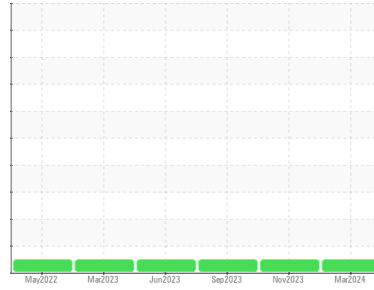




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**725008-1170**

Component  
**Diesel Engine**

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

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. ( Customer Sample Comment: Sample only )

### 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>GFL0116260</b>	GFL0094861	GFL0088277
Sample Date	Client Info		<b>14 Mar 2024</b>	06 Nov 2023	11 Sep 2023
Machine Age	mls	Client Info	<b>172517</b>	169557	164915
Oil Age	mls	Client Info	<b>2909</b>	0	0
Oil Changed	Client Info		<b>Not Chngd</b>	Changed	Not Chngd
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>37</b>	27	11
Chromium	ppm	ASTM D5185m >20	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185m >4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>3</b>	2	1
Lead	ppm	ASTM D5185m >40	<b>4</b>	4	2
Copper	ppm	ASTM D5185m >330	<b>2</b>	2	0
Tin	ppm	ASTM D5185m >15	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</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>6</b>	2	8
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>62</b>	62	59
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 1010	<b>927</b>	902	887
Calcium	ppm	ASTM D5185m 1070	<b>1097</b>	1075	1060
Phosphorus	ppm	ASTM D5185m 1150	<b>998</b>	911	967
Zinc	ppm	ASTM D5185m 1270	<b>1194</b>	1203	1166
Sulfur	ppm	ASTM D5185m 2060	<b>3425</b>	2958	3441

## CONTAMINANTS

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

## INFRA-RED

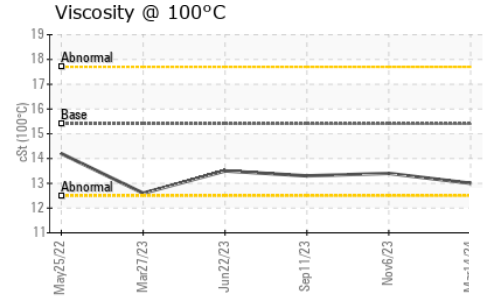
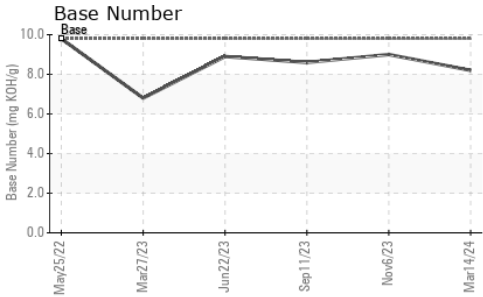
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>2.4</b>	1.8	0.8
Nitration	Abs/cm	*ASTM D7624 >20	<b>9.8</b>	8.5	6.0
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>23.4</b>	21.0	18.0

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>15.7</b>	14.4	12.6
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>8.2</b>	9.0	8.6



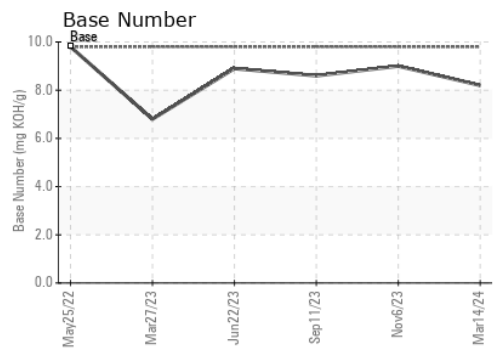
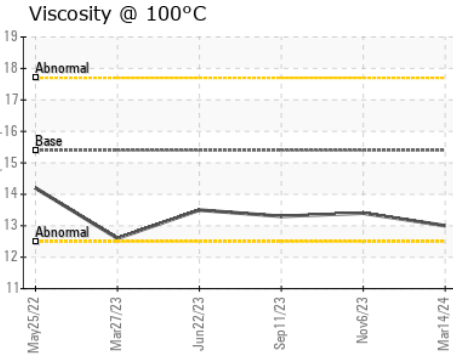
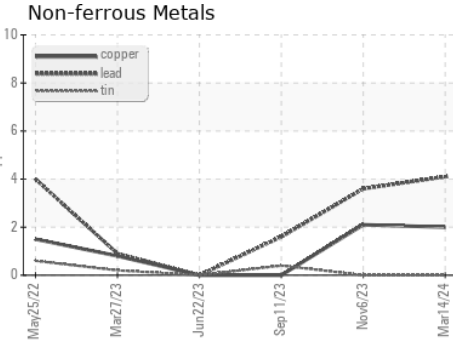
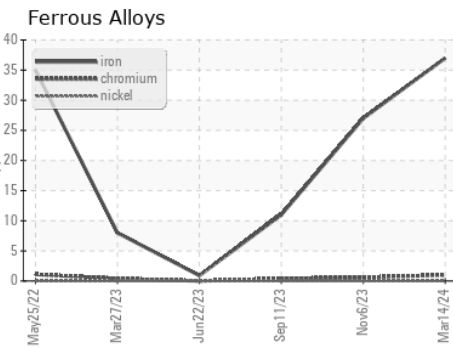
# OIL ANALYSIS REPORT



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>13.0</b>	13.4	13.3

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0116260 **Received** : 19 Mar 2024  
**Lab Number** : **06122962** **Tested** : 20 Mar 2024  
**Unique Number** : 10937113 **Diagnosed** : 21 Mar 2024 - Don Baldrige  
**Test Package** : FLEET

**GFL Environmental - 625 - Harrison Hauling**  
 4102 Industrial Pkwy  
 Harrison, MI  
 US 48625  
 Contact: Glenda Standen  
 gstanden@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)