

# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**


Area  
**(51449Z) Walgreens**  
 Machine Id  
**[Walgreens] 136A63380**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (11 GAL)**



## DIAGNOSIS

### Recommendation

Oil and filter change at the time of sampling has been noted. 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.

### 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>PCA0099941</b>	---	---
Sample Date	Client Info	<b>17 Aug 2023</b>	---	---
Machine Age	mls	Client Info	<b>93328</b>	---
Oil Age	mls	Client Info	<b>50000</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>52</b>	---
Chromium	ppm	ASTM D5185m	>5	<b>6</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>112</b>	---
Lead	ppm	ASTM D5185m	>30	<b>0</b>	---
Copper	ppm	ASTM D5185m	>150	<b>41</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>4</b>	---
Barium	ppm	ASTM D5185m	0	<b>0</b>	---
Molybdenum	ppm	ASTM D5185m	50	<b>64</b>	---
Manganese	ppm	ASTM D5185m	0	<b>2</b>	---
Magnesium	ppm	ASTM D5185m	950	<b>982</b>	---
Calcium	ppm	ASTM D5185m	1050	<b>1265</b>	---
Phosphorus	ppm	ASTM D5185m	995	<b>963</b>	---
Zinc	ppm	ASTM D5185m	1180	<b>1225</b>	---
Sulfur	ppm	ASTM D5185m	2600	<b>2508</b>	---

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>20	<b>6</b>	---
Sodium	ppm	ASTM D5185m		<b>5</b>	---
Potassium	ppm	ASTM D5185m	>20	<b>249</b>	---

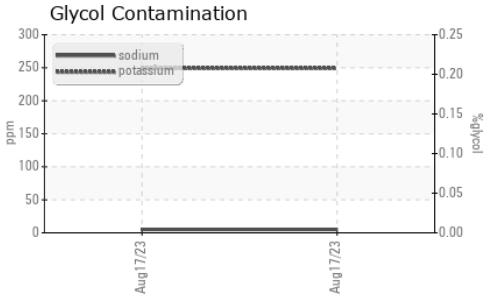
## INFRA-RED

method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	<b>0.9</b>	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.7</b>	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.9</b>	---

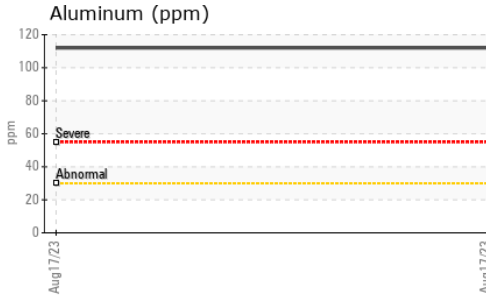
## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.3</b>	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>6.6</b>	---

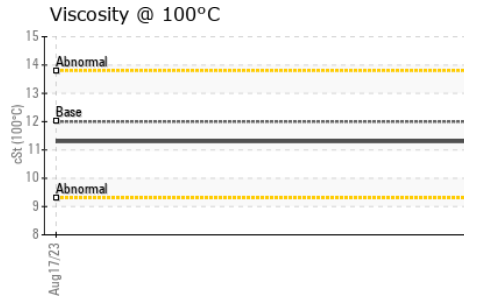
# OIL ANALYSIS REPORT



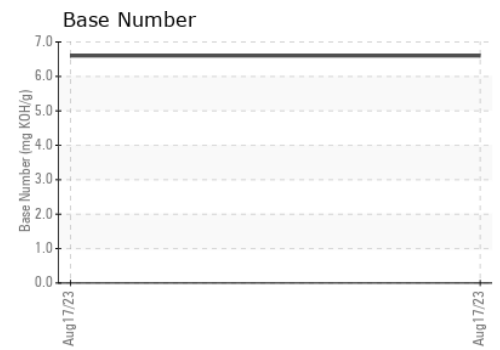
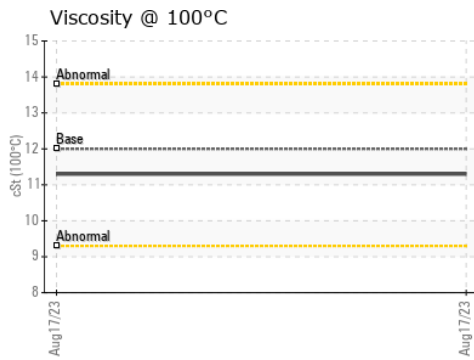
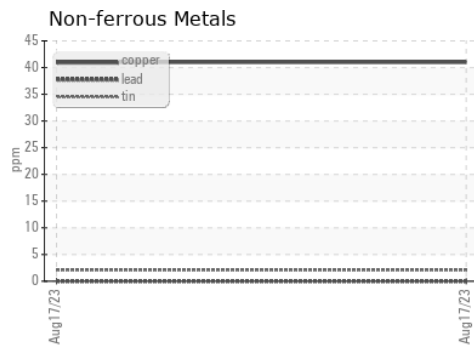
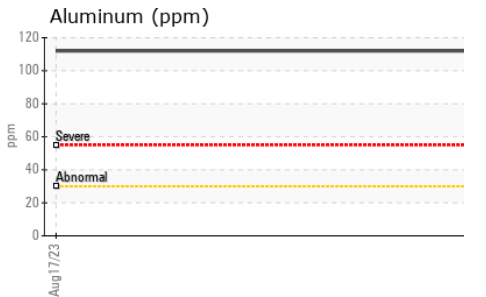
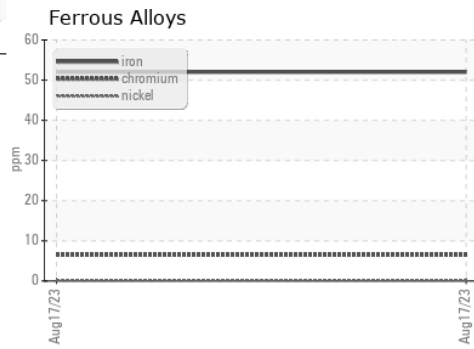
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	11.3	---



## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0099941 **Received** : 07 Sep 2023  
**Lab Number** : **05944358** **Diagnosed** : 09 Sep 2023  
**Unique Number** : 10634970 **Diagnostician** : Don Baldrige  
**Test Package** : FLEET

**Transervice - Shop 1374 - Berkeley-Hartford**  
 80 International Drive  
 Windsor, CT  
 US 06095  
 Contact: Paul Santanella  
 psantanella@transervice.com  
 T: (860)687-1037  
 F: (860)687-1476

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)