

# PROBLEM SUMMARY

Area  
**(AY403B) Supermarket**  
 Machine Id  
**FREIGHTLINER 107A1838**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (11 GAL)**

Sample Rating Trend

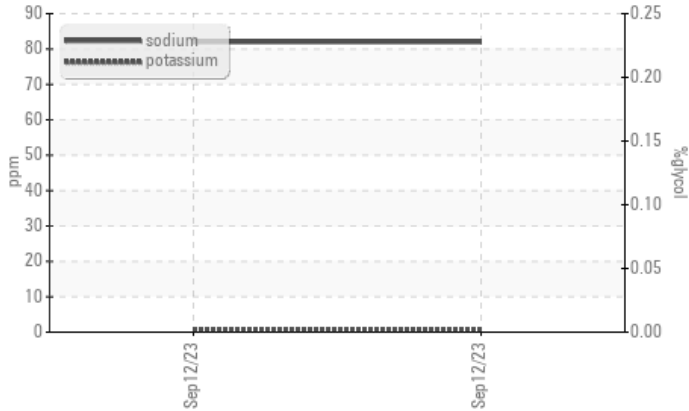


**GLYCOL**



## COMPONENT CONDITION SUMMARY

### ▲ Glycol Contamination



## RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status			ATTENTION	---	---
Sodium	ppm	ASTM D5185m	▲ 82	---	---

Customer Id: TSV1072  
 Sample No.: PCA0104809  
 Lab Number: 05958055  
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@wearcheckusa.com)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

## HISTORICAL DIAGNOSIS



Area  
**(AY403B) Supermarket**  
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**FREIGHTLINER 107A1838**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (11 GAL)**



**DIAGNOSIS**

**▲ Recommendation**  
 Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

**Wear**  
 All component wear rates are normal.

**Contamination**  
 Sodium and/or potassium levels are high. Test for glycol is negative.

**▲ Fluid Condition**  
 The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

**SAMPLE INFORMATION** method limit/base current history1 history2

Sample Number	Client Info		<b>PCA0104809</b>	---	---
Sample Date	Client Info		<b>12 Sep 2023</b>	---	---
Machine Age	mls	Client Info	<b>42999</b>	---	---
Oil Age	mls	Client Info	<b>17809</b>	---	---
Oil Changed	Client Info		<b>Changed</b>	---	---
Sample Status			<b>ATTENTION</b>	---	---

**CONTAMINATION** method limit/base current history1 history2

Fuel	WC Method	>5	<b>&lt;1.0</b>	---	---
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**WEAR METALS** method limit/base current history1 history2

Iron	ppm	ASTM D5185m	>80	<b>21</b>	---	---
Chromium	ppm	ASTM D5185m	>5	<b>1</b>	---	---
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185m		<b>0</b>	---	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>30	<b>4</b>	---	---
Lead	ppm	ASTM D5185m	>30	<b>0</b>	---	---
Copper	ppm	ASTM D5185m	>150	<b>1</b>	---	---
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	---	---

**ADDITIVES** method limit/base current history1 history2

Boron	ppm	ASTM D5185m	2	<b>2</b>	---	---
Barium	ppm	ASTM D5185m	0	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m	50	<b>49</b>	---	---
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m	950	<b>746</b>	---	---
Calcium	ppm	ASTM D5185m	1050	<b>831</b>	---	---
Phosphorus	ppm	ASTM D5185m	995	<b>832</b>	---	---
Zinc	ppm	ASTM D5185m	1180	<b>1023</b>	---	---
Sulfur	ppm	ASTM D5185m	2600	<b>2685</b>	---	---

**CONTAMINANTS** method limit/base current history1 history2

Silicon	ppm	ASTM D5185m	>20	<b>8</b>	---	---
Sodium	ppm	ASTM D5185m		<b>▲ 82</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	---	---
Glycol	%	*ASTM D2982		<b>NEG</b>	---	---

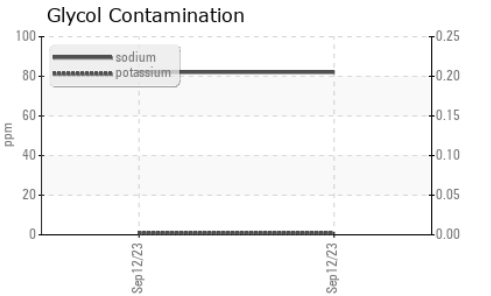
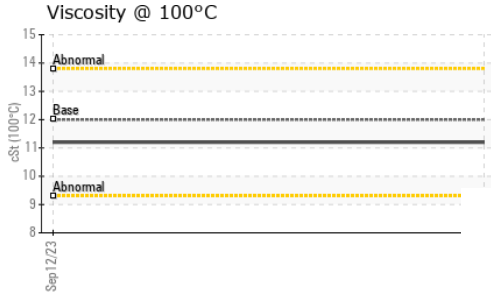
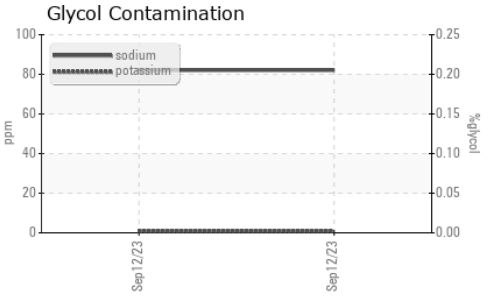
**INFRA-RED** method limit/base current history1 history2

Soot %	%	*ASTM D7844	>3	<b>0.1</b>	---	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.1</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.1</b>	---	---

**FLUID DEGRADATION** method limit/base current history1 history2

Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.5</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>8.2</b>	---	---

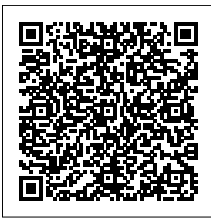
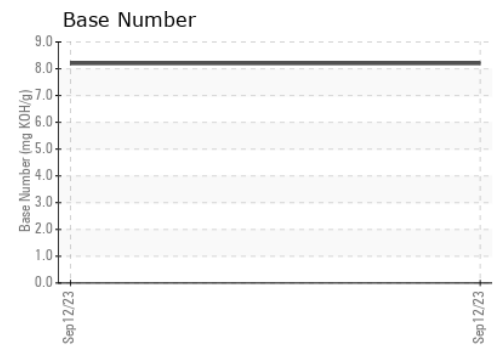
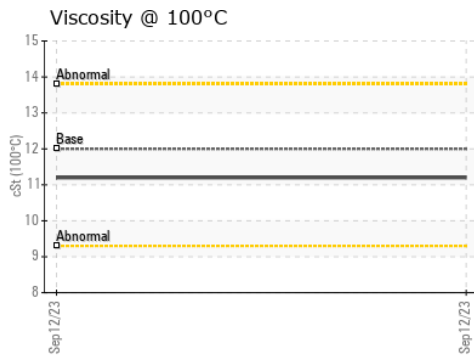
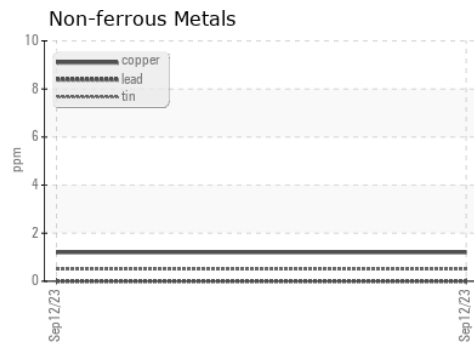
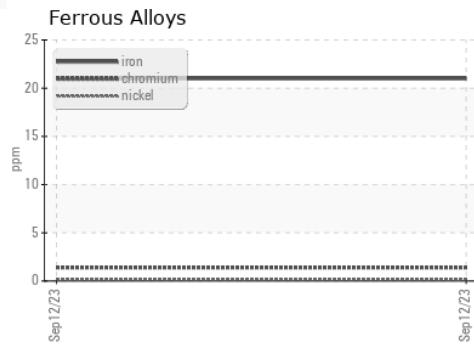
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	11.2	---

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0104809 **Received** : 21 Sep 2023  
**Lab Number** : 05958055 **Diagnosed** : 25 Sep 2023  
**Unique Number** : 10659268 **Diagnostician** : Jonathan Hester  
**Test Package** : FLEET ( Additional Tests: Glycol )

**Transervice - Shop 1072 - Supermarket-Elizabeth**  
 505 Division Street  
 Elizabeth, NJ  
 US 07207  
 Contact: Normand Brizak  
 nbrizak@transervice.com

Certificate L2367  
 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)