



# PROBLEM SUMMARY

Sample Rating Trend

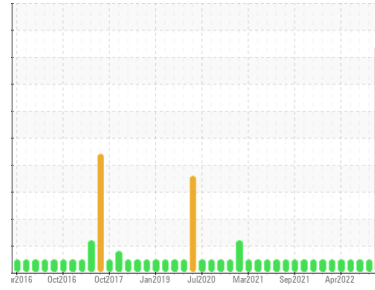
GLYCOL



Machine Id  
**10368C**

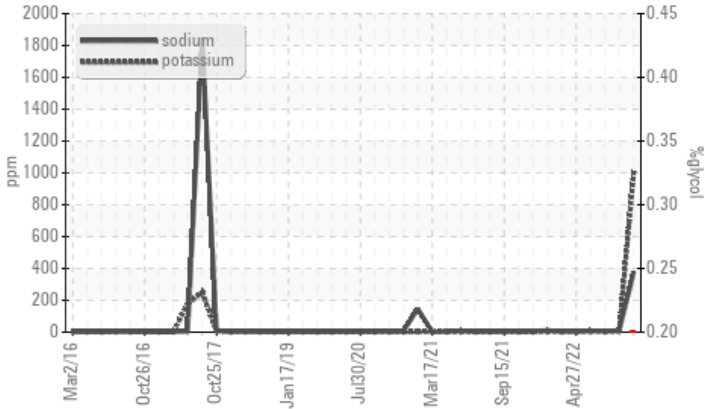
Component  
**Natural Gas Engine**

Fluid  
**PETRO CANADA DURON GEO LD 15W40 (30 GAL)**



## COMPONENT CONDITION SUMMARY

### Glycol Contamination



## RECOMMENDATION

We advise that you check for the source of the 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.

## PROBLEMATIC TEST RESULTS

Sample Status			SEVERE	NORMAL	NORMAL
Sodium	ppm	ASTM D5185m	▲ 374	10	8
Potassium	ppm	ASTM D5185m >20	▲ 991	4	1
Glycol	%	*ASTM D2982	● 0.20	---	---

Customer Id: GFL007  
Sample No.: GFL0082468  
Lab Number: 05901066  
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
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.
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

16 Mar 2023 Diag: Angela Borella

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



14 Oct 2022 Diag: Jonathan Hester

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



10 Aug 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.

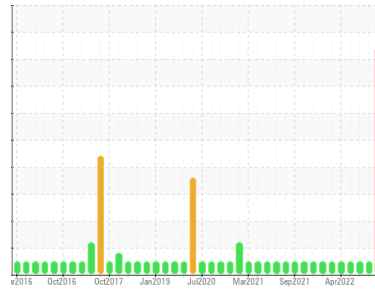
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id  
**10368C**

Component  
**Natural Gas Engine**

Fluid  
**PETRO CANADA DURON GEO LD 15W40 (30 GAL)**

## DIAGNOSIS

### Recommendation

We advise that you check for the source of the 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.

### Wear

All component wear rates are normal.

### Contamination

Sodium and/or potassium levels are 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		<b>GFL0082468</b>	GFL0050741	PCA0061379
Sample Date	Client Info		<b>17 Jul 2023</b>	16 Mar 2023	14 Oct 2022
Machine Age	hrs	Client Info	<b>4723</b>	3559	2348
Oil Age	hrs	Client Info	<b>1176</b>	1200	559
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>SEVERE</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>27</b>	19	8
Chromium	ppm	ASTM D5185m >4	<b>4</b>	4	<1
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >9	<b>4</b>	4	1
Lead	ppm	ASTM D5185m >30	<b>3</b>	3	2
Copper	ppm	ASTM D5185m >35	<b>1</b>	1	<1
Tin	ppm	ASTM D5185m >4	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	<b>0</b>	4	9
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>67</b>	56	49
Manganese	ppm	ASTM D5185m 0	<b>2</b>	<1	<1
Magnesium	ppm	ASTM D5185m 560	<b>533</b>	525	504
Calcium	ppm	ASTM D5185m 1510	<b>1652</b>	1734	1533
Phosphorus	ppm	ASTM D5185m 780	<b>696</b>	700	651
Zinc	ppm	ASTM D5185m 870	<b>992</b>	996	906
Sulfur	ppm	ASTM D5185m 2040	<b>3059</b>	2515	2761

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	<b>7</b>	5	4
Sodium	ppm	ASTM D5185m	<b>374</b>	10	8
Potassium	ppm	ASTM D5185m >20	<b>991</b>	4	1
Glycol	%	*ASTM D2982	<b>0.20</b>	---	---

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>11.5</b>	12.1	11.5
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>22.9</b>	25.1	21.6

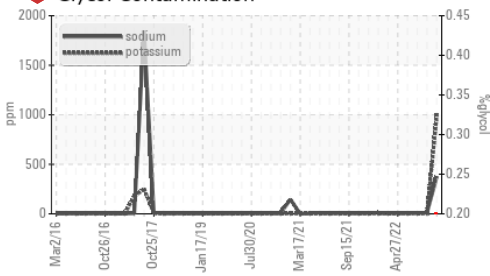
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>18.5</b>	19.5	18.4
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>6.4</b>	3.2	5.7

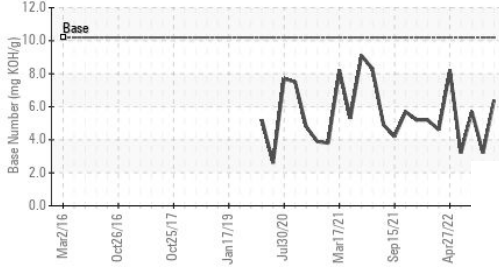


# OIL ANALYSIS REPORT

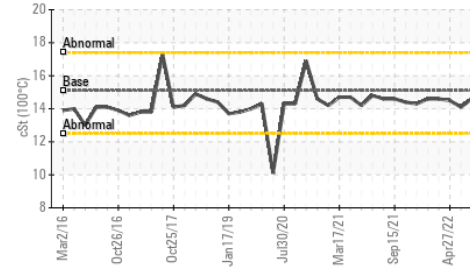
### Glycol Contamination



### Base Number



### Viscosity @ 100°C

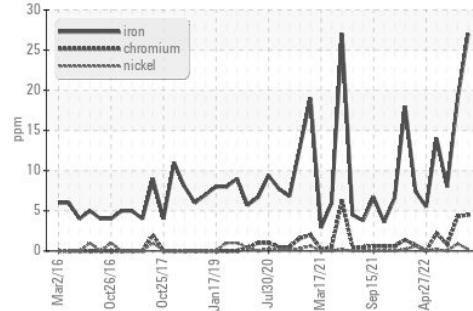


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

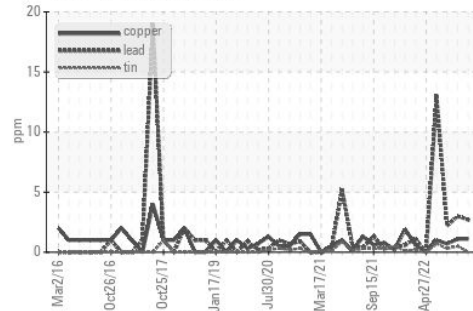
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.0	14.6

### GRAPHS

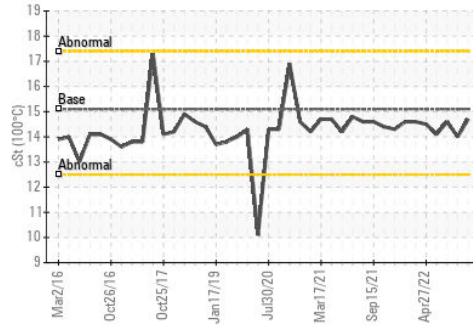
#### Ferrous Alloys



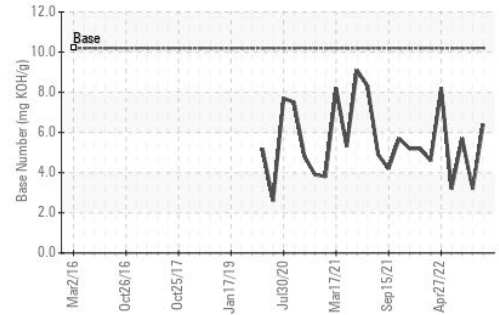
#### Non-ferrous Metals



#### Viscosity @ 100°C



#### Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0082468 **Received** : 18 Jul 2023  
**Lab Number** : 05901066 **Diagnosed** : 20 Jul 2023  
**Unique Number** : 10562422 **Diagnostician** : Jonathan Hester  
**Test Package** : FLEET ( Additional Tests: Glycol )

**GFL Environmental - 007 - Brunswick**  
 2809 Galloway Road  
 Bolivia, NC  
 US 28422  
 Contact: TOMMY DEVINE  
 tommy.devine@gflenv.com  
 T:  
 F: (910)253-4179

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)