



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area  
**G. LOPES CONSTRUCTION INC./ON-ROAD**

Machine Id

**370**

Component

**Diesel Engine**

Fluid

**PETRO CANADA DURON SHP 15W40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PCA0122484</b>	PCA0109899	PCA0109748
Sample Date		Client Info		<b>18 Jun 2024</b>	26 Mar 2024	11 Dec 2023
Machine Age	hrs	Client Info		<b>72000</b>	52000	32000
Oil Age	hrs	Client Info		<b>72000</b>	52000	32000
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	ATTENTION

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>24</b>	31	46
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	2	2
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>3</b>	5	12
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>43</b>	114	111
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	2
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

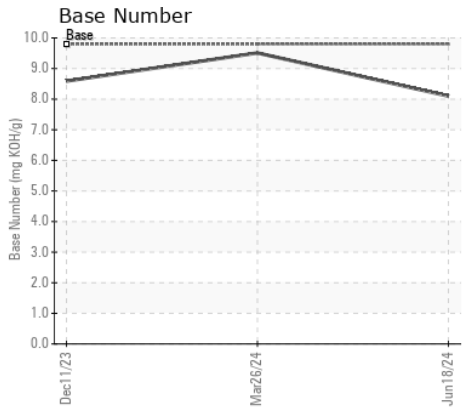
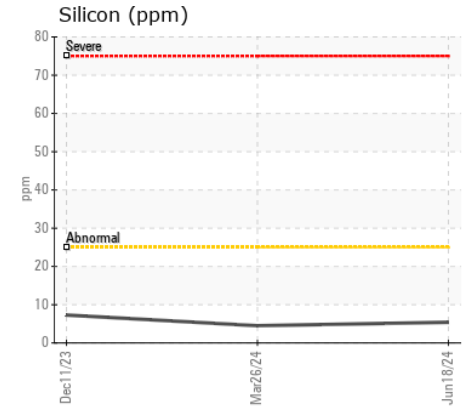
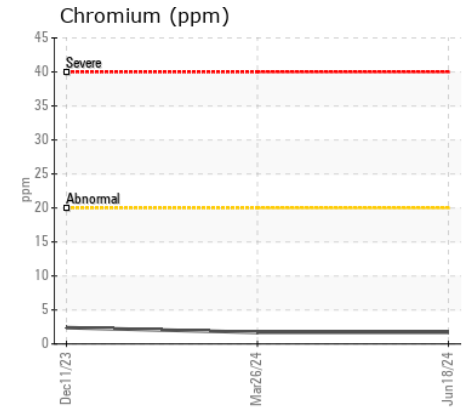
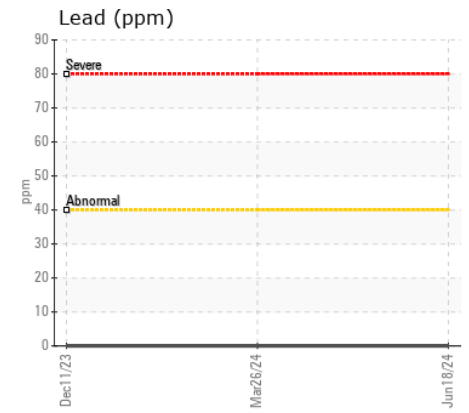
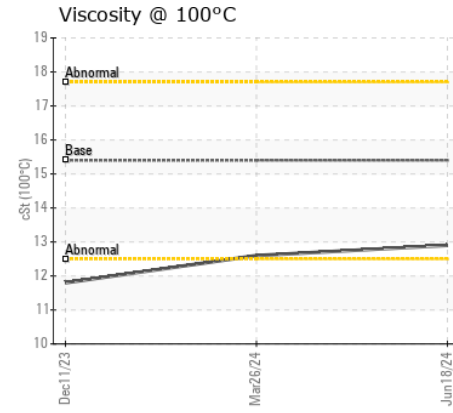
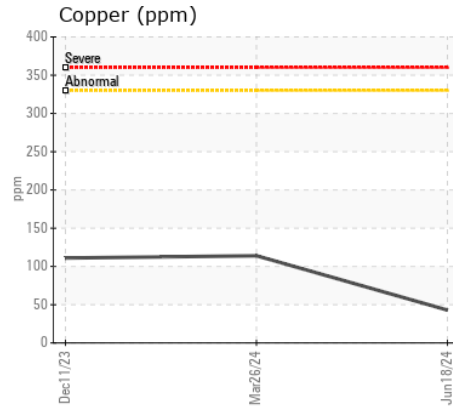
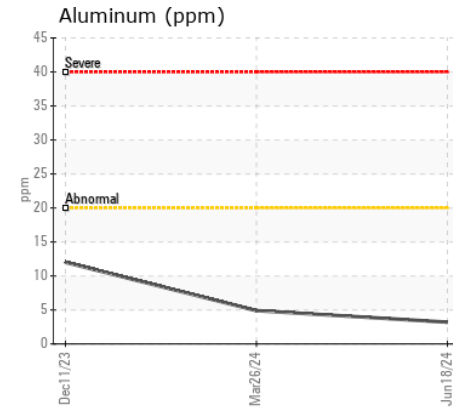
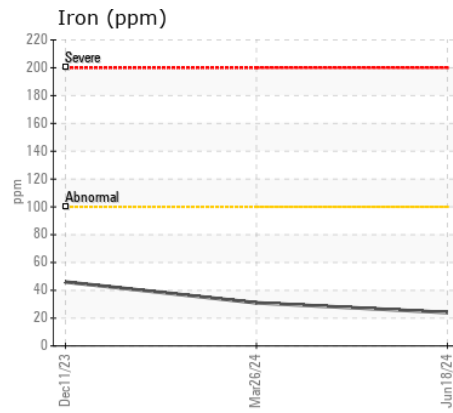
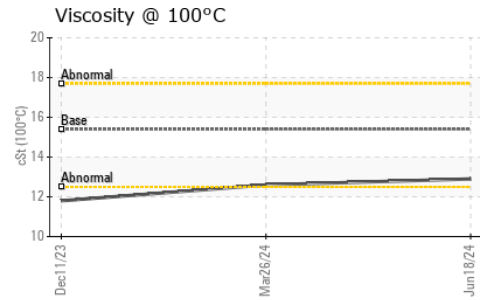
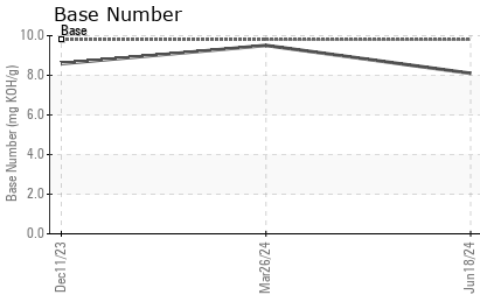
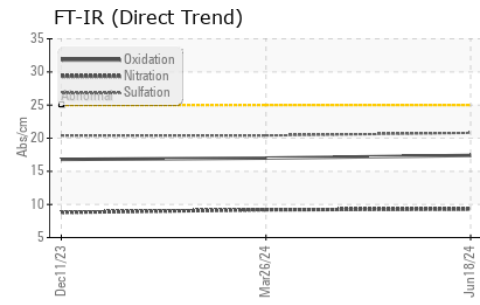
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	4	7
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	10	44
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	0.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.6</b>	0.6	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.3</b>	9.2	8.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.8</b>	20.4	20.4
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

## 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.

Sodium	ppm	ASTM D5185m		<b>2</b>	2	5
Boron	ppm	ASTM D5185m	0	<b>2</b>	3	9
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>62</b>	60	61
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	2
Magnesium	ppm	ASTM D5185m	1010	<b>982</b>	1032	899
Calcium	ppm	ASTM D5185m	1070	<b>1245</b>	1215	1201
Phosphorus	ppm	ASTM D5185m	1150	<b>998</b>	964	944
Zinc	ppm	ASTM D5185m	1270	<b>1260</b>	1252	1185
Sulfur	ppm	ASTM D5185m	2060	<b>2579</b>	2743	2293
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.4</b>	17.0	16.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.10</b>	9.51	8.59
Visc @ 100°C	cSt	ASTM D445	15.4	<b>12.9</b>	12.6	11.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0122484 **Received** : 20 Jun 2024  
**Lab Number** : 06215928 **Tested** : 22 Jun 2024  
**Unique Number** : 11088792 **Diagnosed** : 22 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)

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F: