

# OIL ANALYSIS REPORT

**Sample Rating Trend**

**NORMAL**


Machine Id  
**438675**  
 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>PCA0125192</b>	---	---
Sample Date	Client Info		<b>25 May 2024</b>	---	---
Machine Age	mls	Client Info	<b>18526</b>	---	---
Oil Age	mls	Client Info	<b>18526</b>	---	---
Oil Changed	Client Info		<b>Not 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>166</b>	---
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	---
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	---
Aluminum	ppm	ASTM D5185m	>20	<b>24</b>	---
Lead	ppm	ASTM D5185m	>40	<b>0</b>	---
Copper	ppm	ASTM D5185m	>330	<b>35</b>	---
Tin	ppm	ASTM D5185m	>15	<b>4</b>	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	---

**ADDITIVES**

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	<b>41</b>	---
Barium	ppm	ASTM D5185m	0	<b>&lt;1</b>	---
Molybdenum	ppm	ASTM D5185m	50	<b>46</b>	---
Manganese	ppm	ASTM D5185m	0	<b>14</b>	---
Magnesium	ppm	ASTM D5185m	950	<b>554</b>	---
Calcium	ppm	ASTM D5185m	1050	<b>1795</b>	---
Phosphorus	ppm	ASTM D5185m	995	<b>836</b>	---
Zinc	ppm	ASTM D5185m	1180	<b>957</b>	---
Sulfur	ppm	ASTM D5185m	2600	<b>2603</b>	---

**CONTAMINANTS**

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>14</b>	---
Sodium	ppm	ASTM D5185m		<b>9</b>	---
Potassium	ppm	ASTM D5185m	>20	<b>53</b>	---

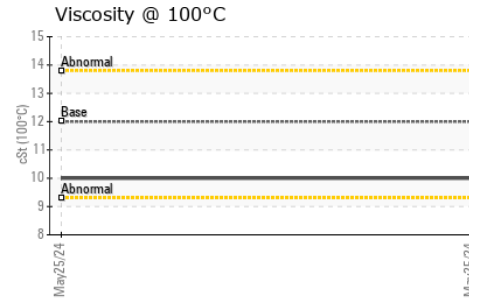
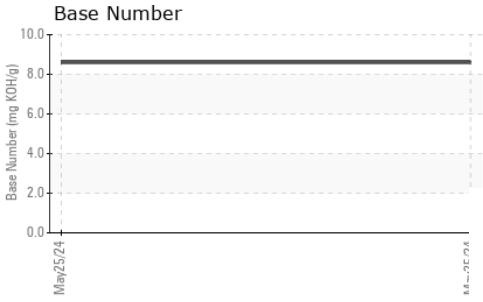
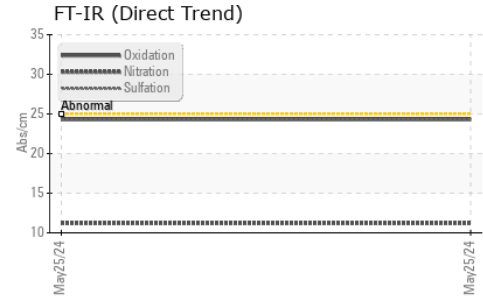
**INFRA-RED**

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.6</b>	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.2</b>	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.3</b>	---

**FLUID DEGRADATION**

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>24.3</b>	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>8.6</b>	---

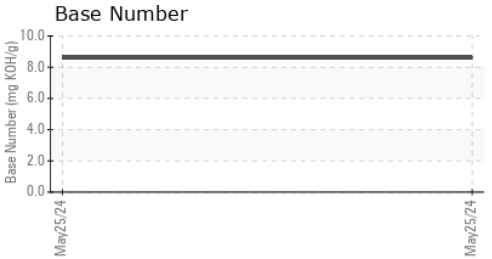
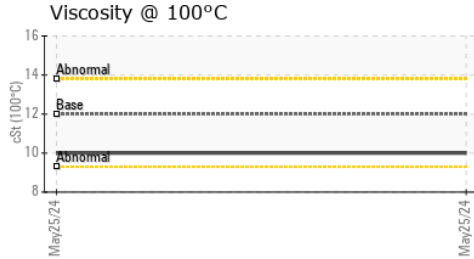
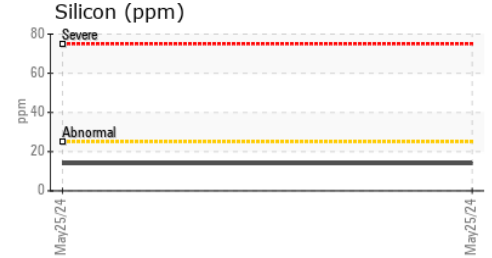
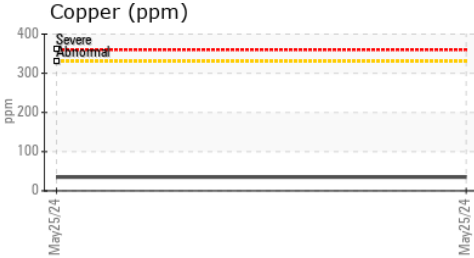
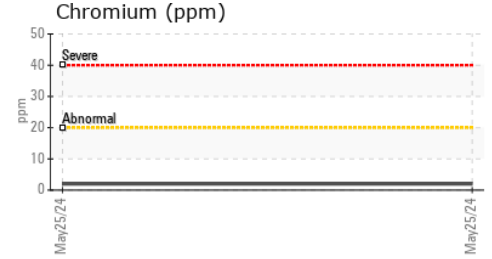
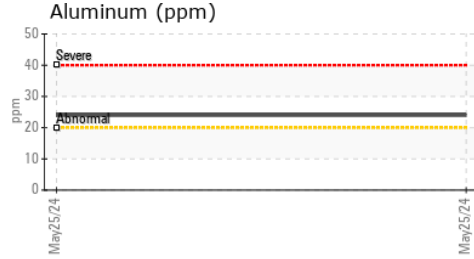
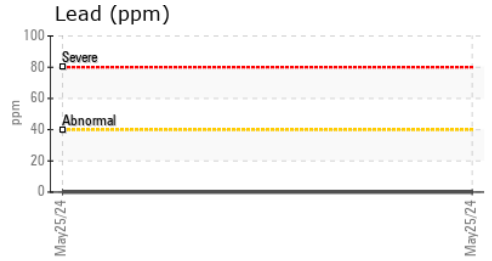
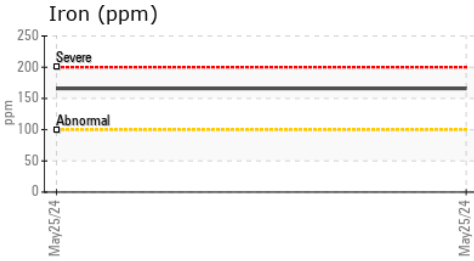
# OIL ANALYSIS REPORT



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	10.0	---

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0125192      **Received** : 05 Jun 2024  
**Lab Number** : 06199830      **Tested** : 05 Jun 2024  
**Unique Number** : 11061953      **Diagnosed** : 07 Jun 2024 - Sean Felton  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**MILLER TRUCK LEASING #118**  
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 PHILADELPHIA, PA  
 US 19116  
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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)