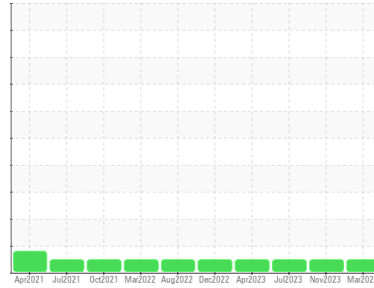


# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**G.LOPES CONSTRUCTION INC./On-Road**  
 Machine Id  
**344**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (10 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>PCA0110059</b>	PCA0109779	PCA0090746
Sample Date	Client Info			<b>06 Mar 2024</b>	07 Nov 2023	03 Jul 2023
Machine Age	mls Client Info			<b>212000</b>	192000	172000
Oil Age	mls Client Info			<b>72000</b>	72000	72000
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	>3.0		<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	>200		<b>18</b>	15	15
Chromium	ppm ASTM D5185m	>6		<b>&lt;1</b>	1	1
Nickel	ppm ASTM D5185m	>3		<b>0</b>	<1	0
Titanium	ppm ASTM D5185m	>2		<b>0</b>	<1	<1
Silver	ppm ASTM D5185m	>2		<b>0</b>	0	0
Aluminum	ppm ASTM D5185m	>50		<b>8</b>	6	4
Lead	ppm ASTM D5185m	>10		<b>0</b>	0	<1
Copper	ppm ASTM D5185m	>50		<b>6</b>	6	8
Tin	ppm ASTM D5185m	>6		<b>&lt;1</b>	<1	<1
Vanadium	ppm ASTM D5185m			<b>0</b>	0	0
Cadmium	ppm ASTM D5185m			<b>0</b>	0	0

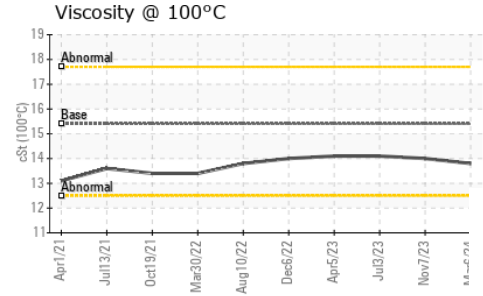
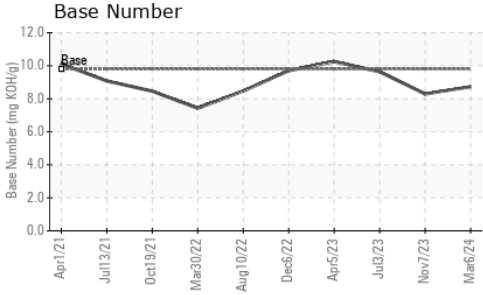
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	0		<b>2</b>	2	2
Barium	ppm ASTM D5185m	0		<b>0</b>	2	2
Molybdenum	ppm ASTM D5185m	60		<b>59</b>	58	64
Manganese	ppm ASTM D5185m	0		<b>0</b>	<1	<1
Magnesium	ppm ASTM D5185m	1010		<b>889</b>	883	948
Calcium	ppm ASTM D5185m	1070		<b>1030</b>	963	1137
Phosphorus	ppm ASTM D5185m	1150		<b>939</b>	988	1025
Zinc	ppm ASTM D5185m	1270		<b>1092</b>	1221	1256
Sulfur	ppm ASTM D5185m	2060		<b>2890</b>	2522	3045

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m	>50		<b>5</b>	6	5
Sodium	ppm ASTM D5185m			<b>4</b>	1	0
Potassium	ppm ASTM D5185m	>20		<b>9</b>	9	6

INFRA-RED		method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	>3		<b>0.5</b>	0.6	0.5
Nitration	Abs/cm *ASTM D7624	>20		<b>9.4</b>	9.0	8.6
Sulfation	Abs/.1mm *ASTM D7415	>30		<b>20.2</b>	21.0	20.9

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414	>25		<b>16.6</b>	17.1	17.6
Base Number (BN)	mg KOH/g ASTM D2896	9.8		<b>8.73</b>	8.29	9.63

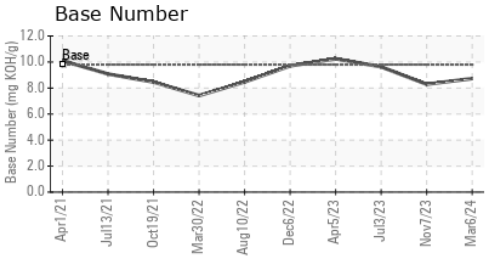
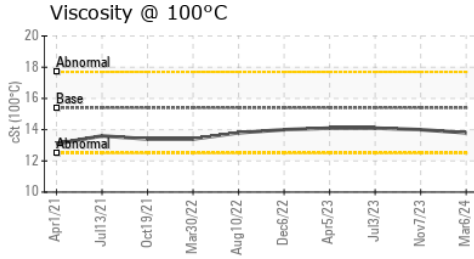
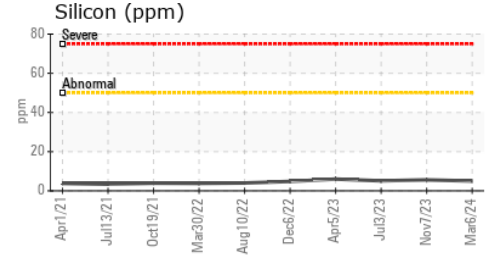
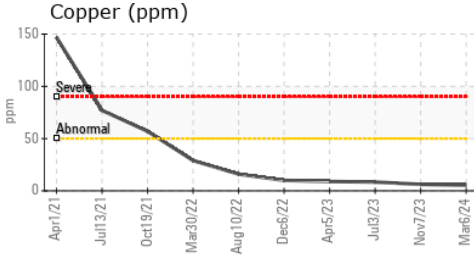
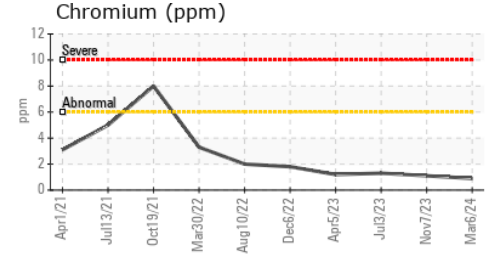
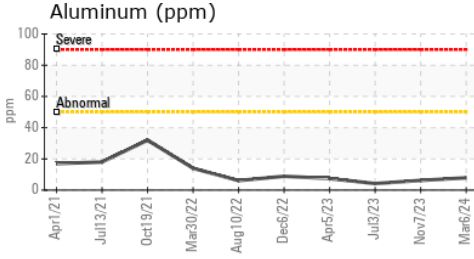
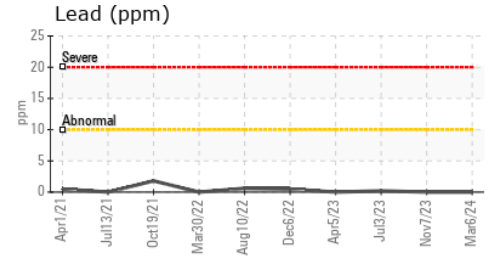
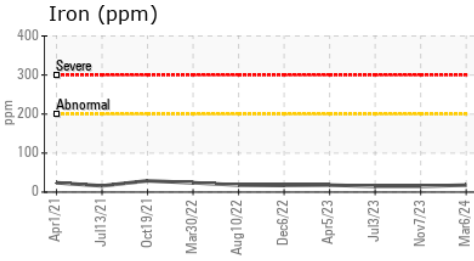
# OIL ANALYSIS REPORT



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>13.8</b>	14.0	14.1

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0110059      **Received** : 11 Mar 2024  
**Lab Number** : **06115452**      **Tested** : 13 Mar 2024  
**Unique Number** : 10924285      **Diagnosed** : 13 Mar 2024 - 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)

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F: