



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
GFL035
Machine Id
834035
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (42 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0116483	GFL0102333	GFL0071624
Sample Date		Client Info		07 May 2024	23 Jan 2024	11 Oct 2023
Machine Age	hrs	Client Info		0	0	637
Oil Age	hrs	Client Info		600	600	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	19	23	54
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	1	1	2
Titanium	ppm	ASTM D5185m	>2	<1	0	0
Silver	ppm	ASTM D5185m	>2	0	<1	<1
Aluminum	ppm	ASTM D5185m	>20	2	4	0
Lead	ppm	ASTM D5185m	>40	1	2	1
Copper	ppm	ASTM D5185m	>330	3	4	20
Tin	ppm	ASTM D5185m	>15	2	2	1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

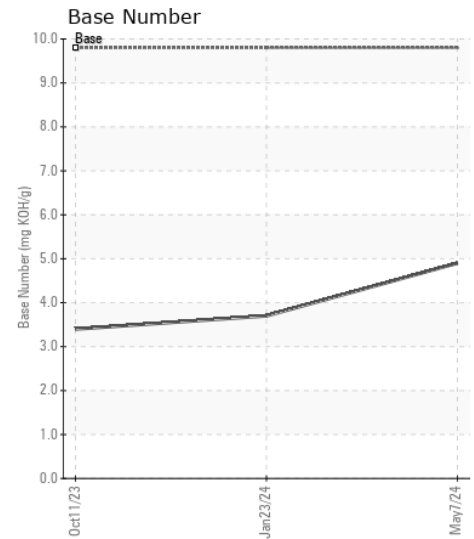
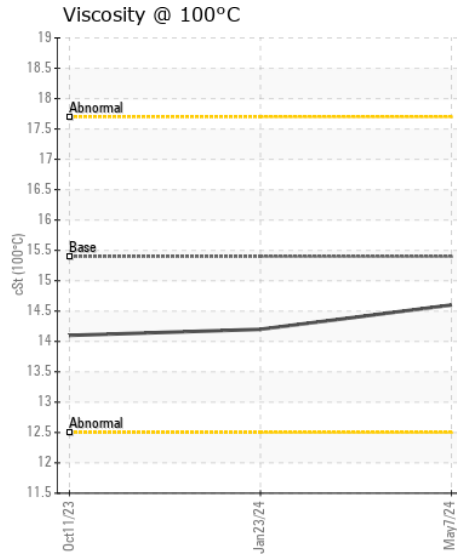
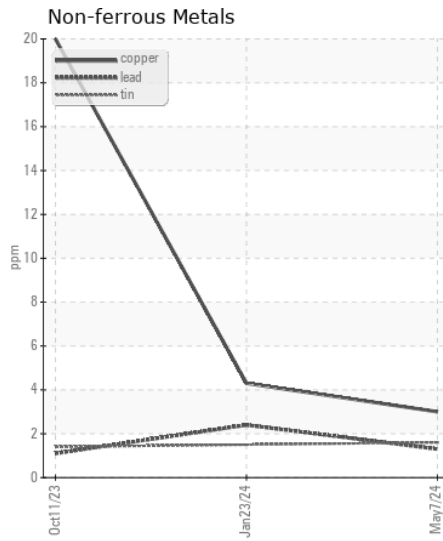
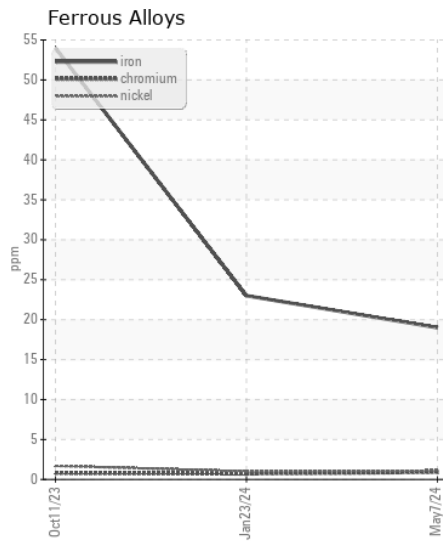
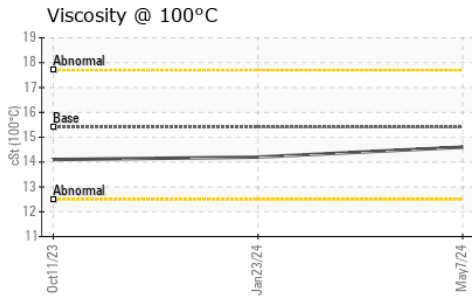
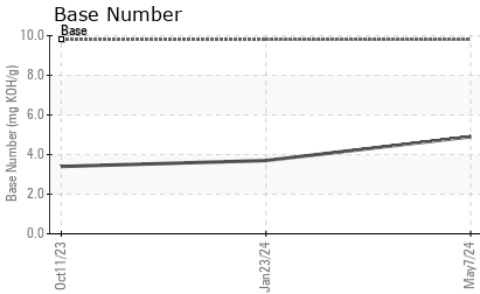
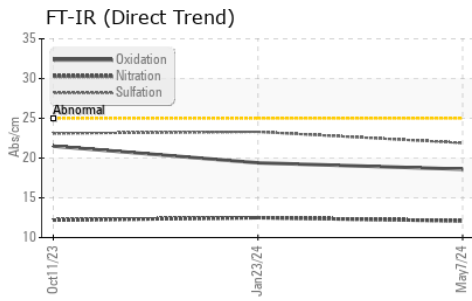
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	6	8	35
Potassium	ppm	ASTM D5185m	>20	6	3	3
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>4	0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	12.1	12.5	12.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.9	23.3	23.1
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	>0.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		8	8	2
Boron	ppm	ASTM D5185m	0	9	8	9
Barium	ppm	ASTM D5185m	0	2	<1	6
Molybdenum	ppm	ASTM D5185m	60	58	57	53
Manganese	ppm	ASTM D5185m	0	1	3	16
Magnesium	ppm	ASTM D5185m	1010	560	609	710
Calcium	ppm	ASTM D5185m	1070	1634	1617	1067
Phosphorus	ppm	ASTM D5185m	1150	759	715	629
Zinc	ppm	ASTM D5185m	1270	982	991	877
Sulfur	ppm	ASTM D5185m	2060	2618	2373	2338
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.6	19.4	21.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	4.9	▲ 3.7	3.4
Visc @ 100°C	cSt	ASTM D445	15.4	14.6	14.2	14.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0116483
Lab Number : 06176484
Unique Number : 11022537
Test Package : FLEET
Received : 10 May 2024
Tested : 13 May 2024
Diagnosed : 14 May 2024 - Sean Felton

GFL Environmental - 035 - Greensboro
 1236 Elon Place
 High Point, NC
 US 27263
 Contact: JORGE COSTA
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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)