



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Area  
**G.LOPES CONSTRUCTION INC./Off-Road**  
Machine Id  
**E77**  
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>PCA0122679</b>	PCA0071957	PCA0071920
Sample Date		Client Info		<b>17 Apr 2024</b>	16 Jan 2023	02 Aug 2022
Machine Age	hrs	Client Info		<b>143334</b>	18825	18582
Oil Age	hrs	Client Info		<b>16792</b>	16792	16792
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	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>16</b>	15	19
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>1</b>	<1	2
Lead	ppm	ASTM D5185m	>40	<b>11</b>	12	12
Copper	ppm	ASTM D5185m	>330	<b>4</b>	3	5
Tin	ppm	ASTM D5185m	>15	<b>1</b>	<1	1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

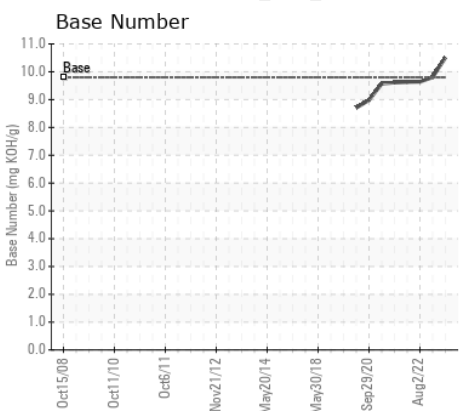
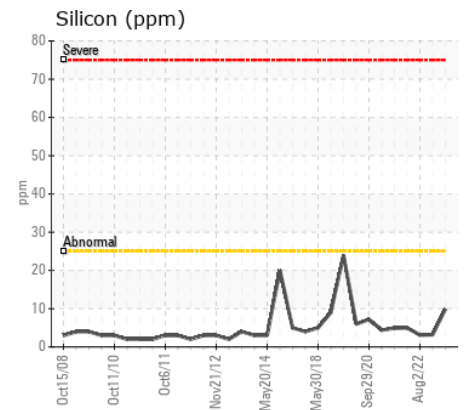
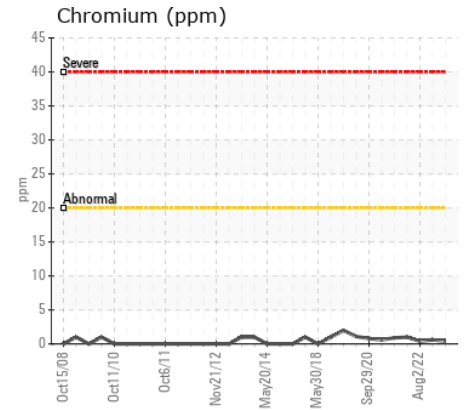
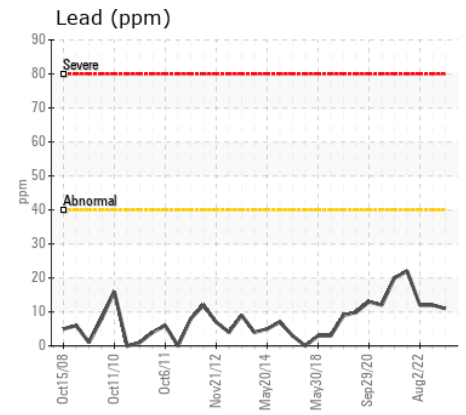
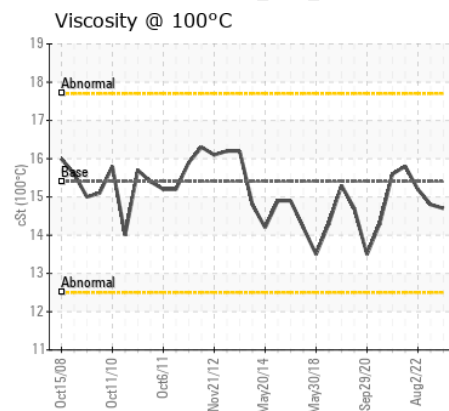
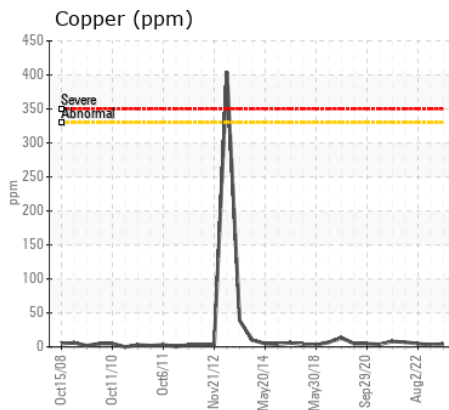
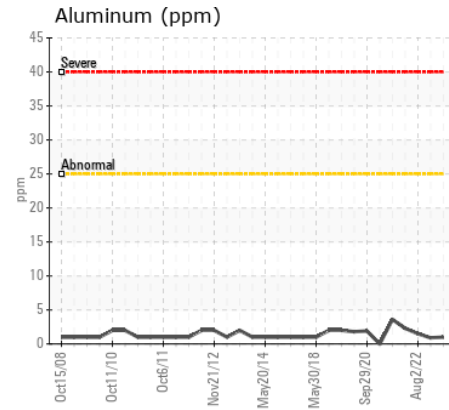
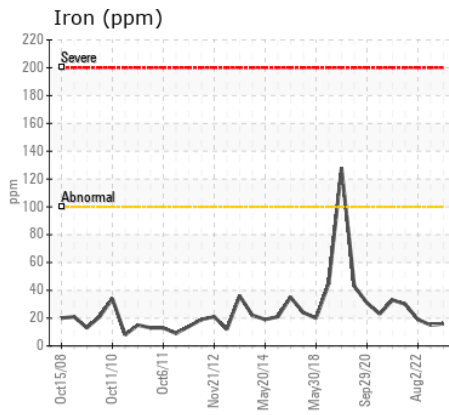
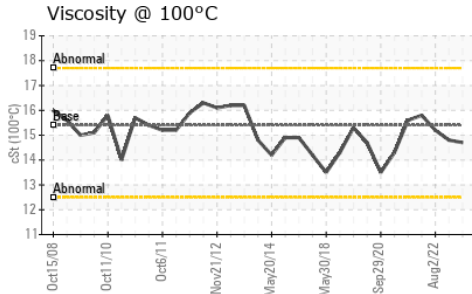
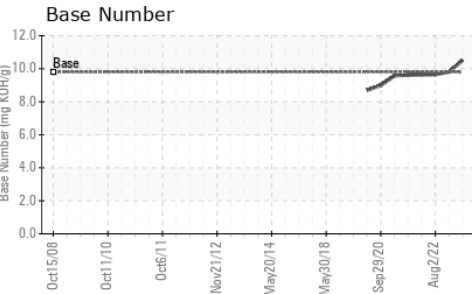
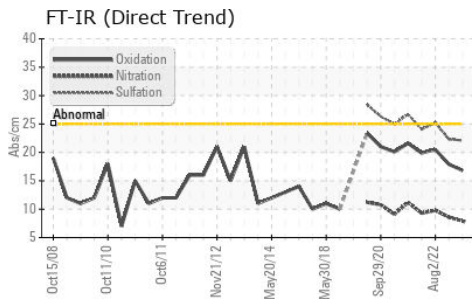
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>10</b>	3	3
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	1	0
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
Soot %	%	*ASTM D7844	>3	<b>0.7</b>	0.7	0.9
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.9</b>	8.6	9.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.1</b>	22.3	25.2
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	1
Boron	ppm	ASTM D5185m	0	<b>4</b>	9	9
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>63</b>	62	71
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>1019</b>	1021	1060
Calcium	ppm	ASTM D5185m	1070	<b>1290</b>	1254	1261
Phosphorus	ppm	ASTM D5185m	1150	<b>1089</b>	1077	1116
Zinc	ppm	ASTM D5185m	1270	<b>1229</b>	1376	1397
Sulfur	ppm	ASTM D5185m	2060	<b>3705</b>	3708	3831
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.8</b>	17.9	20.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>10.51</b>	9.80	9.64
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.7</b>	14.8	15.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0122679  
**Lab Number** : 06154657  
**Unique Number** : 10990080  
**Test Package** : MOB 2  
**Received** : 19 Apr 2024  
**Tested** : 23 Apr 2024  
**Diagnosed** : 23 Apr 2024 - Wes Davis

**G LOPES CONSTRUCTION**  
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 Contact: BUTCH MCGRATH  
 bmcgrath@glopes.com  
 T:  
 F:

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)