



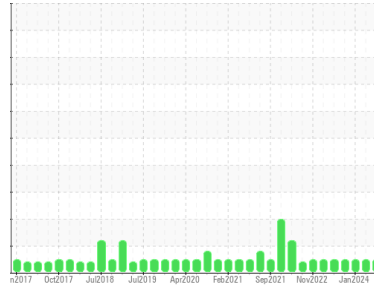
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**(DQR837)**  
Machine Id  
**MACK 2653**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (7 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>GFL0109019</b>	GFL0109087	GFL0109063
Sample Date	Client Info		<b>06 Mar 2024</b>	01 Feb 2024	05 Jan 2024
Machine Age	hrs	Client Info	<b>36425</b>	36303	36180
Oil Age	hrs	Client Info	<b>2687</b>	2565	36180
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	>3.0	<b>&lt;1.0</b>	<1.0	0.9
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>10</b>	3	7
Chromium	ppm	ASTM D5185m >20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m >5	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>0</b>	2	2
Lead	ppm	ASTM D5185m >40	<b>0</b>	1	1
Copper	ppm	ASTM D5185m >330	<b>&lt;1</b>	<1	<1
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	<1

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>6</b>	17	23
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>57</b>	56	56
Manganese	ppm	ASTM D5185m 0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m 1010	<b>702</b>	731	693
Calcium	ppm	ASTM D5185m 1070	<b>1079</b>	1039	1083
Phosphorus	ppm	ASTM D5185m 1150	<b>775</b>	920	783
Zinc	ppm	ASTM D5185m 1270	<b>980</b>	1073	1055
Sulfur	ppm	ASTM D5185m 2060	<b>2314</b>	2796	3018

## CONTAMINANTS

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

## INFRA-RED

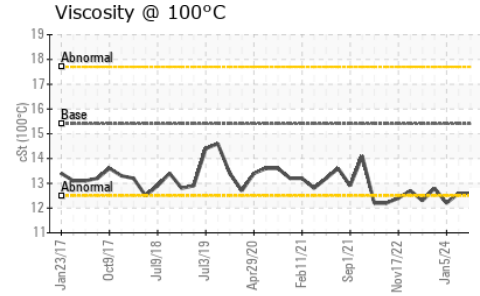
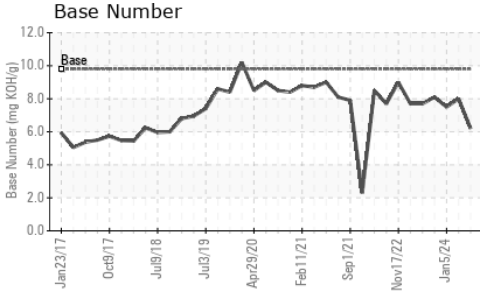
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >4	<b>0.6</b>	0.8	0.9
Nitration	Abs/cm	*ASTM D7624 >20	<b>8.3</b>	5.1	5.3
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>18.6</b>	17.4	17.5

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>13.6</b>	11.1	10.8
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>6.2</b>	8.0	7.5



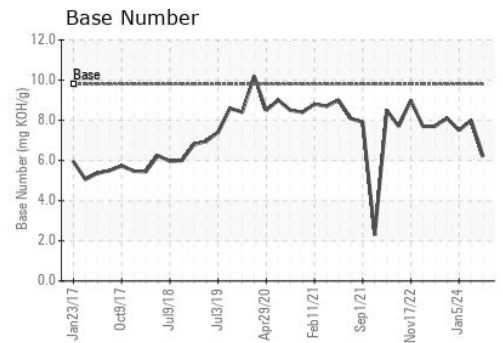
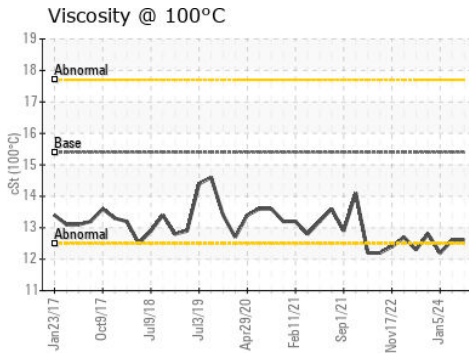
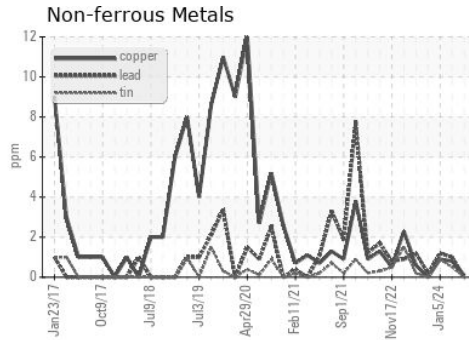
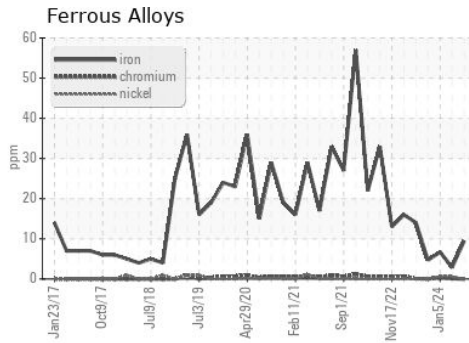
# OIL ANALYSIS REPORT



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	12.6	12.6

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0109019 **Received** : 11 Mar 2024  
**Lab Number** : 06113832 **Tested** : 11 Mar 2024  
**Unique Number** : 10922665 **Diagnosed** : 11 Mar 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 009 - Fairburn**  
 6905 Roosevelt Hwy  
 Fairburn, GA  
 US 30213  
 Contact: Eric Jones  
 erjones@gflenv.com  
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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)