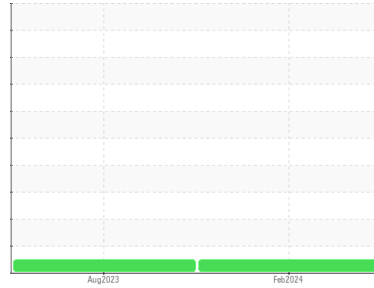


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**BM-164**  
 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>PCA0110731</b>	PCA0103167	---
Sample Date	Client Info		<b>28 Feb 2024</b>	31 Aug 2023	---
Machine Age	hrs	Client Info	<b>2063</b>	995	---
Oil Age	hrs	Client Info	<b>1068</b>	995	---
Oil Changed	Client Info		<b>Changed</b>	Changed	---
Sample Status			<b>NORMAL</b>	NORMAL	---

## CONTAMINATION

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

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>38</b>	49	---
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	---
Silver	ppm	ASTM D5185m >3	<b>&lt;1</b>	<1	---
Aluminum	ppm	ASTM D5185m >20	<b>20</b>	42	---
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	<1	---
Copper	ppm	ASTM D5185m >330	<b>5</b>	13	---
Tin	ppm	ASTM D5185m >15	<b>1</b>	2	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	<b>5</b>	15	---
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m 50	<b>60</b>	18	---
Manganese	ppm	ASTM D5185m 0	<b>1</b>	3	---
Magnesium	ppm	ASTM D5185m 950	<b>975</b>	849	---
Calcium	ppm	ASTM D5185m 1050	<b>1176</b>	1568	---
Phosphorus	ppm	ASTM D5185m 995	<b>1069</b>	817	---
Zinc	ppm	ASTM D5185m 1180	<b>1315</b>	984	---
Sulfur	ppm	ASTM D5185m 2600	<b>3396</b>	3817	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>10</b>	13	---
Sodium	ppm	ASTM D5185m	<b>2</b>	5	---
Potassium	ppm	ASTM D5185m >20	<b>57</b>	127	---

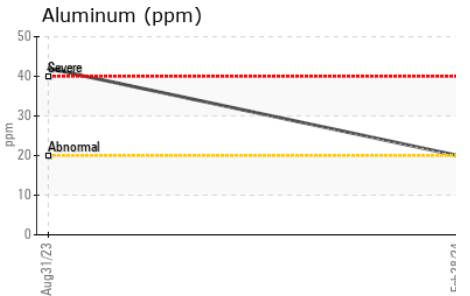
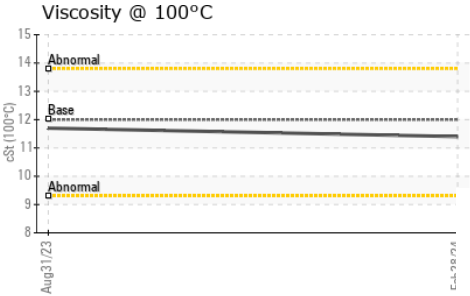
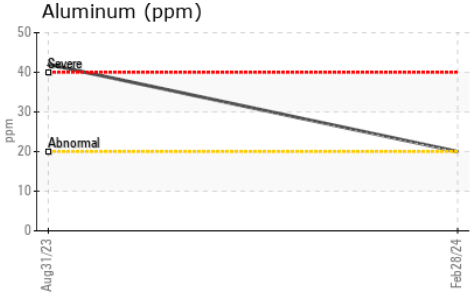
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.5</b>	0.3	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>11.0</b>	10.6	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>22.5</b>	23.4	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>19.5</b>	18.5	---
Base Number (BN)	mg KOH/g	ASTM D2896	<b>5.7</b>	5.6	---

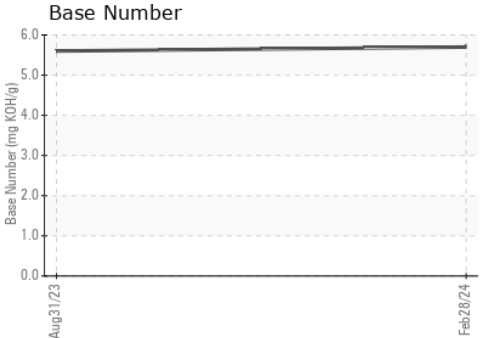
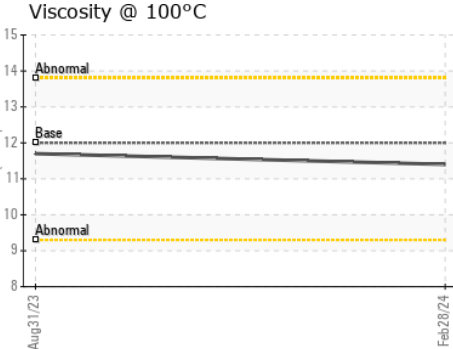
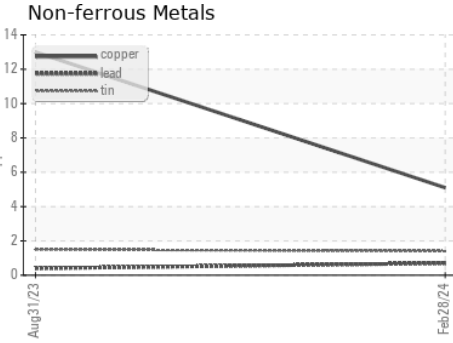
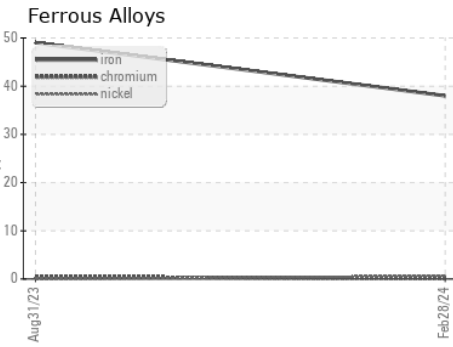
# OIL ANALYSIS REPORT



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	11.4	11.7

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0110731      **Received** : 26 Mar 2024  
**Lab Number** : **06129131**      **Tested** : 27 Mar 2024  
**Unique Number** : 10943282      **Diagnosed** : 27 Mar 2024 - 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)