

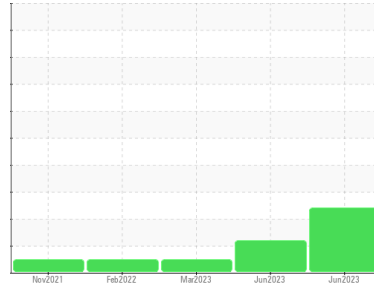


# PROBLEM SUMMARY



Machine Id  
**426071-402405**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- LTR)**

Sample Rating Trend

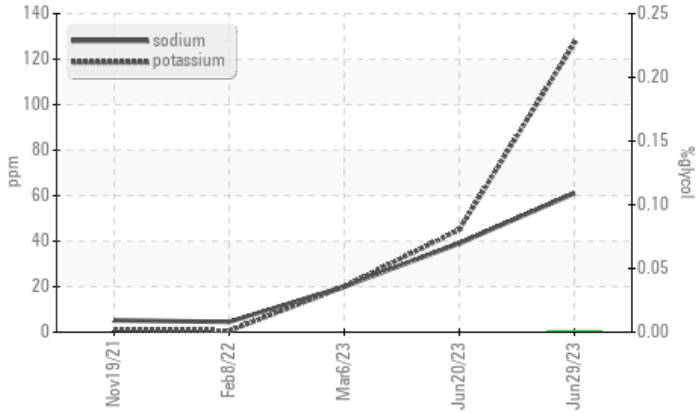


GLYCOL



## COMPONENT CONDITION SUMMARY

### ▲ Glycol Contamination



## RECOMMENDATION

No corrective action is recommended at this time.  
 Resample at the next service interval to monitor. ( Customer Sample Comment: Top Up Amount: 1 LTR )

## PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	NORMAL
Sodium	ppm	ASTM D5185m		▲ 61	39	20
Potassium	ppm	ASTM D5185m	>20	▲ 127	▲ 45	20

Customer Id: GFL885  
 Sample No.: GFL0081522  
 Lab Number: 05888247  
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

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

## RECOMMENDED ACTIONS

There are no recommended actions for this sample.

## HISTORICAL DIAGNOSIS

**20 Jun 2023 Diag: Jonathan Hester**

GLYCOL



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



**06 Mar 2023 Diag: Wes Davis**

NORMAL



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. 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



**08 Feb 2022 Diag: Wes Davis**

NORMAL



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. 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





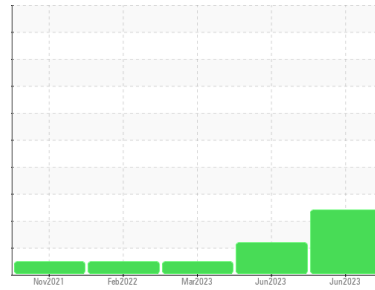
# OIL ANALYSIS REPORT

Sample Rating Trend

GLYCOL



Machine Id  
**426071-402405**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- LTR)**



## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor. ( Customer Sample Comment: Top Up Amount: 1 LTR )

### Wear

All component wear rates are normal.

### Contamination

Sodium and/or potassium levels are 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 suitable for further service.

## SAMPLE INFORMATION

method	limit/base	current	history 1	history 2
Sample Number	Client Info	<b>GFL0081522</b>	GFL0081567	GFL0071956
Sample Date	Client Info	<b>29 Jun 2023</b>	20 Jun 2023	06 Mar 2023
Machine Age	hrs	<b>34866</b>	34866	34353
Oil Age	hrs	<b>600</b>	600	600
Oil Changed	Client Info	<b>Not Chngd</b>	Not Chngd	Not Chngd
Sample Status		<b>ABNORMAL</b>	ABNORMAL	NORMAL

## CONTAMINATION

method	limit/base	current	history 1	history 2
Fuel	WC Method >3.0	<b>&lt;1.0</b>	<1.0	<1.0

## WEAR METALS

method	limit/base	current	history 1	history 2
Iron	ppm ASTM D5185m >120	<b>6</b>	20	60
Chromium	ppm ASTM D5185m >20	<b>&lt;1</b>	<1	1
Nickel	ppm ASTM D5185m >5	<b>0</b>	0	<1
Titanium	ppm ASTM D5185m >2	<b>0</b>	0	0
Silver	ppm ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >20	<b>0</b>	2	2
Lead	ppm ASTM D5185m >40	<b>2</b>	0	2
Copper	ppm ASTM D5185m >330	<b>11</b>	<1	3
Tin	ppm ASTM D5185m >15	<b>&lt;1</b>	0	<1
Antimony	ppm ASTM D5185m	<b>---</b>	---	---
Vanadium	ppm ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history 1	history 2
Boron	ppm ASTM D5185m 0	<b>2</b>	3	7
Barium	ppm ASTM D5185m 0	<b>0</b>	0	2
Molybdenum	ppm ASTM D5185m 60	<b>78</b>	66	68
Manganese	ppm ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185m 1010	<b>743</b>	891	759
Calcium	ppm ASTM D5185m 1070	<b>975</b>	1116	1299
Phosphorus	ppm ASTM D5185m 1150	<b>902</b>	904	1014
Zinc	ppm ASTM D5185m 1270	<b>1137</b>	1239	1183
Sulfur	ppm ASTM D5185m 2060	<b>2904</b>	3478	2816

## CONTAMINANTS

method	limit/base	current	history 1	history 2
Silicon	ppm ASTM D5185m >25	<b>4</b>	5	3
Sodium	ppm ASTM D5185m	<b>▲ 61</b>	39	20
Potassium	ppm ASTM D5185m >20	<b>▲ 127</b>	▲ 45	20
Glycol	% *ASTM D2982	<b>0.0</b>	NEG	NEG

## INFRA-RED

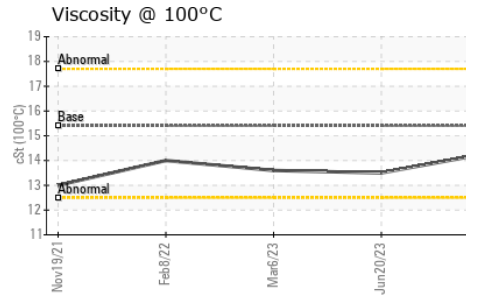
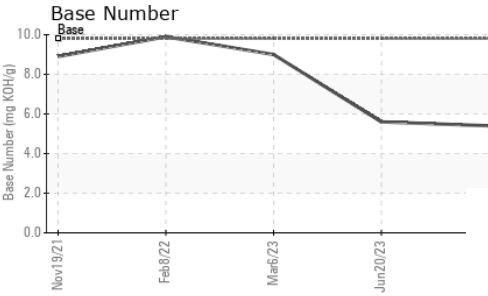
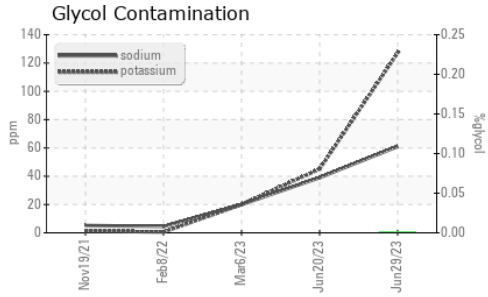
method	limit/base	current	history 1	history 2
Soot %	% *ASTM D7844 >4	<b>1.1</b>	0.3	2.2
Nitration	Abs/cm *ASTM D7624 >20	<b>12.0</b>	10.6	8.7
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>25.4</b>	22.7	22.3

## FLUID DEGRADATION

method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>22.3</b>	18.1	15.5
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>5.4</b>	5.6	9.0



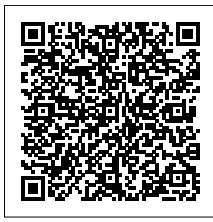
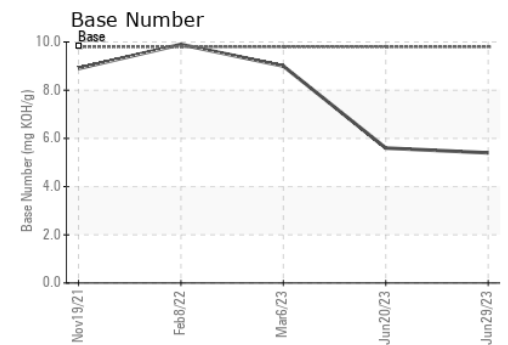
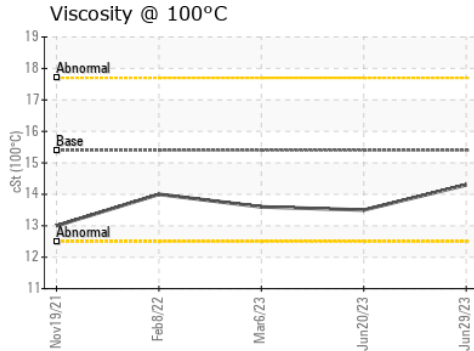
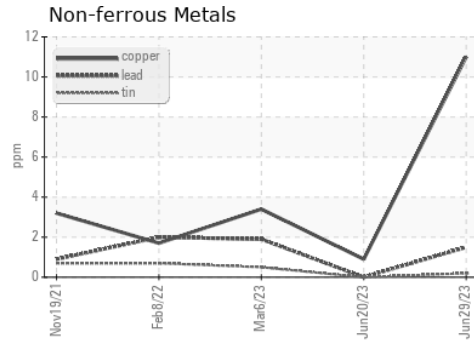
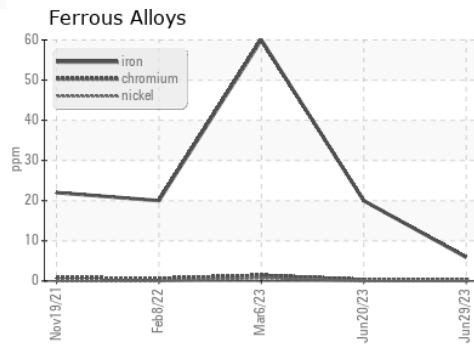
# OIL ANALYSIS REPORT



PARAMETER	method	limit/base	current	history 1	history 2
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

PARAMETER	method	limit/base	current	history 1	history 2
Visc @ 100°C	cSt	ASTM D445	15.4	14.3	13.5

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0081522 **Received** : 30 Jun 2023  
**Lab Number** : 05888247 **Diagnosed** : 04 Jul 2023  
**Unique Number** : 10538730 **Diagnostician** : Don Baldrige  
**Test Package** : FLEET ( Additional Tests: Glycol )

**GFL Environmental - 885 - Orlando**  
 1263 W Landstreet Rd  
 Orlando, FL  
 US 32824  
 Contact: Brian Bou Diaz  
 bboudiaz@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)