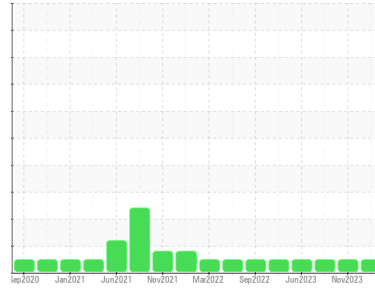




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**827013-1029**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (--- LTR)**

## 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>GFL0077757</b>	GFL0077783	GFL0065059	
Sample Date	Client Info	<b>25 Jan 2024</b>	07 Nov 2023	19 Sep 2023	
Machine Age	hrs	Client Info	<b>15183</b>	14687	14392
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info	<b>Changed</b>	Changed	Not Changed	
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL	

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >3.0	<b>&lt;1.0</b>	<1.0	<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 >120	<b>14</b>	30	16
Chromium	ppm ASTM D5185m >20	<b>0</b>	<1	<1
Nickel	ppm ASTM D5185m >5	<b>0</b>	<1	<1
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 >20	<b>&lt;1</b>	2	<1
Lead	ppm ASTM D5185m >40	<b>&lt;1</b>	4	1
Copper	ppm ASTM D5185m >330	<b>&lt;1</b>	2	2
Tin	ppm ASTM D5185m >15	<b>0</b>	<1	<1
Vanadium	ppm ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	<b>4</b>	2	5
Barium	ppm ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 60	<b>58</b>	58	62
Manganese	ppm ASTM D5185m 0	<b>0</b>	<1	<1
Magnesium	ppm ASTM D5185m 1010	<b>950</b>	897	1038
Calcium	ppm ASTM D5185m 1070	<b>1103</b>	1016	1154
Phosphorus	ppm ASTM D5185m 1150	<b>921</b>	920	1047
Zinc	ppm ASTM D5185m 1270	<b>1198</b>	1230	1361
Sulfur	ppm ASTM D5185m 2060	<b>2645</b>	2235	3111

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>3</b>	7	7
Sodium	ppm ASTM D5185m	<b>4</b>	6	6
Potassium	ppm ASTM D5185m >20	<b>0</b>	2	<1

## INFRA-RED

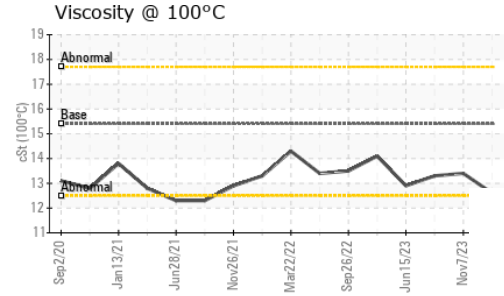
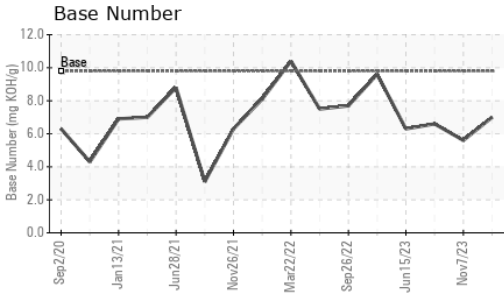
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >4	<b>0.6</b>	1.4	1
Nitration	Abs/cm *ASTM D7624 >20	<b>7.7</b>	9.1	8.1
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>19.7</b>	22.6	20.6

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>15.6</b>	19.8	16.1
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>7.0</b>	5.6	6.6



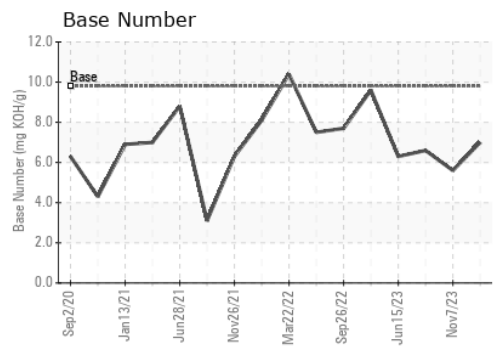
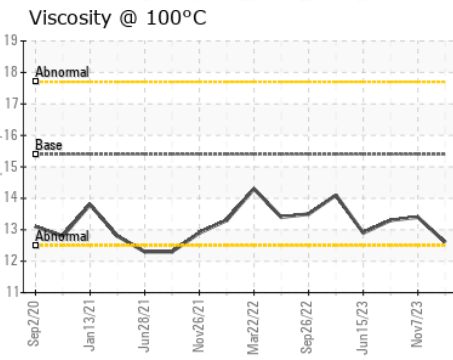
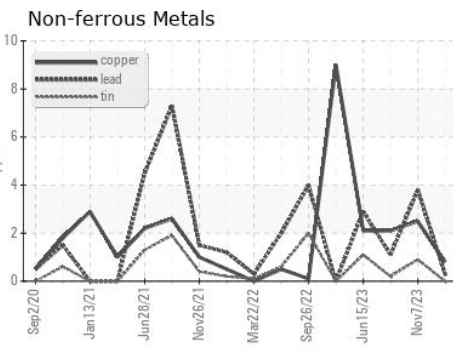
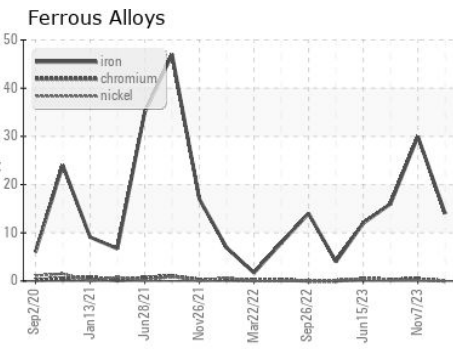
# OIL ANALYSIS REPORT



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>12.6</b>	13.4	13.3

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0077757 **Received** : 30 Jan 2024  
**Lab Number** : **06073570** **Diagnosed** : 30 Jan 2024  
**Unique Number** : 10850247 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 650 - West Point Hauling**  
 7825 Parham Landing Road  
 West Point, VA  
 US 23181  
 Contact: Jason Smith  
 jasonsmith@gflenv.com  
 T:  
 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)