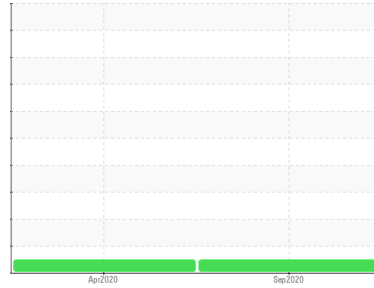




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**926017-9022**

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>GFL0010475</b>	GFL0005269	---
Sample Date	Client Info	<b>09 Sep 2020</b>	28 Apr 2020	---
Machine Age	hrs Client Info	<b>256801</b>	80112	---
Oil Age	hrs Client Info	<b>0</b>	0	---
Oil Changed	Client Info	<b>Changed</b>	Changed	---
Sample Status		<b>NORMAL</b>	NORMAL	---

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<b>&lt;1.0</b>	<1.0	---
Glycol	WC Method	<b>NEG</b>	NEG	---

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >110	<b>17</b>	24	---
Chromium	ppm ASTM D5185m >4	<b>1</b>	1	---
Nickel	ppm ASTM D5185m >2	<b>&lt;1</b>	0	---
Titanium	ppm ASTM D5185m	<b>14</b>	80	---
Silver	ppm ASTM D5185m >2	<b>0</b>	0	---
Aluminum	ppm ASTM D5185m >25	<b>4</b>	3	---
Lead	ppm ASTM D5185m >45	<b>3</b>	10	---
Copper	ppm ASTM D5185m >85	<b>2</b>	2	---
Tin	ppm ASTM D5185m >4	<b>0</b>	<1	---
Antimony	ppm ASTM D5185m	<b>0</b>	0	---
Vanadium	ppm ASTM D5185m	<b>0</b>	0	---
Cadmium	ppm ASTM D5185m	<b>0</b>	0	---

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	<b>10</b>	34	---
Barium	ppm ASTM D5185m	<b>0</b>	0	---
Molybdenum	ppm ASTM D5185m	<b>49</b>	7	---
Manganese	ppm ASTM D5185m	<b>&lt;1</b>	<1	---
Magnesium	ppm ASTM D5185m	<b>968</b>	476	---
Calcium	ppm ASTM D5185m	<b>1294</b>	1728	---
Phosphorus	ppm ASTM D5185m	<b>982</b>	953	---
Zinc	ppm ASTM D5185m	<b>1233</b>	1076	---
Sulfur	ppm ASTM D5185m	<b>2519</b>	3843	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >30	<b>7</b>	10	---
Sodium	ppm ASTM D5185m	<b>7</b>	7	---
Potassium	ppm ASTM D5185m >20	<b>12</b>	5	---

## INFRA-RED

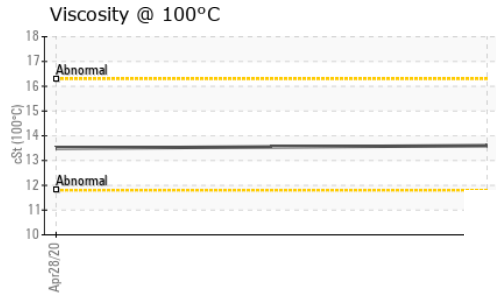
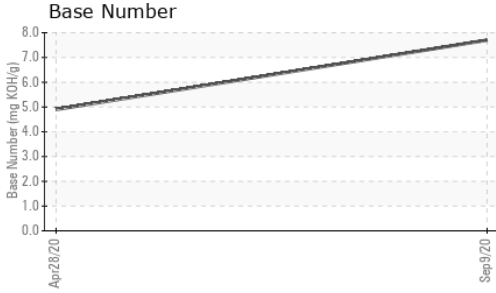
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.5</b>	0.3	---
Nitration	Abs/cm *ASTM D7624 >20	<b>10</b>	11	---
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>22.5</b>	23.2	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>17.9</b>	18.7	---
Base Number (BN)	mg KOH/g ASTM D2896	<b>7.7</b>	4.9	---



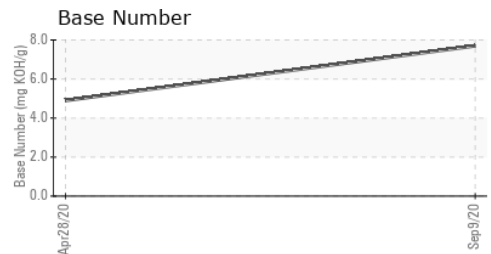
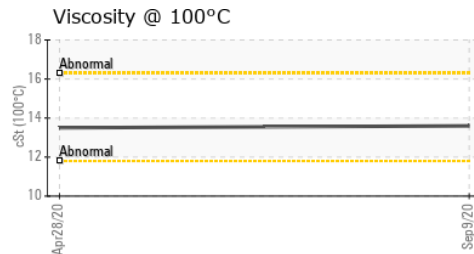
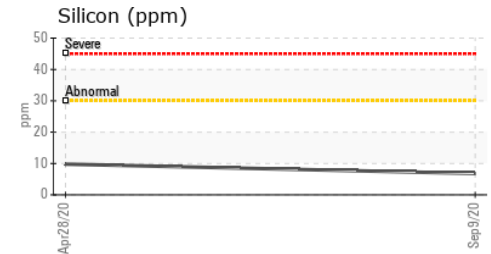
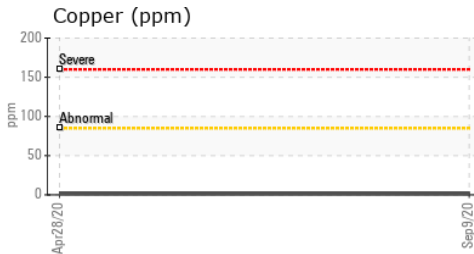
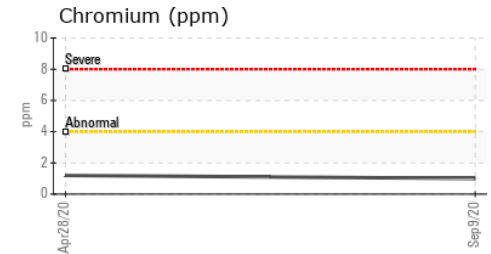
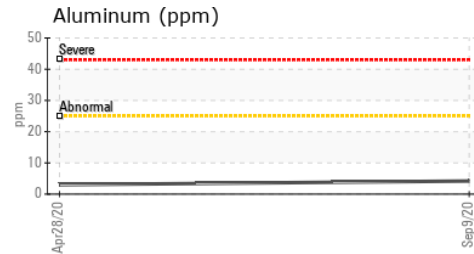
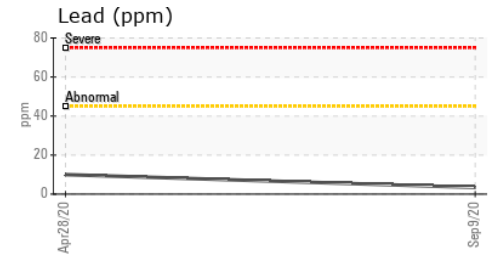
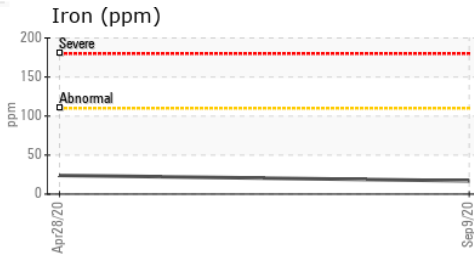
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	<b>13.6</b>	13.5	---

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0010475 **Received** : 16 Sep 2020  
**Lab Number** : **05067627** **Diagnosed** : 17 Sep 2020  
**Unique Number** : 9177817 **Diagnostician** : Don Baldrige  
**Test Package** : MOB 2

**GFL Environmental - 663 - Lake Ariel (Scranton Hauling)**  
 17 Industrial Park Rd  
 Lake Ariel, PA  
 US 18436  
 Contact: Eric Merone  
 emerone@countyclecycling.net

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: