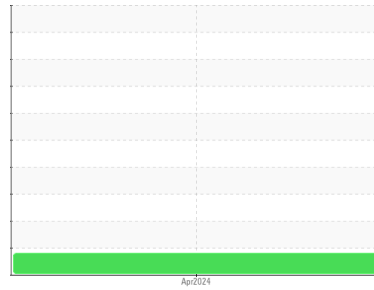




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area
(GD85052)

Machine Id
222124

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 15W40 (--- LTR)

DIAGNOSIS

Recommendation

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

Wear

Cylinder, crank, or cam shaft wear is indicated.

Contamination

There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0108502	---	---
Sample Date	Client Info	30 Apr 2024	---	---
Machine Age	hrs Client Info	7944	---	---
Oil Age	hrs Client Info	7944	---	---
Oil Changed	Client Info	Not Chngd	---	---
Sample Status		ABNORMAL	---	---

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >2.0	<1.0	---	---
Water	WC Method >0.2	NEG	---	---
Glycol	WC Method	NEG	---	---

WEAR METALS

method	limit/base	current	history1	history2
Iron ppm	ASTM D5185m >100	▲ 101	---	---
Chromium ppm	ASTM D5185m >20	1	---	---
Nickel ppm	ASTM D5185m >4	2	---	---
Titanium ppm	ASTM D5185m	0	---	---
Silver ppm	ASTM D5185m >3	0	---	---
Aluminum ppm	ASTM D5185m >20	9	---	---
Lead ppm	ASTM D5185m >40	<1	---	---
Copper ppm	ASTM D5185m >330	2	---	---
Tin ppm	ASTM D5185m >15	1	---	---
Vanadium ppm	ASTM D5185m	0	---	---
Cadmium ppm	ASTM D5185m	0	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron ppm	ASTM D5185m 0	26	---	---
Barium ppm	ASTM D5185m 0	1	---	---
Molybdenum ppm	ASTM D5185m 60	38	---	---
Manganese ppm	ASTM D5185m 0	<1	---	---
Magnesium ppm	ASTM D5185m 1010	196	---	---
Calcium ppm	ASTM D5185m 1070	2140	---	---
Phosphorus ppm	ASTM D5185m 1150	1071	---	---
Zinc ppm	ASTM D5185m 1270	1175	---	---
Sulfur ppm	ASTM D5185m 2060	3909	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm	ASTM D5185m >25	6	---	---
Sodium ppm	ASTM D5185m	8	---	---
Potassium ppm	ASTM D5185m >20	<1	---	---

INFRA-RED

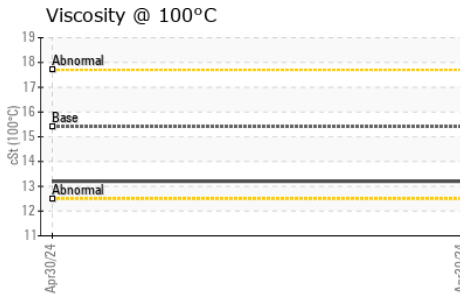
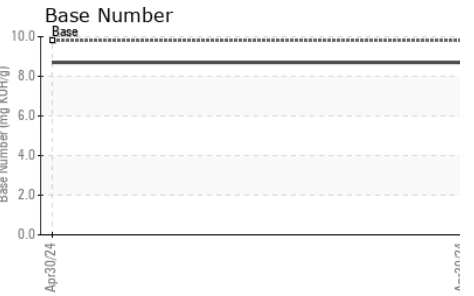
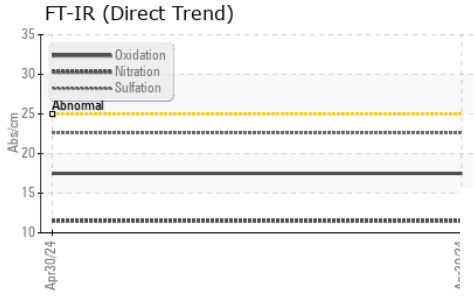
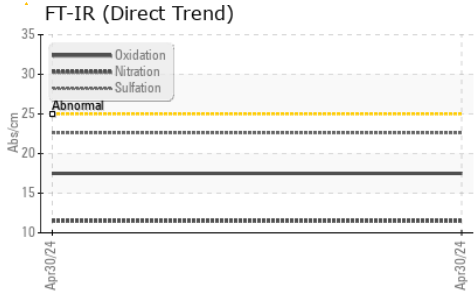
method	limit/base	current	history1	history2
Soot %	*ASTM D7844 >3	1.7	---	---
Nitration	*ASTM D7624 >20	11.5	---	---
Sulfation	*ASTM D7415 >30	22.6	---	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	17.5	---	---
Base Number (BN)	mg KOH/g ASTM D2896 9.8	8.7	---	---



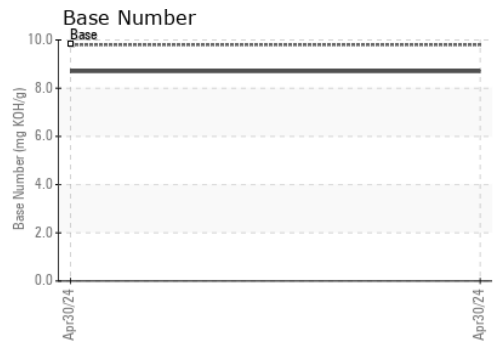
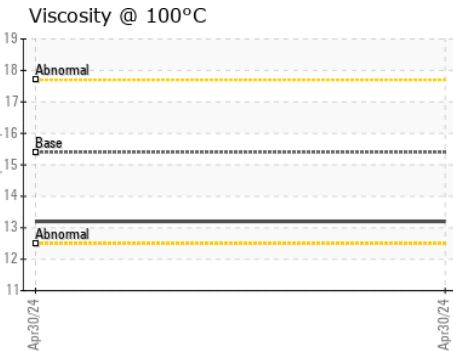
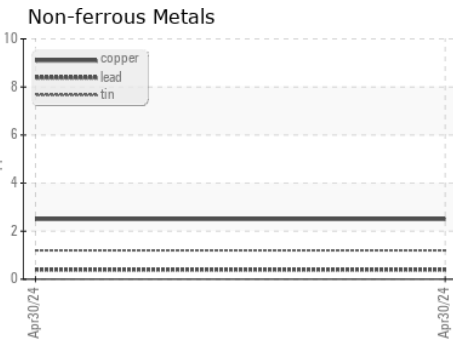
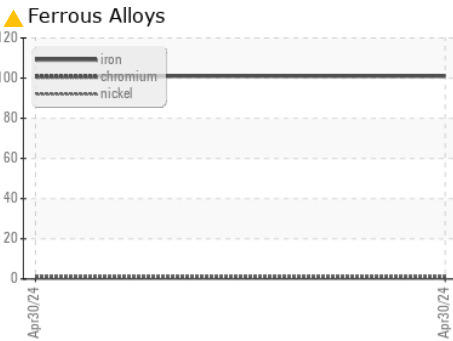
OIL ANALYSIS REPORT



VISUAL	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	13.2	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0108502
Lab Number : 06178395
Unique Number : 11029721
Test Package : FLEET

Received : 14 May 2024
Tested : 14 May 2024
Diagnosed : 16 May 2024 - Sean Felton

GFL Environmental - 904 - Chippewa Falls HC
 11888 & 11863 30th Avenue
 Chippewa Falls, WI
 US 54729
 Contact: Andy Kane

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)

T: (715)202-3420

F: