



# OIL ANALYSIS REPORT

Sample Rating Trend

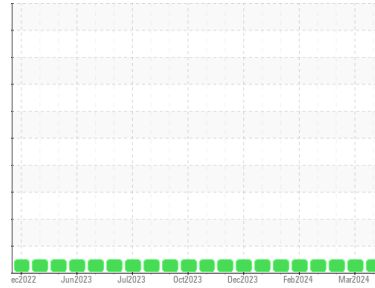
**NORMAL**



Machine Id  
**812101**

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>GFL0113718</b>	GFL0113714	GFL0111091
Sample Date	Client Info		<b>18 Mar 2024</b>	06 Mar 2024	26 Feb 2024
Machine Age	hrs	Client Info	<b>7403</b>	7271	7246
Oil Age	hrs	Client Info	<b>666</b>	25	509
Oil Changed	Client Info		<b>N/A</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 >110	<b>2</b>	3	8
Chromium	ppm	ASTM D5185m >4	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>1</b>	<1	3
Lead	ppm	ASTM D5185m >45	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >85	<b>&lt;1</b>	0	0
Tin	ppm	ASTM D5185m >4	<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>34</b>	26	12
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>69</b>	81	89
Manganese	ppm	ASTM D5185m 0	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m 1010	<b>732</b>	799	968
Calcium	ppm	ASTM D5185m 1070	<b>1166</b>	1078	1132
Phosphorus	ppm	ASTM D5185m 1150	<b>813</b>	842	1029
Zinc	ppm	ASTM D5185m 1270	<b>1119</b>	1072	1220
Sulfur	ppm	ASTM D5185m 2060	<b>3302</b>	2706	2878

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >30	<b>3</b>	3	3
Sodium	ppm	ASTM D5185m	<b>2</b>	<1	1
Potassium	ppm	ASTM D5185m >20	<b>4</b>	5	9

## INFRA-RED

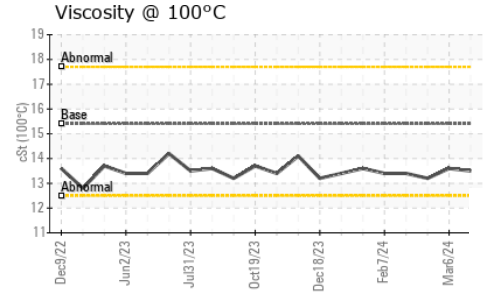
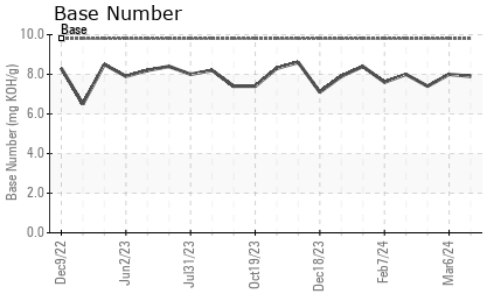
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.2</b>	0.2	0.4
Nitration	Abs/cm	*ASTM D7624 >20	<b>5.7</b>	6.1	7.8
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>17.4</b>	18.0	19.4

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>13.0</b>	13.5	15.2
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>7.9</b>	8.0	7.4



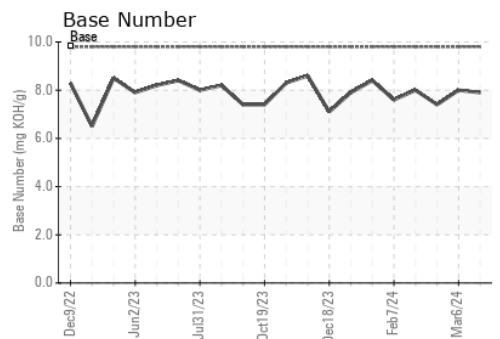
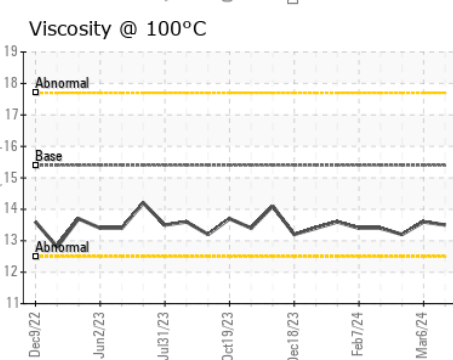
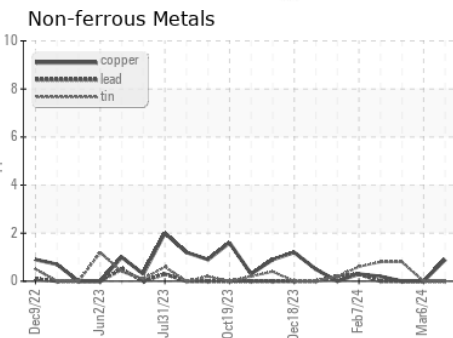
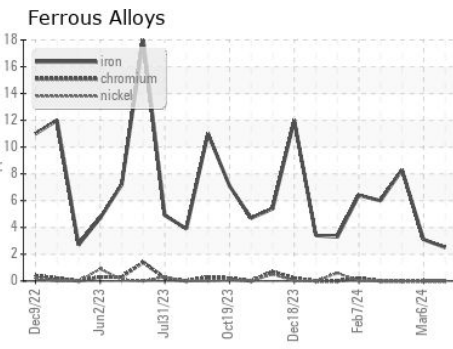
# OIL ANALYSIS REPORT



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>13.5</b>	13.6	13.2

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0113718 **Received** : 27 Mar 2024  
**Lab Number** : **06130232** **Tested** : 27 Mar 2024  
**Unique Number** : 10949697 **Diagnosed** : 27 Mar 2024 - Wes Davis  
**Test Package** : FLEET

**GFL environmental - 867 - Trafford (Blount Hauling)**  
 1130 County Line Rd  
 Trafford, AL  
 US 35172  
 Contact: Jonathan Williams  
 jonathan.williams@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)

T:  
F: