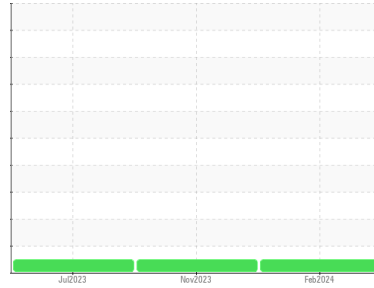


# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**635447**

Component  
**Diesel Engine**

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

## 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>PCA0118985</b>	PCA0112209	PCA0100808
Sample Date	Client Info		<b>28 Feb 2024</b>	15 Nov 2023	20 Jul 2023
Machine Age	mls	Client Info	<b>16791</b>	40896	24449
Oil Age	mls	Client Info	<b>16791</b>	40896	24449
Oil Changed	Client Info		<b>Changed</b>	Changed	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>39</b>	110	120
Chromium	ppm	ASTM D5185m >20	<b>2</b>	6	5
Nickel	ppm	ASTM D5185m >4	<b>&lt;1</b>	1	1
Titanium	ppm	ASTM D5185m	<b>19</b>	<1	<1
Silver	ppm	ASTM D5185m >3	<b>&lt;1</b>	<1	<1
Aluminum	ppm	ASTM D5185m >20	<b>40</b>	135	136
Lead	ppm	ASTM D5185m >40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >330	<b>70</b>	255	412
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	4	4
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	<b>27</b>	30	57
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m 50	<b>37</b>	42	59
Manganese	ppm	ASTM D5185m 0	<b>2</b>	5	7
Magnesium	ppm	ASTM D5185m 950	<b>669</b>	528	711
Calcium	ppm	ASTM D5185m 1050	<b>1354</b>	1724	2384
Phosphorus	ppm	ASTM D5185m 995	<b>1015</b>	753	1026
Zinc	ppm	ASTM D5185m 1180	<b>1188</b>	913	1240
Sulfur	ppm	ASTM D5185m 2600	<b>3037</b>	1974	3237

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>4</b>	9	11
Sodium	ppm	ASTM D5185m	<b>3</b>	7	9
Potassium	ppm	ASTM D5185m >20	<b>92</b>	331	330

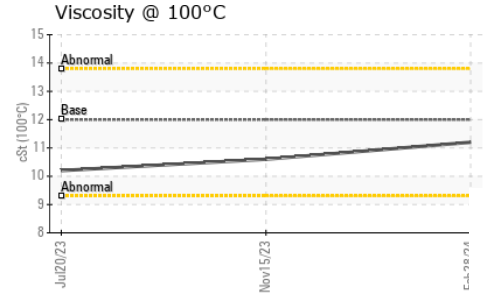
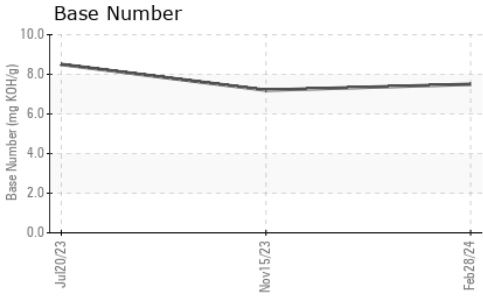
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.6</b>	1	0.6
Nitration	Abs/cm	*ASTM D7624 >20	<b>8.8</b>	10.9	8.9
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>20.3</b>	23.7	23.1

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>17.1</b>	25.0	22.2
Base Number (BN)	mg KOH/g	ASTM D2896	<b>7.5</b>	7.2	8.5

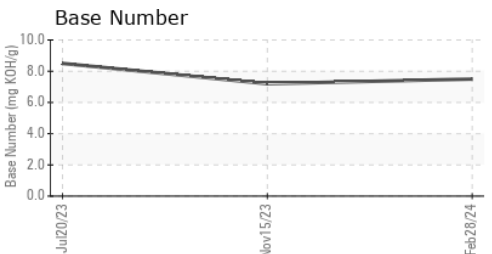
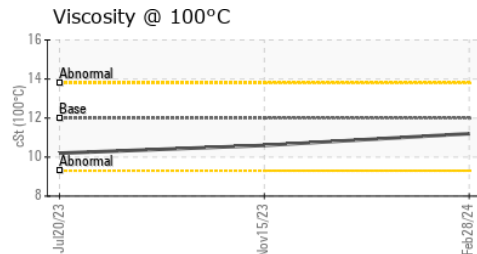
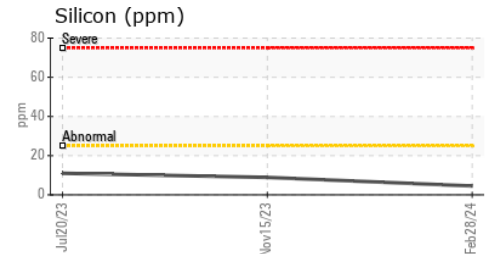
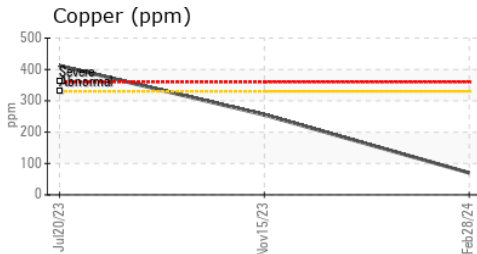
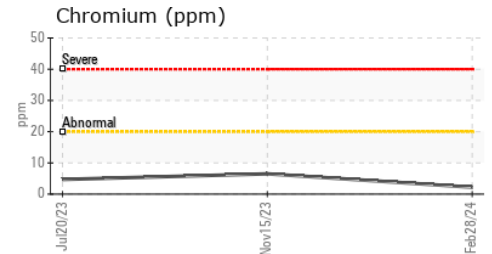
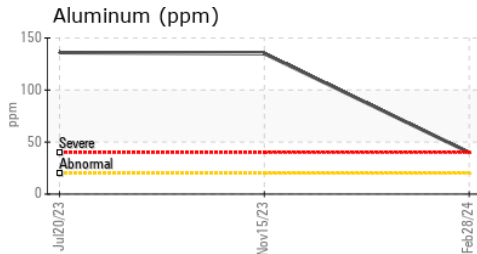
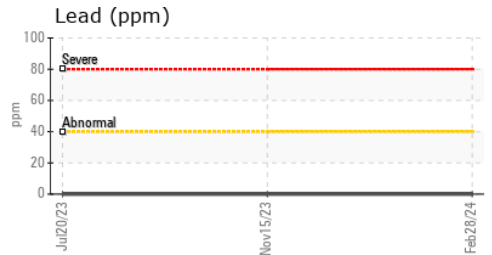
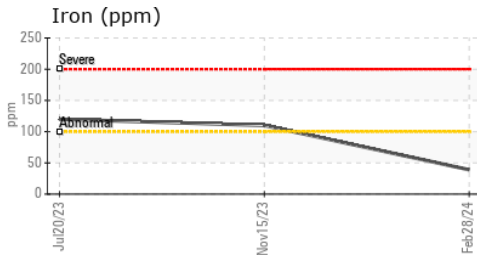
# OIL ANALYSIS REPORT



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	11.2	10.6

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0118985      **Received** : 04 Mar 2024  
**Lab Number** : 06107099      **Tested** : 04 Mar 2024  
**Unique Number** : 10910596      **Diagnosed** : 04 Mar 2024 - Wes Davis  
**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)