

# OIL ANALYSIS REPORT

## Sample Rating Trend

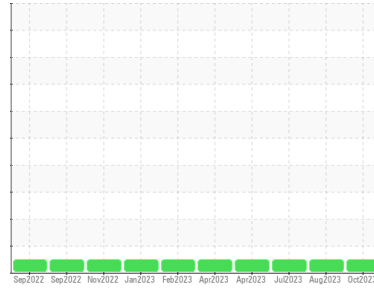
**NORMAL**



Machine Id  
**221001**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON EXTRA 15W40 (9 GAL)**



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### 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>PCA0105995</b>	PCA0102977	PCA0098098
Sample Date	Client Info		<b>23 Oct 2023</b>	25 Aug 2023	13 Jul 2023
Machine Age	hrs	Client Info	<b>5799</b>	5355	4958
Oil Age	hrs	Client Info	<b>444</b>	397	403
Oil Changed	Client Info		<b>Not Changed</b>	Not Changed	Not Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<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 >120	<b>10</b>	11	4
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >5	<b>1</b>	4	7
Titanium	ppm	ASTM D5185m >2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	0
Aluminum	ppm	ASTM D5185m >20	<b>2</b>	1	2
Lead	ppm	ASTM D5185m >40	<b>1</b>	0	0
Copper	ppm	ASTM D5185m >330	<b>2</b>	3	1
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	1	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>1</b>	0	2
Barium	ppm	ASTM D5185m 0	<b>4</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>80</b>	67	60
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 1010	<b>1164</b>	1058	924
Calcium	ppm	ASTM D5185m 1070	<b>1331</b>	1170	1035
Phosphorus	ppm	ASTM D5185m 1150	<b>1295</b>	1058	976
Zinc	ppm	ASTM D5185m 1270	<b>1484</b>	1297	1220
Sulfur	ppm	ASTM D5185m 2150	<b>3827</b>	3439	3150

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>8</b>	5	4
Sodium	ppm	ASTM D5185m	<b>7</b>	13	6
Potassium	ppm	ASTM D5185m >20	<b>6</b>	3	4

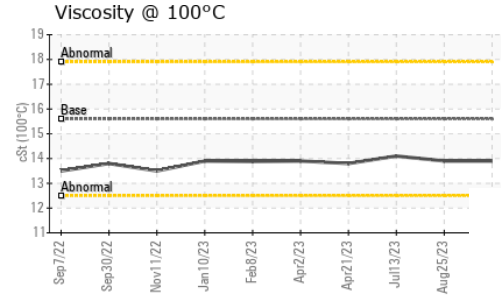
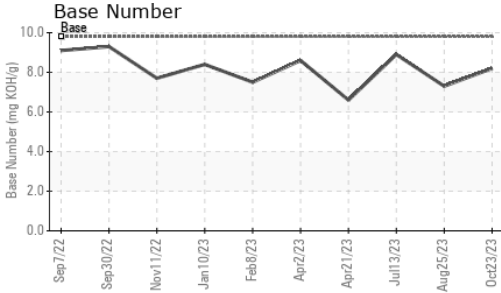
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >4	<b>0.4</b>	0.4	0.2
Nitration	Abs/cm	*ASTM D7624 >20	<b>7.4</b>	8.7	6.3
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.3</b>	19.1	18.4

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>15.2</b>	15.1	14.3
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>8.2</b>	7.3	8.9

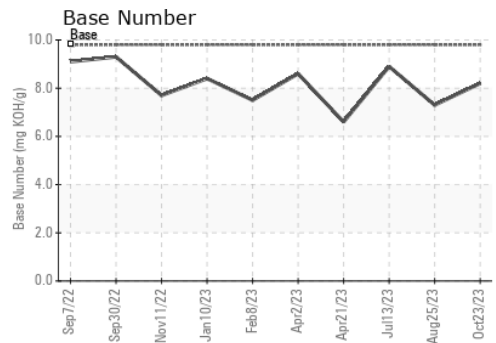
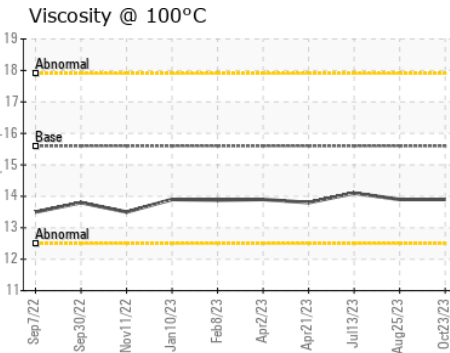
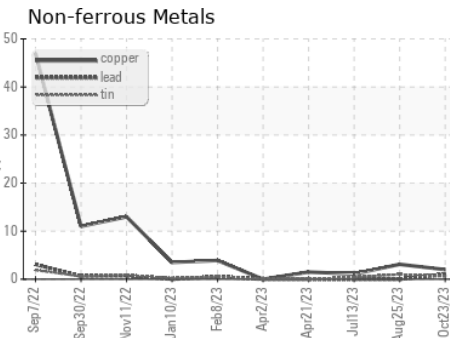
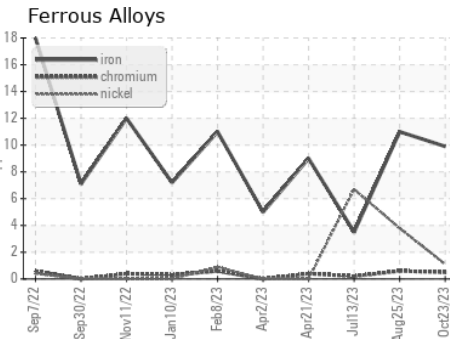
# OIL ANALYSIS REPORT



PARAMETER	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>13.9</b>	13.9	14.1

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0105995 **Received** : 31 Oct 2023  
**Lab Number** : 05995000 **Diagnosed** : 01 Nov 2023  
**Unique Number** : 10723360 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**LRS - BETHEL HEIGHTS (NWA AR)**  
 848 HWY 264 E  
 BETHEL HEIGHTS, AR  
 US 72764  
 Contact: ROBERT HEATH  
 rheath@lrsrecycles.com  
 T: (479)305-8958  
 F:

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)