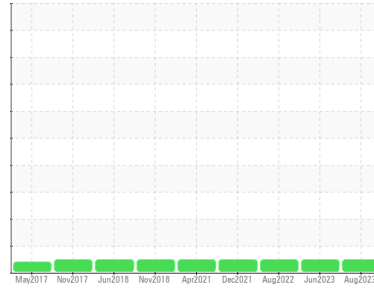


# OIL ANALYSIS REPORT

## Sample Rating Trend

**NORMAL**



Area  
**G.LOPES CONSTRUCTION INC./Off-Road**  
Machine Id  
**WE64**  
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>PCA0098396</b>	PCA0098533	PCA0078308
Sample Date	Client Info	<b>23 Aug 2023</b>	07 Jun 2023	31 Aug 2022
Machine Age	hrs Client Info	<b>5309</b>	4940	4940
Oil Age	hrs Client Info	<b>4598</b>	4229	4580
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
Glycol	WC Method	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	<b>10</b>	17	27
Chromium	ppm ASTM D5185m >20	<b>&lt;1</b>	0	<1
Nickel	ppm ASTM D5185m >2	<b>&lt;1</b>	0	0
Titanium	ppm ASTM D5185m >2	<b>1</b>	<1	<1
Silver	ppm ASTM D5185m >2	<b>&lt;1</b>	0	<1
Aluminum	ppm ASTM D5185m >25	<b>2</b>	<1	2
Lead	ppm ASTM D5185m >40	<b>&lt;1</b>	0	<1
Copper	ppm ASTM D5185m >330	<b>5</b>	3	5
Tin	ppm ASTM D5185m >15	<b>&lt;1</b>	0	<1
Antimony	ppm ASTM D5185m	<b>---</b>	---	---
Vanadium	ppm ASTM D5185m	<b>0</b>	0	<1
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	<b>12</b>	3	9
Barium	ppm ASTM D5185m 0	<b>1</b>	0	<1
Molybdenum	ppm ASTM D5185m 60	<b>61</b>	62	59
Manganese	ppm ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185m 1010	<b>877</b>	1029	912
Calcium	ppm ASTM D5185m 1070	<b>1225</b>	1177	1036
Phosphorus	ppm ASTM D5185m 1150	<b>1072</b>	1092	975
Zinc	ppm ASTM D5185m 1270	<b>1268</b>	1304	1236
Sulfur	ppm ASTM D5185m 2060	<b>3433</b>	3865	2910

## CONTAMINANTS

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

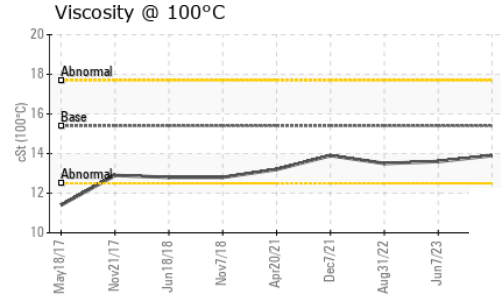
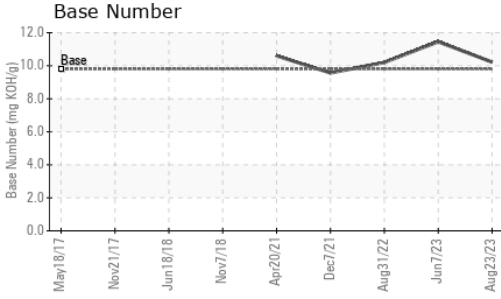
## INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.3</b>	0.6	0.9
Nitration	Abs/cm *ASTM D7624 >20	<b>5.4</b>	6.7	8.0
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>17.9</b>	18.2	20.1

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>13.6</b>	13.3	15.0
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>10.22</b>	11.45	10.2

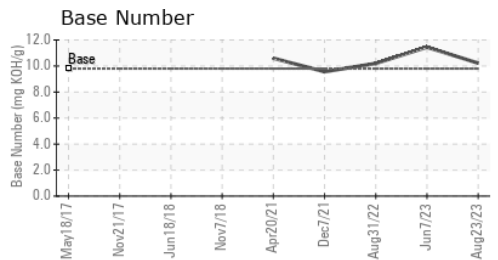
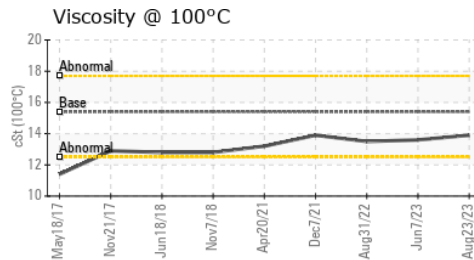
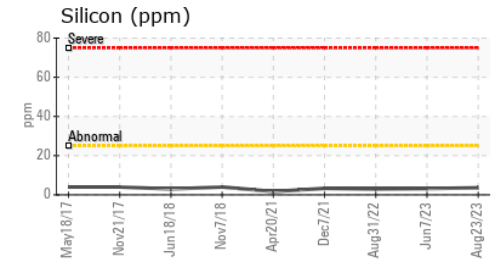
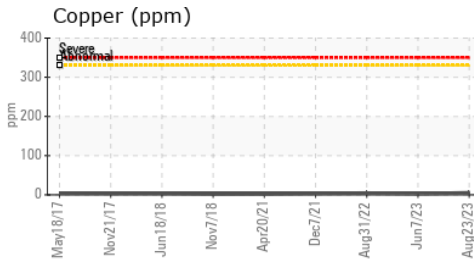
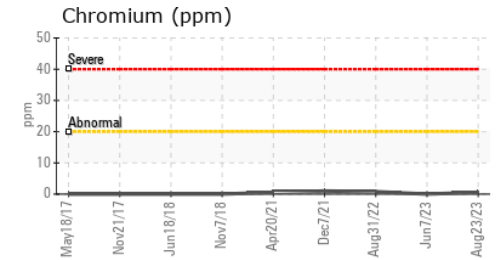
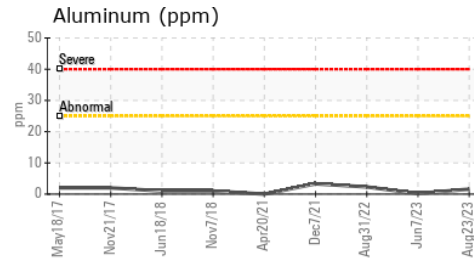
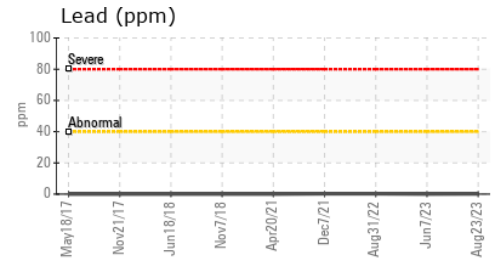
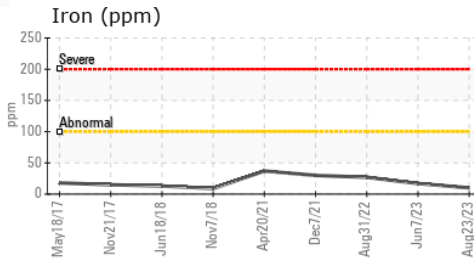
# OIL ANALYSIS REPORT



VISUAL	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>13.9</b>	13.6	13.5

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0098396 **Received** : 25 Aug 2023  
**Lab Number** : 05935642 **Diagnosed** : 28 Aug 2023  
**Unique Number** : 10620913 **Diagnostician** : Wes Davis  
**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: