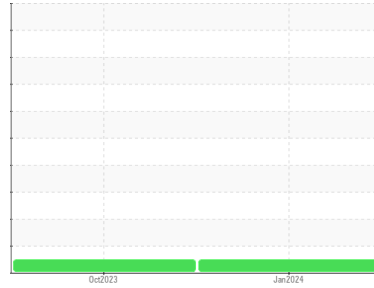


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**438691**  
 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>PCA0117047</b>	PCA0110463	---
Sample Date	Client Info	<b>19 Jan 2024</b>	30 Oct 2023	---
Machine Age	mls Client Info	<b>40521</b>	25696	---
Oil Age	mls Client Info	<b>0</b>	0	---
Oil Changed	Client Info	<b>N/A</b>	N/A	---
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>177</b>	132	---
Chromium	ppm ASTM D5185m >20	<b>6</b>	5	---
Nickel	ppm ASTM D5185m >4	<b>2</b>	2	---
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	<1	---
Silver	ppm ASTM D5185m >3	<b>0</b>	<1	---
Aluminum	ppm ASTM D5185m >20	<b>75</b>	58	---
Lead	ppm ASTM D5185m >40	<b>&lt;1</b>	<1	---
Copper	ppm ASTM D5185m >330	<b>43</b>	38	---
Tin	ppm ASTM D5185m >15	<b>4</b>	3	---
Vanadium	ppm ASTM D5185m	<b>0</b>	<1	---
Cadmium	ppm ASTM D5185m	<b>0</b>	<1	---

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 2	<b>21</b>	29	---
Barium	ppm ASTM D5185m 0	<b>3</b>	<1	---
Molybdenum	ppm ASTM D5185m 50	<b>52</b>	49	---
Manganese	ppm ASTM D5185m 0	<b>16</b>	14	---
Magnesium	ppm ASTM D5185m 950	<b>601</b>	567	---
Calcium	ppm ASTM D5185m 1050	<b>1782</b>	1756	---
Phosphorus	ppm ASTM D5185m 995	<b>813</b>	812	---
Zinc	ppm ASTM D5185m 1180	<b>1020</b>	980	---
Sulfur	ppm ASTM D5185m 2600	<b>2459</b>	2450	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>22</b>	17	---
Sodium	ppm ASTM D5185m	<b>2</b>	1	---
Potassium	ppm ASTM D5185m >20	<b>126</b>	103	---

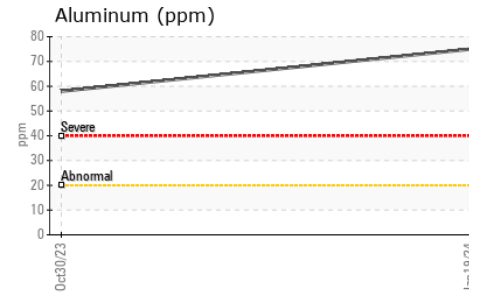
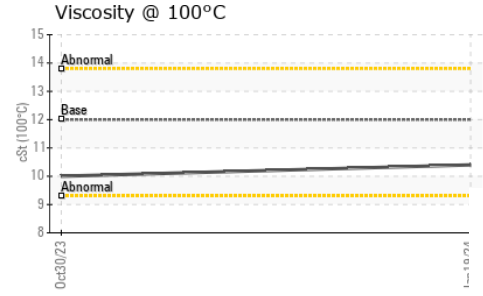
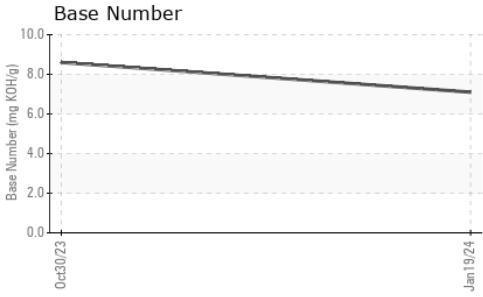
## INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.9</b>	0.6	---
Nitration	Abs/cm *ASTM D7624 >20	<b>13.0</b>	10.3	---
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>24.7</b>	23.8	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>25.4</b>	21.9	---
Base Number (BN)	mg KOH/g ASTM D2896	<b>7.1</b>	8.6	---

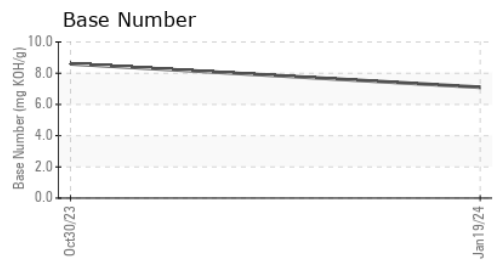
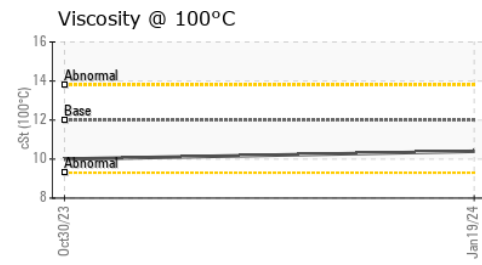
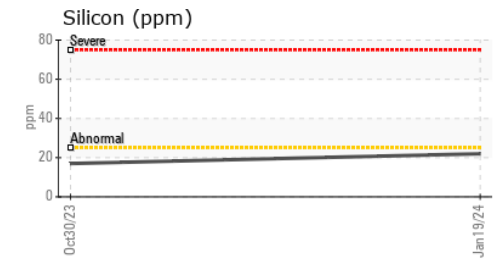
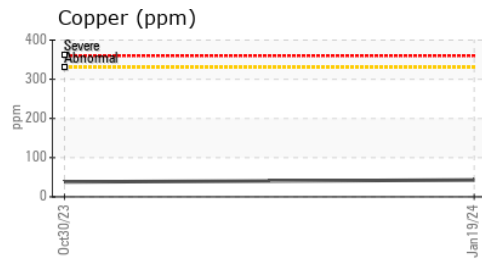
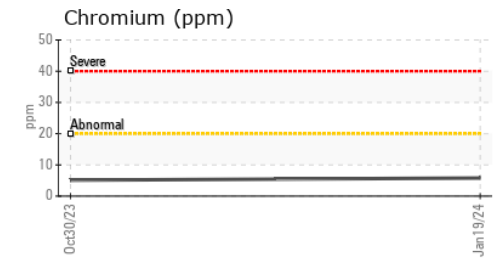
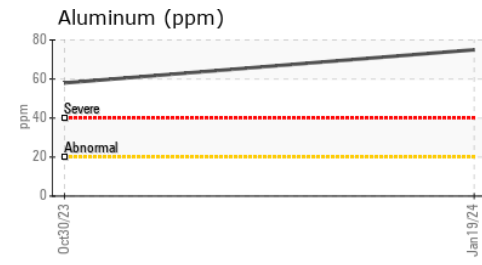
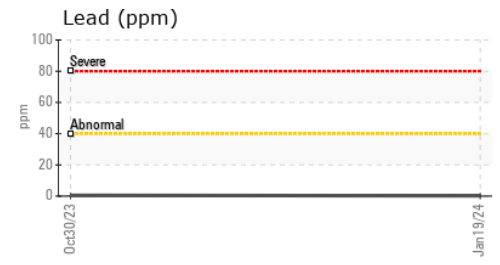
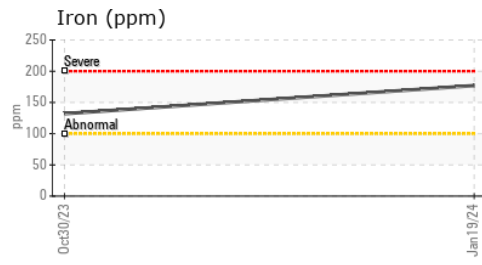
# OIL ANALYSIS REPORT



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	10.4	10.0

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0117047 **Received** : 02 Feb 2024  
**Lab Number** : 06078931 **Tested** : 06 Feb 2024  
**Unique Number** : 10861022 **Diagnosed** : 06 Feb 2024 - Jonathan Hester  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**MILLER TRUCK LEASING #119**  
 39 INDUSTRIAL AVE  
 HASBROUCK HEIGHTS, NJ  
 US 07604  
 Contact: MIKE LONGETTE  
 mlongette@millertransgroup.com

Certificate L2367  
 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) F: (201)528-7053