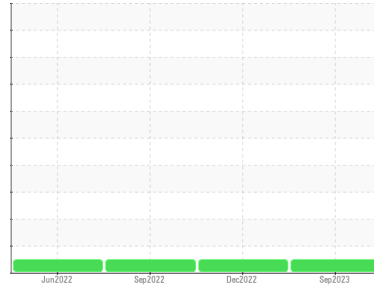




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**929053**

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>GFL0027547</b>	GFL0063303	GFL0056997	
Sample Date	Client Info	<b>19 Sep 2023</b>	02 Dec 2022	15 Sep 2022	
Machine Age	hrs	Client Info	<b>9391</b>	8693	8211
Oil Age	hrs	Client Info	<b>600</b>	600	600
Oil Changed	Client Info	<b>Not Chngd</b>	Changed	Changed	
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
Glycol	WC Method	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >110	<b>27</b>	17	26
Chromium	ppm ASTM D5185m >4	<b>2</b>	<1	<1
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>	4	4
Lead	ppm ASTM D5185m >45	<b>0</b>	0	0
Copper	ppm ASTM D5185m >85	<b>&lt;1</b>	<1	2
Tin	ppm ASTM D5185m >4	<b>0</b>	0	0
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>0</b>	4	4
Barium	ppm ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 60	<b>55</b>	59	59
Manganese	ppm ASTM D5185m 0	<b>0</b>	<1	<1
Magnesium	ppm ASTM D5185m 1010	<b>944</b>	921	887
Calcium	ppm ASTM D5185m 1070	<b>1062</b>	1075	1084
Phosphorus	ppm ASTM D5185m 1150	<b>986</b>	1004	962
Zinc	ppm ASTM D5185m 1270	<b>1252</b>	1222	1158
Sulfur	ppm ASTM D5185m 2060	<b>3583</b>	3545	3207

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >30	<b>14</b>	6	5
Sodium	ppm ASTM D5185m	<b>7</b>	2	2
Potassium	ppm ASTM D5185m >20	<b>5</b>	1	3

## INFRA-RED

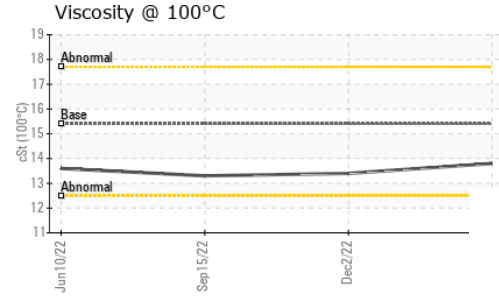
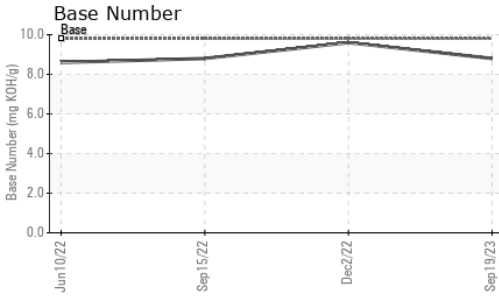
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.3</b>	0.5	1
Nitration	Abs/cm *ASTM D7624 >20	<b>7.2</b>	7.2	7.6
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>19.1</b>	20.5	24.1

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>15.1</b>	14.9	15.3
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>8.8</b>	9.6	8.8



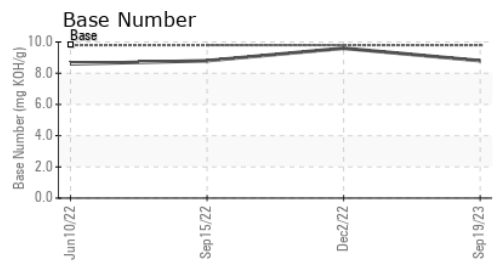
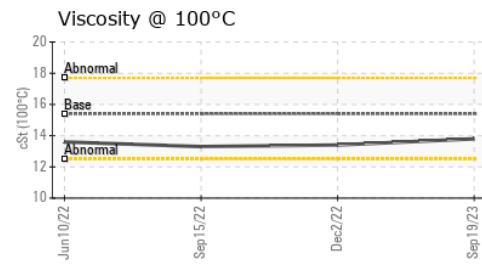
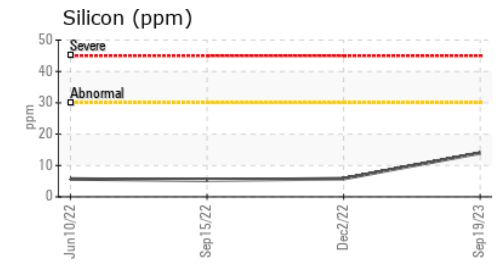
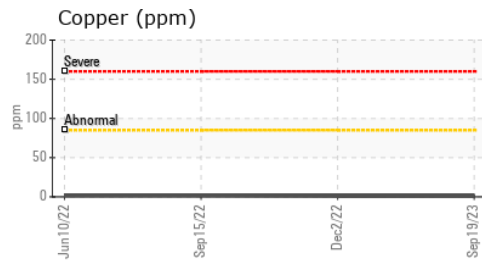
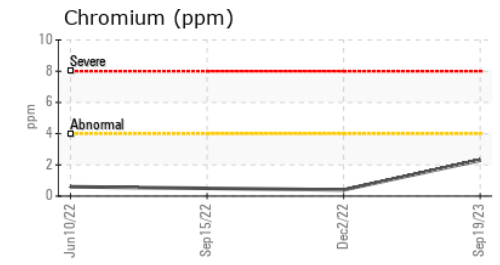
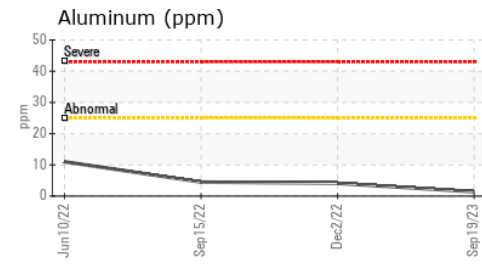
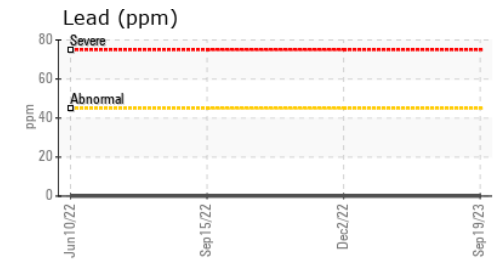
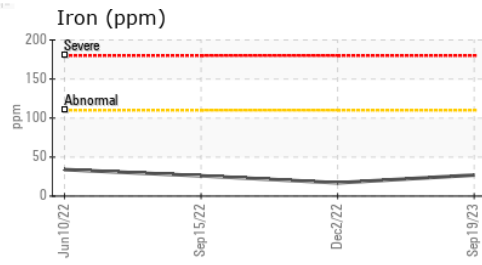
# OIL ANALYSIS REPORT



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>13.8</b>	13.4	13.3

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0027547 **Received** : 22 Sep 2023  
**Lab Number** : 05958360 **Diagnosed** : 22 Sep 2023  
**Unique Number** : 10659573 **Diagnostician** : Wes Davis  
**Test Package** : MOB1+

**GFL Environmental - 465 - Pontiac**  
 888 Baldwin  
 Pontiac, MI  
 US 48340  
 Contact: Ricky Matthews  
 rickymathews@gflenv.com  
 T: (586)825-9514  
 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)