



PROBLEM SUMMARY

Sample Rating Trend

FUEL

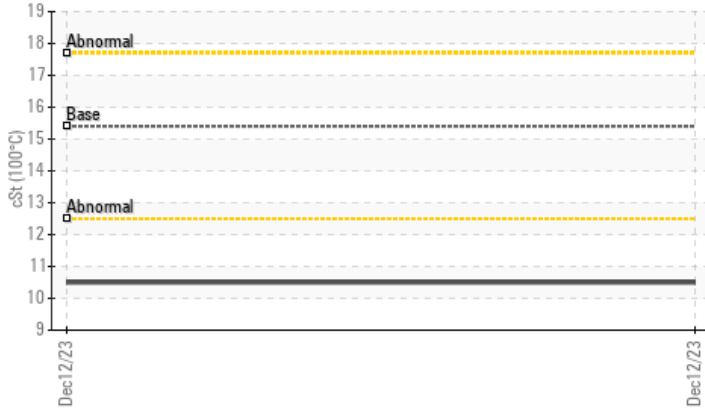


Machine Id
814033
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

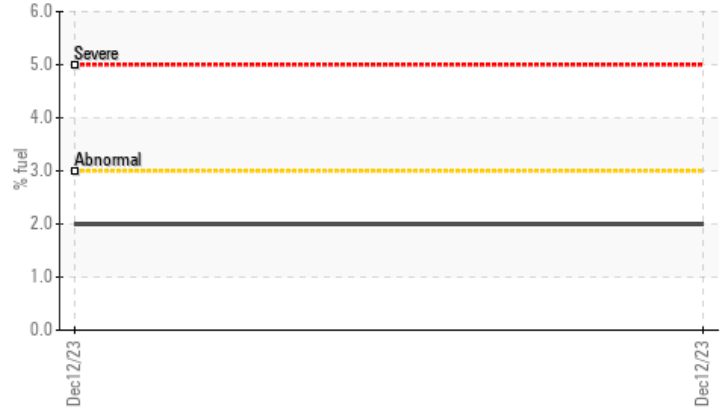


COMPONENT CONDITION SUMMARY

▲ Viscosity @ 100°C



▲ Fuel Dilution



RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	---	---
Fuel	%	ASTM D3524	>3.0	▲ 2.0	---	---
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 10.5	---	---

Customer Id: GFL415
Sample No.: GFL0105616
Lab Number: 06034381
Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
Angela Borella +1 800-237-1369
angela.borella@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



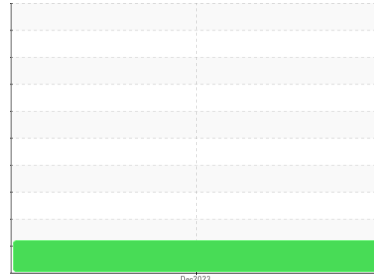
OIL ANALYSIS REPORT

Sample Rating Trend

FUEL



Machine Id
814033
 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

Light fuel dilution occurring.

▲ 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	GFL0105616	---	---
Sample Date	Client Info	12 Dec 2023	---	---
Machine Age	hrs Client Info	482	---	---
Oil Age	hrs Client Info	0	---	---
Oil Changed	Client Info	Not Changed	---	---
Sample Status		ABNORMAL	---	---

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.2	NEG	---	---
Glycol	WC Method	NEG	---	---

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >120	34	---	---
Chromium	ppm ASTM D5185m >20	<1	---	---
Nickel	ppm ASTM D5185m >5	3	---	---
Titanium	ppm ASTM D5185m >2	<1	---	---
Silver	ppm ASTM D5185m >2	<1	---	---
Aluminum	ppm ASTM D5185m >20	5	---	---
Lead	ppm ASTM D5185m >40	3	---	---
Copper	ppm ASTM D5185m >330	231	---	---
Tin	ppm ASTM D5185m >15	2	---	---
Vanadium	ppm ASTM D5185m	<1	---	---
Cadmium	ppm ASTM D5185m	0	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	216	---	---
Barium	ppm ASTM D5185m 0	0	---	---
Molybdenum	ppm ASTM D5185m 60	105	---	---
Manganese	ppm ASTM D5185m 0	3	---	---
Magnesium	ppm ASTM D5185m 1010	682	---	---
Calcium	ppm ASTM D5185m 1070	1355	---	---
Phosphorus	ppm ASTM D5185m 1150	722	---	---
Zinc	ppm ASTM D5185m 1270	891	---	---
Sulfur	ppm ASTM D5185m 2060	1832	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	55	---	---
Sodium	ppm ASTM D5185m	4	---	---
Potassium	ppm ASTM D5185m >20	4	---	---
Fuel	% ASTM D3524 >3.0	▲ 2.0	---	---

INFRA-RED

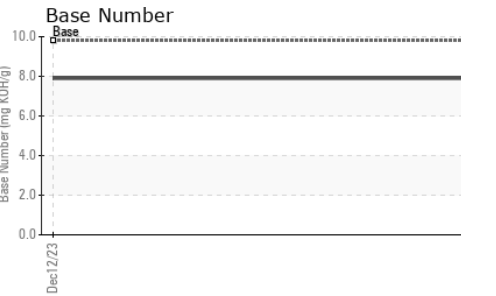
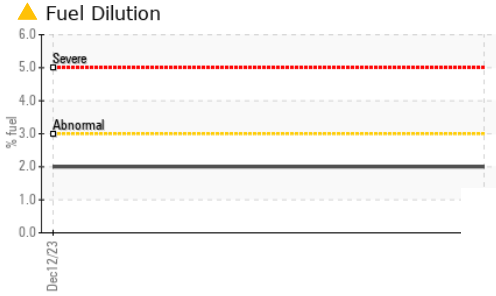
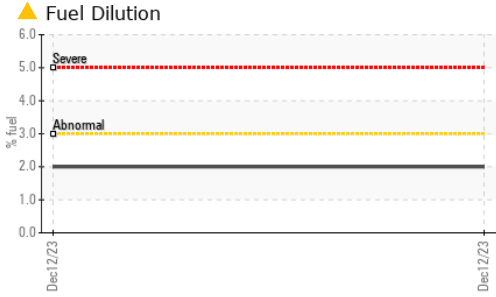
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >4	0.4	---	---
Nitration	Abs/cm *ASTM D7624 >20	9.0	---	---
Sulfation	Abs/.1mm *ASTM D7415 >30	23.9	---	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	21.0	---	---
Base Number (BN)	mg KOH/g ASTM D2896 9.8	7.9	---	---



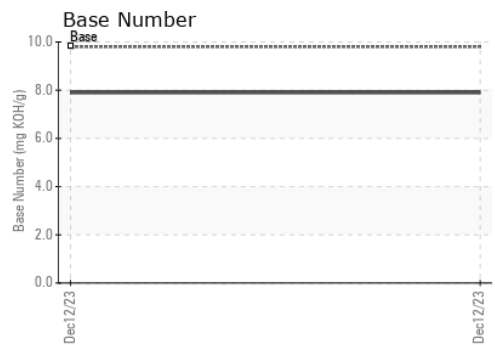
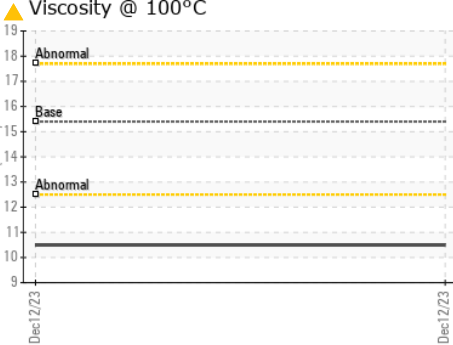
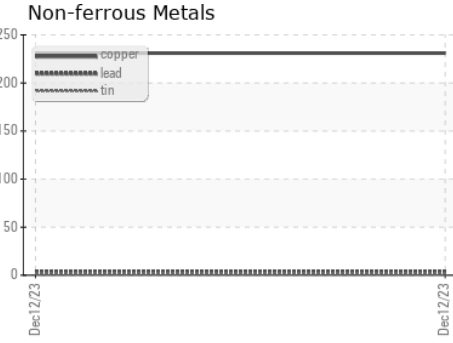
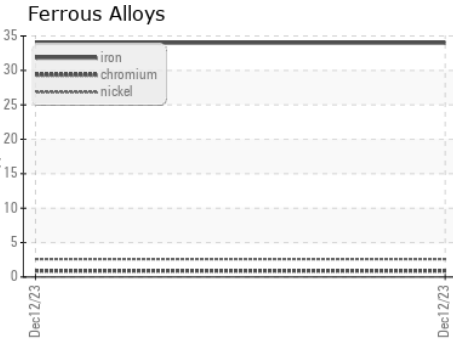
OIL ANALYSIS REPORT



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	▲ 10.5	---	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0105616 **Received** : 14 Dec 2023
Lab Number : 06034381 **Diagnosed** : 19 Dec 2023
Unique Number : 10789610 **Diagnostician** : Angela Borella
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

GFL Environmental - 415 - Michigan East
 6200 Elmridge
 Sterling Heights, MI
 US 48313
 Contact: Cullen Monnette

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:
F: