



Machine Id  
**FREIGHTLINER 196**

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**

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>PCA0100678</b>	---	---
Sample Date	Client Info	<b>11 Jul 2023</b>	---	---
Machine Age	mls	Client Info	<b>106958</b>	---
Oil Age	mls	Client Info	<b>51643</b>	---
Oil Changed	Client Info	<b>Changed</b>	---	---
Sample Status		<b>NORMAL</b>	---	---

**CONTAMINATION** method limit/base current history1 history2

Fuel	WC Method	>5	<b>&lt;1.0</b>	---	---
Glycol	WC Method		<b>NEG</b>	---	---

**WEAR METALS** method limit/base current history1 history2

Iron	ppm	ASTM D5185m	>80	<b>59</b>	---	---
Chromium	ppm	ASTM D5185m	>5	<b>2</b>	---	---
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>30	<b>13</b>	---	---
Lead	ppm	ASTM D5185m	>30	<b>0</b>	---	---
Copper	ppm	ASTM D5185m	>150	<b>62</b>	---	---
Tin	ppm	ASTM D5185m	>5	<b>2</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	---	---

**ADDITIVES** method limit/base current history1 history2

Boron	ppm	ASTM D5185m	2	<b>2</b>	---	---
Barium	ppm	ASTM D5185m	0	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m	50	<b>65</b>	---	---
Manganese	ppm	ASTM D5185m	0	<b>1</b>	---	---
Magnesium	ppm	ASTM D5185m	950	<b>934</b>	---	---
Calcium	ppm	ASTM D5185m	1050	<b>1336</b>	---	---
Phosphorus	ppm	ASTM D5185m	995	<b>965</b>	---	---
Zinc	ppm	ASTM D5185m	1180	<b>1192</b>	---	---
Sulfur	ppm	ASTM D5185m	2600	<b>2497</b>	---	---

**CONTAMINANTS** method limit/base current history1 history2

Silicon	ppm	ASTM D5185m	>20	<b>6</b>	---	---
Sodium	ppm	ASTM D5185m		<b>4</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>29</b>	---	---

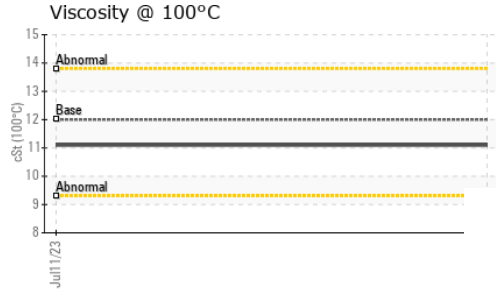
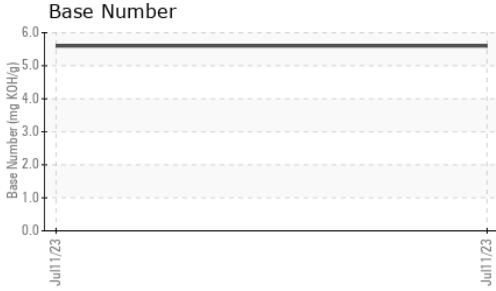
**INFRA-RED** method limit/base current history1 history2

Soot %	%	*ASTM D7844	>3	<b>1.3</b>	---	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>12.4</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.7</b>	---	---

**FLUID DEGRADATION** method limit/base current history1 history2

Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>23.0</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>5.6</b>	---	---

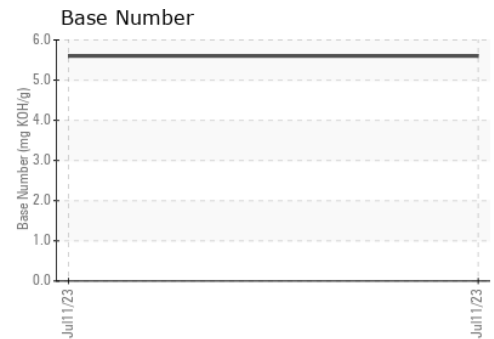
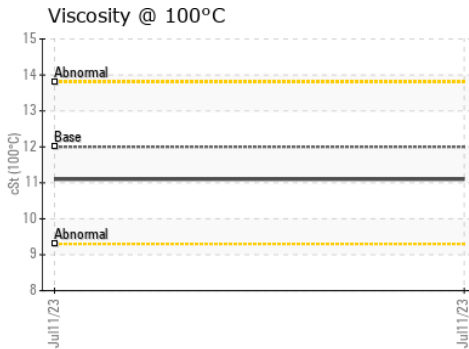
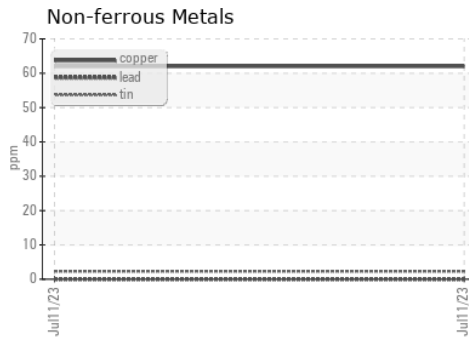
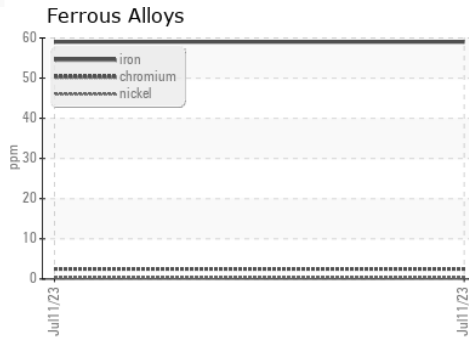
# OIL ANALYSIS REPORT



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	11.1	---

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0100678 **Received** : 19 Jul 2023  
**Lab Number** : 05902076 **Diagnosed** : 20 Jul 2023  
**Unique Number** : 10563432 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**A Truck Repair**  
 9349 China Grove Church Road  
 Pineville, NC  
 US 28134  
 Contact: Vlad Melnichuk  
 shop@migway.com  
 T: (980)255-3200  
 F:

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)