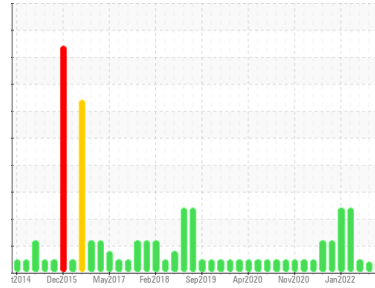




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**10534**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (10 GAL)**

## 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>GFL0072026</b>	GFL0092495	GFL0066930
Sample Date	Client Info	<b>04 Dec 2023</b>	31 Aug 2023	13 Jan 2023
Machine Age	hrs	<b>22470</b>	21803	21363
Oil Age	hrs	<b>600</b>	195	385
Oil Changed	Client Info	<b>N/A</b>	Not Changd	Changed
Sample Status		<b>NORMAL</b>	ATTENTION	NORMAL

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >3.0	<b>&lt;1.0</b>	1.9	<1.0
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 >75	<b>11</b>	25	7
Chromium	ppm ASTM D5185m >5	<b>&lt;1</b>	<1	<1
Nickel	ppm ASTM D5185m >4	<b>0</b>	0	0
Titanium	ppm ASTM D5185m >2	<b>&lt;1</b>	<1	0
Silver	ppm ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >15	<b>4</b>	3	3
Lead	ppm ASTM D5185m >25	<b>&lt;1</b>	0	<1
Copper	ppm ASTM D5185m >100	<b>1</b>	10	<1
Tin	ppm ASTM D5185m >4	<b>&lt;1</b>	0	0
Antimony	ppm ASTM D5185m	<b>---</b>	---	---
Vanadium	ppm ASTM D5185m	<b>&lt;1</b>	<1	0
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	<b>1</b>	40	11
Barium	ppm ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 60	<b>42</b>	42	57
Manganese	ppm ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185m 1010	<b>741</b>	515	890
Calcium	ppm ASTM D5185m 1070	<b>616</b>	1479	994
Phosphorus	ppm ASTM D5185m 1150	<b>633</b>	694	928
Zinc	ppm ASTM D5185m 1270	<b>784</b>	907	1133
Sulfur	ppm ASTM D5185m 2060	<b>1935</b>	2684	3297

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>7</b>	17	5
Sodium	ppm ASTM D5185m	<b>5</b>	52	7
Potassium	ppm ASTM D5185m >20	<b>10</b>	2	2

## INFRA-RED

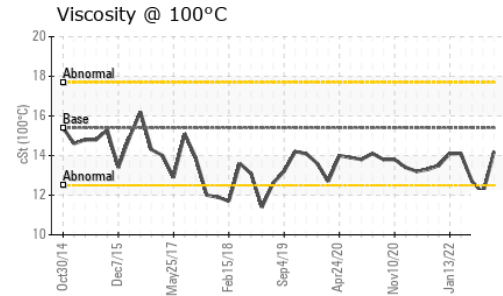
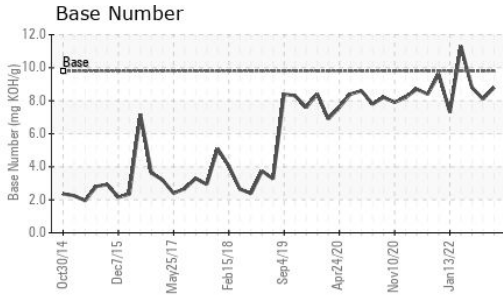
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >6	<b>0.5</b>	0.4	0.2
Nitration	Abs/cm *ASTM D7624 >20	<b>6.1</b>	6.0	6.6
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>18.1</b>	19.9	17.9

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>13.4</b>	16.4	13.8
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>8.8</b>	8.1	8.8



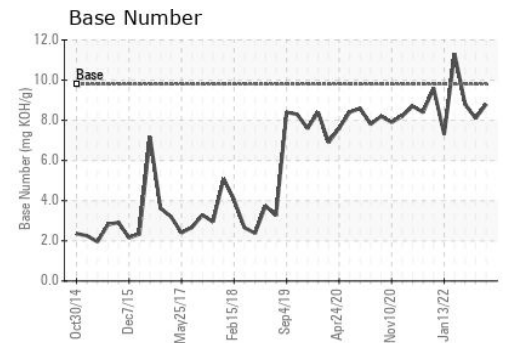
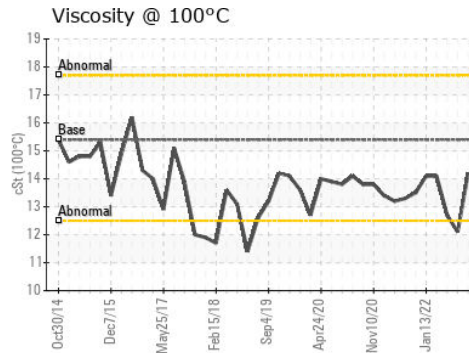
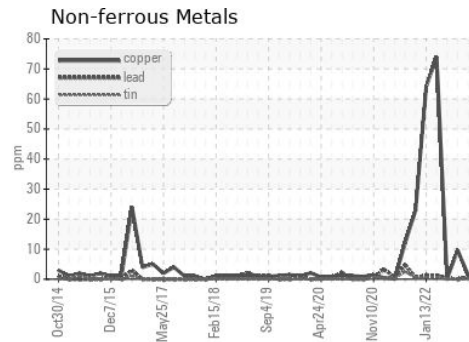
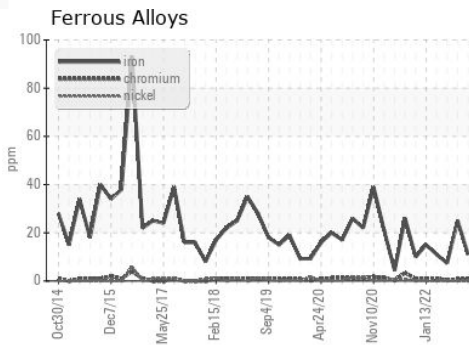
# OIL ANALYSIS REPORT



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	14.2	▲ 12.1 12.7

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0072026 Received : 06 Dec 2023  
 Lab Number : 06027100 Diagnosed : 08 Dec 2023  
 Unique Number : 10776891 Diagnostician : Angela Borella  
 Test Package : FLEET

**GFL Environmental - 094 - Cedartown**  
 2097 Buchanan Highway  
 Cedartown, GA  
 US 30125  
 Contact: WILLIAM FOSTER  
 william.foster@gflenv.com  
 T: (800)207-6618  
 F:

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)