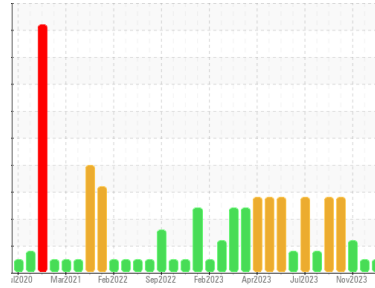




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**724001**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (12 QTS)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### 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	history1	history2
Sample Number	Client Info		<b>GFL0107178</b>	GFL0107230	GFL0101222
Sample Date	Client Info		<b>30 Jan 2024</b>	08 Jan 2024	29 Nov 2023
Machine Age	hrs	Client Info	<b>13007</b>	12867	12600
Oil Age	hrs	Client Info	<b>272</b>	132	442
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Sample Status			<b>NORMAL</b>	NORMAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<b>&lt;1.0</b>	0.8	▲ 3.8
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >90	<b>19</b>	10	36
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >2	<b>0</b>	0	0
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>3</b>	2	2
Lead	ppm	ASTM D5185m >40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >330	<b>&lt;1</b>	<1	1
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>3</b>	3	6
Barium	ppm	ASTM D5185m 0	<b>0</b>	3	0
Molybdenum	ppm	ASTM D5185m 60	<b>56</b>	58	54
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m 1010	<b>851</b>	906	742
Calcium	ppm	ASTM D5185m 1070	<b>962</b>	1001	1049
Phosphorus	ppm	ASTM D5185m 1150	<b>950</b>	929	878
Zinc	ppm	ASTM D5185m 1270	<b>1138</b>	1158	1066
Sulfur	ppm	ASTM D5185m 2060	<b>2733</b>	3106	2236

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>5</b>	3	4
Sodium	ppm	ASTM D5185m	<b>3</b>	3	7
Potassium	ppm	ASTM D5185m >20	<b>1</b>	2	0

## INFRA-RED

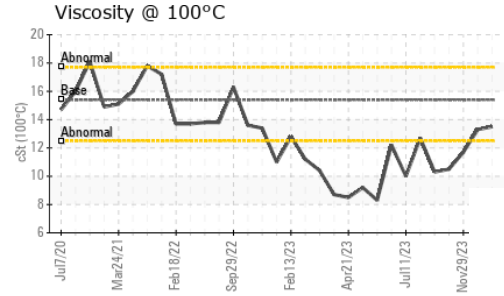
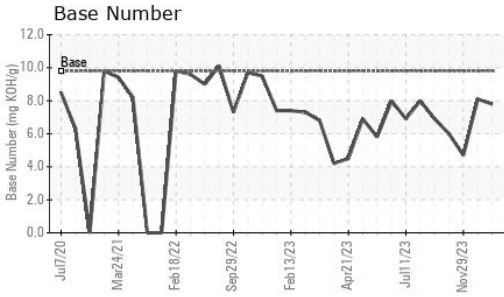
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >6	<b>0.2</b>	0.2	0.6
Nitration	Abs/cm	*ASTM D7624 >20	<b>6.6</b>	5.7	10.1
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>18.2</b>	17.7	21.8

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>14.0</b>	13.4	19.9
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>7.8</b>	8.1	4.7



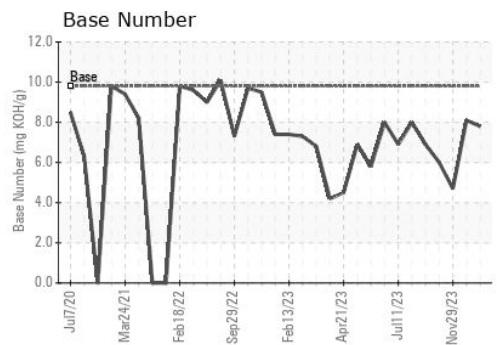
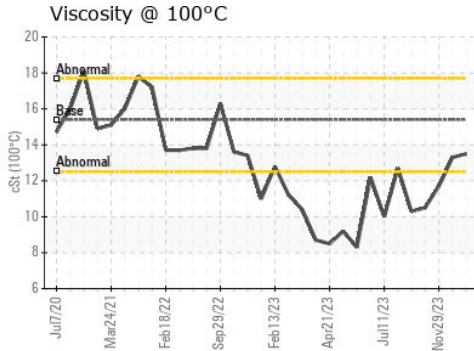
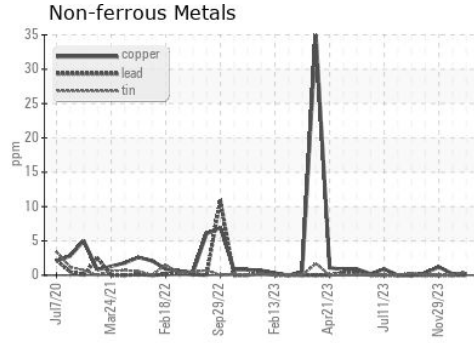
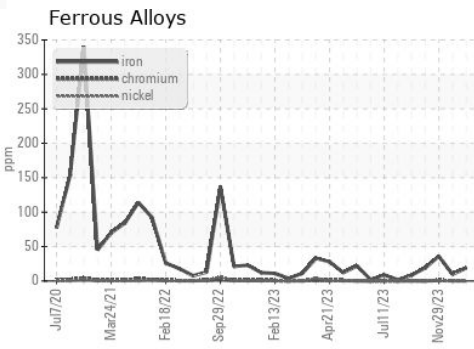
# OIL ANALYSIS REPORT



PARAMETER	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	13.5	13.3 ▲ 11.7

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0107178 **Recieved** : 02 Feb 2024  
**Lab Number** : 06077976 **Diagnosed** : 02 Feb 2024  
**Unique Number** : 10860067 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 010 - Stockbridge**  
 1280 Rum Creek Parkway  
 Stockbridge, GA  
 US 30281  
 Contact: JOSHUA TINKER  
 joshuatinker@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)