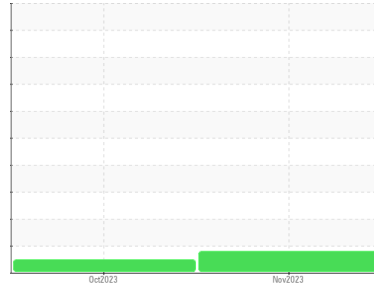




PROBLEM SUMMARY

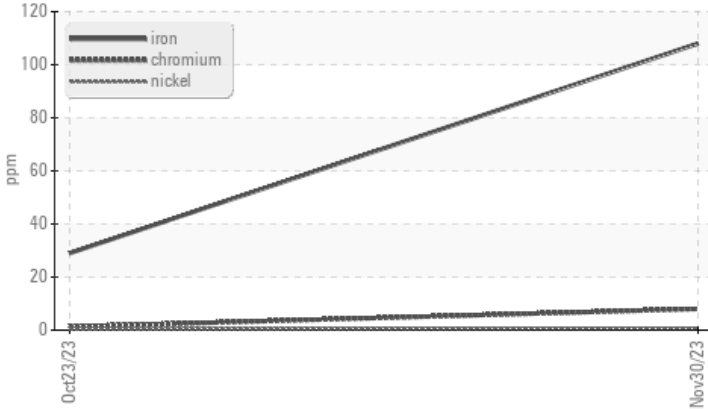
Sample Rating Trend



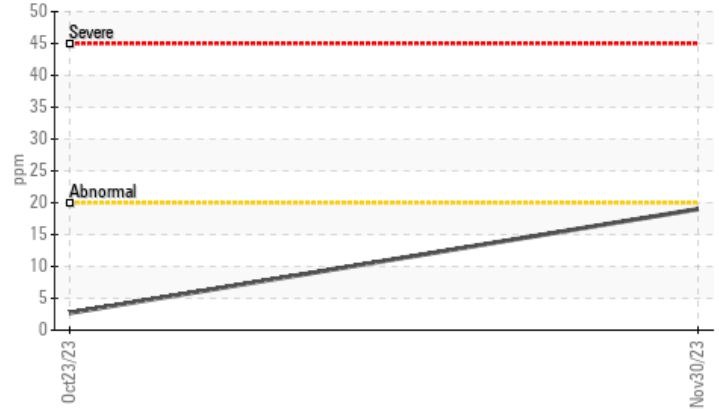
Machine Id
913081
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (36 QTS)

COMPONENT CONDITION SUMMARY

▲ Ferrous Alloys



Aluminum (ppm)



RECOMMENDATION

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

PROBLEMATIC TEST RESULTS

Sample Status	ABNORMAL	NORMAL	---
Iron	▲ 108	29	---

Customer Id: GFL410
 Sample No.: GFL0059312
 Lab Number: 06027372
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

23 Oct 2023 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report

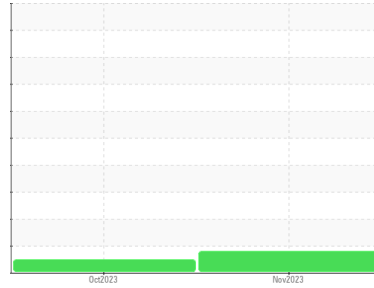




OIL ANALYSIS REPORT

Sample Rating Trend

WEAR



Machine Id
913081
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (36 QTS)

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 suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0059312	GFL0059125	---
Sample Date	Client Info		30 Nov 2023	23 Oct 2023	---
Machine Age	hrs	Client Info	2694	2360	---
Oil Age	hrs	Client Info	2694	2360	---
Oil Changed	Client Info		N/A	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	▲ 108	29	---
Chromium	ppm	ASTM D5185m >20	8	1	---
Nickel	ppm	ASTM D5185m >5	<1	<1	---
Titanium	ppm	ASTM D5185m >2	<1	<1	---
Silver	ppm	ASTM D5185m >2	0	0	---
Aluminum	ppm	ASTM D5185m >20	19	3	---
Lead	ppm	ASTM D5185m >40	<1	0	---
Copper	ppm	ASTM D5185m >330	6	1	---
Tin	ppm	ASTM D5185m >15	0	<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	58	2	---
Barium	ppm	ASTM D5185m 0	0	0	---
Molybdenum	ppm	ASTM D5185m 60	45	59	---
Manganese	ppm	ASTM D5185m 0	2	<1	---
Magnesium	ppm	ASTM D5185m 1010	526	951	---
Calcium	ppm	ASTM D5185m 1070	1741	1114	---
Phosphorus	ppm	ASTM D5185m 1150	832	1020	---
Zinc	ppm	ASTM D5185m 1270	984	1293	---
Sulfur	ppm	ASTM D5185m 2060	2713	2599	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	12	12	---
Sodium	ppm	ASTM D5185m	0	7	---
Potassium	ppm	ASTM D5185m >20	49	2	---

INFRA-RED

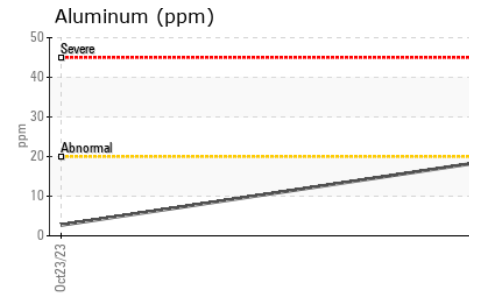
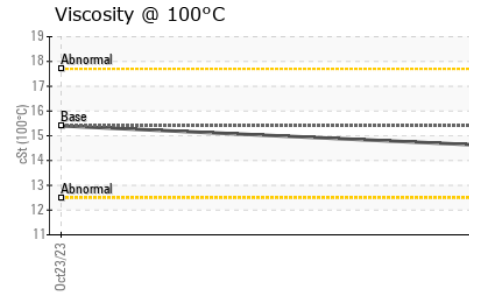
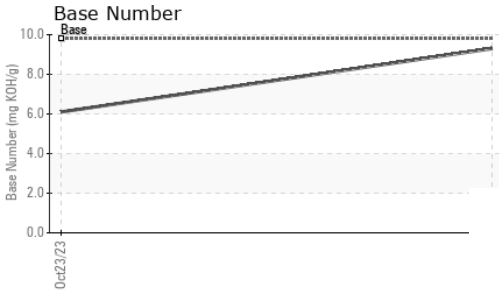
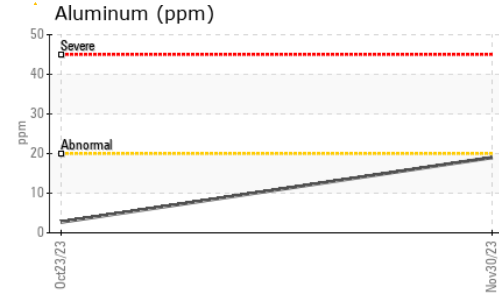
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >4	0.1	0.5	---
Nitration	Abs/cm	*ASTM D7624 >20	5.0	14.0	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	17.6	25.7	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	13.5	27.5	---
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	9.3	6.1	---



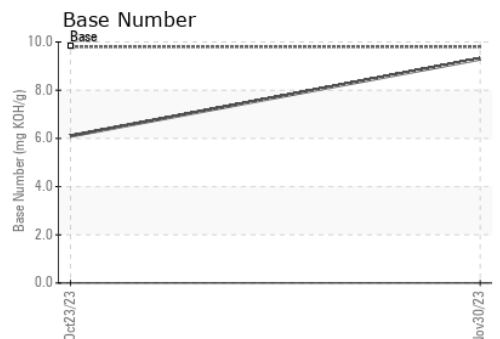
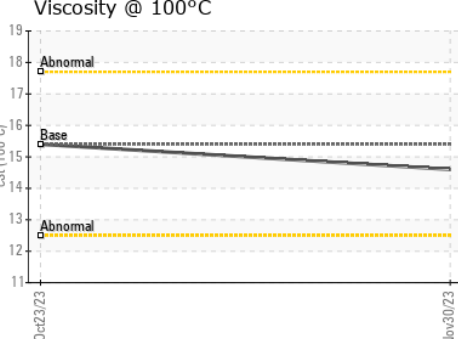
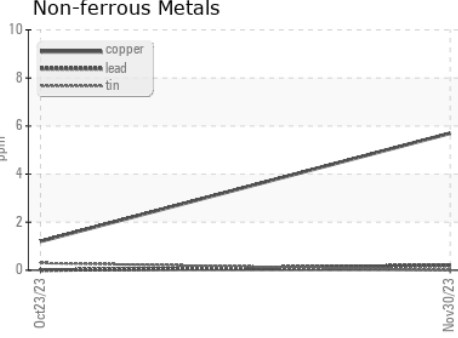
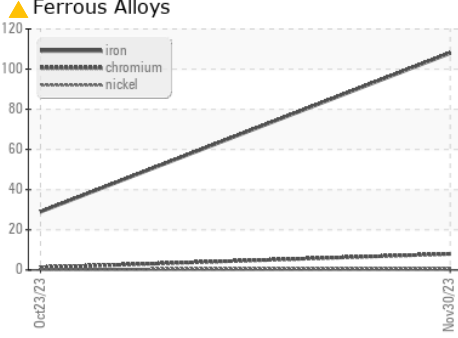
OIL ANALYSIS REPORT



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	14.6	15.4

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0059312 **Received** : 07 Dec 2023
Lab Number : **06027372** **Diagnosed** : 11 Dec 2023
Unique Number : 10777163 **Diagnostician** : Jonathan Hester
Test Package : FLEET

GFL Environmental - 410 - Michigan West
 39000 Van Born Rd
 Wayne, MI
 US 48184
 Contact: Belal Dgheish
 bdgheish@gflenv.com
 T: (734)714-2340
 F:

Certificate L2367
 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)