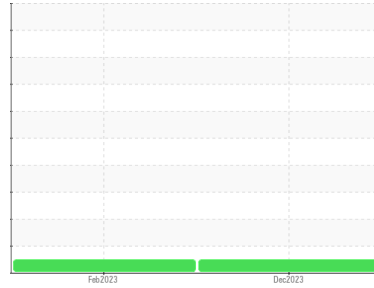


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**Blue Bird 4939**

Component  
**Diesel Engine**

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

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

Metal levels are typical for a components first oil change.

### 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>PCA0091663</b>	PCA0045395	---
Sample Date	Client Info		<b>07 Dec 2023</b>	16 Feb 2023	---
Machine Age	mls	Client Info	<b>91196</b>	72085	---
Oil Age	mls	Client Info	<b>19111</b>	72085	---
Oil Changed	Client Info		<b>Changed</b>	Changed	---
Sample Status			<b>NORMAL</b>	NORMAL	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<b>&lt;1.0</b>	<1.0	---
Water	WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol	WC Method		<b>NEG</b>	NEG	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >90	<b>24</b>	27	---
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185m >2	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m >20	<b>5</b>	8	---
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	<1	---
Copper	ppm	ASTM D5185m >330	<b>2</b>	3	---
Tin	ppm	ASTM D5185m >15	<b>0</b>	<1	---
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	<b>&lt;1</b>	<1	---
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m 50	<b>60</b>	59	---
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	1	---
Magnesium	ppm	ASTM D5185m 950	<b>933</b>	929	---
Calcium	ppm	ASTM D5185m 1050	<b>1024</b>	1109	---
Phosphorus	ppm	ASTM D5185m 995	<b>968</b>	966	---
Zinc	ppm	ASTM D5185m 1180	<b>1184</b>	1211	---
Sulfur	ppm	ASTM D5185m 2600	<b>2806</b>	3204	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>4</b>	3	---
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	2	---
Potassium	ppm	ASTM D5185m >20	<b>7</b>	12	---

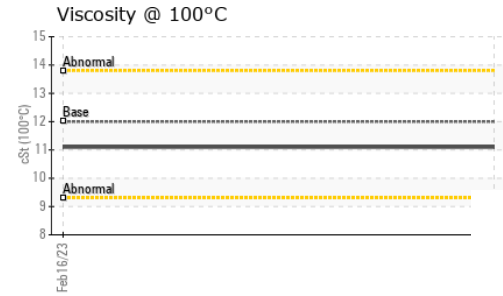
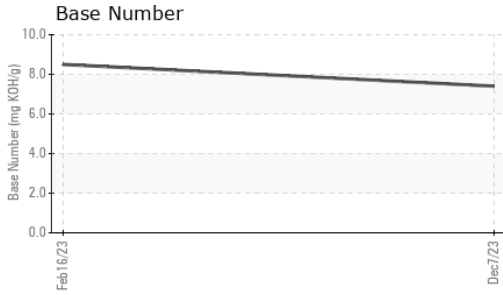
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >6	<b>0.5</b>	0.5	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>9.0</b>	9.1	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.8</b>	19.8	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>17.1</b>	16.8	---
Base Number (BN)	mg KOH/g	ASTM D2896	<b>7.4</b>	8.5	---

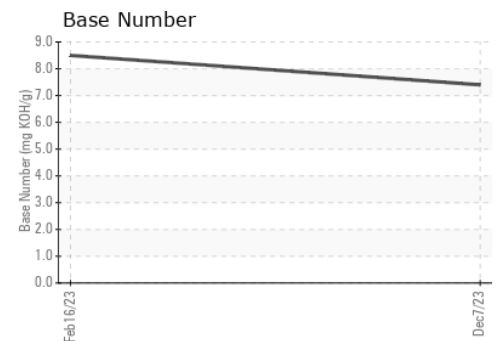
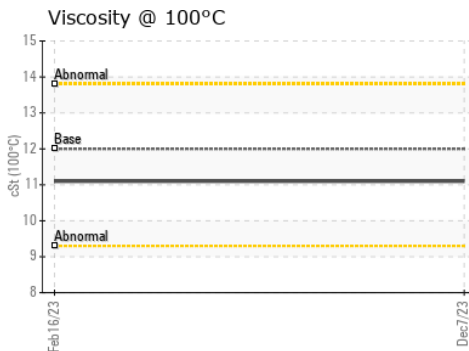
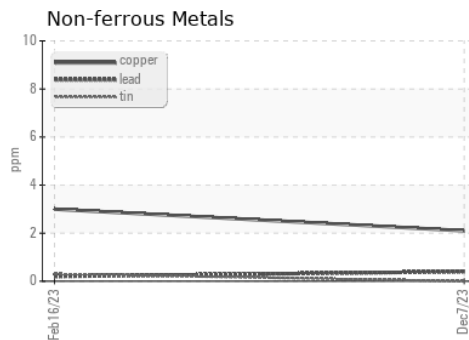
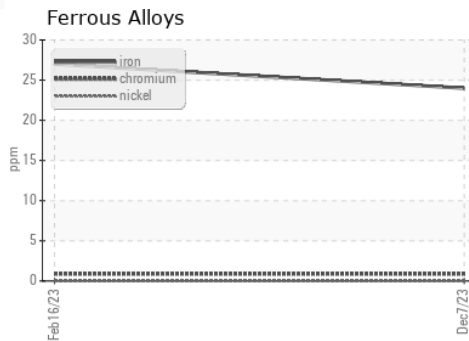
# OIL ANALYSIS REPORT



PARAMETER	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	<b>11.1</b>	11.1	---

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0091663 **Received** : 20 Dec 2023  
**Lab Number** : **06040292** **Diagnosed** : 21 Dec 2023  
**Unique Number** : 10795521 **Diagnostician** : Angela Borella  
**Test Package** : FLEET ( Additional Tests: FT-IR(Diff) )

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)

**ICSB571 - Gibson City**  
 524 East 7th Street  
 Gibson City, IL  
 US 60936

Contact: Wayne Justus  
 w.justus@illinois-central.com

T: (217)784-5800

F: