

# OIL ANALYSIS REPORT

Sample Rating Trend

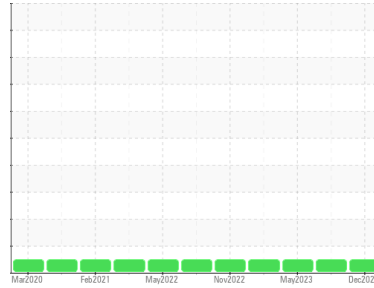
**NORMAL**



Machine Id  
**PIERCE 807 (S/N 4P1BAAGF1EA014651)**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON HP 15W40 (34 GAL)**



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

Metal levels are typical for a new component breaking in.

### 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>PCA0112915</b>	PCA0105366	PCA0097968
Sample Date	Client Info		<b>27 Dec 2023</b>	02 Oct 2023	19 May 2023
Machine Age	mls	Client Info	<b>38532</b>	37301	35033
Oil Age	mls	Client Info	<b>1231</b>	2268	1350
Oil Changed	Client Info		<b>Changed</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
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>&lt;1</b>	5	3
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	2	<1
Nickel	ppm	ASTM D5185m >4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>2</b>	4	1
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m >330	<b>8</b>	15	8
Tin	ppm	ASTM D5185m >15	<b>1</b>	<1	0
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>13</b>	11	16
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>62</b>	62	62
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	<b>898</b>	914	975
Calcium	ppm	ASTM D5185m	<b>999</b>	1058	1134
Phosphorus	ppm	ASTM D5185m	<b>1027</b>	970	1095
Zinc	ppm	ASTM D5185m	<b>1162</b>	1219	1322
Sulfur	ppm	ASTM D5185m	<b>3048</b>	3524	4042

## CONTAMINANTS

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

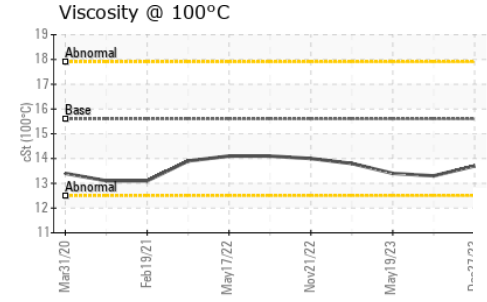
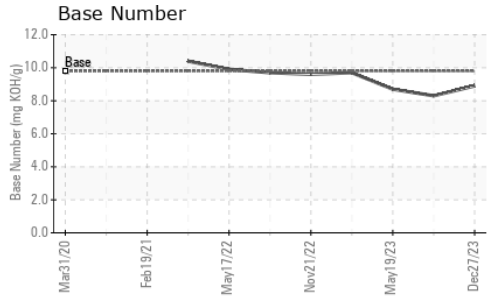
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.3</b>	0.5	0.3
Nitration	Abs/cm	*ASTM D7624 >20	<b>5.7</b>	6.7	5.7
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>17.6</b>	18.5	18.4

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>12.8</b>	13.6	14.5
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>8.9</b>	8.3	8.7

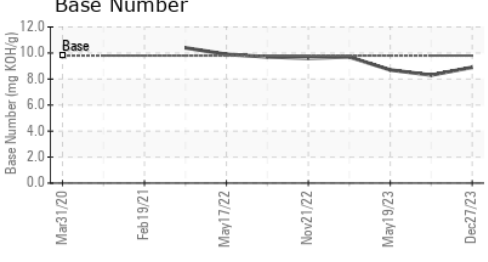
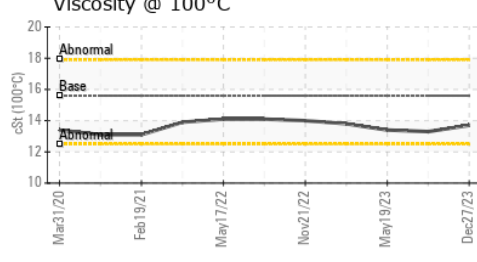
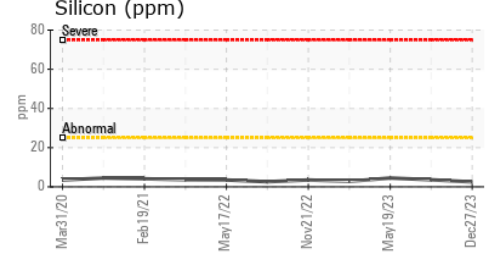
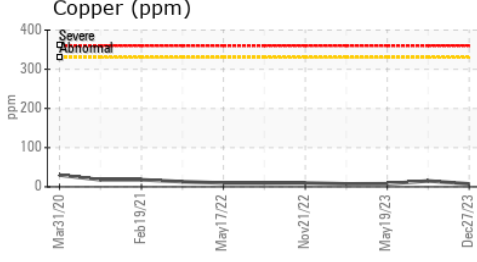
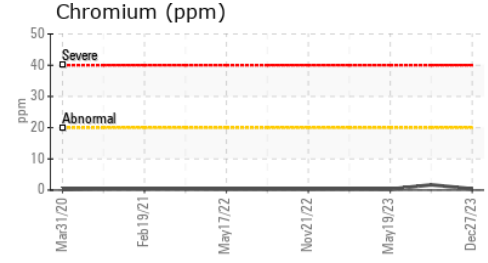
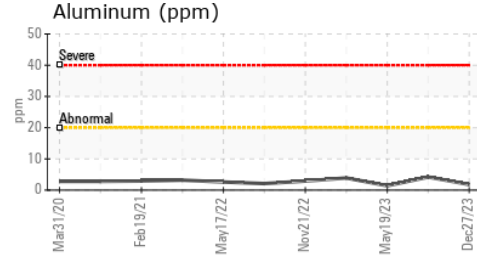
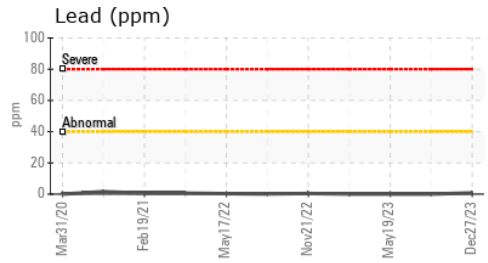
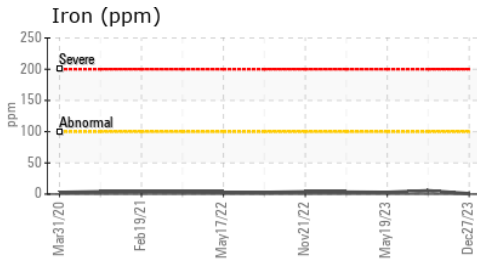
# OIL ANALYSIS REPORT



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>13.7</b>	13.3	13.4

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0112915      **Received** : 01 Feb 2024  
**Lab Number** : **06077442**      **Tested** : 02 Feb 2024  
**Unique Number** : 10859533      **Diagnosed** : 02 Feb 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**VILLAGE OF NORTH RIVERSIDE**  
 2345 S DESPLAINES  
 NORTH RIVERSIDE, IL  
 US 60546  
 Contact: Service Manager  
 vznrdpw@gmail.com

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)

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