

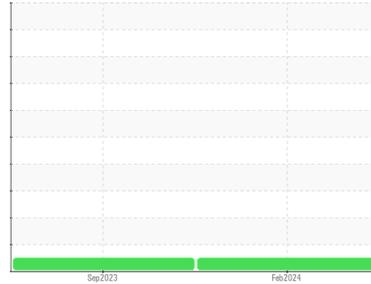
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**

 Machine Id  
**707386**

 Component  
**Diesel Engine**

 Fluid  
**PETRO CANADA DURON SHP 10W30 (--- QTS)**


## 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

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 acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>PCA0114564</b>	PCA0105334	---
Sample Date	Client Info		<b>12 Feb 2024</b>	25 Sep 2023	---
Machine Age	mls	Client Info	<b>385538</b>	62788	---
Oil Age	mls	Client Info	<b>385538</b>	62788	---
Oil Changed	Client Info		<b>Changed</b>	Changed	---
Sample Status			<b>NORMAL</b>	NORMAL	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	---
Water	WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol	WC Method		<b>NEG</b>	NEG	---

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>100	<b>77</b>	98	---
Chromium	ppm	ASTM D5185m	>20	<b>3</b>	5	---
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>36</b>	50	---
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	---
Copper	ppm	ASTM D5185m	>330	<b>10</b>	15	---
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	1	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	2	<b>3</b>	<1	---
Barium	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	---
Molybdenum	ppm	ASTM D5185m	50	<b>65</b>	71	---
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	2	---
Magnesium	ppm	ASTM D5185m	950	<b>848</b>	1050	---
Calcium	ppm	ASTM D5185m	1050	<b>1177</b>	1302	---
Phosphorus	ppm	ASTM D5185m	995	<b>947</b>	1079	---
Zinc	ppm	ASTM D5185m	1180	<b>1224</b>	1402	---
Sulfur	ppm	ASTM D5185m	2600	<b>2561</b>	2432	---

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	<b>6</b>	6	---
Sodium	ppm	ASTM D5185m		<b>0</b>	4	---
Potassium	ppm	ASTM D5185m	>20	<b>32</b>	72	---

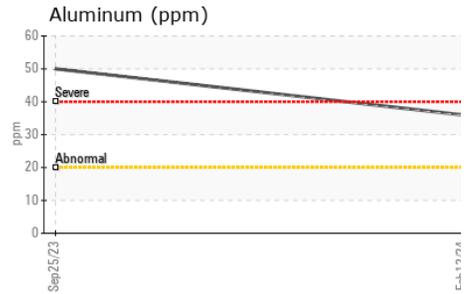
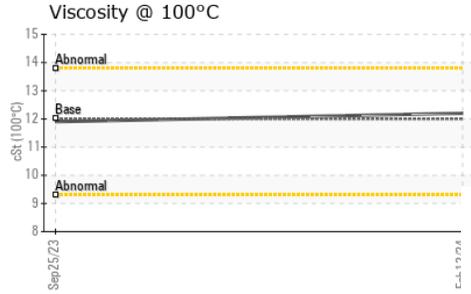
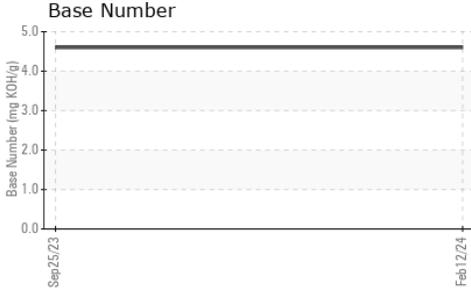
## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	<b>1</b>	1	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.5</b>	11.8	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.8</b>	24.3	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>22.3</b>	22.1	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>4.6</b>	4.6	---

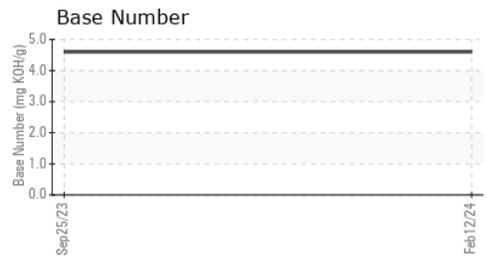
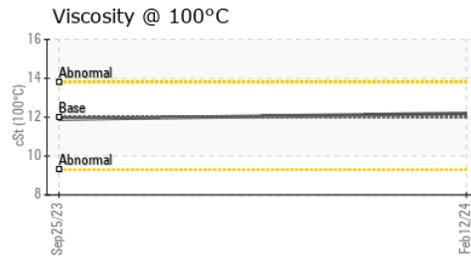
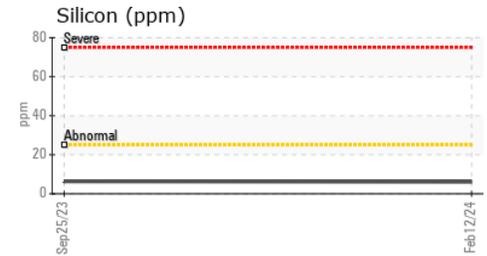
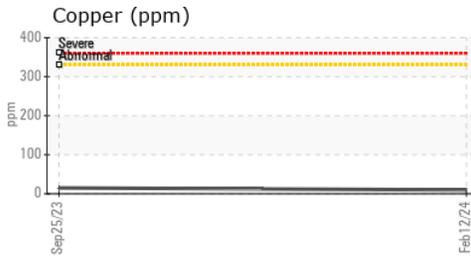
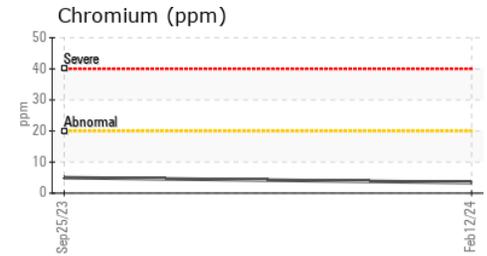
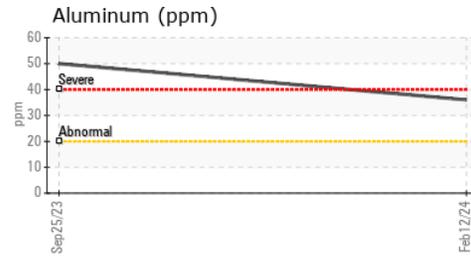
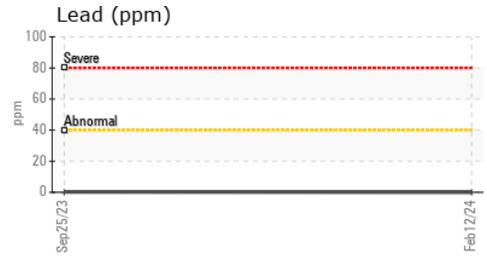
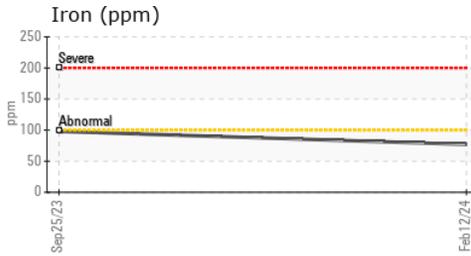
# OIL ANALYSIS REPORT



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	12.2	11.9

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0114564      **Received** : 21 Feb 2024  
**Lab Number** : 06095291      **Tested** : 22 Feb 2024  
**Unique Number** : 10888144      **Diagnosed** : 22 Feb 2024 - Sean Felton  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**MILLER TRUCK LEASING #118**  
 2196 BENNETT ROAD  
 PHILADELPHIA, PA  
 US 19116  
 Contact: ROSTY VITER  
 rviter@millertransgroup.com  
 T: (215)552-9832  
 F: (215)552-9892

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)