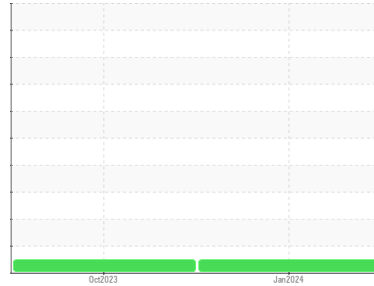


# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**745185**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (--- GAL)**

## DIAGNOSIS

### Recommendation

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

### Wear

Metal levels are typical for a new component breaking in.

### 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. No other contaminants were detected 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>PCA0114549</b>	PCA0108321	---
Sample Date	Client Info		<b>06 Jan 2024</b>	30 Oct 2023	---
Machine Age	mls	Client Info	<b>74140</b>	34998	---
Oil Age	mls	Client Info	<b>0</b>	0	---
Oil Changed	Client Info		<b>Changed</b>	Not Changd	---
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	---

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>100	<b>149</b>	81	---
Chromium	ppm	ASTM D5185m	>20	<b>8</b>	5	---
Nickel	ppm	ASTM D5185m	>4	<b>2</b>	0	---
Titanium	ppm	ASTM D5185m		<b>0</b>	0	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>81</b>	66	---
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	---
Copper	ppm	ASTM D5185m	>330	<b>212</b>	224	---
Tin	ppm	ASTM D5185m	>15	<b>3</b>	2	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	2	<b>19</b>	26	---
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	50	<b>45</b>	42	---
Manganese	ppm	ASTM D5185m	0	<b>5</b>	4	---
Magnesium	ppm	ASTM D5185m	950	<b>611</b>	474	---
Calcium	ppm	ASTM D5185m	1050	<b>1734</b>	1688	---
Phosphorus	ppm	ASTM D5185m	995	<b>799</b>	644	---
Zinc	ppm	ASTM D5185m	1180	<b>1006</b>	795	---
Sulfur	ppm	ASTM D5185m	2600	<b>2009</b>	1611	---

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	<b>14</b>	10	---
Sodium	ppm	ASTM D5185m		<b>16</b>	9	---
Potassium	ppm	ASTM D5185m	>20	<b>190</b>	155	---
Glycol	%	*ASTM D2982		<b>NEG</b>	NEG	---

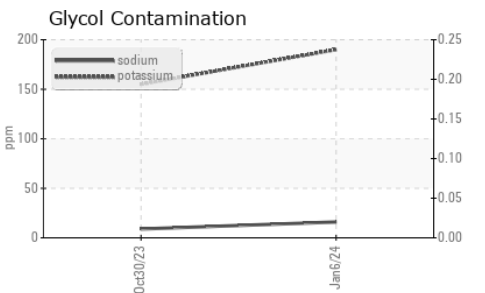
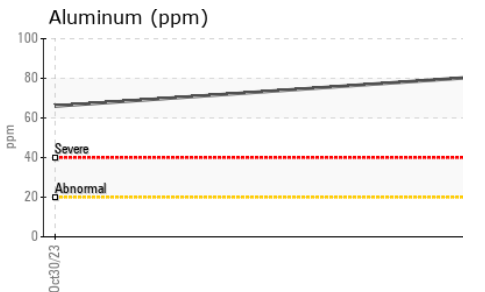
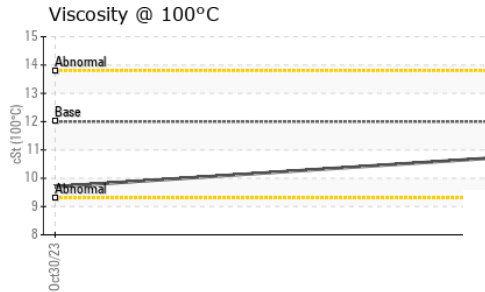
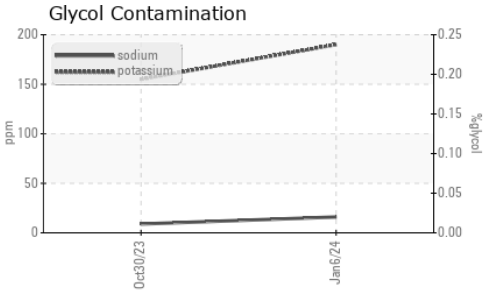
## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	<b>1.1</b>	0.5	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>15.8</b>	10.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>26.6</b>	23.6	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>35.2</b>	25.7	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>4.0</b>	7.3	---

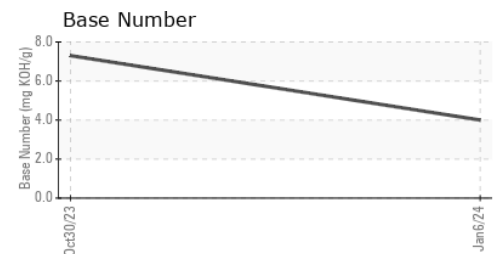
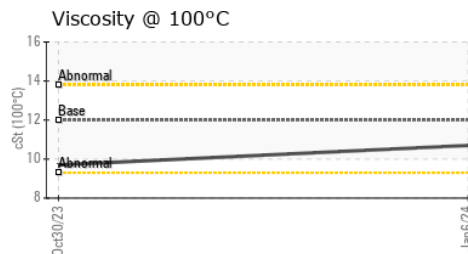
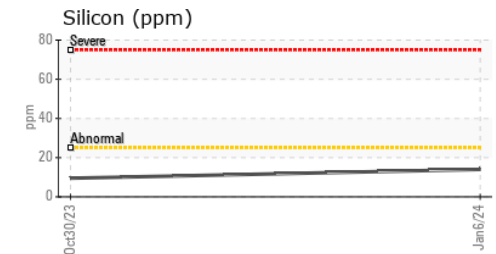
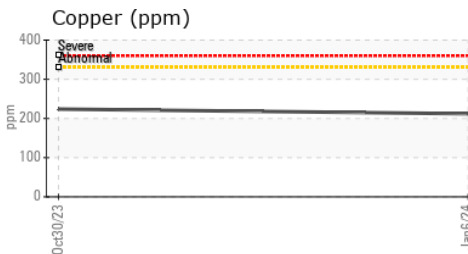
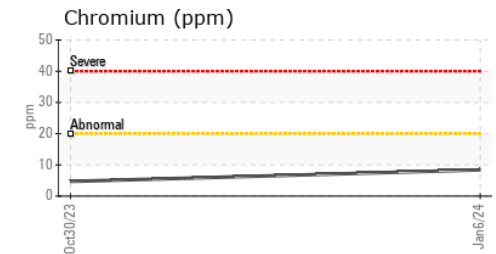
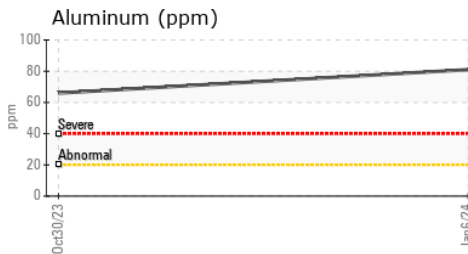
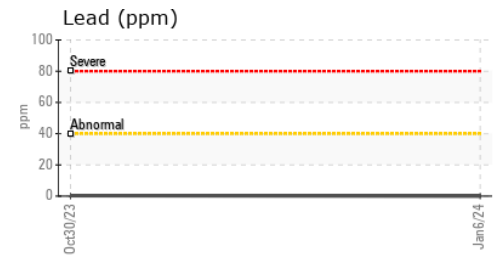
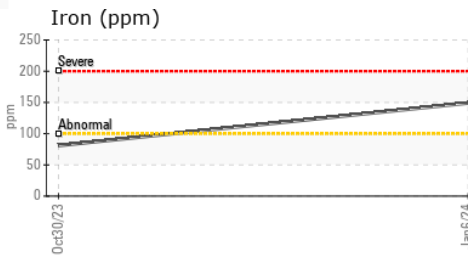
# OIL ANALYSIS REPORT



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	10.7	9.7

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0114549 **Recieved** : 16 Jan 2024  
**Lab Number** : 06060929 **Diagnosed** : 17 Jan 2024  
**Unique Number** : 10832311 **Diagnostician** : Jonathan Hester  
**Test Package** : MOB 1 ( Additional Tests: Glycol, TBN )

**MILLER TRUCK LEASING #118**  
 2196 BENNETT ROAD  
 PHILADELPHIA, PA  
 US 19116  
 Contact: ROSTY VITER  
 rviter@millertransgroup.com  
 T: (215)552-9832  
 F: (215)552-9892

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)