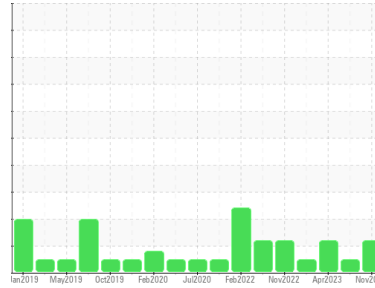




# PROBLEM SUMMARY

Sample Rating Trend



GLYCOL



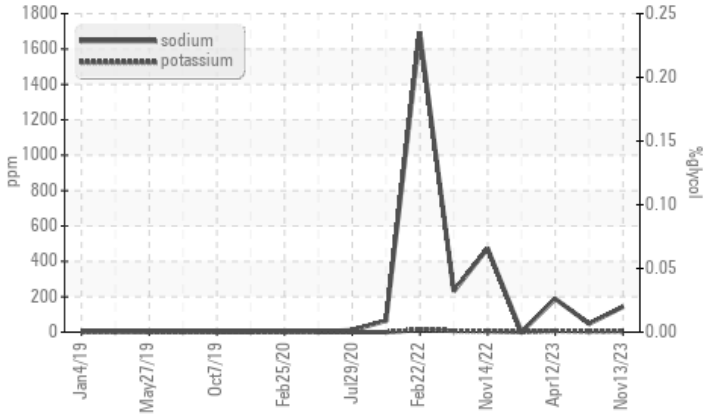
Machine Id  
**727091-310016**

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	NORMAL	ATTENTION
Sodium	ppm	ASTM D5185m	▲ 143	48	▲ 188

Customer Id: GFL865  
Sample No.: GFL0100496  
Lab Number: 06011930  
Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Sean Felton +1 919-379-4092  
[sfelton@wearcheckusa.com](mailto:sfelton@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
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

### 19 May 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



### 12 Apr 2023 Diag: Jonathan Hester

GLYCOL



Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. Sodium and/or potassium levels remain 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 acceptable for the time in service.

view report



### 01 Dec 2022 Diag: Don Baldrige

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

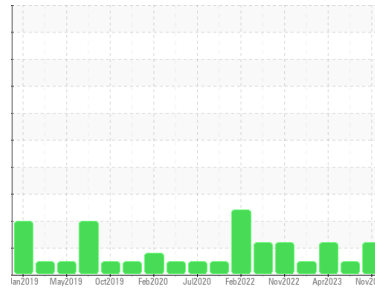
GLYCOL



Machine Id  
**727091-310016**

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	<b>GFL0100496</b>	GFL0074225	GFL0074167
Sample Date	Client Info	<b>13 Nov 2023</b>	19 May 2023	12 Apr 2023
Machine Age	hrs	<b>15374</b>	14253	13995
Oil Age	hrs	<b>15374</b>	14253	13995
Oil Changed	Client Info	<b>Changed</b>	Changed	Changed
Sample Status		<b>ATTENTION</b>	NORMAL	ATTENTION

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<b>&lt;1.0</b>	<1.0	<1.0
Water	WC Method >0.2	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	<b>16</b>	15	56
Chromium	ppm ASTM D5185m >20	<b>1</b>	<1	2
Nickel	ppm ASTM D5185m >4	<b>0</b>	<1	0
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	0	<1
Silver	ppm ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >20	<b>4</b>	2	1
Lead	ppm ASTM D5185m >40	<b>0</b>	1	1
Copper	ppm ASTM D5185m >330	<b>3</b>	0	1
Tin	ppm ASTM D5185m >15	<b>&lt;1</b>	0	<1
Vanadium	ppm ASTM D5185m	<b>&lt;1</b>	<1	<1
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	<b>8</b>	11	0
Barium	ppm ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 60	<b>64</b>	59	67
Manganese	ppm ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185m 1010	<b>938</b>	910	952
Calcium	ppm ASTM D5185m 1070	<b>1312</b>	1201	1026
Phosphorus	ppm ASTM D5185m 1150	<b>1061</b>	994	1015
Zinc	ppm ASTM D5185m 1270	<b>1271</b>	1225	1230
Sulfur	ppm ASTM D5185m 2060	<b>2993</b>	3544	2681

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>8</b>	5	7
Sodium	ppm ASTM D5185m	<b>▲ 143</b>	48	▲ 188
Potassium	ppm ASTM D5185m >20	<b>5</b>	4	8
Glycol	% *ASTM D2982	<b>NEG</b>	NEG	NEG

## INFRA-RED

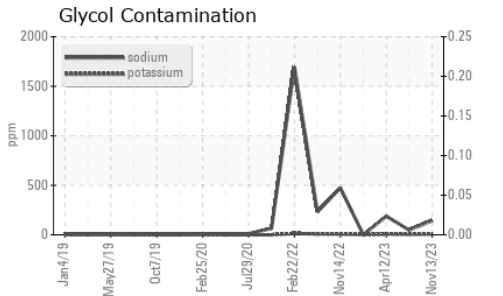
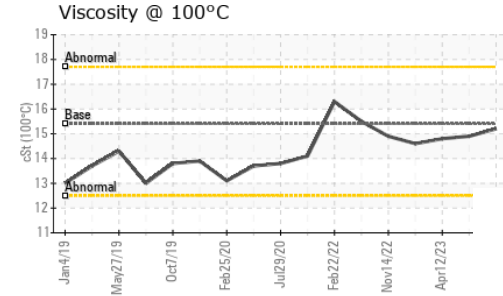
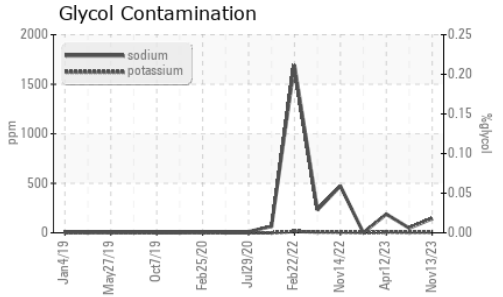
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.5</b>	0.5	1.9
Nitration	Abs/cm *ASTM D7624 >20	<b>9.8</b>	9.2	14.4
Sulfation	Abs.1mm *ASTM D7415 >30	<b>21.5</b>	20.9	26.2

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs.1mm *ASTM D7414 >25	<b>17.9</b>	17.2	23.0
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>9.1</b>	9.2	8.9



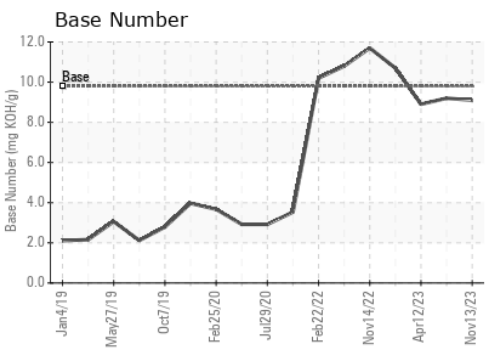
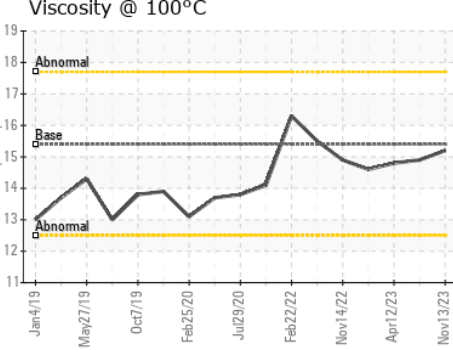
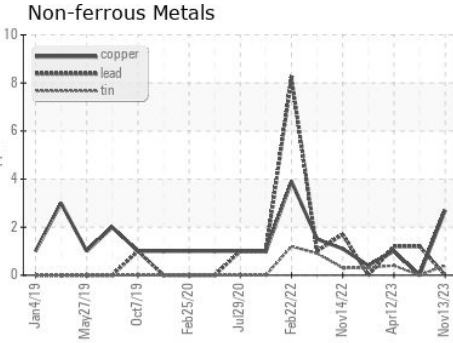
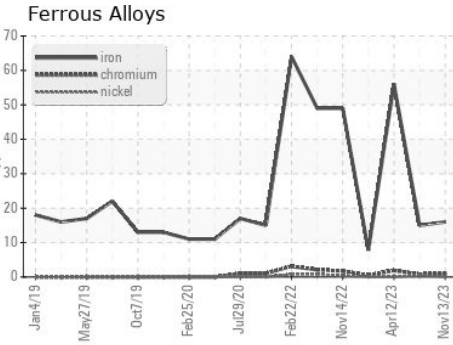
# OIL ANALYSIS REPORT



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>15.2</b>	14.9	14.8

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0100496 **Received** : 20 Nov 2023  
**Lab Number** : **06011930** **Diagnosed** : 21 Nov 2023  
**Unique Number** : 10751074 **Diagnostician** : Sean Felton  
**Test Package** : FLEET ( Additional Tests: Glycol )

**GFL Environmental - 865 - East Mount Hauling**  
 7213 East Mount Houston Road  
 Houston, TX  
 US 77050  
 Contact: Saul Castillo  
 saul.castillo@gflenv.com

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: