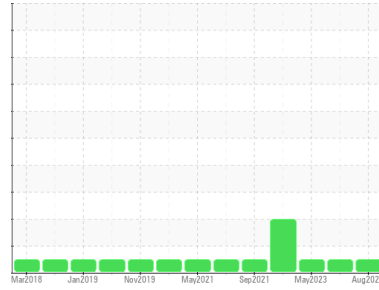


# OIL ANALYSIS REPORT



Area  
**G.LOPES CONSTRUCTION INC./Off-Road**  
 Machine Id  
**L43**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

Sample Rating Trend



**NORMAL**



## 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>PCA0098400</b>	PCA0098314	PCA0098559
Sample Date	Client Info		<b>23 Aug 2023</b>	28 Jun 2023	17 May 2023
Machine Age	hrs	Client Info	<b>24210</b>	24210	24210
Oil Age	hrs	Client Info	<b>18062</b>	18062	18062
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>63</b>	43	49
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m >2	<b>&lt;1</b>	1	<1
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >25	<b>1</b>	0	1
Lead	ppm	ASTM D5185m >40	<b>1</b>	<1	2
Copper	ppm	ASTM D5185m >330	<b>8</b>	6	10
Tin	ppm	ASTM D5185m >15	<b>1</b>	<1	2
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>28</b>	41	52
Barium	ppm	ASTM D5185m 0	<b>1</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>64</b>	64	63
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m 1010	<b>887</b>	971	895
Calcium	ppm	ASTM D5185m 1070	<b>1201</b>	1208	1169
Phosphorus	ppm	ASTM D5185m 1150	<b>1076</b>	1135	1019
Zinc	ppm	ASTM D5185m 1270	<b>1292</b>	1382	1230
Sulfur	ppm	ASTM D5185m 2060	<b>3479</b>	4107	3363

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>7</b>	7	10
Sodium	ppm	ASTM D5185m	<b>0</b>	<1	2
Potassium	ppm	ASTM D5185m >20	<b>1</b>	0	0

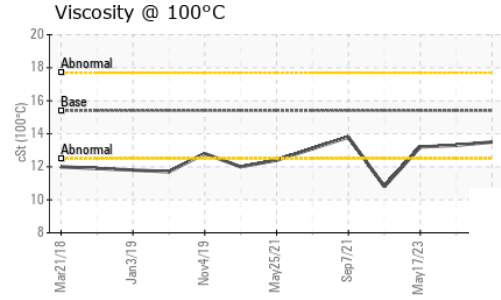
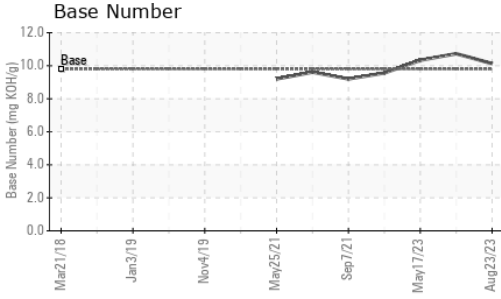
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.8</b>	0.5	0.5
Nitration	Abs/cm	*ASTM D7624 >20	<b>7.3</b>	7.3	7.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>20.5</b>	20.5	20.6

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>15.8</b>	16.1	16.2
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>10.13</b>	10.73	10.33

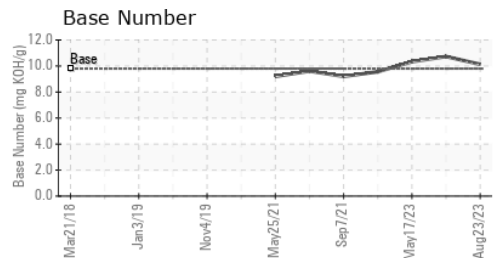
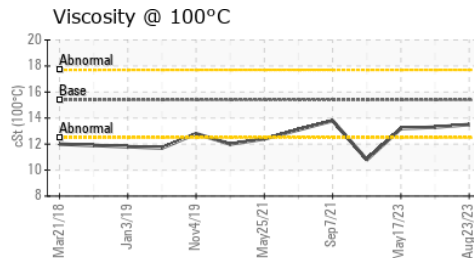
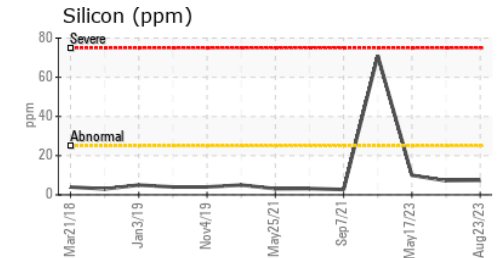
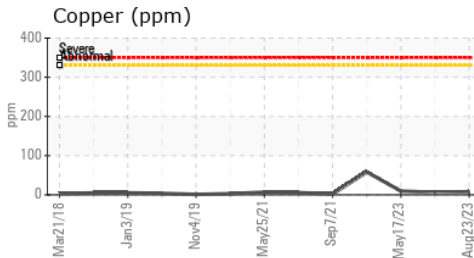
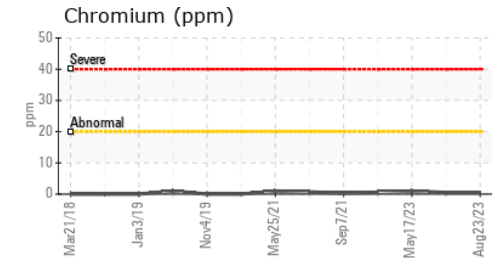
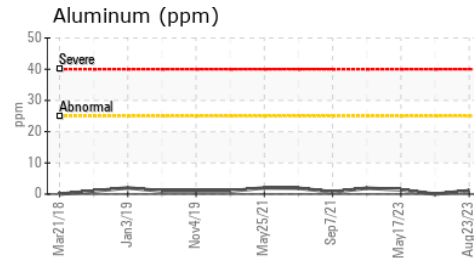
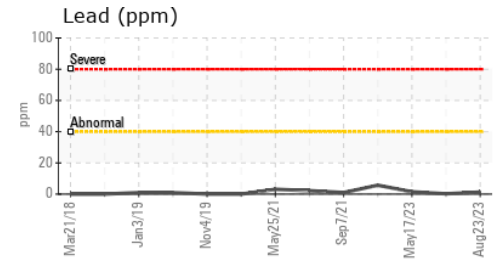
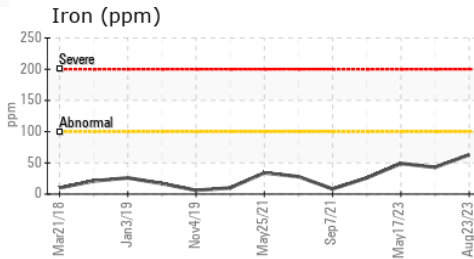
# OIL ANALYSIS REPORT



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	13.5	13.3

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0098400 **Received** : 25 Aug 2023  
**Lab Number** : 05935641 **Diagnosed** : 28 Aug 2023  
**Unique Number** : 10620912 **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: