



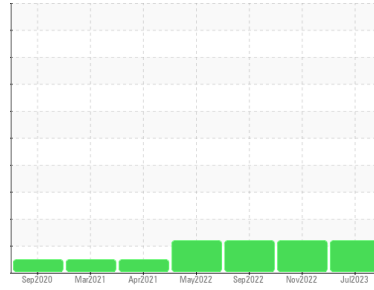
PROBLEM SUMMARY

Sample Rating Trend

GLYCOL

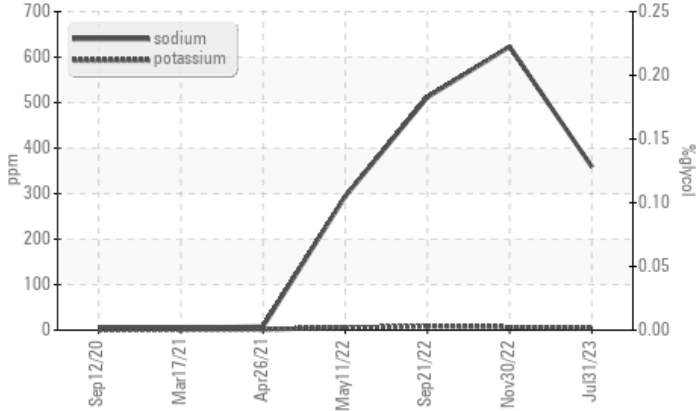


Machine Id
825011-1015
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)



COMPONENT CONDITION SUMMARY

▲ Glycol Contamination



RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	ABNORMAL	ABNORMAL
Sodium	ppm	ASTM D5185m	▲ 359	▲ 623	▲ 512

Customer Id: GFL663
Sample No.: GFL0079789
Lab Number: 05922739
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
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

30 Nov 2022 Diag: Jonathan Hester

GLYCOL



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

[view report](#)



21 Sep 2022 Diag: Jonathan Hester

GLYCOL



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

[view report](#)



11 May 2022 Diag: Jonathan Hester

GLYCOL



Oil and filter change at the time of sampling has been noted. 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. The condition of the oil is acceptable for the time in service.

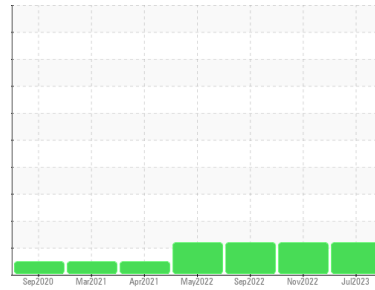
[view report](#)





OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id
825011-1015

Component
Diesel Engine

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

DIAGNOSIS

Recommendation

We advise that you check for the source of the coolant leak. Check for low coolant level. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Sodium and/or potassium levels remain high.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0079789	GFL0055051	GFL0055078
Sample Date	Client Info		31 Jul 2023	30 Nov 2022	21 Sep 2022
Machine Age	hrs	Client Info	21127	19880	19676
Oil Age	hrs	Client Info	601	19880	19679
Oil Changed	Client Info		Not Chngd	Changed	Changed
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	25	28	37
Chromium	ppm	ASTM D5185m >20	1	1	1
Nickel	ppm	ASTM D5185m >4	0	0	0
Titanium	ppm	ASTM D5185m	4	23	6
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >20	5	5	5
Lead	ppm	ASTM D5185m >40	0	1	5
Copper	ppm	ASTM D5185m >330	<1	2	2
Tin	ppm	ASTM D5185m >15	0	<1	<1
Vanadium	ppm	ASTM D5185m	0	<1	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	23	30	16
Barium	ppm	ASTM D5185m 0	0	0	1
Molybdenum	ppm	ASTM D5185m 60	77	74	79
Manganese	ppm	ASTM D5185m 0	<1	<1	<1
Magnesium	ppm	ASTM D5185m 1010	974	769	831
Calcium	ppm	ASTM D5185m 1070	1144	1325	1234
Phosphorus	ppm	ASTM D5185m 1150	1064	1002	1007
Zinc	ppm	ASTM D5185m 1270	1289	1191	1209
Sulfur	ppm	ASTM D5185m 2060	3996	3995	3905

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	14	15	14
Sodium	ppm	ASTM D5185m	▲ 359	▲ 623	▲ 512
Potassium	ppm	ASTM D5185m >20	5	7	8
Glycol	%	*ASTM D2982	NEG	NEG	NEG

INFRA-RED

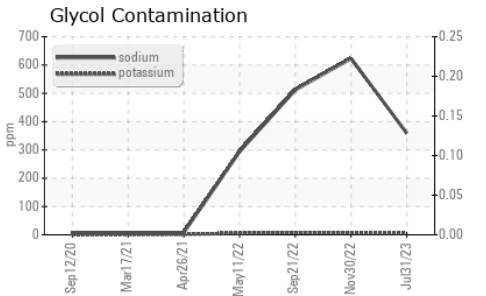
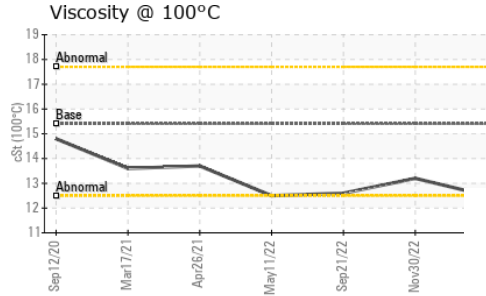
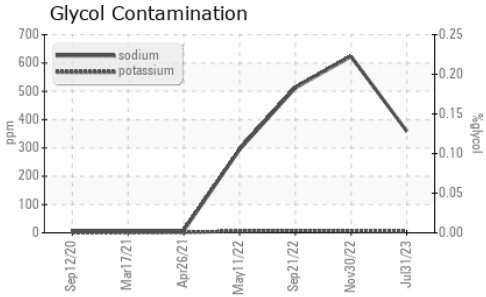
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.6	0.8	1.4
Nitration	Abs/cm	*ASTM D7624 >20	9.1	11.7	12.8
Sulfation	Abs/.1mm	*ASTM D7415 >30	20.9	23.4	26.4

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	15.5	17.4	19.9
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	7.9	9.7	8.1



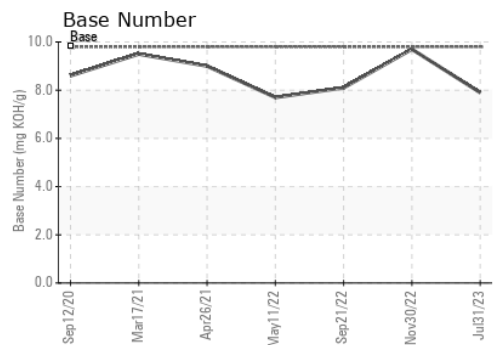
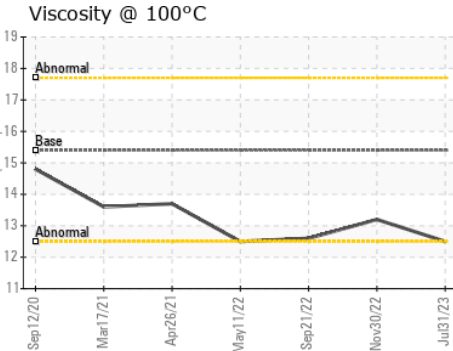
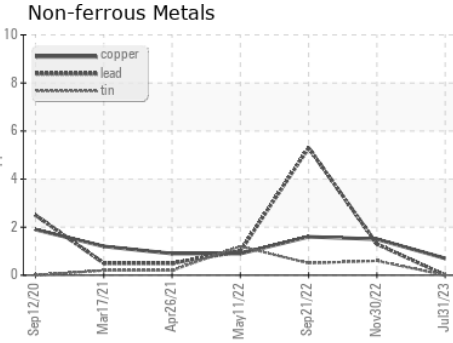
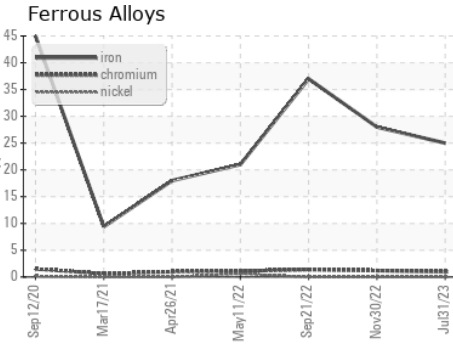
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.4	12.5	13.2	12.6

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0079789 **Received** : 11 Aug 2023
Lab Number : 05922739 **Diagnosed** : 14 Aug 2023
Unique Number : 10602686 **Diagnostician** : Jonathan Hester
Test Package : FLEET (Additional Tests: Glycol)

GFL Environmental - 663 - Lake Ariel (Scranton Hauling)
 17 Industrial Park Rd
 Lake Ariel, PA
 US 18436
 Contact: Eric Merone
 emerone@countyclecycling.net

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)

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F: