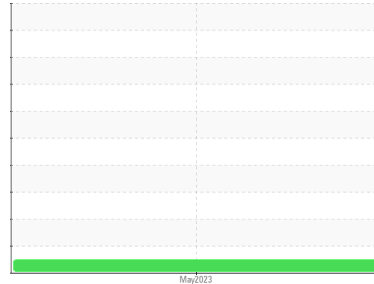


# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**

 Machine Id  
**426746**

 Component  
**Diesel Engine**

 Fluid  
**PETRO CANADA DURON SHP 10W30 (--- QTS)**
**DIAGNOSIS**
**Recommendation**

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

**Wear**

All component wear rates are normal.

**Contamination**

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. 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 acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history 1	history 2
Sample Number	Client Info			<b>PCA0097781</b>	---	---
Sample Date	Client Info			<b>11 May 2023</b>	---	---
Machine Age	mls	Client Info		<b>31487</b>	---	---
Oil Age	mls	Client Info		<b>31487</b>	---	---
Oil Changed	Client Info			<b>Changed</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

CONTAMINATION		method	limit/base	current	history 1	history 2
Fuel	WC Method	>5		<b>&lt;1.0</b>	---	---
Glycol	WC Method			<b>NEG</b>	---	---

WEAR METALS		method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m	>100	<b>53</b>	---	---
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	---	---
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185m		<b>0</b>	---	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>20	<b>27</b>	---	---
Lead	ppm	ASTM D5185m	>40	<b>0</b>	---	---
Copper	ppm	ASTM D5185m	>330	<b>16</b>	---	---
Tin	ppm	ASTM D5185m	>15	<b>2</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	---	---

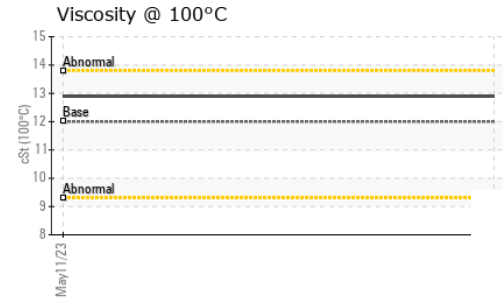
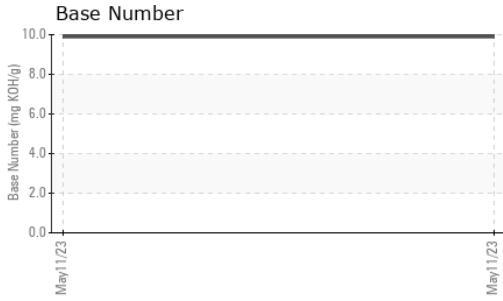
ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	2	<b>88</b>	---	---
Barium	ppm	ASTM D5185m	0	<b>2</b>	---	---
Molybdenum	ppm	ASTM D5185m	50	<b>47</b>	---	---
Manganese	ppm	ASTM D5185m	0	<b>2</b>	---	---
Magnesium	ppm	ASTM D5185m	950	<b>320</b>	---	---
Calcium	ppm	ASTM D5185m	1050	<b>1905</b>	---	---
Phosphorus	ppm	ASTM D5185m	995	<b>986</b>	---	---
Zinc	ppm	ASTM D5185m	1180	<b>1178</b>	---	---
Sulfur	ppm	ASTM D5185m	2600	<b>3387</b>	---	---

CONTAMINANTS		method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m	>25	<b>4</b>	---	---
Sodium	ppm	ASTM D5185m		<b>2</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>60</b>	---	---

INFRA-RED		method	limit/base	current	history 1	history 2
Soot %	%	*ASTM D7844	>3	<b>1</b>	---	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.3</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.6</b>	---	---

FLUID DEGRADATION		method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.2</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>9.9</b>	---	---

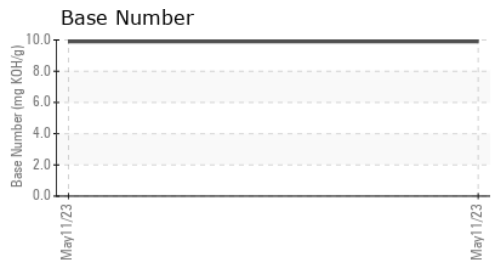
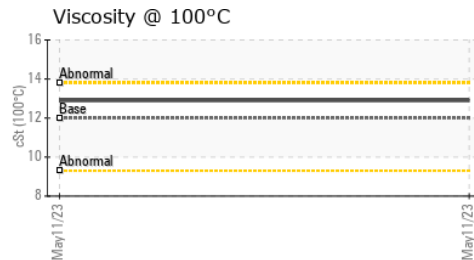
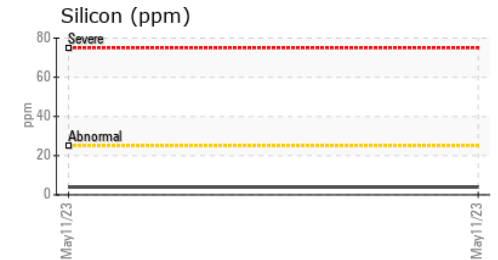
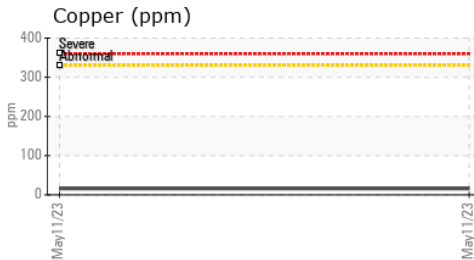
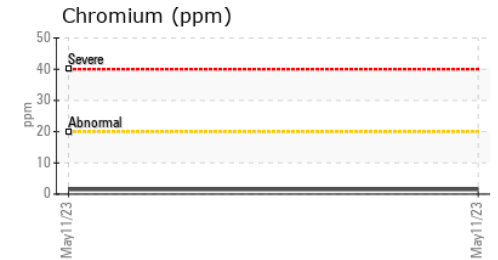
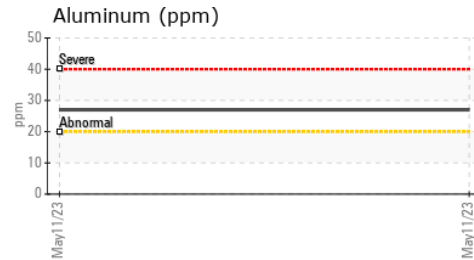
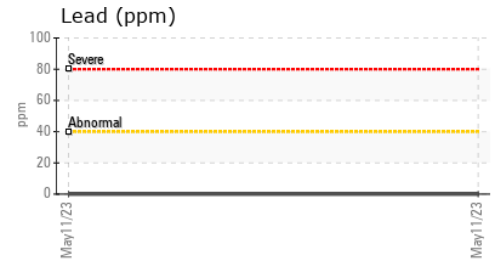
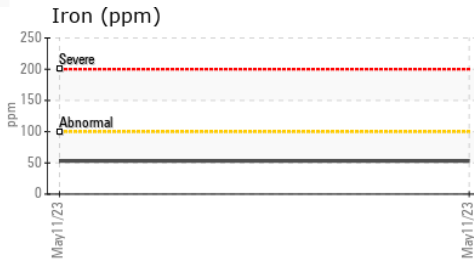
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 100°C	cSt	ASTM D445	12.00	<b>12.9</b>	---

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0097781 **Received** : 03 Jul 2023  
**Lab Number** : 05888718 **Diagnosed** : 05 Jul 2023  
**Unique Number** : 10539201 **Diagnostician** : Don Baldrige  
**Test Package** : MOB 1 ( Additional Tests: TBN )

63 REPAUPO STATION ROAD  
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 US 08085  
 Contact: ED DAVIS  
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 T: (856)214-3521  
 F: (856)214-3663

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)