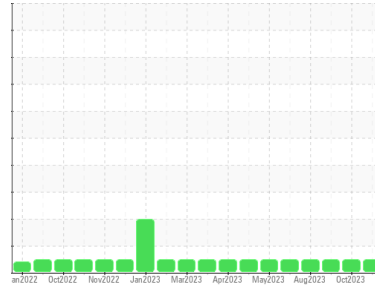




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**811055**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (9 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

### 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>GFL0099050</b>	GFL0094922	GFL0088419
Sample Date	Client Info		<b>26 Oct 2023</b>	06 Oct 2023	14 Sep 2023
Machine Age	hrs	Client Info	<b>5450</b>	5498	5148
Oil Age	hrs	Client Info	<b>3826</b>	3826	3826
Oil Changed	Client Info		<b>Not Chngd</b>	N/A	N/A
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
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>12</b>	6	4
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>&lt;1</b>	<1	0
Aluminum	ppm	ASTM D5185m >20	<b>2</b>	2	2
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m >330	<b>2</b>	2	0
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>&lt;1</b>	2	<1
Barium	ppm	ASTM D5185m 0	<b>4</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>60</b>	55	59
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 1010	<b>885</b>	886	988
Calcium	ppm	ASTM D5185m 1070	<b>1045</b>	1017	1116
Phosphorus	ppm	ASTM D5185m 1150	<b>1002</b>	987	1062
Zinc	ppm	ASTM D5185m 1270	<b>1175</b>	1213	1292
Sulfur	ppm	ASTM D5185m 2060	<b>2808</b>	2838	3804

## CONTAMINANTS

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

## INFRA-RED

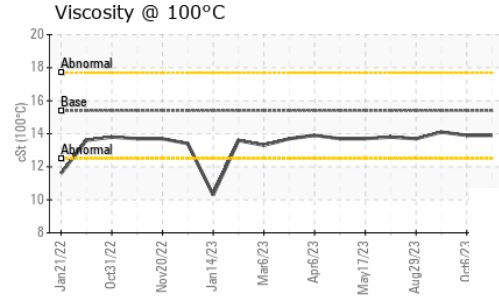
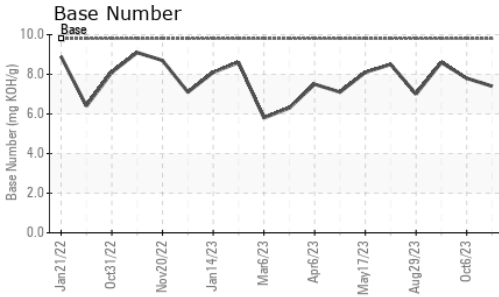
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.5</b>	0.4	0
Nitration	Abs/cm	*ASTM D7624 >20	<b>7.7</b>	6.8	6.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.5</b>	19.0	21.3

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>14.8</b>	14.2	14.8
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>7.4</b>	7.8	8.6



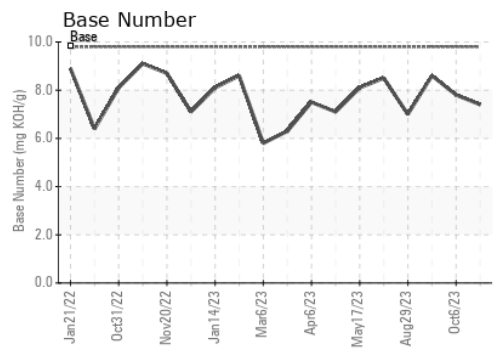
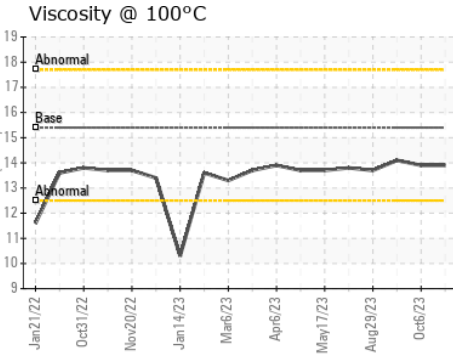
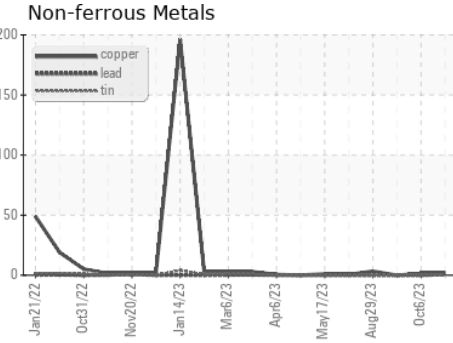
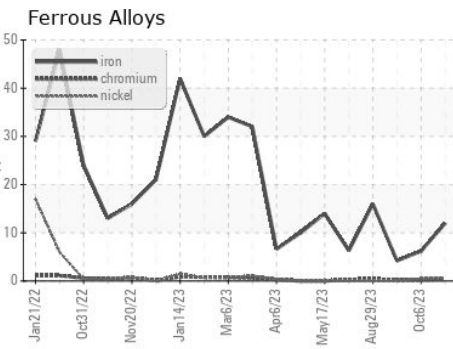
# OIL ANALYSIS REPORT



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>13.9</b>	13.9	14.1

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0099050 **Received** : 31 Oct 2023  
**Lab Number** : **05994903** **Diagnosed** : 01 Nov 2023  
**Unique Number** : 10723263 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 084 - Clarksville**  
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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)