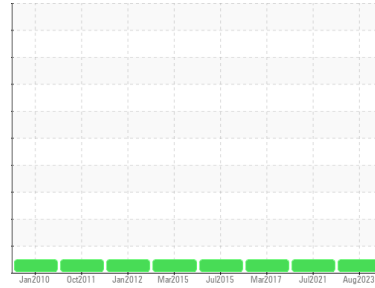


Area  
**G.LOPES CONSTRUCTION INC./Off-Road**  
 Machine Id  
**R11**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**



## 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>PCA0098485</b>	WC0594299	PCA76253029
Sample Date	Client Info		<b>15 Aug 2023</b>	27 Jul 2021	06 Mar 2017
Machine Age	hrs	Client Info	<b>6188</b>	5884	4916
Oil Age	hrs	Client Info	<b>304</b>	0	---
Oil Changed	Client Info		<b>N/A</b>	Changed	N/A
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	0.0

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>15</b>	15	15
Chromium	ppm	ASTM D5185m >20	<b>2</b>	4	2
Nickel	ppm	ASTM D5185m >4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>4</b>	2	2
Lead	ppm	ASTM D5185m >40	<b>1</b>	2	2
Copper	ppm	ASTM D5185m >330	<b>&lt;1</b>	2	2
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	0
Antimony	ppm	ASTM D5185m	<b>---</b>	0	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>14</b>	65	39
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>61</b>	38	50
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m 1010	<b>973</b>	566	825
Calcium	ppm	ASTM D5185m 1070	<b>1179</b>	1838	1514
Phosphorus	ppm	ASTM D5185m 1150	<b>1033</b>	800	995
Zinc	ppm	ASTM D5185m 1270	<b>1285</b>	955	1151
Sulfur	ppm	ASTM D5185m 2060	<b>3689</b>	2468	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>9</b>	6	7
Sodium	ppm	ASTM D5185m	<b>0</b>	3	5
Potassium	ppm	ASTM D5185m >20	<b>0</b>	2	0

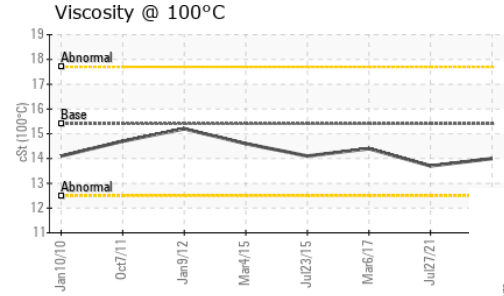
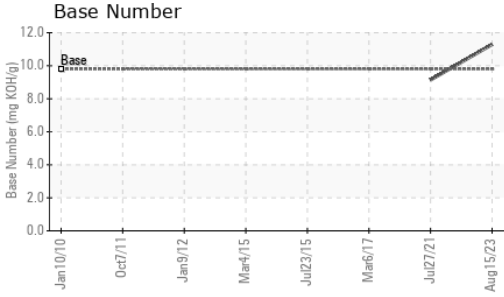
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.1</b>	0.3	0.24
Nitration	Abs/cm	*ASTM D7624 >20	<b>7.1</b>	9.7	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>18.1</b>	23.6	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>14.5</b>	22.2	2
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>11.29</b>	9.14	---

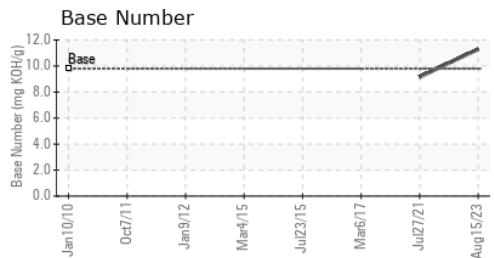
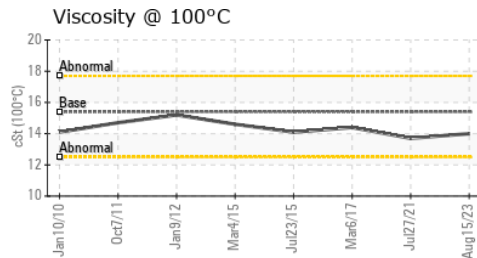
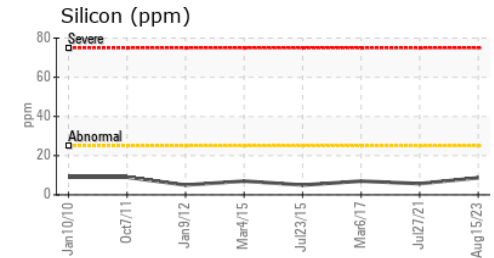
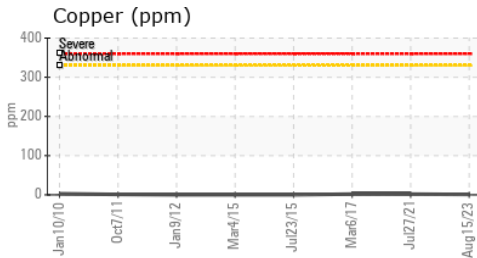
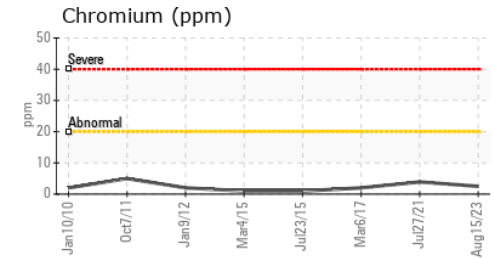
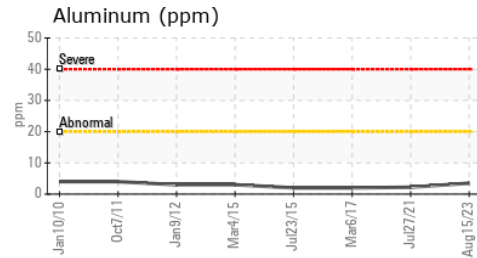
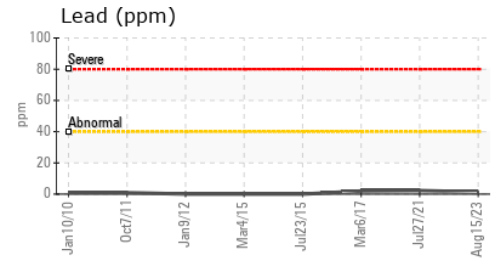
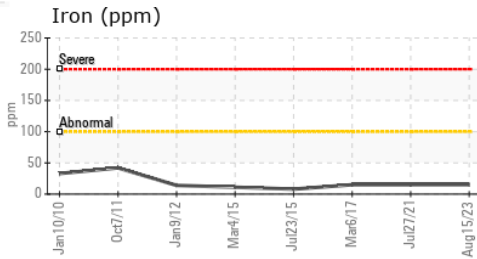
# OIL ANALYSIS REPORT



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	<b>14.0</b>	13.7	14.4

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0098485 **Received** : 17 Aug 2023  
**Lab Number** : **05927430** **Diagnosed** : 18 Aug 2023  
**Unique Number** : 10607377 **Diagnostician** : Angela Borella  
**Test Package** : MOB 2

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

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: