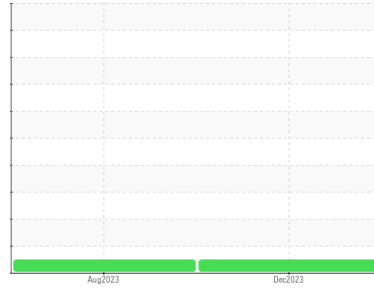


# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**

 Machine Id  
**631634**

 Component  
**Diesel Engine**

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

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. 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. 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 acceptable for the time in service.

**SAMPLE INFORMATION**

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>PCA0112232</b>	PCA0102921	---
Sample Date	Client Info		<b>01 Dec 2023</b>	07 Aug 2023	---
Machine Age	mls	Client Info	<b>59096</b>	30519	---
Oil Age	mls	Client Info	<b>28577</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	---
Glycol	WC Method		<b>NEG</b>	NEG	---

**WEAR METALS**

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>100	<b>87</b>	54	---
Chromium	ppm	ASTM D5185m	>20	<b>6</b>	4	---
Nickel	ppm	ASTM D5185m	>4	<b>2</b>	<1	---
Titanium	ppm	ASTM D5185m		<b>2</b>	<1	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>166</b>	145	---
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	<1	---
Copper	ppm	ASTM D5185m	>330	<b>162</b>	181	---
Tin	ppm	ASTM D5185m	>15	<b>5</b>	4	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---

**ADDITIVES**

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	2	<b>18</b>	27	---
Barium	ppm	ASTM D5185m	0	<b>13</b>	2	---
Molybdenum	ppm	ASTM D5185m	50	<b>49</b>	46	---
Manganese	ppm	ASTM D5185m	0	<b>6</b>	5	---
Magnesium	ppm	ASTM D5185m	950	<b>619</b>	565	---
Calcium	ppm	ASTM D5185m	1050	<b>1649</b>	1624	---
Phosphorus	ppm	ASTM D5185m	995	<b>747</b>	746	---
Zinc	ppm	ASTM D5185m	1180	<b>938</b>	909	---
Sulfur	ppm	ASTM D5185m	2600	<b>2053</b>	2032	---

**CONTAMINANTS**

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	<b>13</b>	9	---
Sodium	ppm	ASTM D5185m		<b>5</b>	5	---
Potassium	ppm	ASTM D5185m	>20	<b>373</b>	302	---

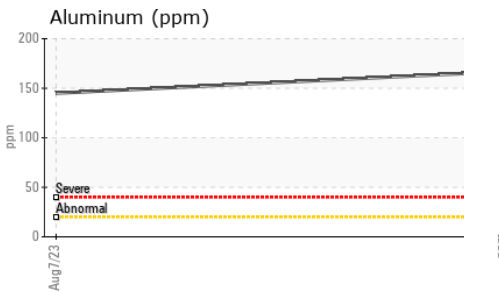
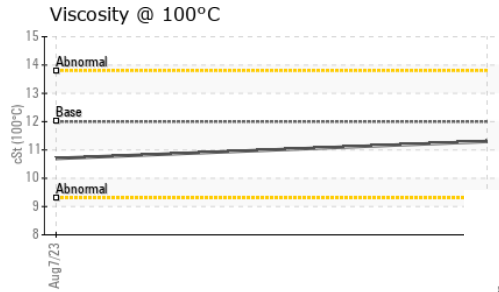
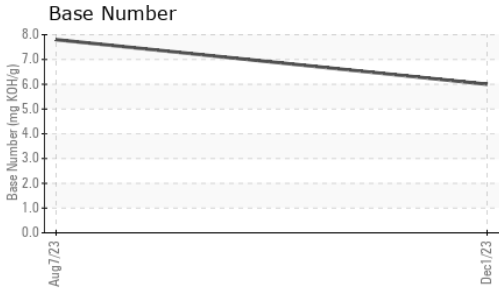
**INFRA-RED**

	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	<b>1.3</b>	0.6	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.6</b>	9.3	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>25.0</b>	23.0	---

**FLUID DEGRADATION**

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>26.3</b>	22.2	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>6.0</b>	7.8	---

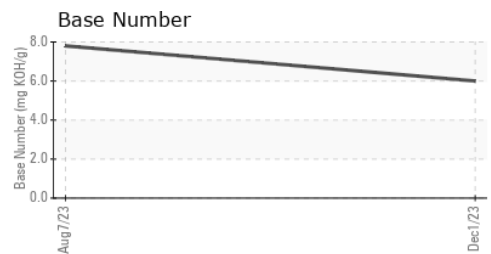
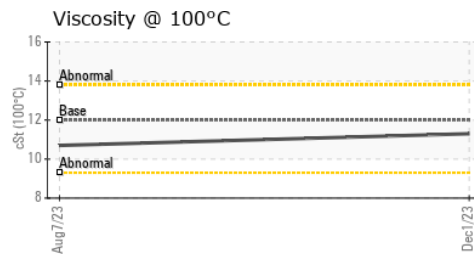
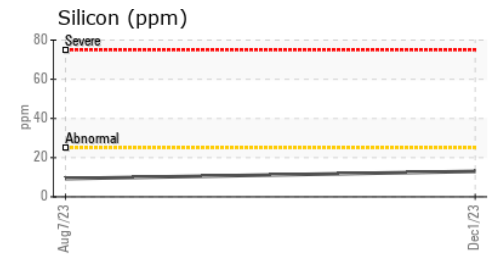
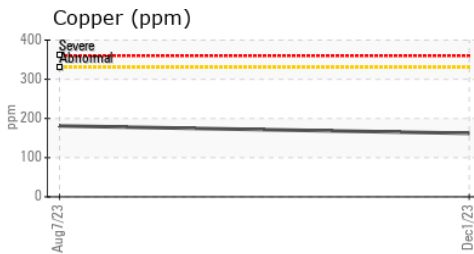
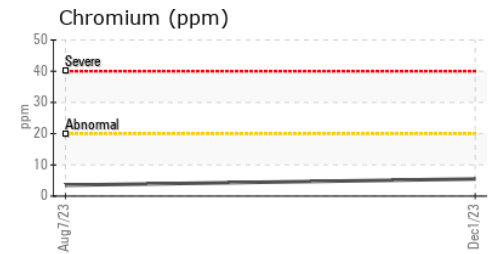
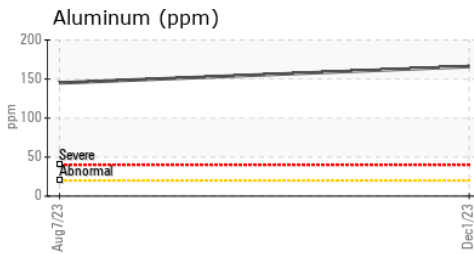
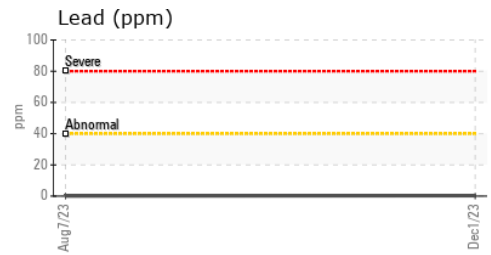
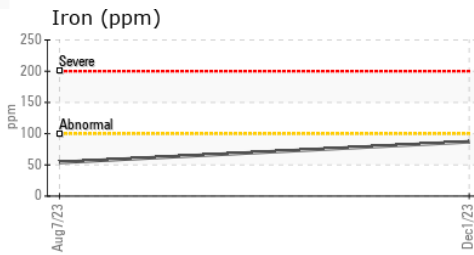
# OIL ANALYSIS REPORT



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	11.3	10.7

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0112232 **Recieved** : 15 Dec 2023  
**Lab Number** : 06035821 **Diagnosed** : 19 Dec 2023  
**Unique Number** : 10791050 **Diagnostician** : Don Baldrige  
**Test Package** : MOB 1 ( Additional Tests: 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)