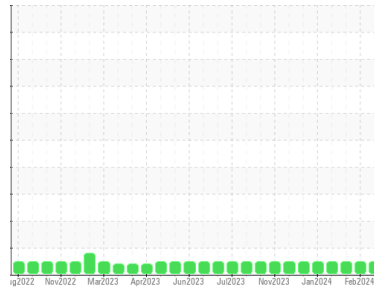




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id

**910093**

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>GFL0103466</b>	GFL0086330	GFL0103449
Sample Date	Client Info		<b>08 Apr 2024</b>	29 Feb 2024	15 Feb 2024
Machine Age	hrs	Client Info	<b>8298</b>	0	8176
Oil Age	hrs	Client Info	<b>1303</b>	0	1181
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
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>14</b>	11	4
Chromium	ppm	ASTM D5185m >20	<b>2</b>	<1	0
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	0
Aluminum	ppm	ASTM D5185m >20	<b>4</b>	2	<1
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m >330	<b>2</b>	<1	0
Tin	ppm	ASTM D5185m >15	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</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>25</b>	6	32
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>72</b>	55	70
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m 1010	<b>927</b>	844	893
Calcium	ppm	ASTM D5185m 1070	<b>1176</b>	965	1124
Phosphorus	ppm	ASTM D5185m 1150	<b>1018</b>	920	1000
Zinc	ppm	ASTM D5185m 1270	<b>1273</b>	1177	1157
Sulfur	ppm	ASTM D5185m 2060	<b>3580</b>	2687	3041

## CONTAMINANTS

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

## INFRA-RED

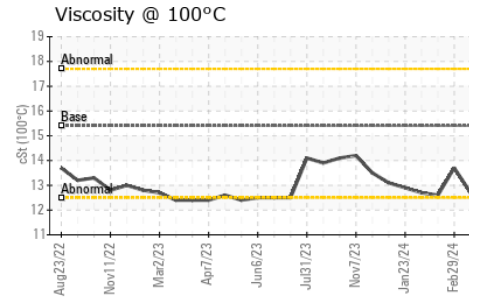
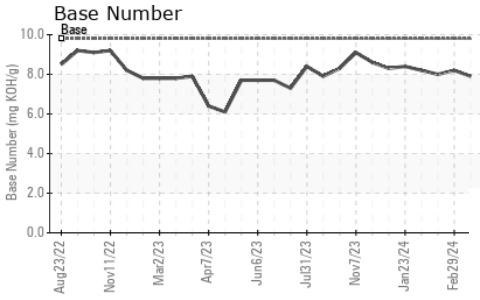
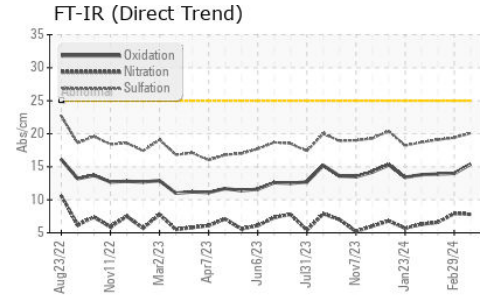
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.6</b>	0.8	0.6
Nitration	Abs/cm	*ASTM D7624 >20	<b>7.8</b>	7.9	6.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>20.1</b>	19.4	19.1

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>15.4</b>	14.0	13.9
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>7.9</b>	8.2	8.0



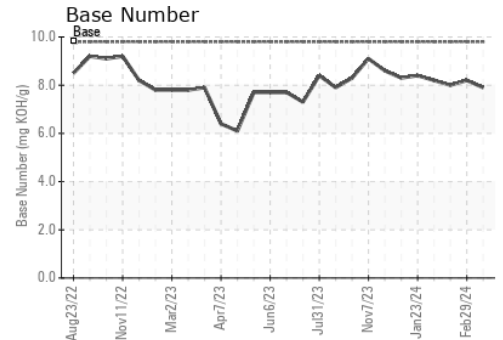
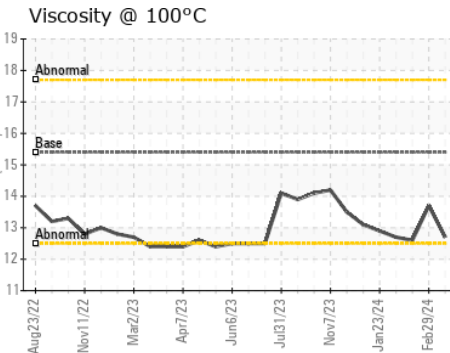
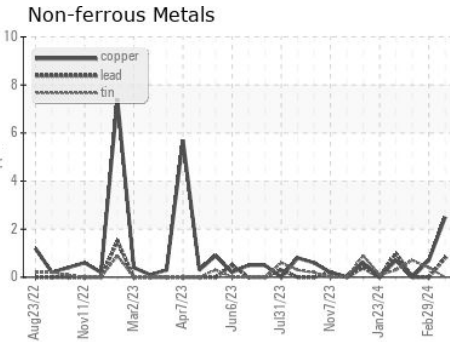
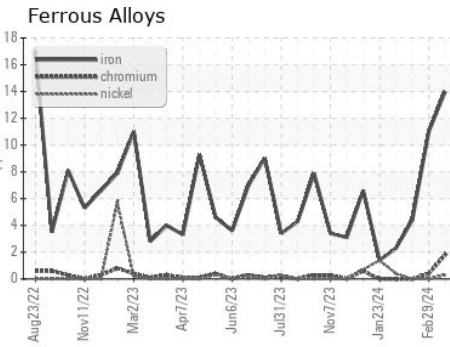
# OIL ANALYSIS REPORT



PARAMETER	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	12.7	13.7

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0103466  
 Lab Number : 06145707  
 Unique Number : 10970515  
 Test Package : FLEET

Received : 11 Apr 2024  
 Tested : 12 Apr 2024  
 Diagnosed : 12 Apr 2024 - Wes Davis

GFL Environmental - 180 - Tuscaloosa Hauling  
 4701 12TH ST NE  
 Tuscaloosa, AL  
 US 35404

Contact: FREDERICK ROGERS  
 fred.rogers@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)

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