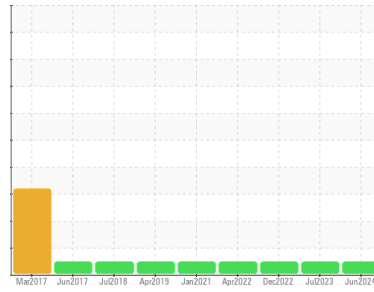


# OIL ANALYSIS REPORT



Area  
**G.LOPES CONSTRUCTION INC./Off-Road**  
Machine Id  
**SL69**  
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>PCA0122913</b>	PCA0098318	PCA0083335
Sample Date	Client Info			<b>24 Jun 2024</b>	12 Jul 2023	12 Dec 2022
Machine Age	hrs	Client Info		<b>2720</b>	2720	2521
Oil Age	hrs	Client Info		<b>2046</b>	2245	2153
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>6</b>	12	16
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	3	3
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>330	<b>2</b>	2	<1
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>5</b>	4	6
Barium	ppm	ASTM D5185m	0	<b>0</b>	2	0
Molybdenum	ppm	ASTM D5185m	60	<b>58</b>	60	58
Manganese	ppm	ASTM D5185m	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>909</b>	906	931
Calcium	ppm	ASTM D5185m	1070	<b>1056</b>	1072	1050
Phosphorus	ppm	ASTM D5185m	1150	<b>896</b>	969	995
Zinc	ppm	ASTM D5185m	1270	<b>1248</b>	1225	1231
Sulfur	ppm	ASTM D5185m	2060	<b>2819</b>	3310	3372

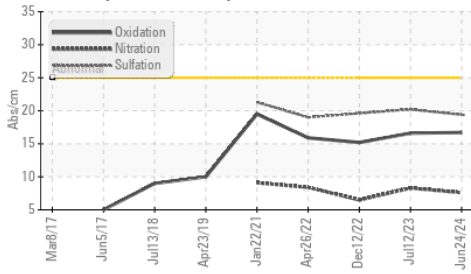
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>3</b>	5	8
Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	2	2
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	1	0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.6</b>	8.3	6.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.4</b>	20.2	19.6

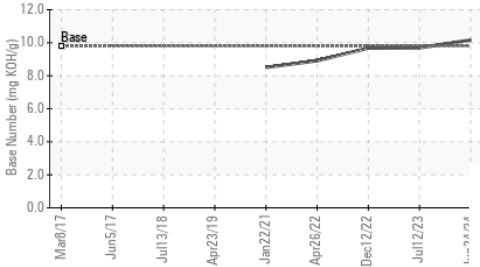
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.7</b>	16.6	15.2
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>10.16</b>	9.69	9.67

# OIL ANALYSIS REPORT

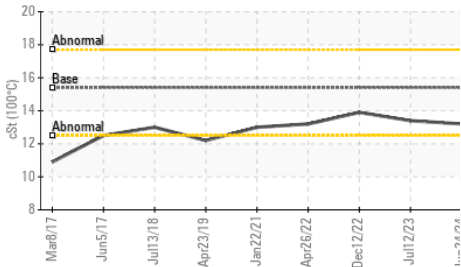
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

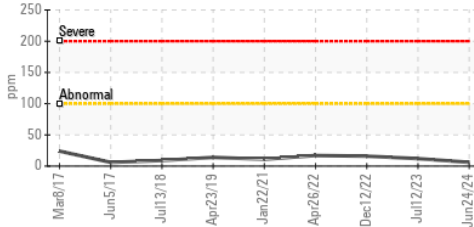


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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

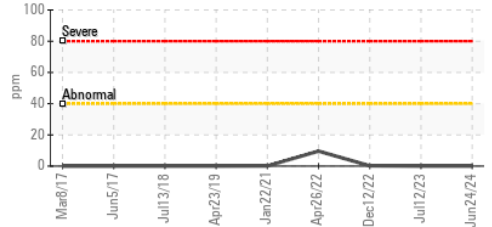
FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.4	13.2	13.4	13.9

## GRAPHS

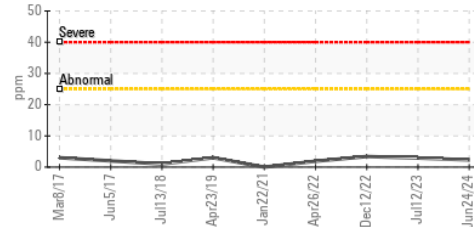
Iron (ppm)



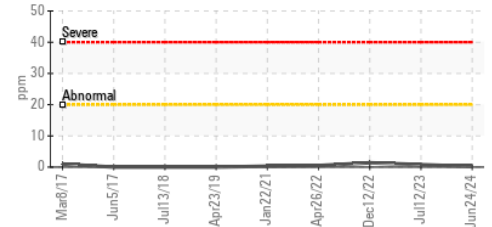
Lead (ppm)



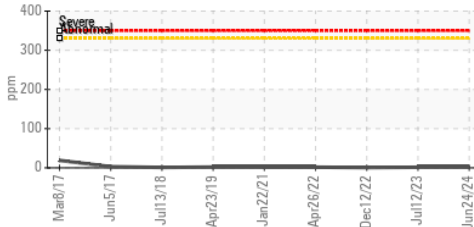
Aluminum (ppm)



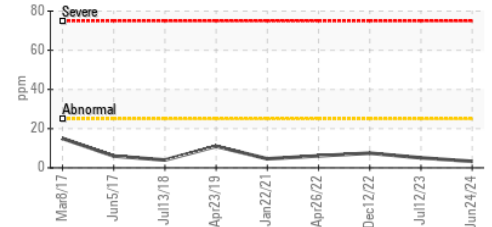
Chromium (ppm)



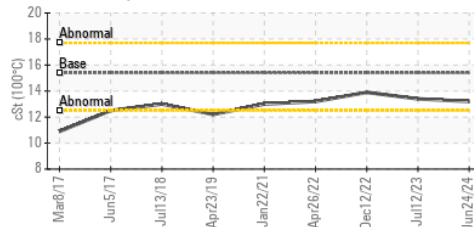
Copper (ppm)



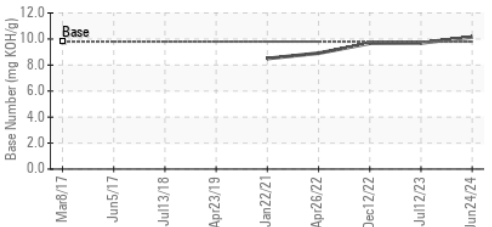
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0122913      **Received** : 26 Jun 2024  
**Lab Number** : 06221438      **Tested** : 27 Jun 2024  
**Unique Number** : 11099635      **Diagnosed** : 27 Jun 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)

T:  
F: