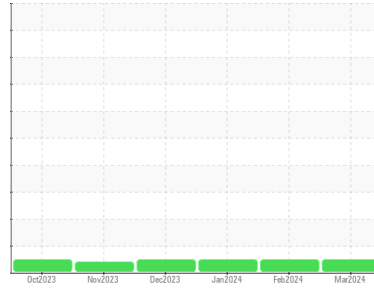




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**723054**

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>GFL0101902</b>	GFL0101893	GFL0101992
Sample Date	Client Info	<b>20 Mar 2024</b>	27 Feb 2024	30 Jan 2024
Machine Age	hrs	<b>8386</b>	8317	8236
Oil Age	hrs	<b>381</b>	312	231
Oil Changed	Client Info	<b>Not Changed</b>	Not Changed	Not Changed
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >2.0	<b>&lt;1.0</b>	<1.0	1.4
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>4</b>	1	1
Chromium	ppm ASTM D5185m >20	<b>&lt;1</b>	0	0
Nickel	ppm ASTM D5185m >4	<b>0</b>	0	<1
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	<1	<1
Silver	ppm ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >20	<b>2</b>	<1	2
Lead	ppm ASTM D5185m >40	<b>&lt;1</b>	0	1
Copper	ppm ASTM D5185m >330	<b>&lt;1</b>	0	<1
Tin	ppm ASTM D5185m >15	<b>&lt;1</b>	0	<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>4</b>	6	6
Barium	ppm ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 60	<b>59</b>	57	58
Manganese	ppm ASTM D5185m 0	<b>0</b>	<1	<1
Magnesium	ppm ASTM D5185m 1010	<b>941</b>	916	895
Calcium	ppm ASTM D5185m 1070	<b>1130</b>	1040	1015
Phosphorus	ppm ASTM D5185m 1150	<b>1142</b>	1036	1076
Zinc	ppm ASTM D5185m 1270	<b>1261</b>	1222	1232
Sulfur	ppm ASTM D5185m 2060	<b>3322</b>	3045	3158

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>10</b>	2	3
Sodium	ppm ASTM D5185m	<b>1</b>	2	2
Potassium	ppm ASTM D5185m >20	<b>2</b>	0	2

## INFRA-RED

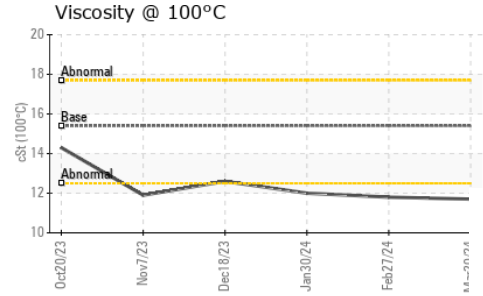
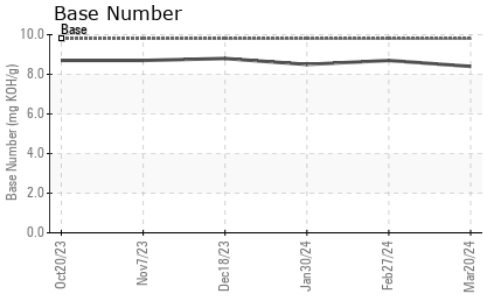
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.1</b>	0	0
Nitration	Abs/cm *ASTM D7624 >20	<b>5.5</b>	5.1	4.9
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>17.8</b>	17.6	17.5

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>14.2</b>	13.6	13.6
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>8.4</b>	8.7	8.5



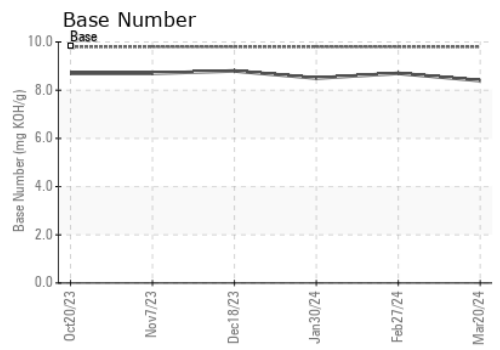
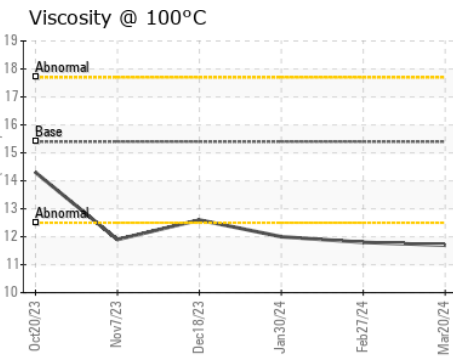
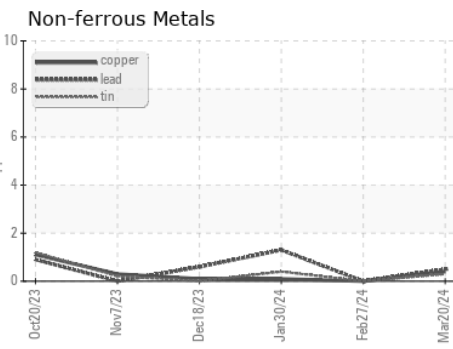
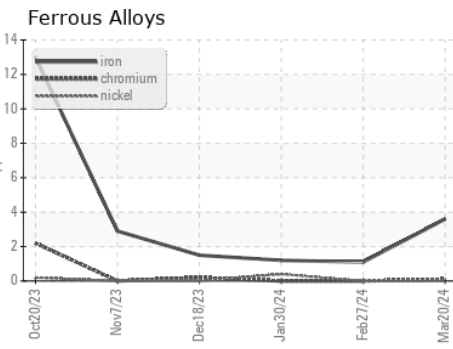
# OIL ANALYSIS REPORT



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	11.7	11.8

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0101902 **Received** : 21 Mar 2024  
**Lab Number** : 06125481 **Tested** : 22 Mar 2024  
**Unique Number** : 10939632 **Diagnosed** : 22 Mar 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 894 - Ada Hauling**  
 1904 North Broadway, Suite D  
 Ada, OK  
 US 74820  
 Contact: Johnny Spurlock  
 jspurlock@gflenv.com  
 T: (405)664-4476  
 F:

Certificate L2367  
 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)