



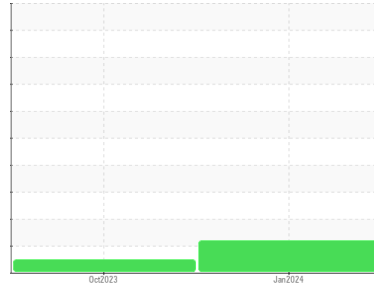
OIL ANALYSIS REPORT

Sample Rating Trend

DEGRADATION



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



DIAGNOSIS

Recommendation

The oil is near the end of its useful service life, recommend schedule an oil change. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The BN level is low. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0102333	GFL0071624	---
Sample Date	Client Info		23 Jan 2024	11 Oct 2023	---
Machine Age	hrs	Client Info	0	637	---
Oil Age	hrs	Client Info	600	0	---
Oil Changed	Client Info		Not Chngd	N/A	---
Sample Status			ABNORMAL	NORMAL	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<1.0	<1.0	---
Water	WC Method	>0.2	NEG	NEG	---
Glycol	WC Method		NEG	NEG	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >120	23	54	---
Chromium	ppm	ASTM D5185m >20	<1	<1	---
Nickel	ppm	ASTM D5185m >5	1	2	---
Titanium	ppm	ASTM D5185m >2	0	0	---
Silver	ppm	ASTM D5185m >2	<1	<1	---
Aluminum	ppm	ASTM D5185m >20	4	0	---
Lead	ppm	ASTM D5185m >40	2	1	---
Copper	ppm	ASTM D5185m >330	4	20	---
Tin	ppm	ASTM D5185m >15	2	1	---
Vanadium	ppm	ASTM D5185m	0	0	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	8	9	---
Barium	ppm	ASTM D5185m 0	<1	6	---
Molybdenum	ppm	ASTM D5185m 60	57	53	---
Manganese	ppm	ASTM D5185m 0	3	16	---
Magnesium	ppm	ASTM D5185m 1010	609	710	---
Calcium	ppm	ASTM D5185m 1070	1617	1067	---
Phosphorus	ppm	ASTM D5185m 1150	715	629	---
Zinc	ppm	ASTM D5185m 1270	991	877	---
Sulfur	ppm	ASTM D5185m 2060	2373	2338	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	8	35	---
Sodium	ppm	ASTM D5185m	8	2	---
Potassium	ppm	ASTM D5185m >20	3	3	---

INFRA-RED

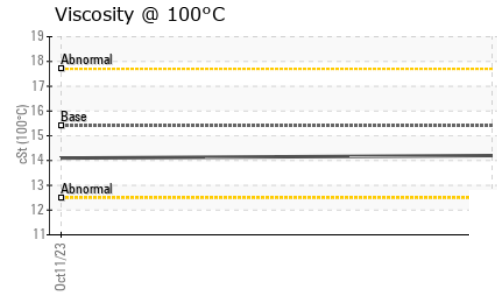
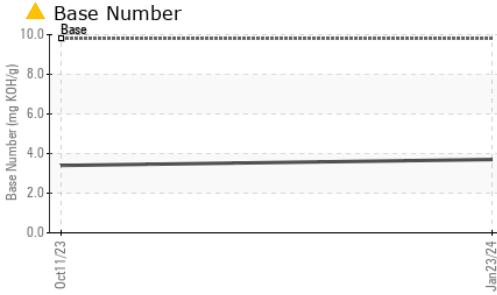
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >4	0	0	---
Nitration	Abs/cm	*ASTM D7624 >20	12.5	12.2	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	23.3	23.1	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	19.4	21.5	---
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	▲ 3.7	3.4	---



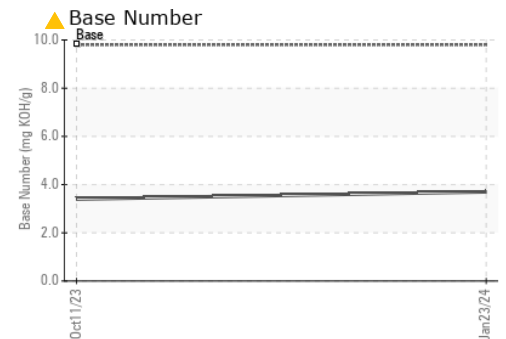
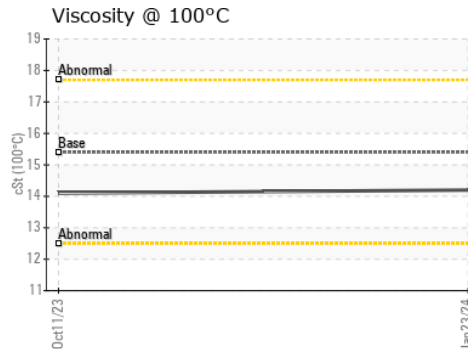
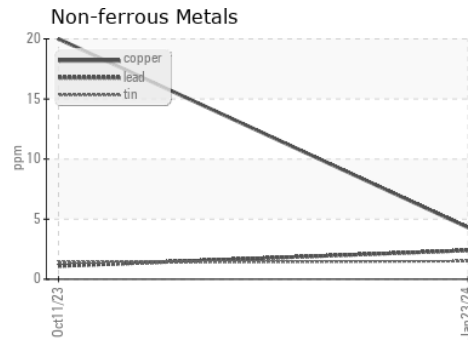
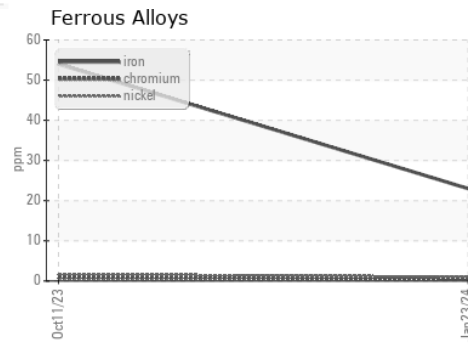
OIL ANALYSIS REPORT



PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	14.2	14.1

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : GFL0102333 Recieved : 29 Jan 2024
 Lab Number : 06072676 Diagnosed : 30 Jan 2024
 Unique Number : 10849353 Diagnostician : Jonathan Hester
 Test Package : FLEET

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)