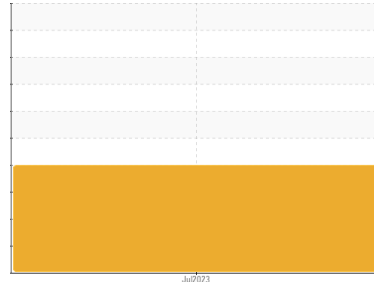


# OIL ANALYSIS REPORT

Sample Rating Trend



**GLYCOL**



Machine Id  
**302819**

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. We recommend an early resample to monitor this condition.

### ▲ Wear

Piston, ring and cylinder wear is indicated.

### ▲ Contamination

Sodium and/or potassium levels are high. Test for glycol is negative.

### ▲ 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>PCA0099101</b>	---	---
Sample Date	Client Info		<b>27 Jul 2023</b>	---	---
Machine Age	mls	Client Info	<b>0</b>	---	---
Oil Age	mls	Client Info	<b>0</b>	---	---
Oil Changed	Client Info		<b>Changed</b>	---	---
Sample Status			<b>ABNORMAL</b>	---	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>▲ 115</b>	---	---
Chromium	ppm	ASTM D5185m >20	<b>3</b>	---	---
Nickel	ppm	ASTM D5185m >4	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185m	<b>0</b>	---	---
Silver	ppm	ASTM D5185m >3	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m >20	<b>▲ 66</b>	---	---
Lead	ppm	ASTM D5185m >40	<b>0</b>	---	---
Copper	ppm	ASTM D5185m >330	<b>6</b>	---	---
Tin	ppm	ASTM D5185m >15	<b>0</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>0</b>	---	---
Barium	ppm	ASTM D5185m 0	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m 50	<b>96</b>	---	---
Manganese	ppm	ASTM D5185m 0	<b>2</b>	---	---
Magnesium	ppm	ASTM D5185m 950	<b>1137</b>	---	---
Calcium	ppm	ASTM D5185m 1050	<b>1312</b>	---	---
Phosphorus	ppm	ASTM D5185m 995	<b>1165</b>	---	---
Zinc	ppm	ASTM D5185m 1180	<b>1494</b>	---	---
Sulfur	ppm	ASTM D5185m 2600	<b>3526</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>8</b>	---	---
Sodium	ppm	ASTM D5185m	<b>▲ 149</b>	---	---
Potassium	ppm	ASTM D5185m >20	<b>▲ 133</b>	---	---
Glycol	%	*ASTM D2982	<b>0.0</b>	---	---

## INFRA-RED

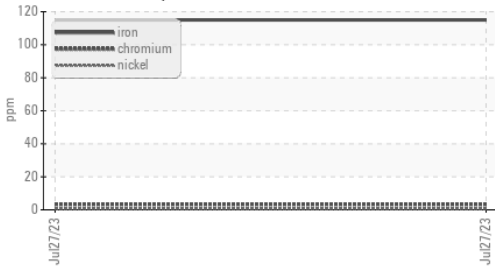
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>1.3</b>	---	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>15.7</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>29.8</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>28.0</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	<b>5.0</b>	---	---

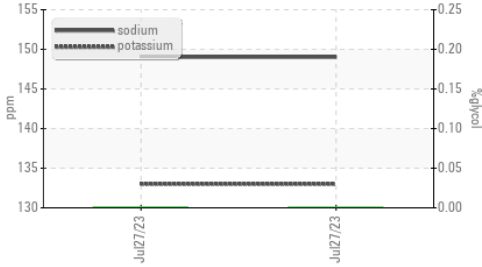
# OIL ANALYSIS REPORT

**▲ Ferrous Alloys**



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	---

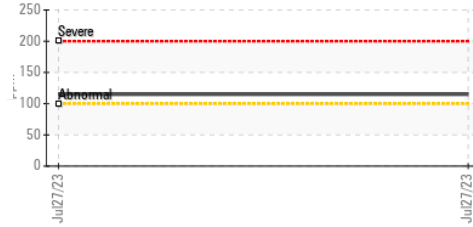
**● Glycol Contamination**



FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	11.9	---

**GRAPHS**

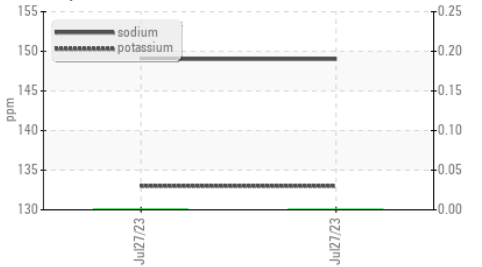
**▲ Iron (ppm)**



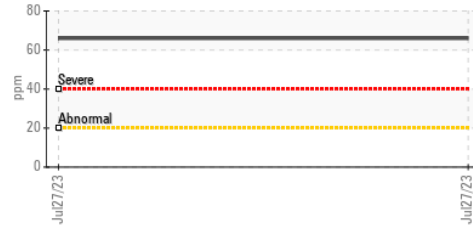
**Lead (ppm)**



**● Glycol Contamination**



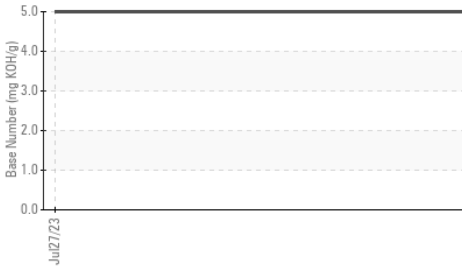
**▲ Aluminum (ppm)**



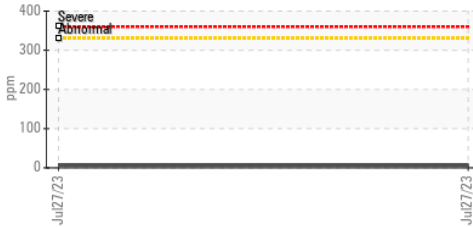
**Chromium (ppm)**



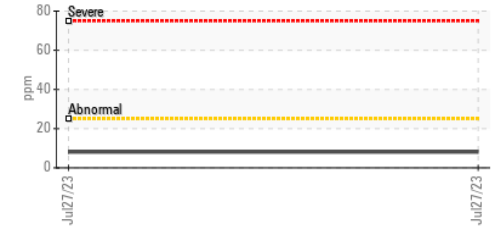
**Base Number**



**Copper (ppm)**



**Silicon (ppm)**



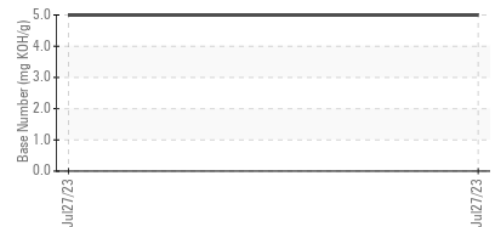
**Viscosity @ 100°C**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0099101 **Received** : 31 Aug 2023  
**Lab Number** : 05939535 **Diagnosed** : 01 Sep 2023  
**Unique Number** : 10630147 **Diagnostician** : Don Baldrige

**MILLER TRUCK LEASING #116**  
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 VINELAND, NJ  
 US 08360  
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 gprice@millertransgroup.com  
 T: (856)696-4848  
 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)