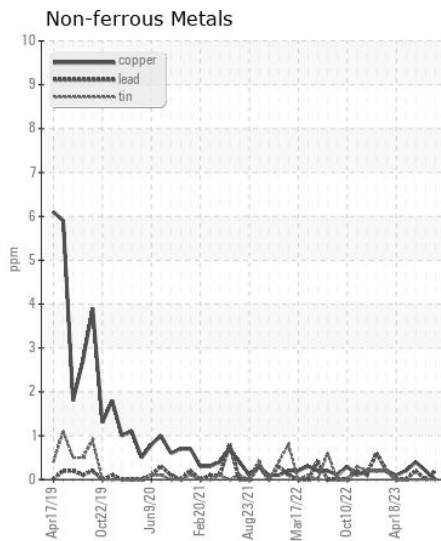
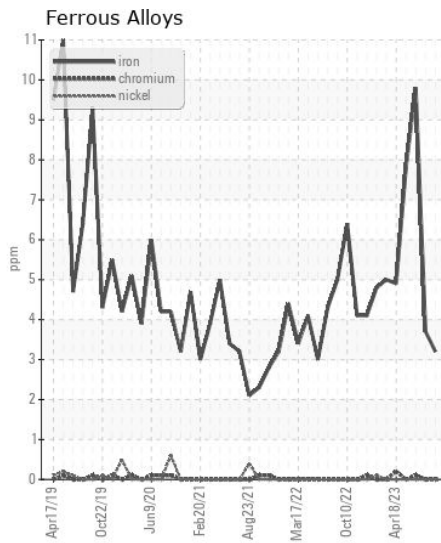
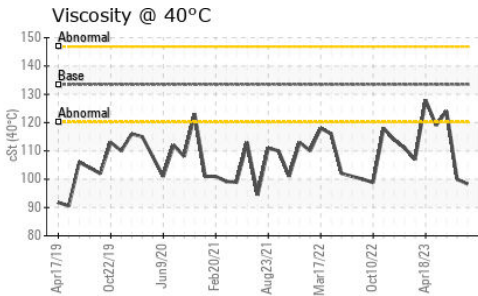
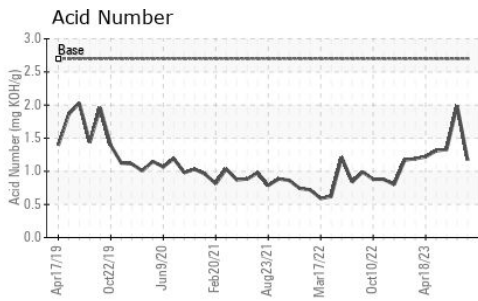
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	6	7	7
Potassium	ppm	ASTM D5185m	>20	2	2	2
Water		WC Method	>0.1	NEG	NEG	NEG
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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		1	0	0
Boron	ppm	ASTM D5185m	1.0	382	422	665
Barium	ppm	ASTM D5185m	1.0	3	<1	2
Molybdenum	ppm	ASTM D5185m	1.0	80	85	61
Manganese	ppm	ASTM D5185m	1	0	<1	<1
Magnesium	ppm	ASTM D5185m	15	306	302	47
Calcium	ppm	ASTM D5185m	2540	2102	2152	4354
Phosphorus	ppm	ASTM D5185m	1000	832	780	1317
Zinc	ppm	ASTM D5185m	1110	949	906	1452
Sulfur	ppm	ASTM D5185m	3700	2992	3175	5277
Acid Number (AN)	mg KOH/g	ASTM D8045	2.7	1.17	1.99	1.33
Visc @ 40°C	cSt	ASTM D445	133.5	98.3	100	124



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW05981980
Lab Number : 05981980
Unique Number : 10699275
Test Package : MAR 2
Received : 17 Oct 2023
Tested : 19 Oct 2023
Diagnosed : 19 Oct 2023 - Don Baldrige

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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)