

# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Machine Id  
**707389**

Component  
**Diesel Engine**

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

## DIAGNOSIS

### ▲ Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### ▲ Wear

Piston, ring and cylinder wear is indicated.

### Contamination

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 acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>PCA0118679</b>	---	---
Sample Date	Client Info		<b>07 Feb 2024</b>	---	---
Machine Age	mls	Client Info	<b>445651</b>	---	---
Oil Age	mls	Client Info	<b>0</b>	---	---
Oil Changed	Client Info		<b>N/A</b>	---	---
Sample Status			<b>ABNORMAL</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>▲ 149</b>	---	---
Chromium	ppm	ASTM D5185m >20	<b>4</b>	---	---
Nickel	ppm	ASTM D5185m >4	<b>1</b>	---	---
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185m >3	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m >20	<b>▲ 32</b>	---	---
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185m >330	<b>33</b>	---	---
Tin	ppm	ASTM D5185m >15	<b>2</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>4</b>	---	---
Barium	ppm	ASTM D5185m 0	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m 50	<b>71</b>	---	---
Manganese	ppm	ASTM D5185m 0	<b>2</b>	---	---
Magnesium	ppm	ASTM D5185m 950	<b>882</b>	---	---
Calcium	ppm	ASTM D5185m 1050	<b>1135</b>	---	---
Phosphorus	ppm	ASTM D5185m 995	<b>1042</b>	---	---
Zinc	ppm	ASTM D5185m 1180	<b>1256</b>	---	---
Sulfur	ppm	ASTM D5185m 2600	<b>2436</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>11</b>	---	---
Sodium	ppm	ASTM D5185m	<b>5</b>	---	---
Potassium	ppm	ASTM D5185m >20	<b>8</b>	---	---

## INFRA-RED

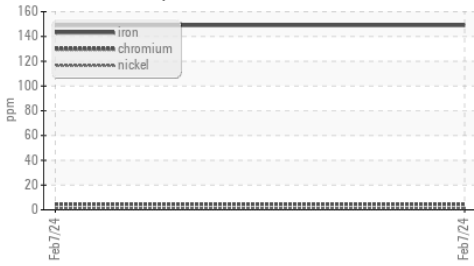
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.9</b>	---	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>14.9</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>26.7</b>	---	---

## FLUID DEGRADATION

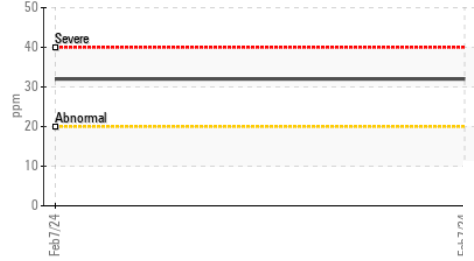
	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>28.7</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	<b>3.6</b>	---	---

# OIL ANALYSIS REPORT

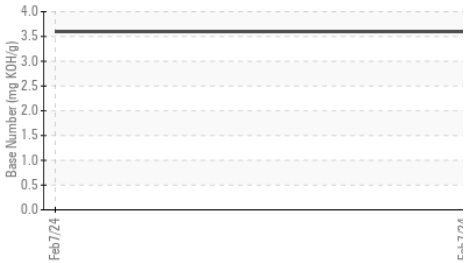
**▲ Ferrous Alloys**



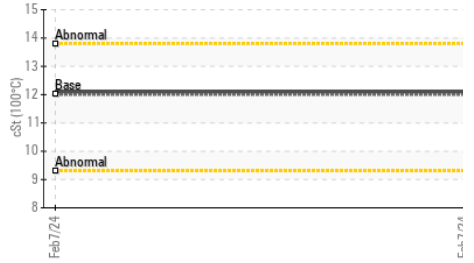
**▲ Aluminum (ppm)**



**Base Number**



**Viscosity @ 100°C**

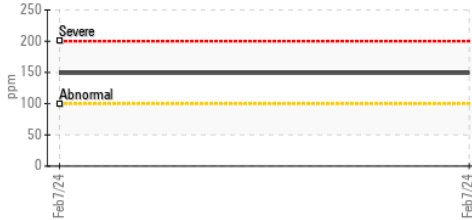


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	---
Free Water	scalar	*Visual		<b>NEG</b>	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	<b>12.1</b>	---

**GRAPHS**

**▲ Iron (ppm)**



**Lead (ppm)**



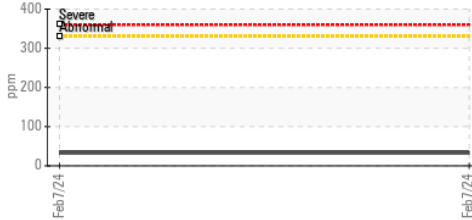
**▲ Aluminum (ppm)**



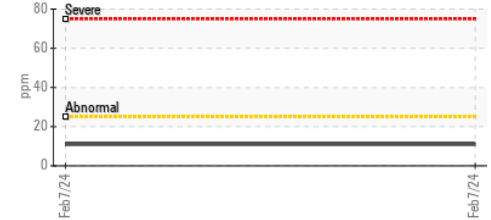
**Chromium (ppm)**



**▲ Copper (ppm)**



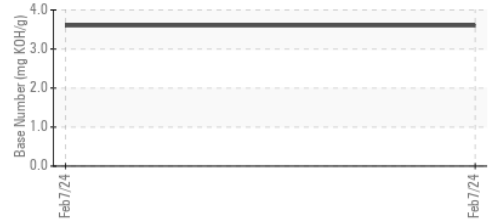
**Silicon (ppm)**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0118679      **Received** : 04 Mar 2024  
**Lab Number** : **06107194**      **Tested** : 05 Mar 2024  
**Unique Number** : 10910691      **Diagnosed** : 06 Mar 2024 - Sean Felton  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**MILLER TRUCK LEASING #116**  
 1197 NORTH MAIN ROAD  
 VINELAND, NJ  
 US 08360  
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 gprice@millertransgroup.com  
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 F: (856)696-5629

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)