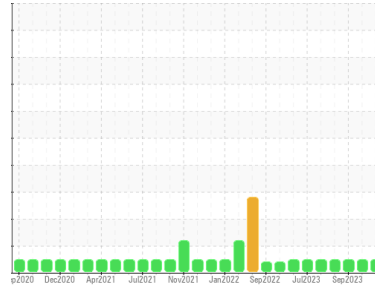




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**CUMMINS 810030**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (28 QTS)**

## 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>GFL0109100</b>	GFL0109062	GFL0086202
Sample Date	Client Info		<b>11 Jan 2024</b>	05 Jan 2024	26 Sep 2023
Machine Age	hrs	Client Info	<b>15837</b>	15744	15150
Oil Age	hrs	Client Info	<b>15837</b>	15744	15150
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	<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 >75	<b>35</b>	6	9
Chromium	ppm	ASTM D5185m >5	<b>1</b>	<1	0
Nickel	ppm	ASTM D5185m >4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m >2	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m >15	<b>5</b>	2	<1
Lead	ppm	ASTM D5185m >25	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m >100	<b>6</b>	1	<1
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	<1	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>16</b>	19	11
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>60</b>	57	58
Manganese	ppm	ASTM D5185m 0	<b>1</b>	<1	0
Magnesium	ppm	ASTM D5185m 1010	<b>795</b>	704	764
Calcium	ppm	ASTM D5185m 1070	<b>1046</b>	1097	1037
Phosphorus	ppm	ASTM D5185m 1150	<b>957</b>	772	883
Zinc	ppm	ASTM D5185m 1270	<b>1132</b>	1089	1112
Sulfur	ppm	ASTM D5185m 2060	<b>2774</b>	2862	2782

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>9</b>	4	4
Sodium	ppm	ASTM D5185m	<b>7</b>	0	<1
Potassium	ppm	ASTM D5185m >20	<b>2</b>	3	5

## INFRA-RED

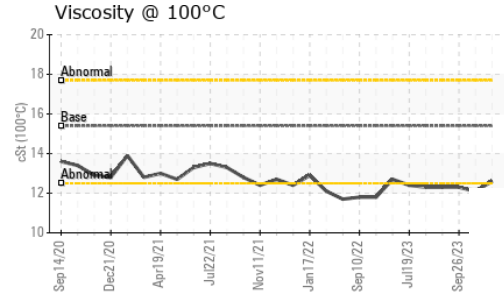
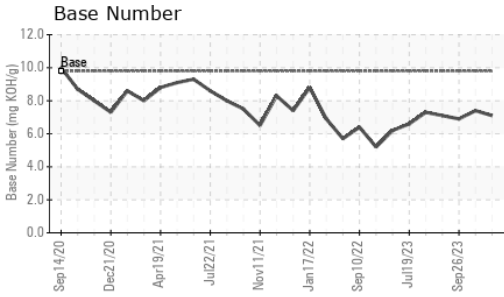
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >6	<b>0.8</b>	0.3	0.5
Nitration	Abs/cm	*ASTM D7624 >20	<b>8.4</b>	7.1	8.7
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>18.3</b>	17.7	18.9

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>13.5</b>	13.1	15.0
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>7.1</b>	7.4	6.9



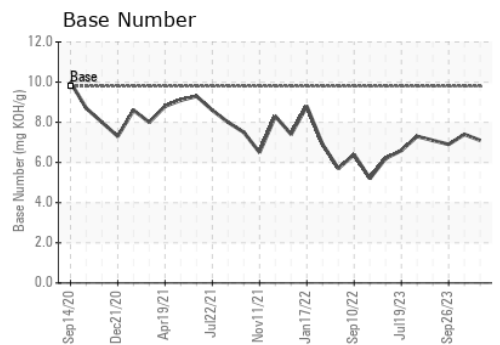
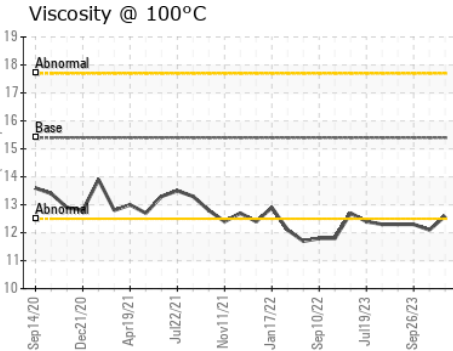
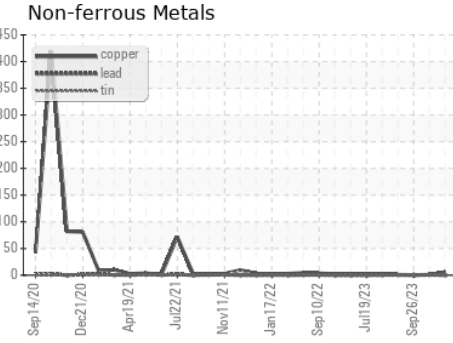
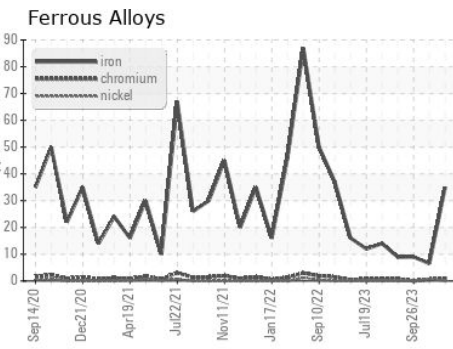
# OIL ANALYSIS REPORT



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>12.6</b>	12.1	12.3

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0109100 **Received** : 16 Jan 2024  
**Lab Number** : **06060734** **Diagnosed** : 17 Jan 2024  
**Unique Number** : 10832116 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 009 - Fairburn**  
 6905 Roosevelt Hwy  
 Fairburn, GA  
 US 30213  
 Contact: Eric Jones  
 erjones@gflenv.com  
 T: (678)630-9927  
 F:

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)