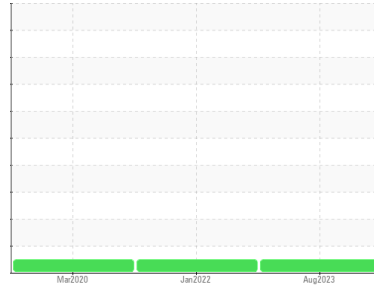


# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**G.LOPES CONSTRUCTION INC./On-Road**  
 Machine Id  
**197**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

Fuel content negligible. 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>PCA0098482</b>	PCA0059522	PCA80429003
Sample Date	Client Info		<b>15 Aug 2023</b>	04 Jan 2022	03 Mar 2020
Machine Age	mls	Client Info	<b>87500</b>	83000	79000
Oil Age	mls	Client Info	<b>87500</b>	83000	---
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Glycol	WC Method		<b>NEG</b>	NEG	0.0

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>10</b>	13	16
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m >4	<b>0</b>	0	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>3</b>	<1	3
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	<1	1
Copper	ppm	ASTM D5185m >330	<b>0</b>	<1	1
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>15</b>	54	52
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>59</b>	45	42
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m 1010	<b>943</b>	612	469
Calcium	ppm	ASTM D5185m 1070	<b>1172</b>	1564	1577
Phosphorus	ppm	ASTM D5185m 1150	<b>1053</b>	850	763
Zinc	ppm	ASTM D5185m 1270	<b>1250</b>	959	768
Sulfur	ppm	ASTM D5185m 2060	<b>3787</b>	2536	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>3</b>	5	4
Sodium	ppm	ASTM D5185m	<b>0</b>	2	4
Potassium	ppm	ASTM D5185m >20	<b>0</b>	<1	2
Fuel	%	ASTM D3524 >5	<b>0.4</b>	<1.0	<1.0

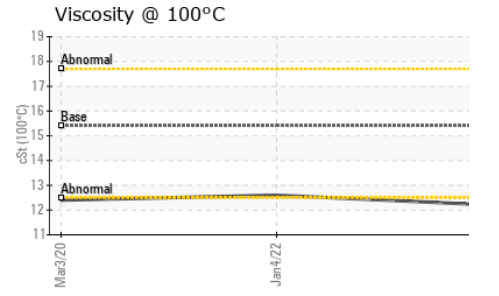
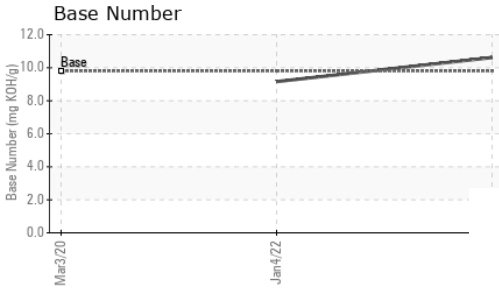
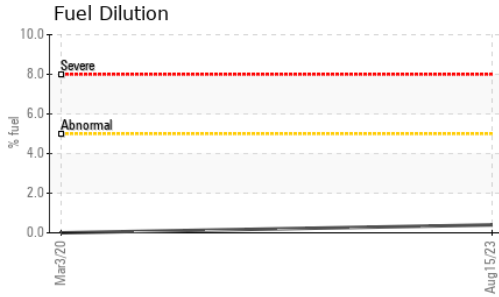
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.3</b>	0.3	0.65
Nitration	Abs/cm	*ASTM D7624 >20	<b>6.1</b>	7.2	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>17.3</b>	21	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>13.3</b>	18.5	6
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>10.62</b>	9.16	---

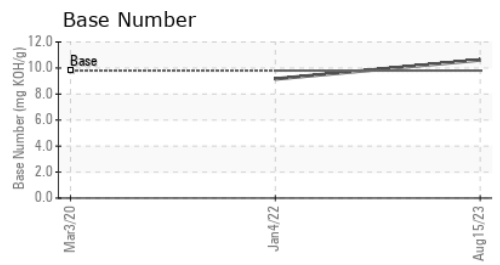
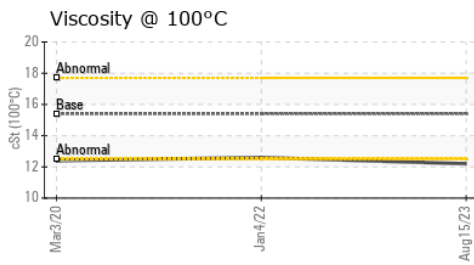
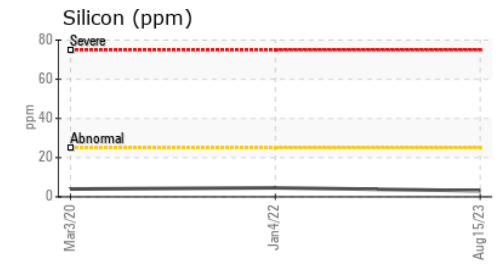
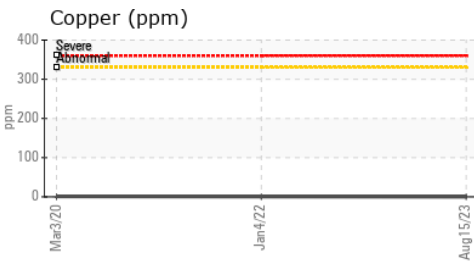
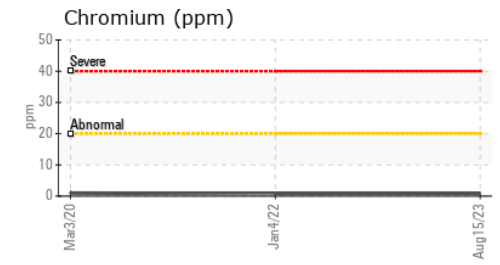
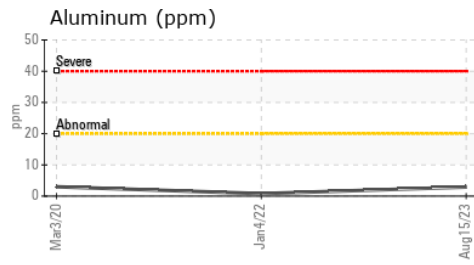
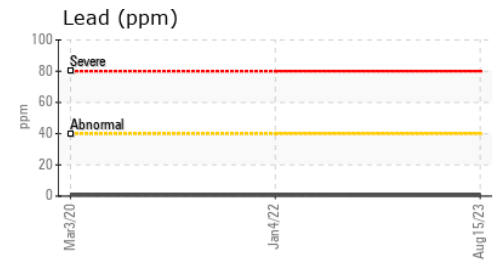
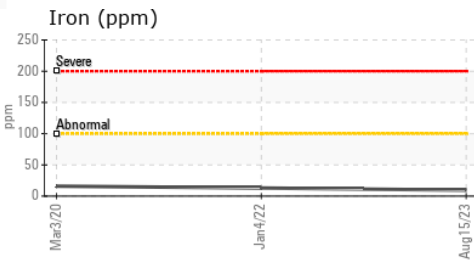
# OIL ANALYSIS REPORT



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>12.2</b>	12.6	12.4

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0098482 **Received** : 17 Aug 2023  
**Lab Number** : **05927431** **Diagnosed** : 21 Aug 2023  
**Unique Number** : 10607378 **Diagnostician** : Wes Davis  
**Test Package** : MOB 2 ( Additional Tests: FuelDilution, PercentFuel )

**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)