

Machine Id  
**2126924**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (--- QTS)**

**DIAGNOSIS**

**Recommendation**

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

**Wear**

Metal levels are typical for a new component breaking in.

**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>PCA0101678</b>	PCA0099472	PCA0094891
Sample Date	Client Info			<b>14 Aug 2023</b>	22 May 2023	13 Mar 2023
Machine Age	mls Client Info			<b>61312</b>	0	21693
Oil Age	mls Client Info			<b>39619</b>	20000	21693
Oil Changed	Client Info			<b>Changed</b>	Not Changd	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>33</b>	17	41
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	>4	<b>1</b>	0	1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>20	<b>17</b>	12	22
Lead	ppm	ASTM D5185m	>40	<b>2</b>	4	2
Copper	ppm	ASTM D5185m	>330	<b>125</b>	294	153
Tin	ppm	ASTM D5185m	>15	<b>3</b>	<1	4
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0

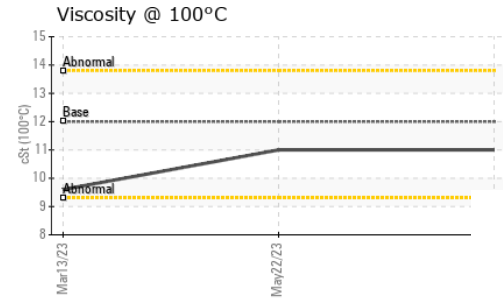
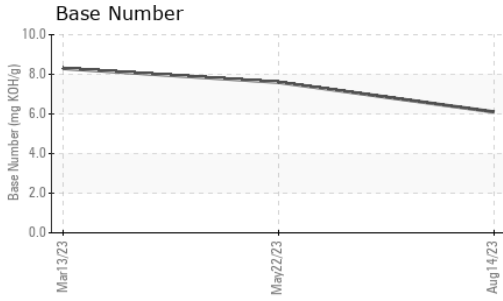
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	<b>4</b>	15	229
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	50	<b>64</b>	63	107
Manganese	ppm	ASTM D5185m	0	<b>1</b>	<1	3
Magnesium	ppm	ASTM D5185m	950	<b>871</b>	908	666
Calcium	ppm	ASTM D5185m	1050	<b>1120</b>	1054	1490
Phosphorus	ppm	ASTM D5185m	995	<b>840</b>	935	635
Zinc	ppm	ASTM D5185m	1180	<b>1114</b>	1157	814
Sulfur	ppm	ASTM D5185m	2600	<b>2598</b>	2715	2450

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>8</b>	8	34
Sodium	ppm	ASTM D5185m		<b>4</b>	2	5
Potassium	ppm	ASTM D5185m	>20	<b>50</b>	37	66

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.4</b>	8.9	9.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.5</b>	19.8	24.6

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.1</b>	16.2	22.4
Base Number (BN)	mg KOH/g	ASTM D2896		<b>6.1</b>	7.6	8.3

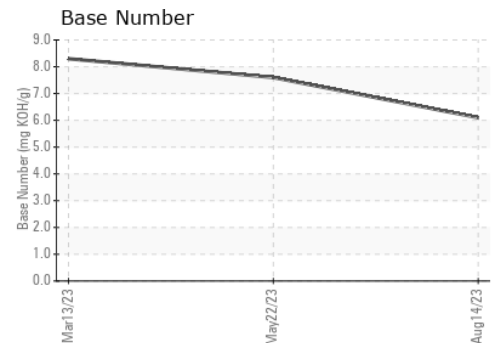
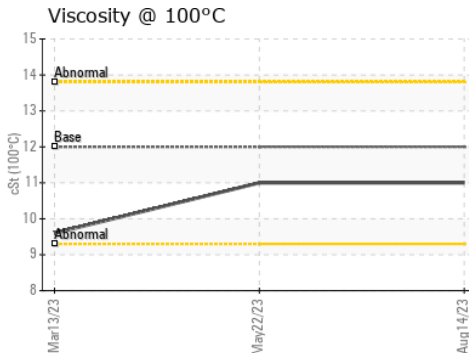
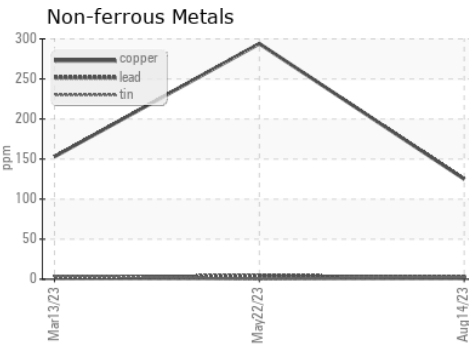
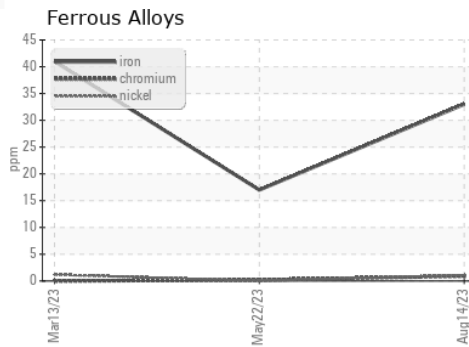
# OIL ANALYSIS REPORT



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	12.00	11.0	9.6

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0101678 **Received** : 11 Dec 2023  
**Lab Number** : 06031149 **Diagnosed** : 12 Dec 2023  
**Unique Number** : 10780940 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**PERDUE FARMS - GEORGETOWN**  
 20621 SAVANAH RD  
 GEORGETOWN, DE  
 US 19947  
 Contact: ROBERT LOCKWOOD  
 Robert.Lockwood@Perdue.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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