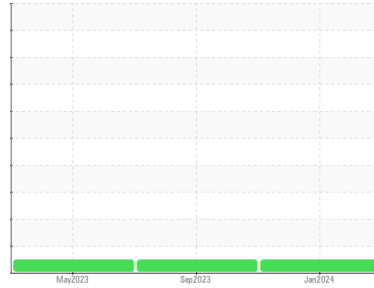


# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**(AY405B) Supermarket - Tractor**  
Machine Id  
**FREIGHTLINER 107A1864**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 10W30 (11 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### 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>PCA0111020</b>	PCA0104085	PCA0097066
Sample Date	Client Info		<b>11 Jan 2024</b>	07 Sep 2023	19 May 2023
Machine Age	mls	Client Info	<b>50569</b>	36452	24488
Oil Age	mls	Client Info	<b>14117</b>	11964	13489
Oil Changed	Client Info		<b>Changed</b>	Changed	Not 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	>80	<b>23</b>	42	24
Chromium	ppm	ASTM D5185m	>5	<b>1</b>	3	2
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>30	<b>25</b>	48	28
Lead	ppm	ASTM D5185m	>30	<b>&lt;1</b>	0	1
Copper	ppm	ASTM D5185m	>150	<b>130</b>	182	301
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	2	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	2	<b>21</b>	18	24
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	50	<b>60</b>	65	61
Manganese	ppm	ASTM D5185m	0	<b>1</b>	3	2
Magnesium	ppm	ASTM D5185m	950	<b>853</b>	894	833
Calcium	ppm	ASTM D5185m	1050	<b>1103</b>	1435	1270
Phosphorus	ppm	ASTM D5185m	995	<b>1040</b>	987	961
Zinc	ppm	ASTM D5185m	1180	<b>1219</b>	1245	1180
Sulfur	ppm	ASTM D5185m	2600	<b>2609</b>	2864	3328

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>20	<b>5</b>	7	6
Sodium	ppm	ASTM D5185m		<b>2</b>	4	3
Potassium	ppm	ASTM D5185m	>20	<b>60</b>	121	71

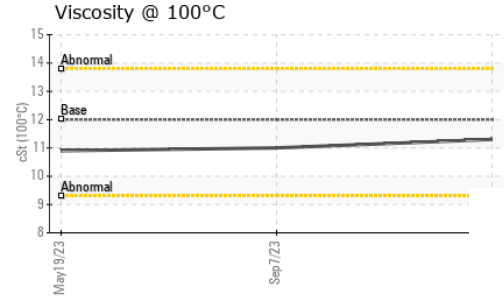
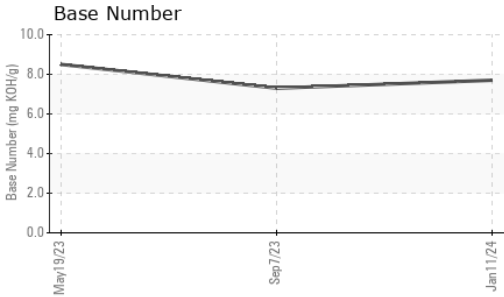
## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	<b>0.7</b>	0.9	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.8</b>	9.5	7.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.4</b>	21.7	20.8

## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.8</b>	18.5	16.5
Base Number (BN)	mg KOH/g	ASTM D2896		<b>7.7</b>	7.3	8.5

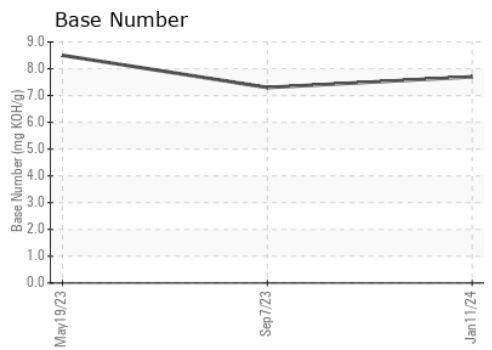
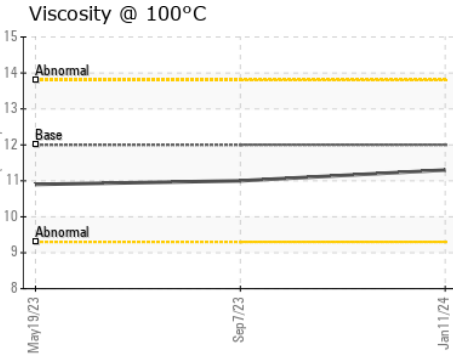
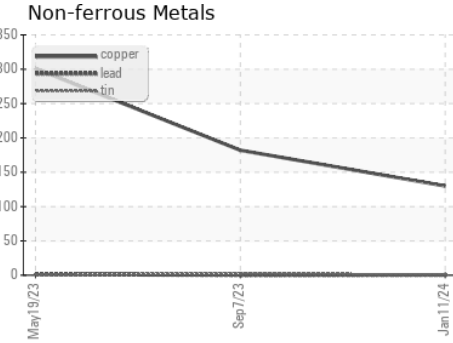
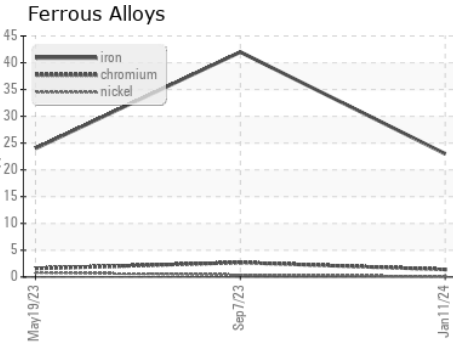
# OIL ANALYSIS REPORT



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	<b>11.3</b>	11.0	10.9

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0111020 **Received** : 18 Jan 2024  
**Lab Number** : **06064155** **Diagnosed** : 19 Jan 2024  
**Unique Number** : 10835537 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**Transervice - Shop 1071 - Supermarket-Dayton**  
 60 A Tower Road  
 Dayton, NJ  
 US 08810  
 Contact: Brian Quinn  
 bquinn@transervice.com  
 T:  
 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)