



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
913066
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (11 GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0107467	GFL0072496	GFL0072491
Sample Date		Client Info		09 Feb 2024	08 Jun 2023	28 Mar 2023
Machine Age	hrs	Client Info		3479	1776	1199
Oil Age	hrs	Client Info		601	598	550
Filter Age	hrs	Client Info		601	598	550
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	SEVERE	SEVERE

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>120	17	21	20
Chromium	ppm	ASTM D5185m	>20	<1	1	<1
Nickel	ppm	ASTM D5185m	>5	4	6	2
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>20	3	<1	<1
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	4	29	67
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

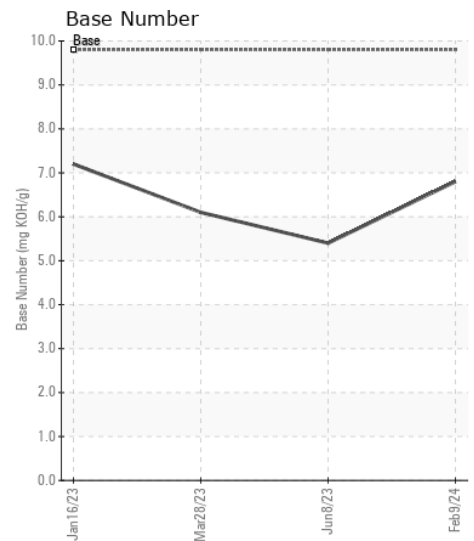
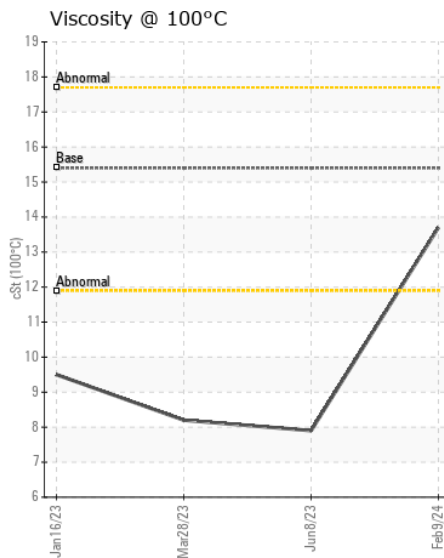
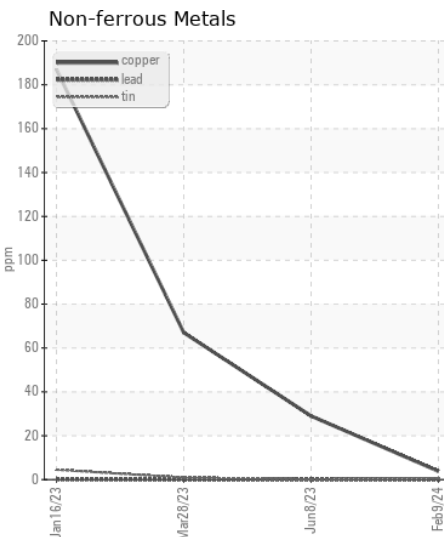
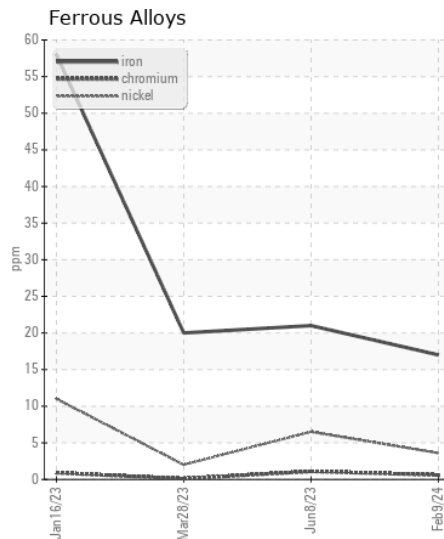
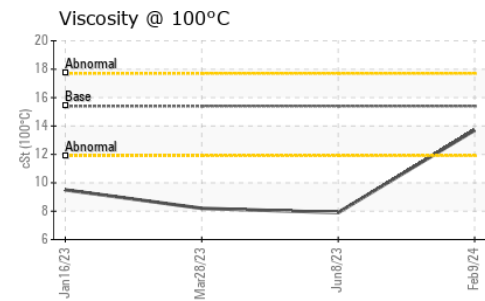
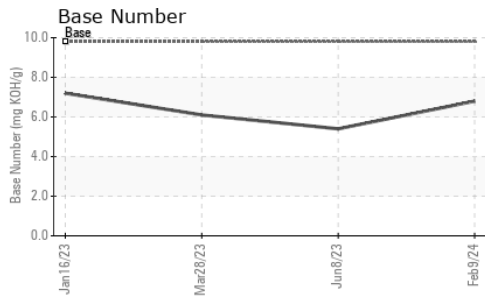
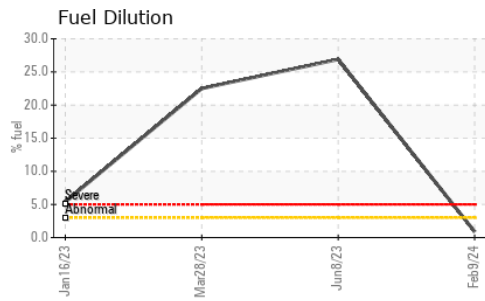
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	4	5	9
Potassium	ppm	ASTM D5185m	>20	4	0	0
Fuel	%	ASTM D3524	>3.0	0.9	26.9	22.5
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>4	0.5	0.5	0.4
Nitration	Abs/cm	*ASTM D7624	>20	8.5	10.2	8.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.9	19.1	18.4
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	>0.2	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		2	4	2
Boron	ppm	ASTM D5185m	0	18	3	11
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	66	42	50
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	865	666	688
Calcium	ppm	ASTM D5185m	1070	1107	789	886
Phosphorus	ppm	ASTM D5185m	1150	870	684	680
Zinc	ppm	ASTM D5185m	1270	1174	853	851
Sulfur	ppm	ASTM D5185m	2060	2839	1936	1730
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.0	15.6	14.4
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	6.8	5.4	6.1
Visc @ 100°C	cSt	ASTM D445	15.4	13.7	7.9	8.2



Certificate L2367

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

Sample No. : GFL0107467

Lab Number : 06089242

Unique Number : 10876687

Test Package : FLEET (Additional Tests: PercentFuel)

Received : 14 Feb 2024

Tested : 15 Feb 2024

Diagnosed : 15 Feb 2024 - Wes Davis

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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