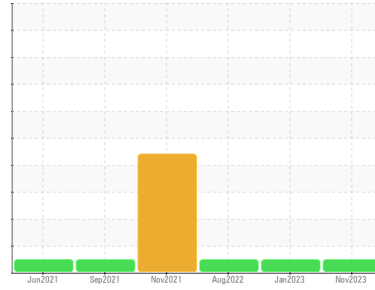




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**787M**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (--- 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>GFL0101530</b>	GFL0068618	GFL0057242
Sample Date	Client Info		<b>16 Nov 2023</b>	31 Jan 2023	18 Aug 2022
Machine Age	hrs	Client Info	<b>16632</b>	14587	11595
Oil Age	hrs	Client Info	<b>14587</b>	11595	11595
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<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 >100	<b>36</b>	14	43
Chromium	ppm	ASTM D5185m >20	<b>2</b>	<1	2
Nickel	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >20	<b>7</b>	9	4
Lead	ppm	ASTM D5185m >40	<b>1</b>	<1	4
Copper	ppm	ASTM D5185m >330	<b>2</b>	<1	1
Tin	ppm	ASTM D5185m >15	<b>0</b>	0	0
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	history1	history2
Boron	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	4
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>65</b>	63	60
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 1010	<b>953</b>	892	944
Calcium	ppm	ASTM D5185m 1070	<b>1125</b>	1103	1092
Phosphorus	ppm	ASTM D5185m 1150	<b>1056</b>	1010	941
Zinc	ppm	ASTM D5185m 1270	<b>1269</b>	1211	1204
Sulfur	ppm	ASTM D5185m 2060	<b>2908</b>	2730	2646

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>5</b>	4	9
Sodium	ppm	ASTM D5185m	<b>2</b>	4	<1
Potassium	ppm	ASTM D5185m >20	<b>15</b>	19	10

## INFRA-RED

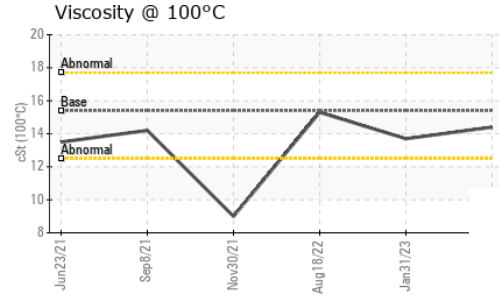
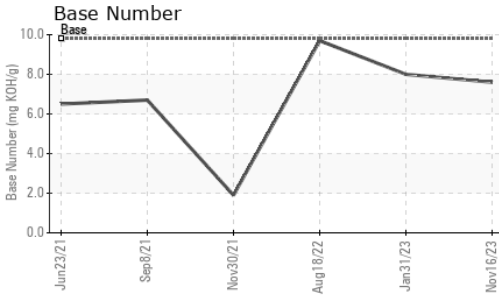
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>1.2</b>	0.7	2.6
Nitration	Abs/cm	*ASTM D7624 >20	<b>11.5</b>	10.3	16.3
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>23.9</b>	20.8	30.0

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>20.2</b>	17.7	26.6
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>7.6</b>	8.0	9.7



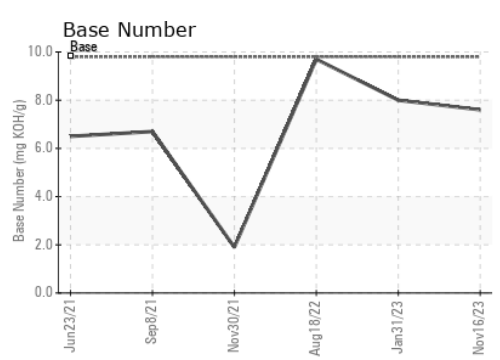
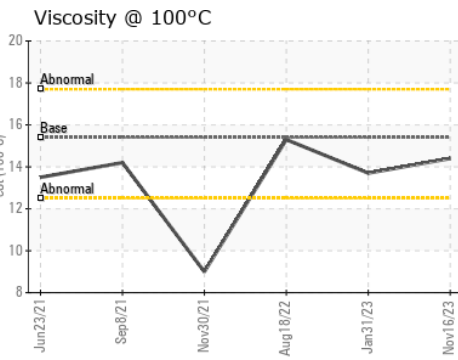
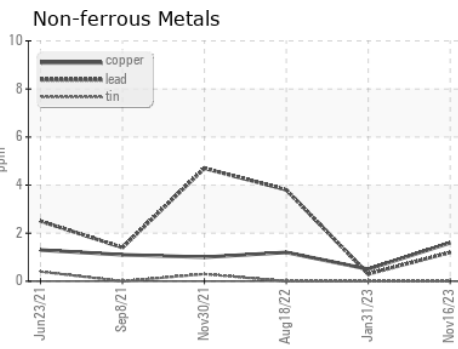
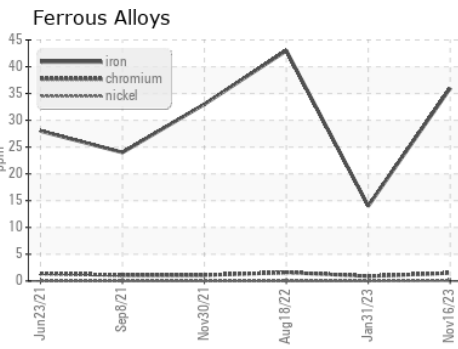
# OIL ANALYSIS REPORT



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>14.4</b>	13.7	15.3

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0101530 **Received** : 20 Nov 2023  
**Lab Number** : **06011813** **Diagnosed** : 21 Nov 2023  
**Unique Number** : 10750957 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 415 - Michigan East**  
 6200 Elmridge  
 Sterling Heights, MI  
 US 48313  
 Contact: Frank Wolak  
 fwolak@gflenv.com  
 T: (586)825-9514  
 F:

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)