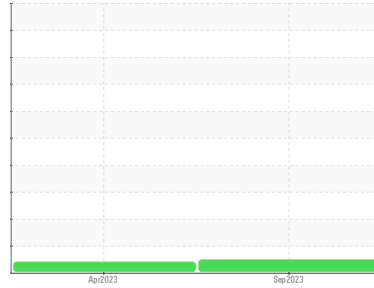


# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Area  
**G.LOPES CONSTRUCTION INC./ON-ROAD**  
 Machine Id  
**361**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

#### Wear

All component wear rates are normal.

#### Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. 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>PCA0104763</b>	PCA0090772	---
Sample Date	Client Info		<b>27 Sep 2023</b>	19 Apr 2023	---
Machine Age	hrs	Client Info	<b>52000</b>	32000	---
Oil Age	hrs	Client Info	<b>52000</b>	32000	---
Oil Changed	Client Info		<b>N/A</b>	N/A	---
Sample Status			<b>NORMAL</b>	ABNORMAL	---

### CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	0.3	---
Glycol	WC Method		<b>NEG</b>	NEG	---

### WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>44</b>	44	---
Chromium	ppm	ASTM D5185m >20	<b>3</b>	3	---
Nickel	ppm	ASTM D5185m >4	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m >20	<b>31</b>	28	---
Lead	ppm	ASTM D5185m >40	<b>0</b>	0	---
Copper	ppm	ASTM D5185m >330	<b>40</b>	189	---
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	2	---
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 0	<b>1</b>	6	---
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m 60	<b>64</b>	59	---
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	2	---
Magnesium	ppm	ASTM D5185m 1010	<b>1015</b>	907	---
Calcium	ppm	ASTM D5185m 1070	<b>1164</b>	1193	---
Phosphorus	ppm	ASTM D5185m 1150	<b>960</b>	866	---
Zinc	ppm	ASTM D5185m 1270	<b>1280</b>	1170	---
Sulfur	ppm	ASTM D5185m 2060	<b>2270</b>	2309	---

### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>6</b>	5	---
Sodium	ppm	ASTM D5185m	<b>2</b>	1	---
Potassium	ppm	ASTM D5185m >20	<b>58</b>	63	---

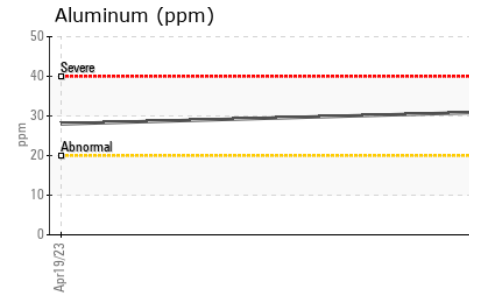
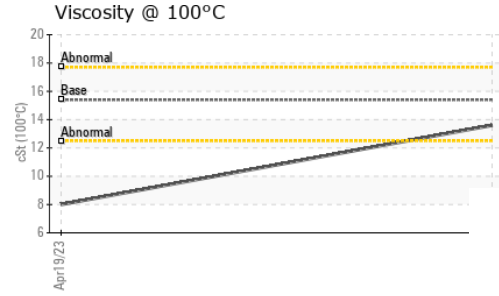
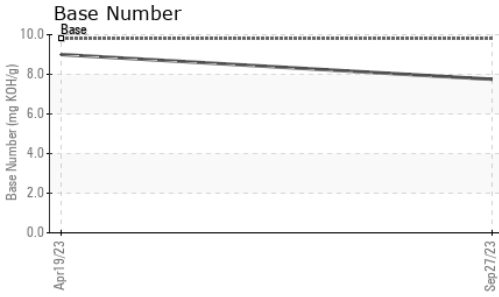
### INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.6</b>	0.5	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>8.9</b>	8.7	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>20.4</b>	19.1	---

### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>17.3</b>	17.1	---
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>7.75</b>	9.00	---

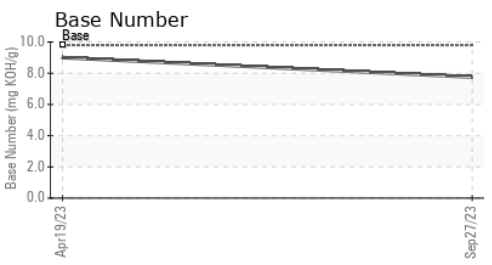
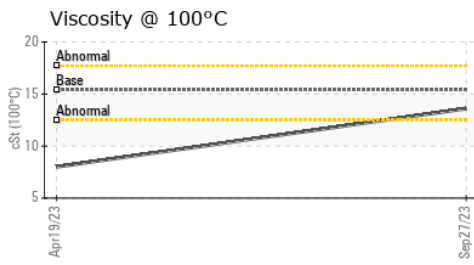
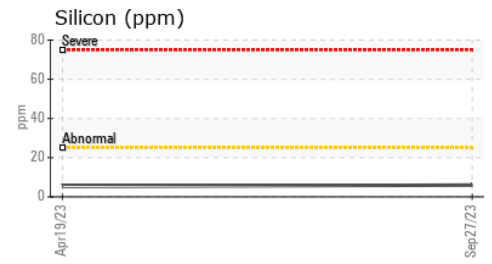
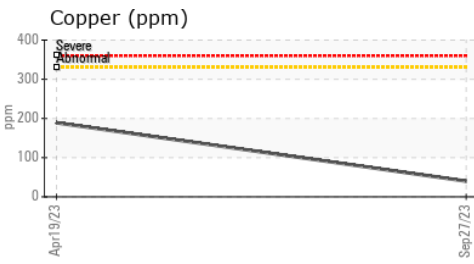
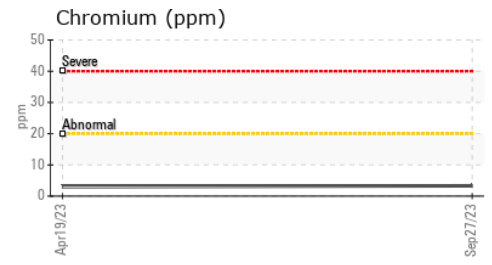
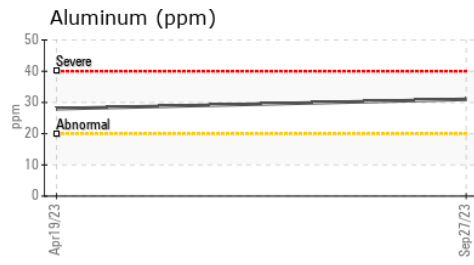
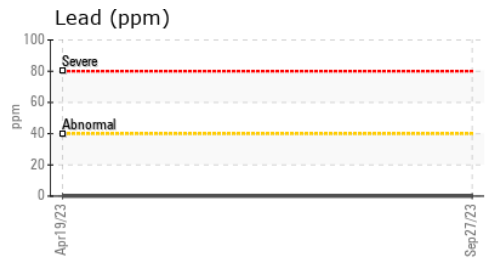
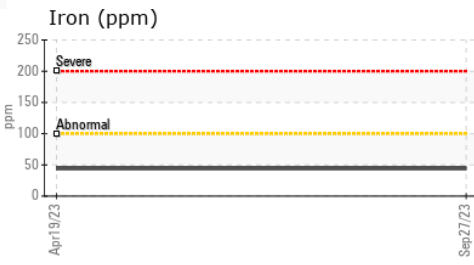
# OIL ANALYSIS REPORT



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	15.4	13.6	▲ 8

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0104763 **Received** : 29 Sep 2023  
**Lab Number** : 05965553 **Diagnosed** : 03 Oct 2023  
**Unique Number** : 10672104 **Diagnostician** : Wes Davis  
**Test Package** : MOB 2

**G LOPES CONSTRUCTION**  
 565 WINTHROP ST  
 TAUNTON, MA  
 US 02780  
 Contact: BUTCH MCGRATH  
 bmcgrath@glopes.com  
 T:  
 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)