



PROBLEM SUMMARY

Sample Rating Trend

DEGRADATION

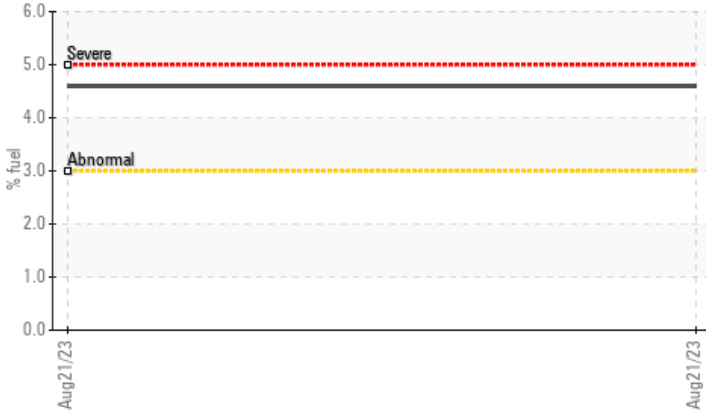


Machine Id
723008
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)



COMPONENT CONDITION SUMMARY

▲ Fuel Dilution



▲ Viscosity @ 100°C



RECOMMENDATION

We advise that you check the fuel injection system. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	---	---
Fuel	%	ASTM D3524	>3.0	▲ 4.6	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	▲ 0.8	---	---
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 9.1	---	---

Customer Id: GFL867
Sample No.: GFL0086339
Lab Number: 05937114
Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	We recommend that you drain the oil and perform a filter service on this component if not already done.
Change Filter	---	---	?	We recommend that you drain the oil and perform a filter service on this component if not already done.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Fuel/injector System	---	---	?	We advise that you check the fuel injection system.

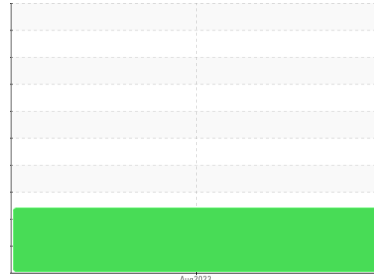
HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Sample Rating Trend

DEGRADATION



Machine Id
723008
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check the fuel injection system. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of fuel present in the oil.

Fluid Condition

Fuel is present in the oil and is lowering the viscosity. The BN level is low. The oil is no longer serviceable.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0086339	---	---
Sample Date	Client Info	21 Aug 2023	---	---
Machine Age	hrs Client Info	22605	---	---
Oil Age	hrs Client Info	0	---	---
Oil Changed	Client Info	N/A	---	---
Sample Status		ABNORMAL	---	---

CONTAMINATION

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

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >120	67	---	---
Chromium	ppm ASTM D5185m >20	<1	---	---
Nickel	ppm ASTM D5185m >5	0	---	---
Titanium	ppm ASTM D5185m >2	0	---	---
Silver	ppm ASTM D5185m >2	0	---	---
Aluminum	ppm ASTM D5185m >20	8	---	---
Lead	ppm ASTM D5185m >40	<1	---	---
Copper	ppm ASTM D5185m >330	10	---	---
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	0	---	---
Barium	ppm ASTM D5185m 0	0	---	---
Molybdenum	ppm ASTM D5185m 60	9	---	---
Manganese	ppm ASTM D5185m 0	<1	---	---
Magnesium	ppm ASTM D5185m 1010	109	---	---
Calcium	ppm ASTM D5185m 1070	205	---	---
Phosphorus	ppm ASTM D5185m 1150	424	---	---
Zinc	ppm ASTM D5185m 1270	518	---	---
Sulfur	ppm ASTM D5185m 2060	912	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	7	---	---
Sodium	ppm ASTM D5185m	21	---	---
Potassium	ppm ASTM D5185m >20	<1	---	---
Fuel	% ASTM D3524 >3.0	▲ 4.6	---	---

INFRA-RED

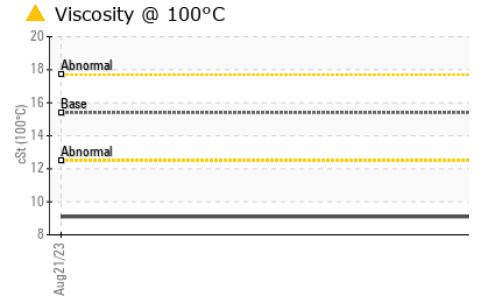
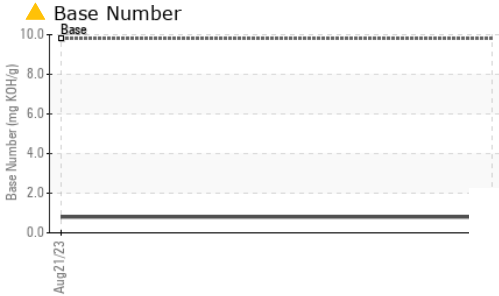
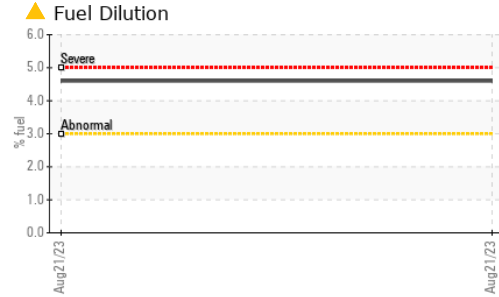
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >4	0.7	---	---
Nitration	Abs/cm *ASTM D7624 >20	4.7	---	---
Sulfation	Abs/.1mm *ASTM D7415 >30	15.4	---	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	7.7	---	---
Base Number (BN)	mg KOH/g ASTM D2896 9.8	▲ 0.8	---	---



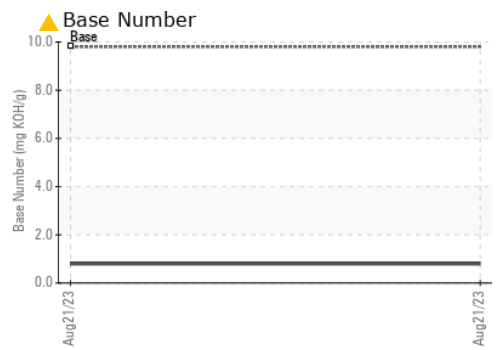
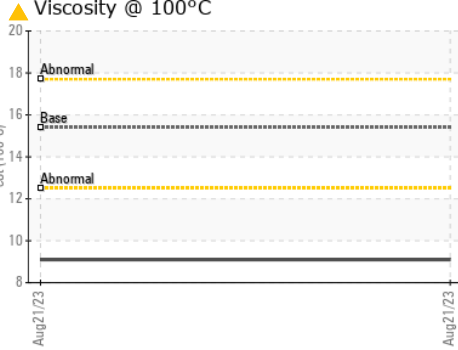
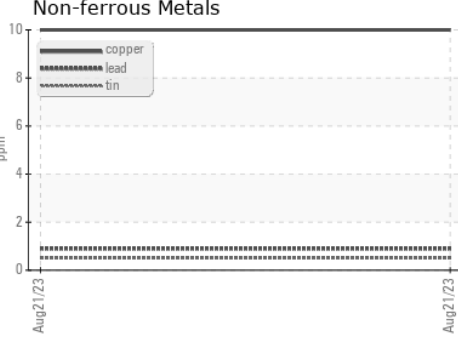
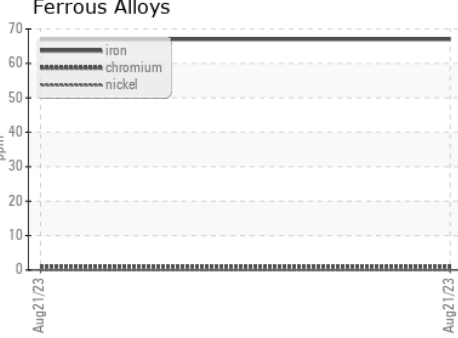
OIL ANALYSIS REPORT



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	▲ 9.1	---	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0086339 **Received** : 29 Aug 2023
Lab Number : 05937114 **Diagnosed** : 08 Sep 2023
Unique Number : 10622385 **Diagnostician** : Doug Bogart
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

GFL environmental - 867 - Trafford (Blount Hauling)
 1130 County Line Rd
 Trafford, AL
 US 35172
 Contact: Service Manager

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: