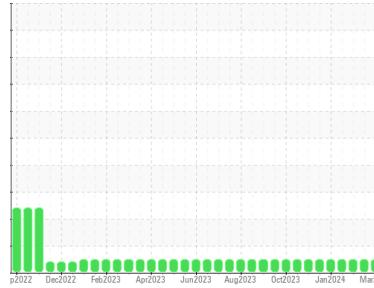




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**MONTGOMERY**  
 Machine Id  
**MACK 913008**  
 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>GFL0115612</b>	GFL0115585	GFL0115583
Sample Date	Client Info	<b>27 Mar 2024</b>	11 Mar 2024	11 Mar 2024
Machine Age	hrs	<b>4711</b>	4600	4597
Oil Age	hrs	<b>111</b>	1138	1135
Oil Changed	Client Info	<b>Not Changed</b>	Changed	Not Changed
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >3.0	<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 >120	<b>4</b>	<1	4
Chromium	ppm ASTM D5185m >20	<b>0</b>	0	0
Nickel	ppm ASTM D5185m >5	<b>&lt;1</b>	<1	<1
Titanium	ppm ASTM D5185m >2	<b>0</b>	0	0
Silver	ppm ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >20	<b>&lt;1</b>	1	1
Lead	ppm ASTM D5185m >40	<b>0</b>	<1	<1
Copper	ppm ASTM D5185m >330	<b>0</b>	0	0
Tin	ppm ASTM D5185m >15	<b>0</b>	<1	<1
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>2</b>	4	4
Barium	ppm ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 60	<b>59</b>	57	59
Manganese	ppm ASTM D5185m 0	<b>0</b>	<1	<1
Magnesium	ppm ASTM D5185m 1010	<b>1042</b>	954	951
Calcium	ppm ASTM D5185m 1070	<b>1136</b>	1044	1055
Phosphorus	ppm ASTM D5185m 1150	<b>1122</b>	1072	1067
Zinc	ppm ASTM D5185m 1270	<b>1320</b>	1239	1257
Sulfur	ppm ASTM D5185m 2060	<b>3822</b>	3600	3573

## CONTAMINANTS

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

## INFRA-RED

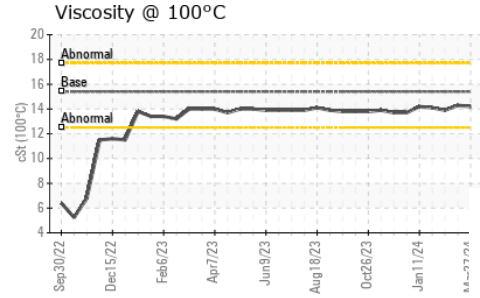
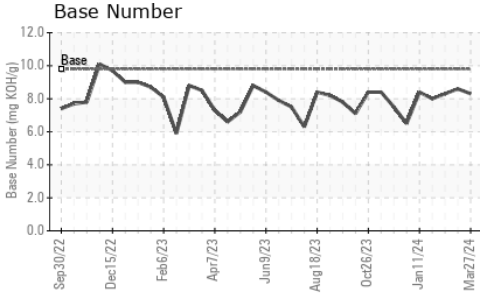
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >4	<b>0.2</b>	0.1	0.4
Nitration	Abs/cm *ASTM D7624 >20	<b>6.1</b>	5.2	6.5
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>18.3</b>	17.8	17.8

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>14.7</b>	14.0	13.9
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>8.3</b>	8.6	8.3



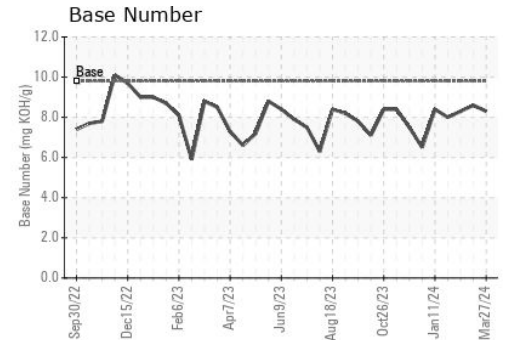
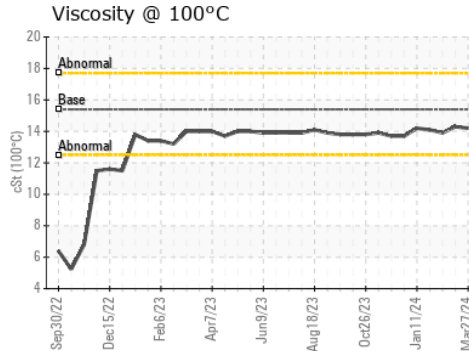
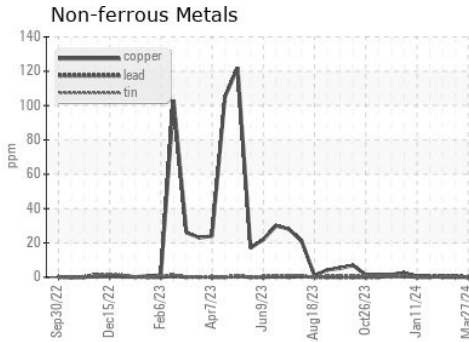
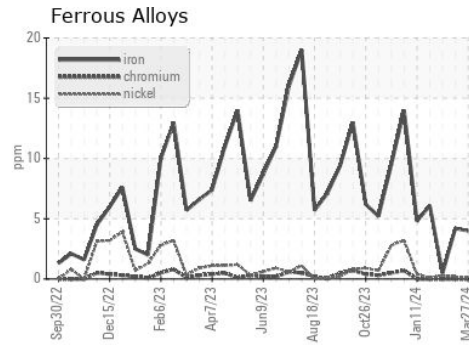
# OIL ANALYSIS REPORT



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>14.2</b>	14.3	13.9

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0115612  
 Lab Number : **06132940**  
 Unique Number : 10952405  
 Test Package : FLEET

Received : 29 Mar 2024  
 Tested : 31 Mar 2024  
 Diagnosed : 31 Mar 2024 - Wes Davis

GFL Environmental - 955 - Montgomery  
 1121 Wilbanks St  
 Montgomery, AL  
 US 36108  
 Contact: LISA REEVES

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: