OIL ANALYSIS REPORT

WEAR CHECK

Sample Rating Trend

Mar 2024

NORMAL

✓

Area
(KTW037)
Machine Id
Service truck-shop
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

Recommendation
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 result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0114119	---	---
Sample Date	Client Info		20 Mar 2024	---	---
Machine Age	mls	Client Info	396889	---	---
Oil Age	mls	Client Info	0	---	---
Oil Changed		Client Info	Changed	---	---
Sample Status			NORMAL	---	---

CONTAMINATION

		method	limit/base	current	history1	history2
Fuel		WC Method	>5	<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	2	---	---
Chromium	ppm	ASTM D5185m	>20	0	---	---
Nickel	ppm	ASTM D5185m	>2	0	---	---
Titanium	ppm	ASTM D5185m	>2	0	---	---
Silver	ppm	ASTM D5185m	>2	0	---	---
Aluminum	ppm	ASTM D5185m	>25	<1	---	---
Lead	ppm	ASTM D5185m	>40	<1	---	---
Copper	ppm	ASTM D5185m	>330	<1	---	---
Tin	ppm	ASTM D5185m	>15	0	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
Cadmium	ppm	ASTM D5185m		0	---	---

ADDITIVES

		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<1	---	---
Barium	ppm	ASTM D5185m	0	0	---	---
Molybdenum	ppm	ASTM D5185m	60	57	---	---
Manganese	ppm	ASTM D5185m	0	0	---	---
Magnesium	ppm	ASTM D5185m	1010	1005	---	---
Calcium	ppm	ASTM D5185m	1070	1133	---	---
Phosphorus	ppm	ASTM D5185m	1150	1015	---	---
Zinc	ppm	ASTM D5185m	1270	1337	---	---
Sulfur	ppm	ASTM D5185m	2060	3829	---	---

CONTAMINANTS

		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	3	---	---
Sodium	ppm	ASTM D5185m		2	---	---
Potassium	ppm	ASTM D5185m	>20	1	---	---

INFRA-RED

		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.3	---	---
Nitration	Abs/cm	*ASTM D7624	>20	5.3	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.9	---	---

FLUID DEGRADATION

		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.3	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.8	---	---

FT-IR (Direct Trend)

Base Number

Viscosity @ 100°C
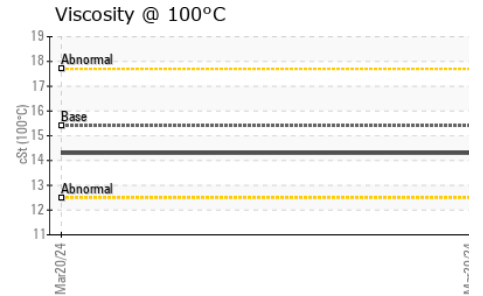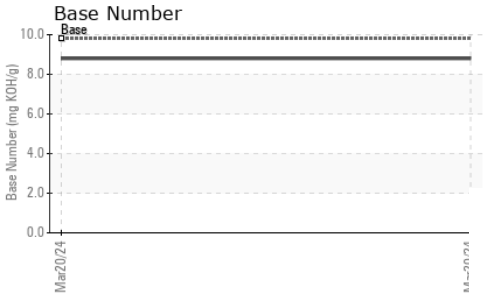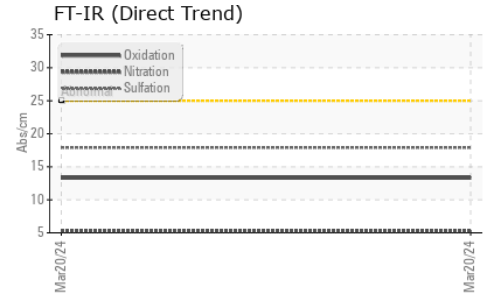
VISUAL

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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	**14.3**	---	---

GRAPHS

Ferrous Alloys

Non-ferrous Metals

Viscosity @ 100°C

Base Number
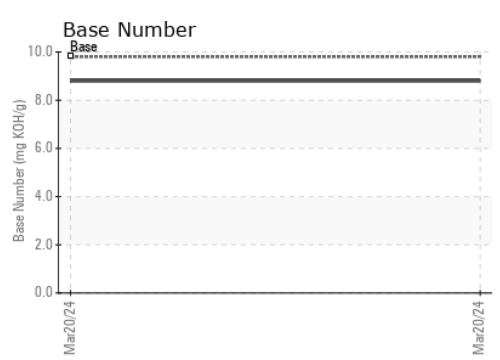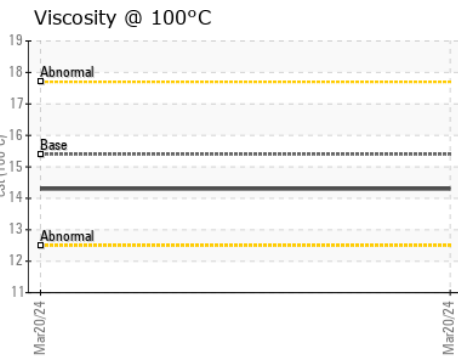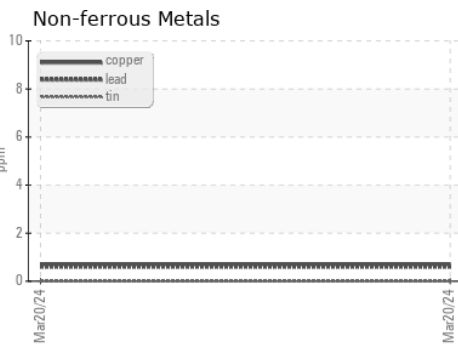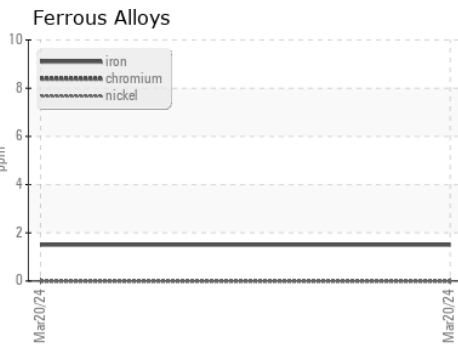
Laboratory	: WearCheck USA - 501 Madison Ave., Cary, NC 27513			**GFL Environmental - 836 - Kansas City Hauling**
Sample No.	: GFL0114119	Received	: 04 Apr 2024	7801 East Truman Road
Lab Number	: 06139179	Tested	: 05 Apr 2024	Kansas City, MO
Unique Number	: 10963987	Diagnosed	: 05 Apr 2024 - Wes Davis	US 64126
Test Package	: FLEET			Contact: Loyce Stewart

Certificate L2367

To discuss this sample report, contact Customer Service at 1-800-237-1369.
loyce.stewart@gflenv.com

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
T:

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)
F: