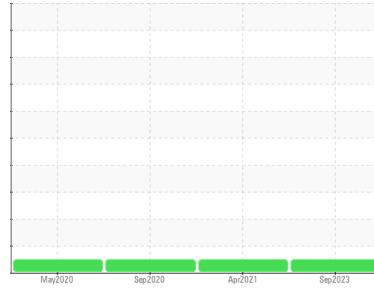


# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id

**548**

Component

**Diesel Engine**

Fluid

**PETRO CANADA DURON HP 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

### 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>PCA0082894</b>	PCA0043158	PCA0027635
Sample Date	Client Info	<b>26 Sep 2023</b>	20 Apr 2021	01 Sep 2020
Machine Age	hrs	Client Info	0	5492
Oil Age	hrs	Client Info	0	500
Oil Changed	Client Info	<b>Not Chngd</b>	Changed	Changed
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

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

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	<b>11</b>	16	14
Chromium	ppm ASTM D5185m >20	<b>&lt;1</b>	1	<1
Nickel	ppm ASTM D5185m >4	<b>&lt;1</b>	<1	<1
Titanium	ppm ASTM D5185m	<b>0</b>	<1	2
Silver	ppm ASTM D5185m >3	<b>0</b>	<1	<1
Aluminum	ppm ASTM D5185m >20	<b>0</b>	6	9
Lead	ppm ASTM D5185m >40	<b>2</b>	2	<1
Copper	ppm ASTM D5185m >330	<b>&lt;1</b>	1	<1
Tin	ppm ASTM D5185m >15	<b>&lt;1</b>	<1	0
Antimony	ppm ASTM D5185m	<b>---</b>	<1	0
Vanadium	ppm ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm ASTM D5185m	<b>0</b>	<1	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	<b>&lt;1</b>	10	23
Barium	ppm ASTM D5185m	<b>2</b>	0	0
Molybdenum	ppm ASTM D5185m	<b>62</b>	64	56
Manganese	ppm ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185m	<b>890</b>	1038	925
Calcium	ppm ASTM D5185m	<b>1031</b>	1164	1148
Phosphorus	ppm ASTM D5185m	<b>980</b>	1085	919
Zinc	ppm ASTM D5185m	<b>1157</b>	1371	1087
Sulfur	ppm ASTM D5185m	<b>2853</b>	2931	2330

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>6</b>	5	6
Sodium	ppm ASTM D5185m	<b>0</b>	1	2
Potassium	ppm ASTM D5185m >20	<b>6</b>	12	20

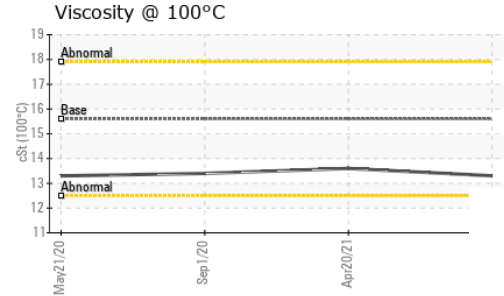
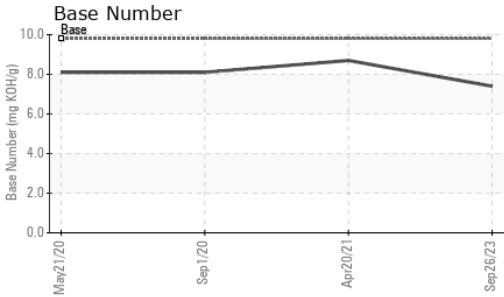
## INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.3</b>	0.5	0.4
Nitration	Abs/cm *ASTM D7624 >20	<b>8.2</b>	8.6	8.8
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>19.8</b>	21.8	21.6

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>16.2</b>	17.3	17.1
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>7.4</b>	8.7	8.1

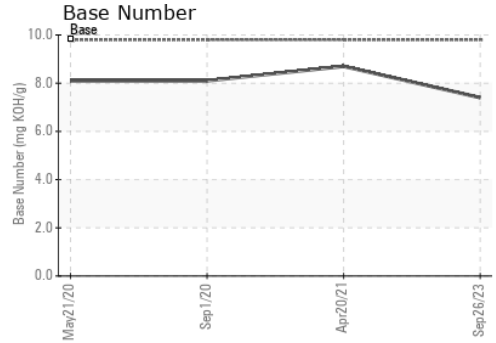
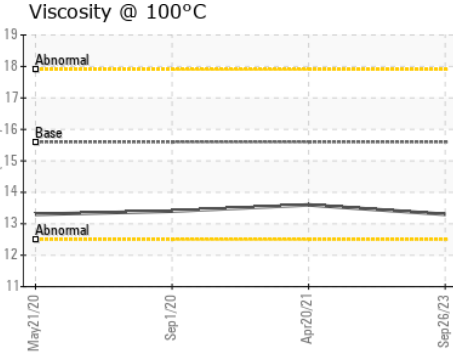
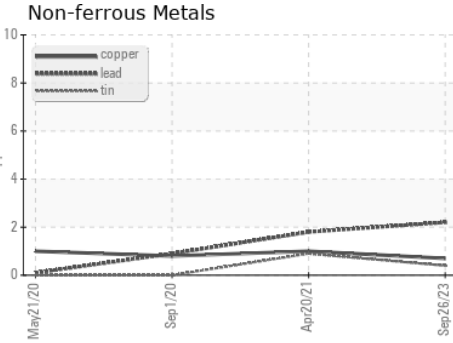
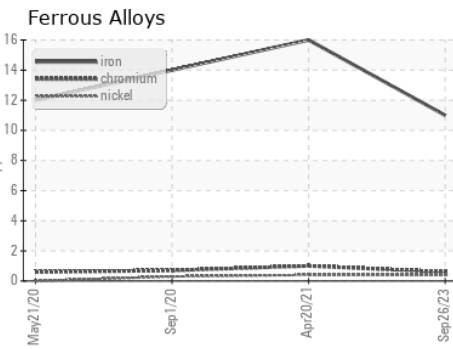
# OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.6	<b>13.3</b>	13.6	13.4

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0082894 **Received** : 16 Oct 2023  
**Lab Number** : **05979428** **Diagnosed** : 17 Oct 2023  
**Unique Number** : 10696723 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**AVR - APPLE VALLEY READY MIX**  
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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)