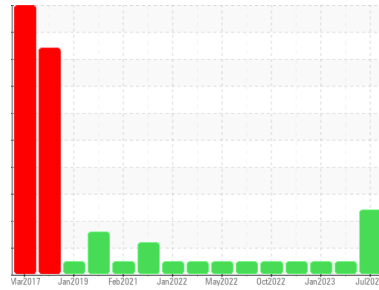




# PROBLEM SUMMARY

Machine Id  
**10695**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

Sample Rating Trend

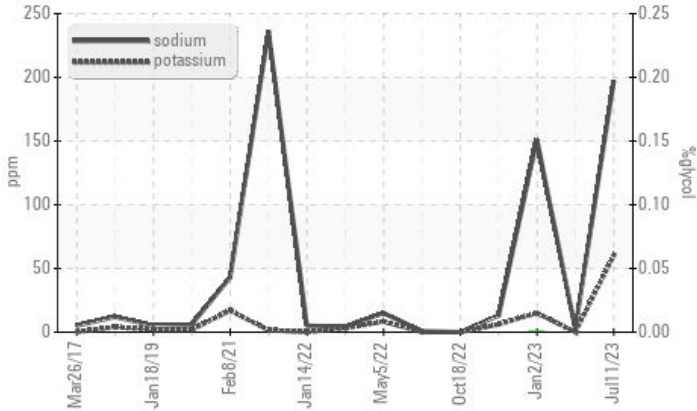


GLYCOL



## COMPONENT CONDITION SUMMARY

### ▲ Glycol Contamination



## RECOMMENDATION

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

## PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	NORMAL	NORMAL
Sodium	ppm	ASTM D5185m	▲ 197	2	151
Potassium	ppm	ASTM D5185m >20	▲ 60	0	15

Customer Id: GFL732  
 Sample No.: GFL0046605  
 Lab Number: 05898351  
 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](mailto:jhester@wearcheckusa.com)

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

### 19 Apr 2023 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



### 02 Jan 2023 Diag: Doug Bogart

NORMAL



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. Sodium and/or potassium levels are high. Test for glycol is negative. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



### 04 Nov 2022 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

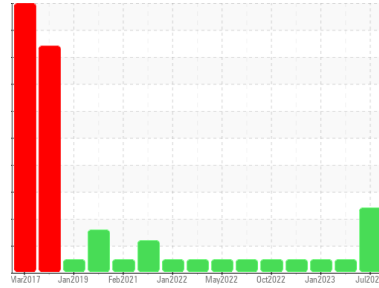
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id  
**10695**

Component  
**Diesel Engine**

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

## DIAGNOSIS

### Recommendation

We advise that you check for possible 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 are high. Fuel content negligible.

### 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	<b>GFL0046605</b>	GFL0046593	GFL0046668
Sample Date	Client Info	<b>11 Jul 2023</b>	19 Apr 2023	02 Jan 2023
Machine Age	hrs	<b>0</b>	6628	0
Oil Age	hrs	<b>0</b>	0	0
Oil Changed	Client Info	<b>Not Changed</b>	Not Changed	Not Changed
Sample Status		<b>ABNORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<b>&lt;1.0</b>	<1.0	<1.0

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	<b>12</b>	6	65
Chromium	ppm ASTM D5185m >20	<b>&lt;1</b>	0	2
Nickel	ppm ASTM D5185m >4	<b>&lt;1</b>	0	0
Titanium	ppm ASTM D5185m	<b>0</b>	0	0
Silver	ppm ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >20	<b>2</b>	<1	13
Lead	ppm ASTM D5185m >40	<b>0</b>	0	0
Copper	ppm ASTM D5185m >330	<b>20</b>	<1	51
Tin	ppm ASTM D5185m >15	<b>0</b>	0	<1
Vanadium	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	<b>27</b>	3	2
Barium	ppm ASTM D5185m 0	<b>2</b>	0	2
Molybdenum	ppm ASTM D5185m 60	<b>74</b>	60	65
Manganese	ppm ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185m 1010	<b>787</b>	910	846
Calcium	ppm ASTM D5185m 1070	<b>1042</b>	1012	1081
Phosphorus	ppm ASTM D5185m 1150	<b>961</b>	965	892
Zinc	ppm ASTM D5185m 1270	<b>1163</b>	1229	1164
Sulfur	ppm ASTM D5185m 2060	<b>3027</b>	3214	2561

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>8</b>	4	12
Sodium	ppm ASTM D5185m	<b>▲ 197</b>	2	151
Potassium	ppm ASTM D5185m >20	<b>▲ 60</b>	0	15
Glycol	% *ASTM D2982	<b>NEG</b>	NEG	0.0

## INFRA-RED

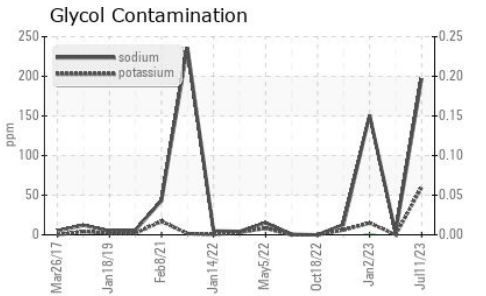
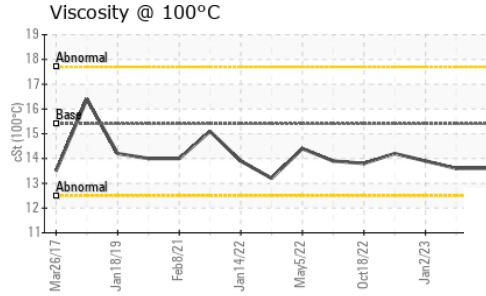
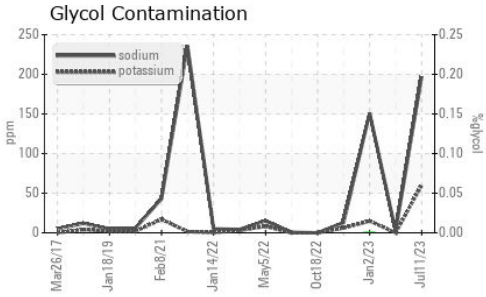
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.4</b>	0.2	2
Nitration	Abs/cm *ASTM D7624 >20	<b>7.1</b>	5.6	11.5
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>18.8</b>	16.3	25.0

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>14.3</b>	13.0	19.2
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>9.6</b>	7.6	7.1



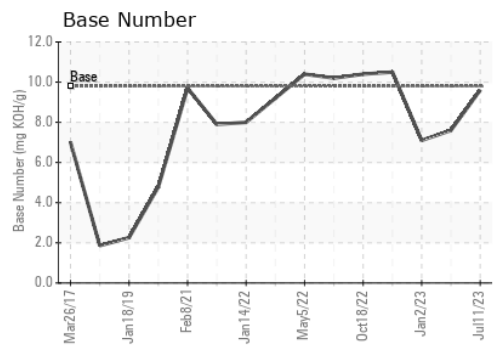
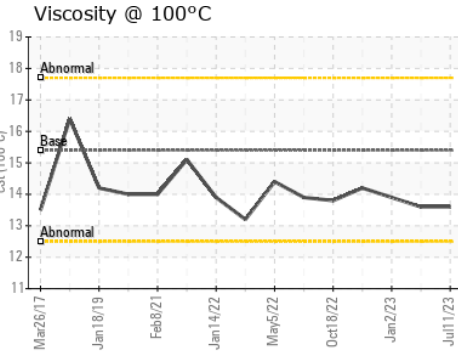
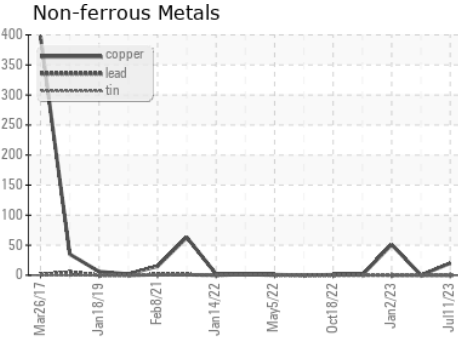
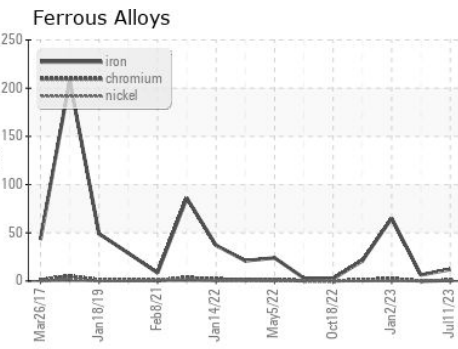
# OIL ANALYSIS REPORT



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	<b>13.6</b>	13.6	13.9

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0046605  
**Lab Number** : **05898351**  
**Unique Number** : 10559707  
**Test Package** : FLEET ( Additional Tests: Glycol )

**GFL Environmental - 732 - Thomaston Hauling**  
 2616 Waynmanville Road  
 Thomaston, GA  
 US 30286  
 Contact: Michael Taft

Received : 14 Jul 2023  
 Diagnosed : 17 Jul 2023  
 Diagnostician : Jonathan Hester

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)