



PROBLEM SUMMARY

Sample Rating Trend

GLYCOL



Machine Id
428092

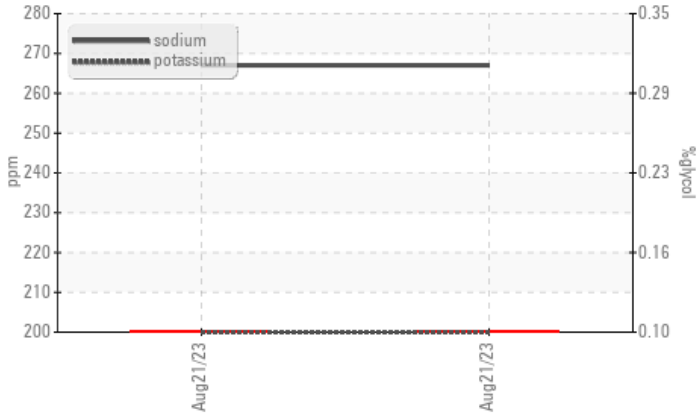
Component
Diesel Engine

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



COMPONENT CONDITION SUMMARY

Glycol Contamination



RECOMMENDATION

We advise that you check for the source of the coolant leak. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	---	---
Sodium	ppm	ASTM D5185m		▲ 267	---	---
Potassium	ppm	ASTM D5185m	>20	▲ 200	---	---
Glycol	%	*ASTM D2982		● 0.10	---	---

Customer Id: GFL411
Sample No.: GFL0085635
Lab Number: 05936546
Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
Wes Davis +1 905-569-8600 x223
wesd@wearcheck.ca

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Glycol Access	---	---	?	We advise that you check for the source of the coolant leak.

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Sample Rating Trend

GLYCOL



Machine Id
428092

Component
Diesel Engine

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



DIAGNOSIS

Recommendation

We advise that you check for the source of the coolant leak. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Test for glycol is positive. There is a high concentration of glycol present in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0085635	---	---
Sample Date	Client Info	21 Aug 2023	---	---
Machine Age	hrs	Client Info	5273	---
Oil Age	hrs	Client Info	150	---
Oil Changed	Client Info	Changed	---	---
Sample Status		SEVERE	---	---

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<1.0	---	---

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	6	---
Chromium	ppm	ASTM D5185m >20	<1	---
Nickel	ppm	ASTM D5185m >2	<1	---
Titanium	ppm	ASTM D5185m >2	<1	---
Silver	ppm	ASTM D5185m >2	<1	---
Aluminum	ppm	ASTM D5185m >25	1	---
Lead	ppm	ASTM D5185m >40	8	---
Copper	ppm	ASTM D5185m >330	36	---
Tin	ppm	ASTM D5185m >15	<1	---
Vanadium	ppm	ASTM D5185m	0	---
Cadmium	ppm	ASTM D5185m	<1	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	46	---
Barium	ppm	ASTM D5185m 0	3	---
Molybdenum	ppm	ASTM D5185m 60	73	---
Manganese	ppm	ASTM D5185m 0	<1	---
Magnesium	ppm	ASTM D5185m 1010	792	---
Calcium	ppm	ASTM D5185m 1070	1265	---
Phosphorus	ppm	ASTM D5185m 1150	1080	---
Zinc	ppm	ASTM D5185m 1270	1131	---
Sulfur	ppm	ASTM D5185m 2060	3197	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	12	---
Sodium	ppm	ASTM D5185m	267	---
Potassium	ppm	ASTM D5185m >20	200	---
Glycol	%	*ASTM D2982	0.10	---

INFRA-RED

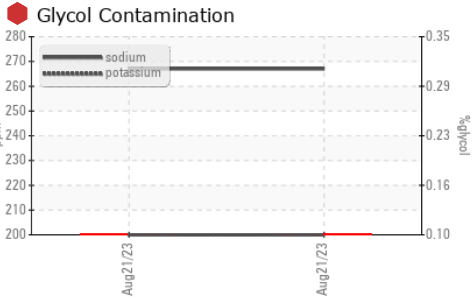
method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.1	---
Nitration	Abs/cm	*ASTM D7624 >20	6.3	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	18.3	---

FLUID DEGRADATION

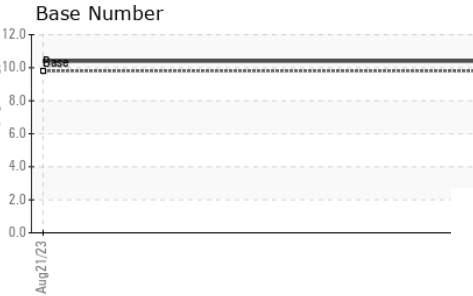
method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	13.3	---
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	10.4	---



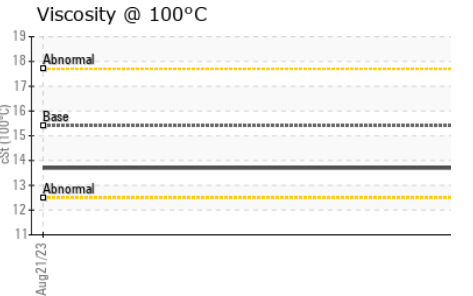
OIL ANALYSIS REPORT



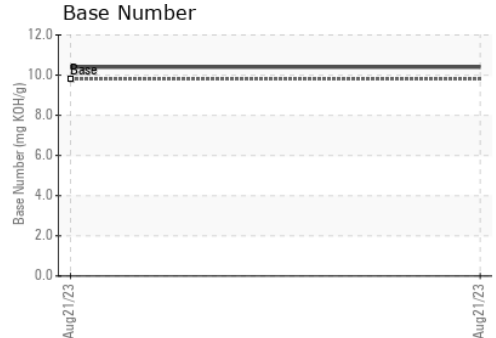
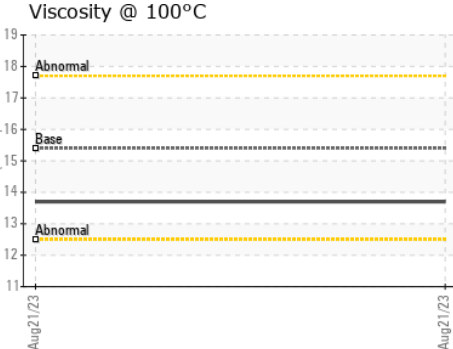
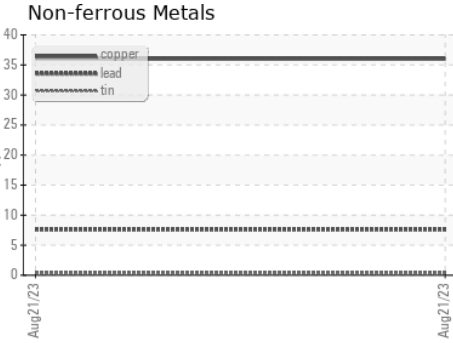
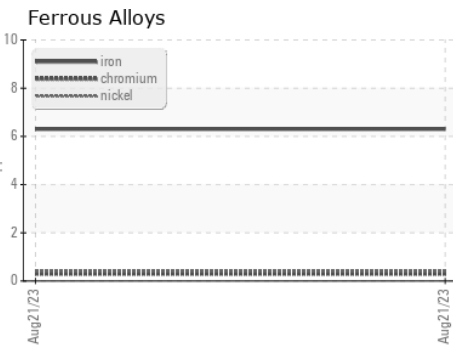
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	13.7	---



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0085635 **Received** : 28 Aug 2023
Lab Number : 05936546 **Diagnosed** : 01 Sep 2023
Unique Number : 10621817 **Diagnostician** : Wes Davis
Test Package : FLEET (Additional Tests: Glycol)

GFL Environmental - 411 - Kingsford HC
 1001 E Blvd
 Kingsford, MI
 US 49802
 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: