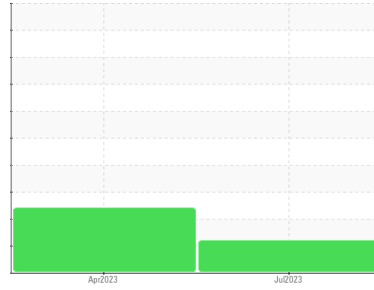




PROBLEM SUMMARY

Sample Rating Trend



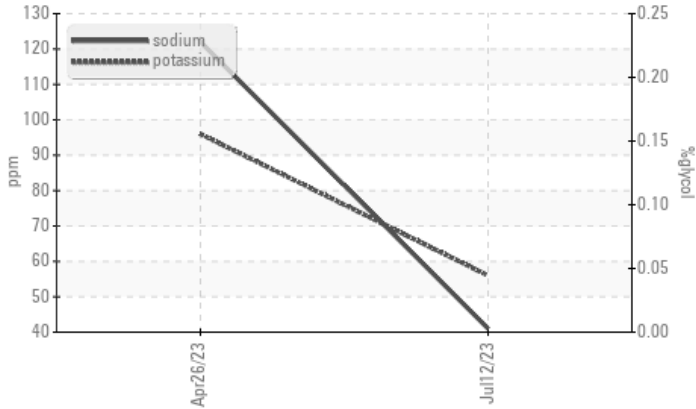
GLYCOL



Machine Id
427167 - SW4743
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Glycol Contamination



RECOMMENDATION

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

PROBLEMATIC TEST RESULTS

Sample Status	ATTENTION	ABNORMAL	---
Potassium	▲ 56	▲ 96	---

Customer Id: GFL983
 Sample No.: GFL0085496
 Lab Number: 05901055
 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

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

HISTORICAL DIAGNOSIS

26 Apr 2023 Diag: Jonathan Hester

GLYCOL



We advise that you check for possible coolant leak. Check for low coolant level. We recommend an early resample to monitor this condition. All component wear rates are normal. Sodium and/or potassium levels are high. The BN result indicates that there is suitable alkalinity remaining in the oil.

view report





OIL ANALYSIS REPORT

Sample Rating Trend

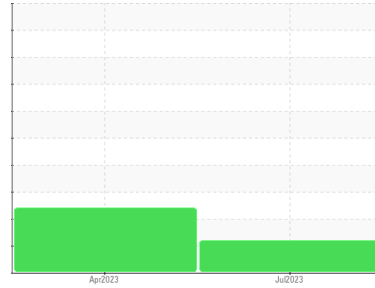
GLYCOL



Machine Id
427167 - SW4743

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

Sodium and/or potassium levels remain high. Test for glycol is negative.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0085496	GFL0075367	---
Sample Date	Client Info	12 Jul 2023	26 Apr 2023	---
Machine Age	mls	Client Info	344865	335531
Oil Age	mls	Client Info	344865	0
Oil Changed	Client Info	Changed	N/A	---
Sample Status		ATTENTION	ABNORMAL	---

CONTAMINATION

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

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	20	46	---
Chromium	ppm ASTM D5185m >20	<1	1	---
Nickel	ppm ASTM D5185m >4	0	0	---
Titanium	ppm ASTM D5185m	0	<1	---
Silver	ppm ASTM D5185m >3	0	0	---
Aluminum	ppm ASTM D5185m >20	2	0	---
Lead	ppm ASTM D5185m >40	3	12	---
Copper	ppm ASTM D5185m >330	1	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	0	12	---
Barium	ppm ASTM D5185m 0	0	0	---
Molybdenum	ppm ASTM D5185m 60	63	101	---
Manganese	ppm ASTM D5185m 0	1	<1	---
Magnesium	ppm ASTM D5185m 1010	132	687	---
Calcium	ppm ASTM D5185m 1070	2534	1614	---
Phosphorus	ppm ASTM D5185m 1150	1125	1095	---
Zinc	ppm ASTM D5185m 1270	1375	1399	---
Sulfur	ppm ASTM D5185m 2060	3990	3057	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	6	8	---
Sodium	ppm ASTM D5185m	41	▲ 122	---
Potassium	ppm ASTM D5185m >20	▲ 56	▲ 96	---
Glycol	% *ASTM D2982	NEG	NEG	---

INFRA-RED

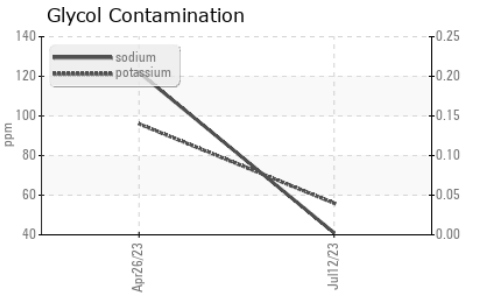
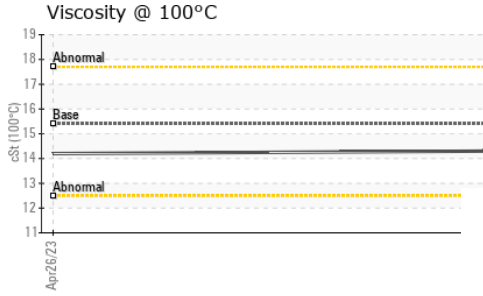
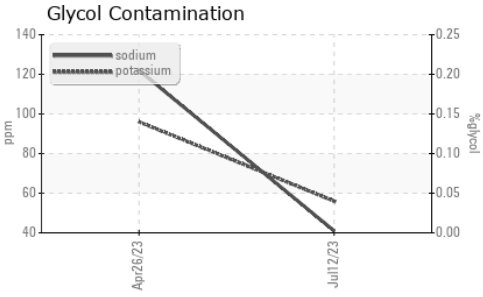
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	0.6	0.9	---
Nitration	Abs/cm *ASTM D7624 >20	11.2	12.0	---
Sulfation	Abs/.1mm *ASTM D7415 >30	23.5	27.5	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	15.1	23.4	---
Base Number (BN)	mg KOH/g ASTM D2896 9.8	6.0	4.1	---



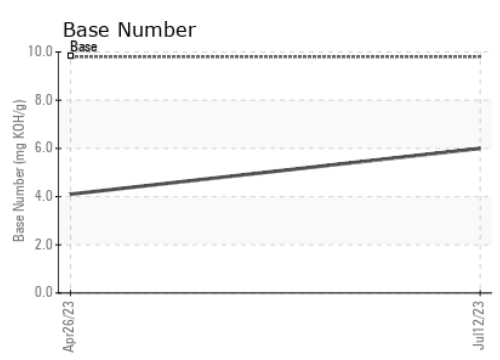
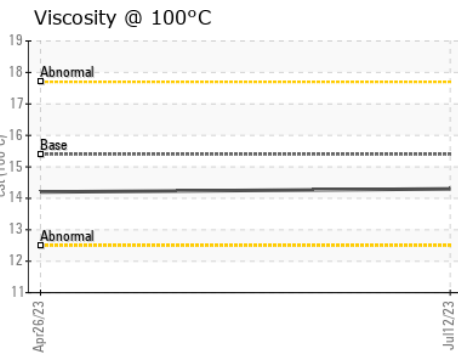
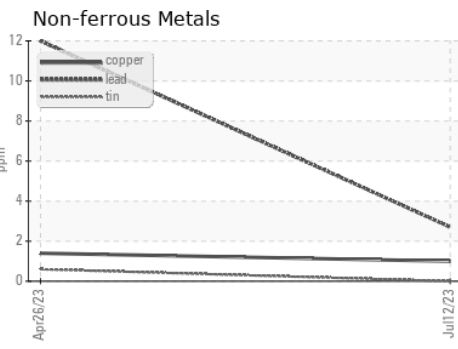
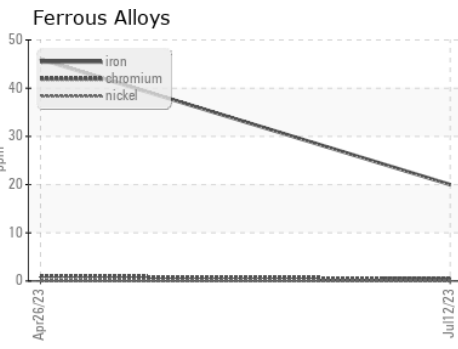
OIL ANALYSIS REPORT



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	14.3	14.2

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0085496 **Received** : 18 Jul 2023
Lab Number : **05901055** **Diagnosed** : 20 Jul 2023
Unique Number : 10562411 **Diagnostician** : Jonathan Hester
Test Package : FLEET (Additional Tests: Glycol)

GFL Environmental - 983 - Sugar Land Hauling
 16011 West Belfort Street
 Sugar Land, TX
 US 77498
 Contact: Gino Griego
 ggriego@gflenv.com

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)