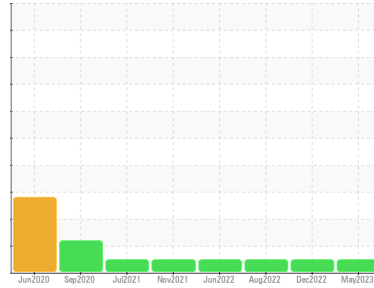


# OIL ANALYSIS REPORT

**Sample Rating Trend**

**NORMAL**


Machine Id

**595**

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**

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. 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>PCA0069609</b>	PCA0069267	PCA0058352
Sample Date	Client Info		<b>31 May 2023</b>	19 Dec 2022	17 Aug 2022
Machine Age	hrs	Client Info	<b>5149</b>	1094	1094
Oil Age	hrs	Client Info	<b>303</b>	1094	1094
Oil Changed	Client Info		<b>Not Chngd</b>	N/A	N/A
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>23</b>	23	14
Chromium	ppm	ASTM D5185m >20	<b>2</b>	2	1
Nickel	ppm	ASTM D5185m >4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >20	<b>30</b>	18	13
Lead	ppm	ASTM D5185m >40	<b>0</b>	1	<1
Copper	ppm	ASTM D5185m >330	<b>&lt;1</b>	1	<1
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

**ADDITIVES**

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>3</b>	91	8
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>67</b>	64	63
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>1040</b>	889	890
Calcium	ppm	ASTM D5185m	<b>1216</b>	1224	1181
Phosphorus	ppm	ASTM D5185m	<b>1137</b>	1013	1010
Zinc	ppm	ASTM D5185m	<b>1382</b>	1254	1228
Sulfur	ppm	ASTM D5185m	<b>3813</b>	3390	3633

**CONTAMINANTS**

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>8</b>	10	8
Sodium	ppm	ASTM D5185m	<b>2</b>	<1	2
Potassium	ppm	ASTM D5185m >20	<b>57</b>	41	23

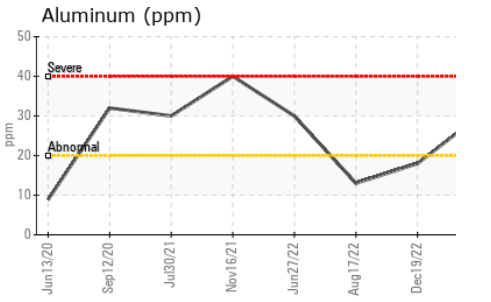
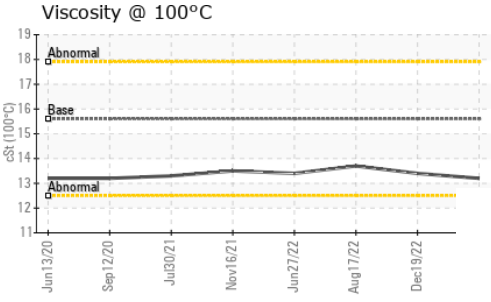
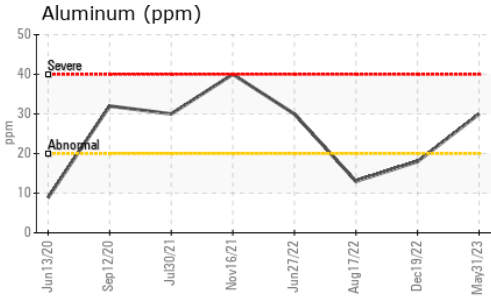
**INFRA-RED**

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.3</b>	0.4	0.3
Nitration	Abs/cm	*ASTM D7624 >20	<b>9.6</b>	9.8	8.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>20.4</b>	21.0	20.8

**FLUID DEGRADATION**

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>17.3</b>	18.3	16.9
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>7.6</b>	7.3	9.1

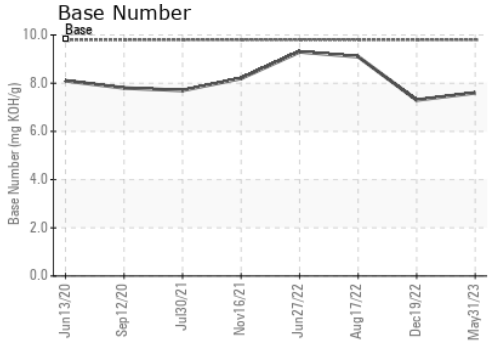
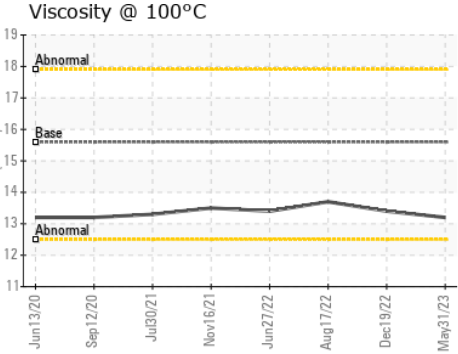
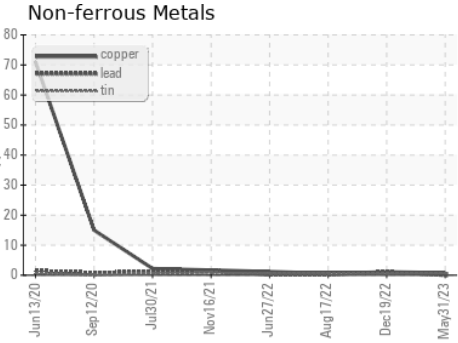
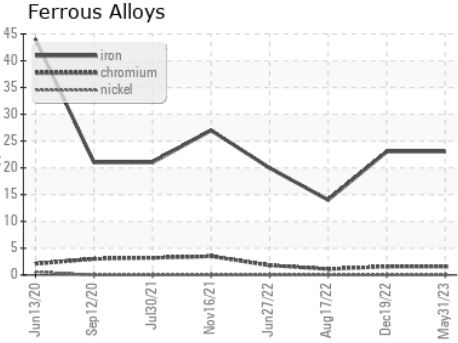
# OIL ANALYSIS REPORT



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>13.2</b>	13.4	13.7

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0069609 **Received** : 25 Aug 2023  
**Lab Number** : **05934715** **Diagnosed** : 25 Aug 2023  
**Unique Number** : 10619986 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**AVR - APPLE VALLEY READY MIX**  
 14698 GALAXY AVE  
 APPLE VALLEY, MN  
 US 55124  
 Contact: senia zimmer  
 avrconcrete.senia@gmail.com  
 T: (952)953-2992  
 F: (952)953-2994

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)