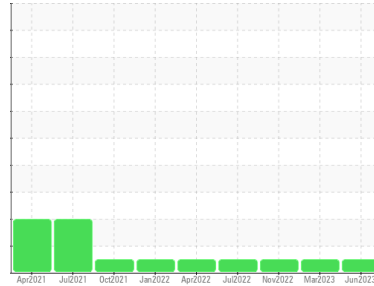


# OIL ANALYSIS REPORT

## Sample Rating Trend

**NORMAL**



Area  
**G.LOPES CONSTRUCTION INC./On-Road**  
 Machine Id  
**342**  
 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	history 1	history 2
Sample Number	Client Info			<b>PCA0098355</b>	PCA0083137	PCA0083192
Sample Date	Client Info			<b>28 Jun 2023</b>	08 Mar 2023	01 Nov 2022
Machine Age	mls	Client Info		<b>172000</b>	152000	132000
Oil Age	mls	Client Info		<b>72334</b>	54334	72334
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history 1	history 2
Fuel	WC Method		>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Glycol	WC Method			<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m	>200	<b>14</b>	19	17
Chromium	ppm	ASTM D5185m	>6	<b>2</b>	2	2
Nickel	ppm	ASTM D5185m	>3	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>50	<b>4</b>	7	8
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>6</b>	11	10
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

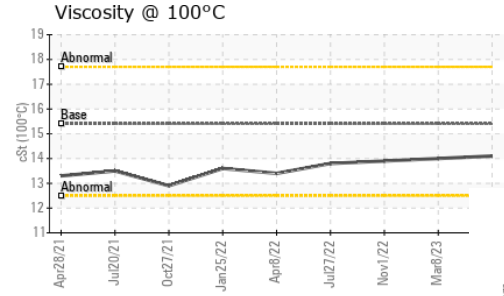
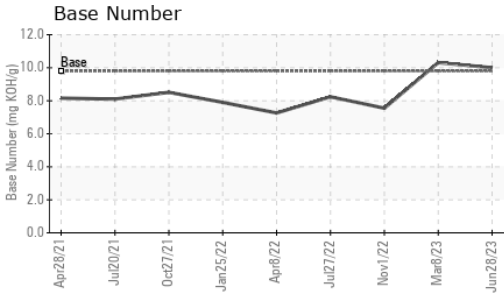
ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	0	<b>3</b>	2	<1
Barium	ppm	ASTM D5185m	0	<b>0</b>	2	0
Molybdenum	ppm	ASTM D5185m	60	<b>65</b>	62	63
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>1082</b>	944	974
Calcium	ppm	ASTM D5185m	1070	<b>1210</b>	1133	1138
Phosphorus	ppm	ASTM D5185m	1150	<b>1103</b>	987	995
Zinc	ppm	ASTM D5185m	1270	<b>1414</b>	1238	1228
Sulfur	ppm	ASTM D5185m	2060	<b>3696</b>	2687	3345

CONTAMINANTS		method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m	>50	<b>4</b>	5	5
Sodium	ppm	ASTM D5185m		<b>2</b>	0	2
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	12	13

INFRA-RED		method	limit/base	current	history 1	history 2
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	0.4	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.6</b>	8.9	9.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.2</b>	20.0	21.7

FLUID DEGRADATION		method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.7</b>	16.0	17.3
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>10.00</b>	10.31	7.55

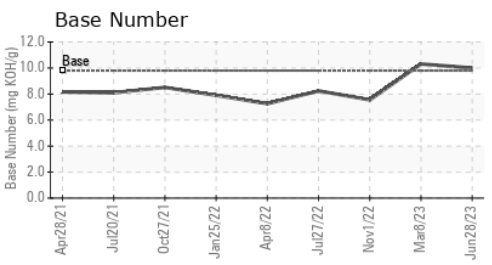
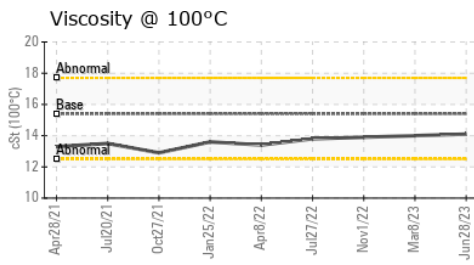
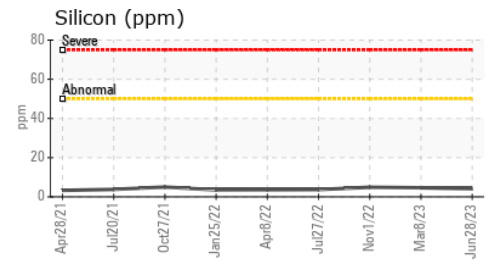
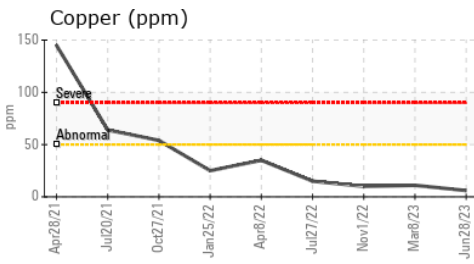
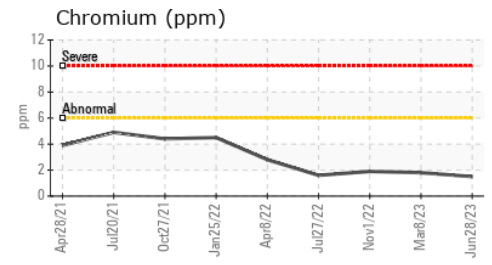
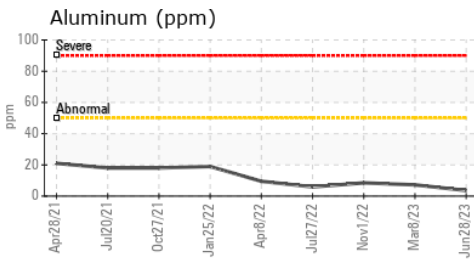
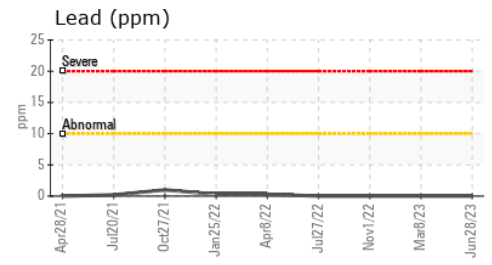
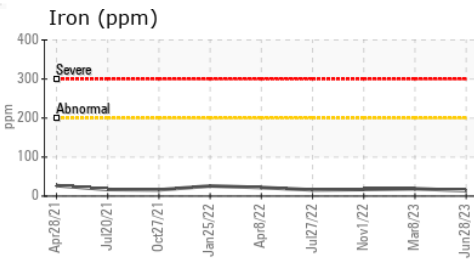
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history 1	history 2
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	history 1	history 2	
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.1</b>	14.0	13.9

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0098355 **Received** : 30 Jun 2023  
**Lab Number** : 05887989 **Diagnosed** : 03 Jul 2023  
**Unique Number** : 10538472 **Diagnostician** : Wes Davis  
**Test Package** : MOB 2

**G LOPES CONSTRUCTION**  
 565 WINTHROP ST  
 TAUNTON, MA  
 US 02780  
 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)