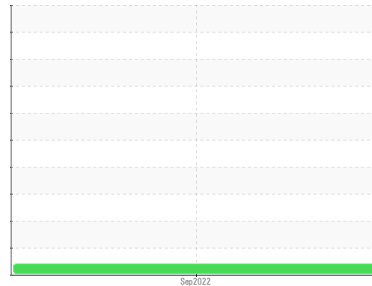




OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id
WATER 14

Component
Diesel Engine

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

DIAGNOSIS

▲ Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

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

▲ Fluid Condition

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0040886	---	---
Sample Date	Client Info	02 Sep 2022	---	---
Machine Age	mls	Client Info	25560	---
Oil Age	mls	Client Info	0	---
Oil Changed	Client Info	Changed	---	---
Sample Status			ATTENTION	---

CONTAMINATION

method	limit/base	current	history1	history2
Glycol	WC Method	NEG	---	---

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	10	---
Chromium	ppm	ASTM D5185m >20	1	---
Nickel	ppm	ASTM D5185m >4	<1	---
Titanium	ppm	ASTM D5185m	<1	---
Silver	ppm	ASTM D5185m >3	0	---
Aluminum	ppm	ASTM D5185m >20	<1	---
Lead	ppm	ASTM D5185m >40	<1	---
Copper	ppm	ASTM D5185m >330	1	---
Tin	ppm	ASTM D5185m >15	1	---
Vanadium	ppm	ASTM D5185m	<1	---
Cadmium	ppm	ASTM D5185m	0	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	52	---
Barium	ppm	ASTM D5185m 0	0	---
Molybdenum	ppm	ASTM D5185m 60	42	---
Manganese	ppm	ASTM D5185m 0	<1	---
Magnesium	ppm	ASTM D5185m 1010	498	---
Calcium	ppm	ASTM D5185m 1070	1672	---
Phosphorus	ppm	ASTM D5185m 1150	917	---
Zinc	ppm	ASTM D5185m 1270	1111	---
Sulfur	ppm	ASTM D5185m 2060	3420	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	6	---
Sodium	ppm	ASTM D5185m	2	---
Potassium	ppm	ASTM D5185m >20	0	---
Fuel	%	ASTM D3524 >5	0.5	---

INFRA-RED

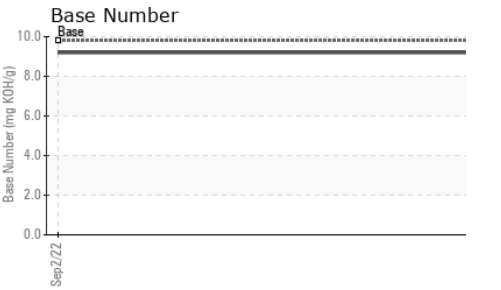
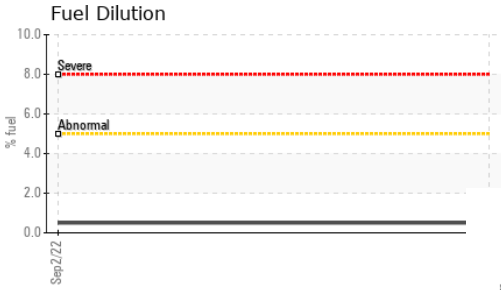
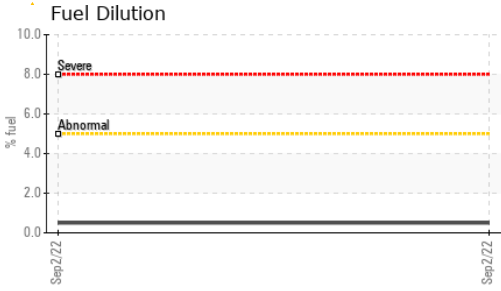
method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.3	---
Nitration	Abs/cm	*ASTM D7624 >20	11.1	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	25.2	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	21.5	---
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	9.2	---



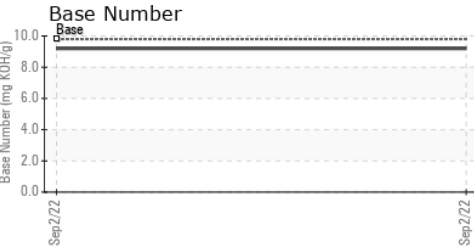
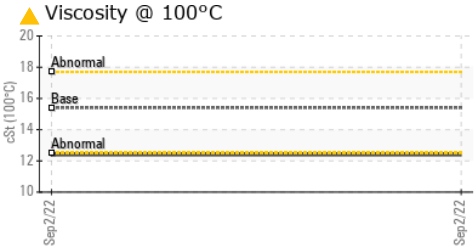
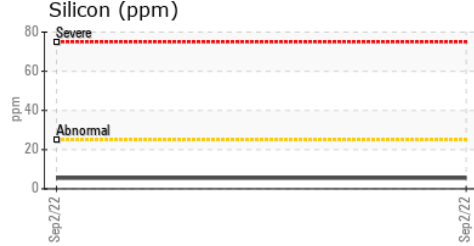
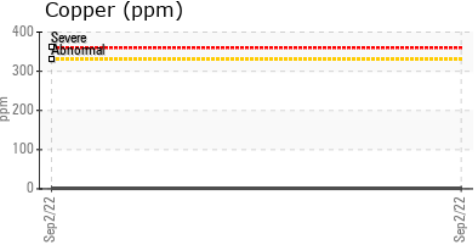
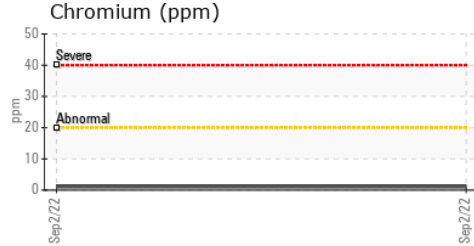
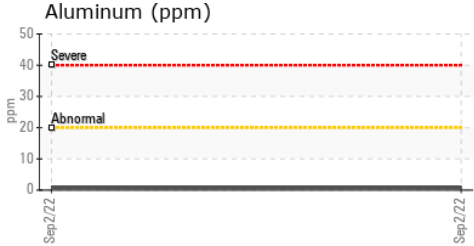
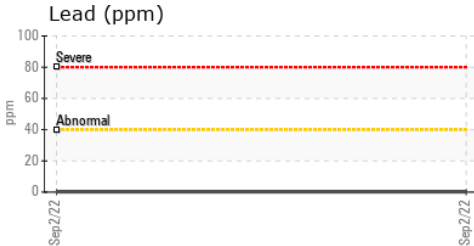
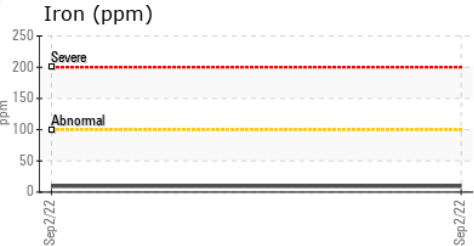
OIL ANALYSIS REPORT



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	▲ 12.4	---	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0040886 **Received** : 20 Sep 2022
Lab Number : 05645749 **Diagnosed** : 22 Sep 2022
Unique Number : 10140288 **Diagnostician** : Jonathan Hester
Test Package : MOB1+ (Additional Tests: FuelDilution, PercentFuel)

GFL Environmental - 9999 - Moved No Longer Used Units

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)

US
Contact:

T:
F: