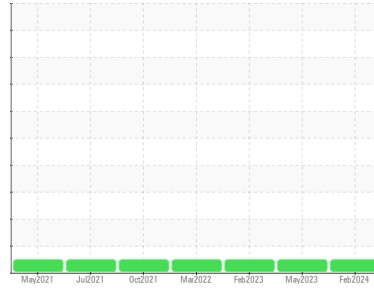


# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**N.E.R./Off-Road**  
Machine Id  
**TG15**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (--- 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>PCA0018794</b>	PCA0083119	PCA0090592
Sample Date	Client Info		<b>07 Feb 2024</b>	31 May 2023	09 Feb 2023
Machine Age	hrs	Client Info	<b>2081</b>	1723	1493
Oil Age	hrs	Client Info	<b>1042</b>	914	1317
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>38</b>	27	54
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >4	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>1</b>	0	1
Lead	ppm	ASTM D5185m >40	<b>12</b>	2	6
Copper	ppm	ASTM D5185m >330	<b>4</b>	3	8
Tin	ppm	ASTM D5185m >15	<b>1</b>	1	2
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>7</b>	2	5
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>60</b>	59	63
Manganese	ppm	ASTM D5185m 0	<b>1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 1010	<b>914</b>	962	920
Calcium	ppm	ASTM D5185m 1070	<b>1022</b>	1144	1078
Phosphorus	ppm	ASTM D5185m 1150	<b>998</b>	1015	1014
Zinc	ppm	ASTM D5185m 1270	<b>1232</b>	1250	1223
Sulfur	ppm	ASTM D5185m 2060	<b>2794</b>	3535	3420

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>0</b>	4	5
Sodium	ppm	ASTM D5185m	<b>2</b>	2	3
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	0

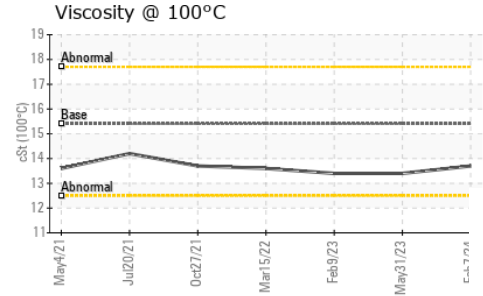
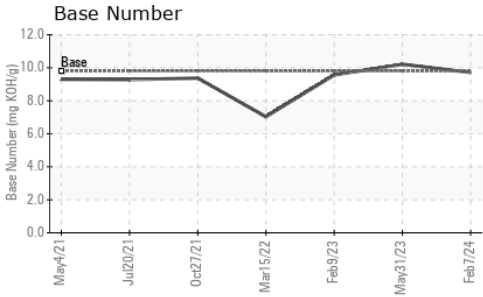
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.4</b>	0.3	0.6
Nitration	Abs/cm	*ASTM D7624 >20	<b>10.3</b>	9.4	10.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>22.3</b>	21.2	21.8

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>21.6</b>	19.4	19.8
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>9.71</b>	10.21	9.56

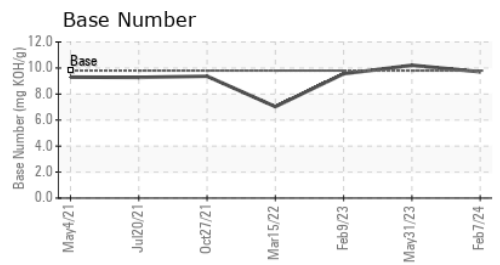
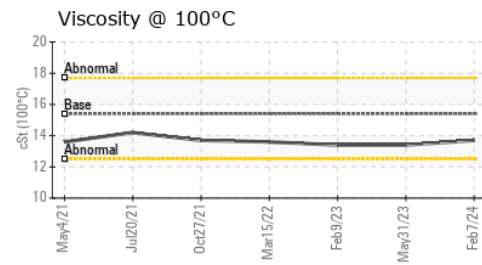
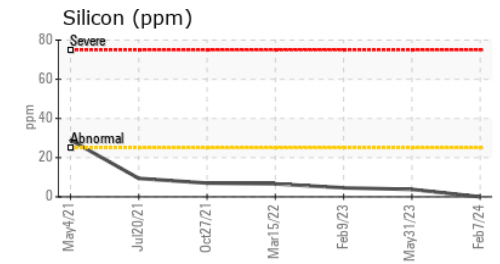
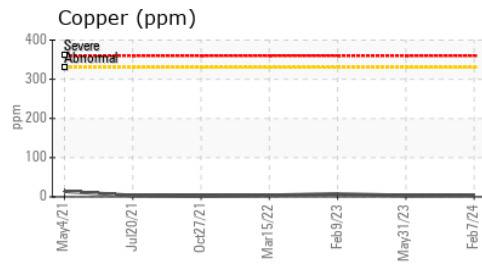
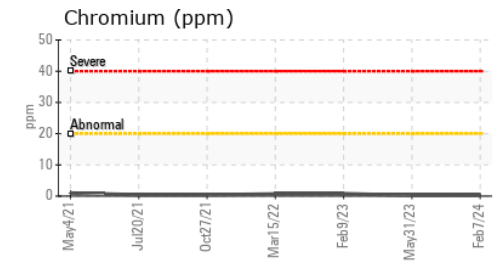
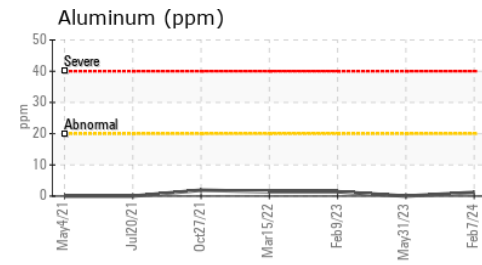
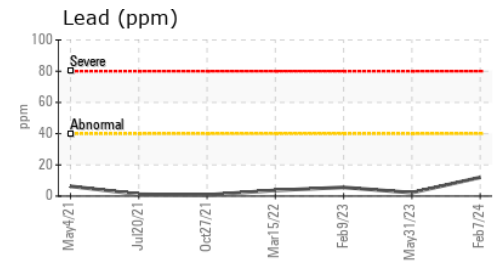
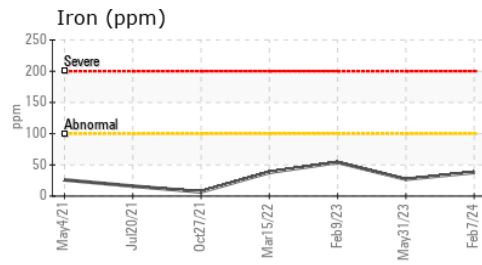
# OIL ANALYSIS REPORT



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>13.7</b>	13.4	13.4

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0018794 **Received** : 09 Feb 2024  
**Lab Number** : 06085008 **Tested** : 12 Feb 2024  
**Unique Number** : 10872453 **Diagnosed** : 12 Feb 2024 - 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)