

# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id

**88**

Component

**Diesel Engine**

Fluid

**PETRO CANADA DURON SHP 10W30 (--- GAL)**

## DIAGNOSIS

### Recommendation

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 suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>PCA0110780</b>	---	---
Sample Date	Client Info		<b>21 Nov 2023</b>	---	---
Machine Age	mls Client Info		<b>0</b>	---	---
Oil Age	mls Client Info		<b>25917</b>	---	---
Oil Changed	Client Info		<b>Changed</b>	---	---
Sample Status			<b>NORMAL</b>	---	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	---	---
Water	WC Method	>0.2	<b>NEG</b>	---	---
Glycol	WC Method		<b>NEG</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m	>100	<b>66</b>	---	---
Chromium	ppm ASTM D5185m	>20	<b>&lt;1</b>	---	---
Nickel	ppm ASTM D5185m	>4	<b>&lt;1</b>	---	---
Titanium	ppm ASTM D5185m		<b>&lt;1</b>	---	---
Silver	ppm ASTM D5185m	>3	<b>&lt;1</b>	---	---
Aluminum	ppm ASTM D5185m	>20	<b>25</b>	---	---
Lead	ppm ASTM D5185m	>40	<b>&lt;1</b>	---	---
Copper	ppm ASTM D5185m	>330	<b>13</b>	---	---
Tin	ppm ASTM D5185m	>15	<b>2</b>	---	---
Vanadium	ppm ASTM D5185m		<b>&lt;1</b>	---	---
Cadmium	ppm ASTM D5185m		<b>0</b>	---	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	2	<b>20</b>	---	---
Barium	ppm ASTM D5185m	0	<b>&lt;1</b>	---	---
Molybdenum	ppm ASTM D5185m	50	<b>5</b>	---	---
Manganese	ppm ASTM D5185m	0	<b>2</b>	---	---
Magnesium	ppm ASTM D5185m	950	<b>766</b>	---	---
Calcium	ppm ASTM D5185m	1050	<b>1352</b>	---	---
Phosphorus	ppm ASTM D5185m	995	<b>800</b>	---	---
Zinc	ppm ASTM D5185m	1180	<b>892</b>	---	---
Sulfur	ppm ASTM D5185m	2600	<b>3016</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m	>25	<b>20</b>	---	---
Sodium	ppm ASTM D5185m		<b>5</b>	---	---
Potassium	ppm ASTM D5185m	>20	<b>80</b>	---	---

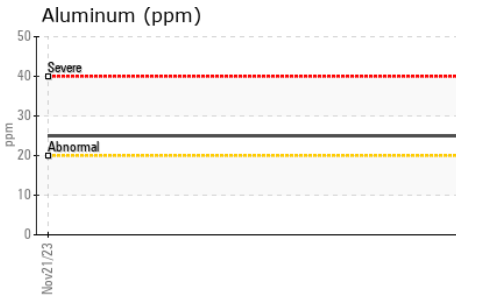
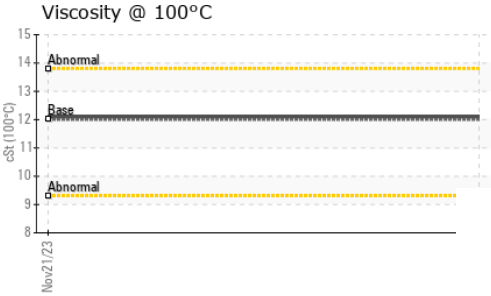
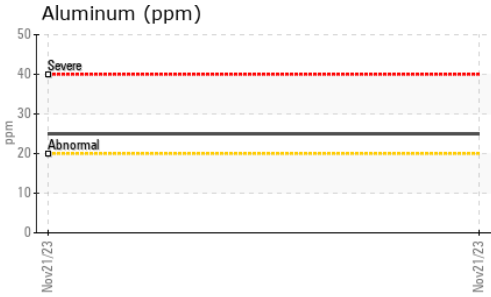
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	>3	<b>0.4</b>	---	---
Nitration	Abs/cm *ASTM D7624	>20	<b>11.7</b>	---	---
Sulfation	Abs/.1mm *ASTM D7415	>30	<b>26.0</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414	>25	<b>22.7</b>	---	---
Base Number (BN)	mg KOH/g ASTM D2896		<b>4.9</b>	---	---

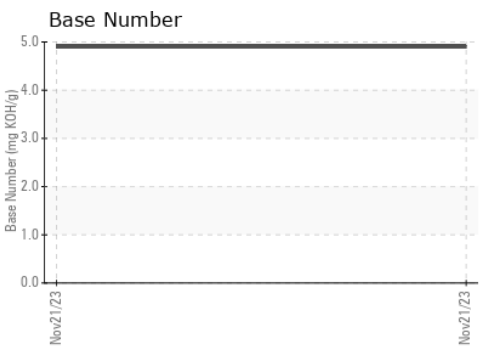
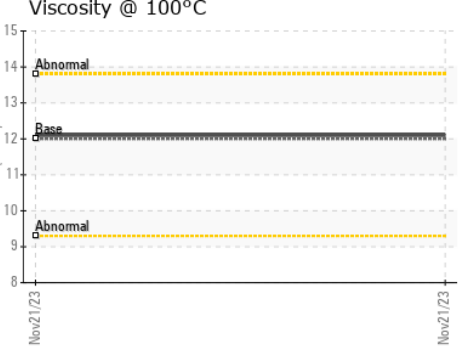
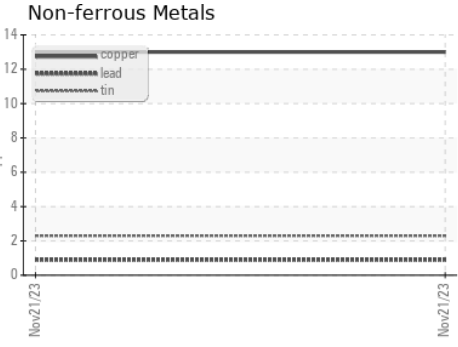
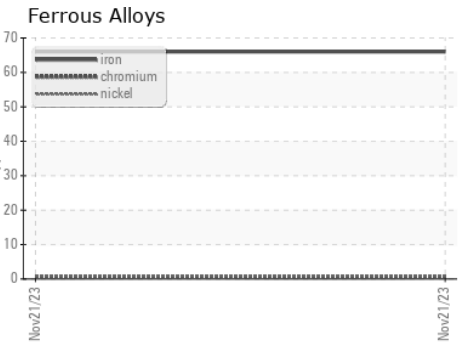
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
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	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	<b>12.1</b>	---

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0110780 **Received** : 27 Nov 2023  
**Lab Number** : 06017690 **Diagnosed** : 28 Nov 2023  
**Unique Number** : 10756834 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**BLUE MAX TRUCKING**  
 1015 E. WESTINGHOUSE BLVD.  
 CHARLOTTE, NC  
 US 28273  
 Contact: Jody Greer  
 jgreer@bluemaxtrucking.com  
 T: (980)225-9968  
 F: (704)588-2901

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)