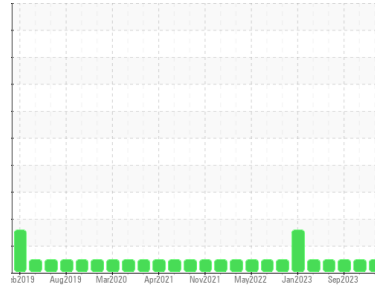


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**G.LOPES CONSTRUCTION INC./Off-Road**  
 Machine Id  
**L33**  
 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>PCA0018796</b>	PCA0078194	PCA0104753
Sample Date	Client Info		<b>07 Feb 2024</b>	15 Nov 2023	20 Sep 2023
Machine Age	hrs	Client Info	<b>11001</b>	10557	10220
Oil Age	hrs	Client Info	<b>6908</b>	6801	6724
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
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>5</b>	20	13
Chromium	ppm	ASTM D5185m >20	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185m >2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m >2	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>&lt;1</b>	1	1
Lead	ppm	ASTM D5185m >40	<b>5</b>	12	<1
Copper	ppm	ASTM D5185m >330	<b>3</b>	5	4
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	<1	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>8</b>	9	5
Barium	ppm	ASTM D5185m 0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m 60	<b>61</b>	69	63
Manganese	ppm	ASTM D5185m 0	<b>1</b>	0	0
Magnesium	ppm	ASTM D5185m 1010	<b>946</b>	1044	1074
Calcium	ppm	ASTM D5185m 1070	<b>1068</b>	1183	1236
Phosphorus	ppm	ASTM D5185m 1150	<b>1052</b>	1076	1110
Zinc	ppm	ASTM D5185m 1270	<b>1270</b>	1329	1400
Sulfur	ppm	ASTM D5185m 2060	<b>2977</b>	3323	3921

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>0</b>	4	4
Sodium	ppm	ASTM D5185m	<b>1</b>	2	3
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	3	3

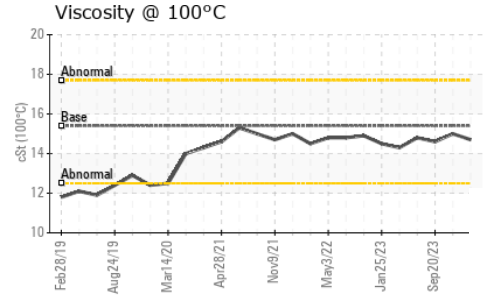
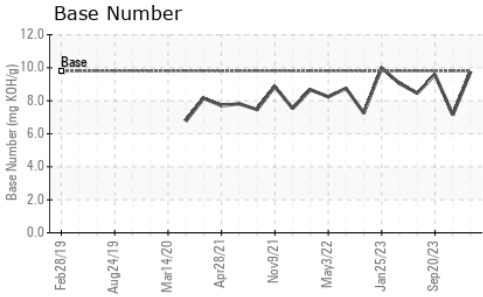
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.2</b>	0.3	0.4
Nitration	Abs/cm	*ASTM D7624 >20	<b>10.0</b>	12.7	10.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>23.5</b>	27.8	23.3

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>22.0</b>	29.8	21.9
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>9.76</b>	7.14	9.58

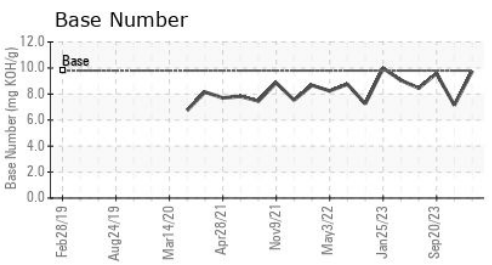
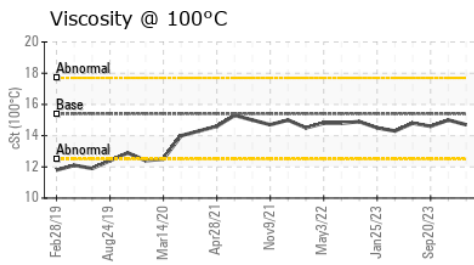
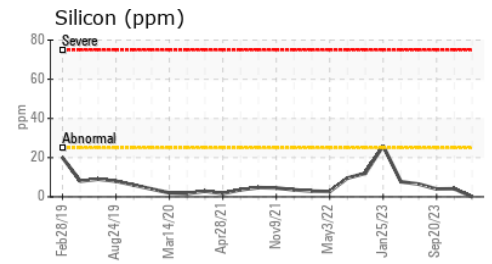
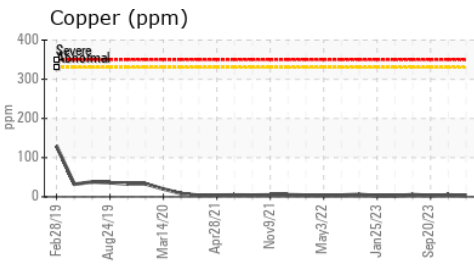
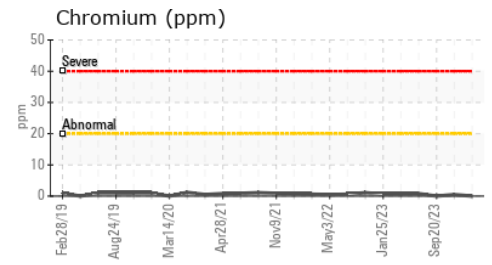
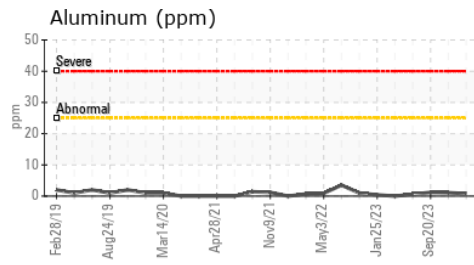
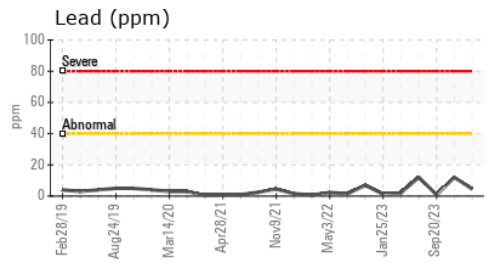
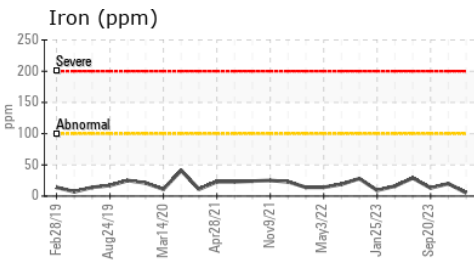
# OIL ANALYSIS REPORT



PARAMETER	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>14.7</b>	15.0	14.6

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0018796 **Received** : 09 Feb 2024  
**Lab Number** : **06085004** **Tested** : 12 Feb 2024  
**Unique Number** : 10872449 **Diagnosed** : 12 Feb 2024 - Wes Davis  
**Test Package** : MOB 2

**G LOPES CONSTRUCTION**  
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 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)