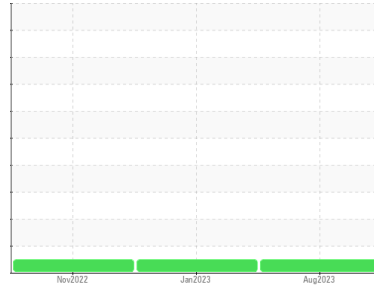


# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**738198**  
 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

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 suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>PCA0102901</b>	PCA0090140	PCA0085202
Sample Date	Client Info		<b>12 Aug 2023</b>	31 Jan 2023	22 Nov 2022
Machine Age	mls	Client Info	<b>136539</b>	58541	37397
Oil Age	mls	Client Info	<b>136539</b>	30000	37397
Oil Changed	Client Info		<b>Changed</b>	N/A	Not Changd
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
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>66</b>	27	52
Chromium	ppm	ASTM D5185m >20	<b>4</b>	<1	3
Nickel	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m	<b>5</b>	3	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >20	<b>35</b>	4	36
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	4	0
Copper	ppm	ASTM D5185m >330	<b>88</b>	2	299
Tin	ppm	ASTM D5185m >15	<b>3</b>	1	5
Vanadium	ppm	ASTM D5185m	<b>&lt;1</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>3</b>	2	29
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>61</b>	59	52
Manganese	ppm	ASTM D5185m 0	<b>2</b>	<1	4
Magnesium	ppm	ASTM D5185m 950	<b>871</b>	936	528
Calcium	ppm	ASTM D5185m 1050	<b>1464</b>	1248	1875
Phosphorus	ppm	ASTM D5185m 995	<b>962</b>	1023	777
Zinc	ppm	ASTM D5185m 1180	<b>1225</b>	1339	936
Sulfur	ppm	ASTM D5185m 2600	<b>2650</b>	3735	2426

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>8</b>	4	8
Sodium	ppm	ASTM D5185m	<b>4</b>	5	2
Potassium	ppm	ASTM D5185m >20	<b>91</b>	5	112

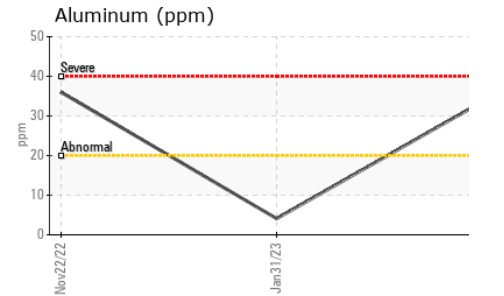
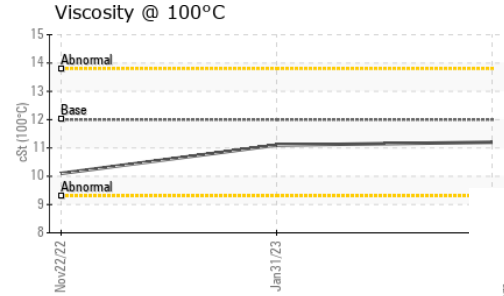
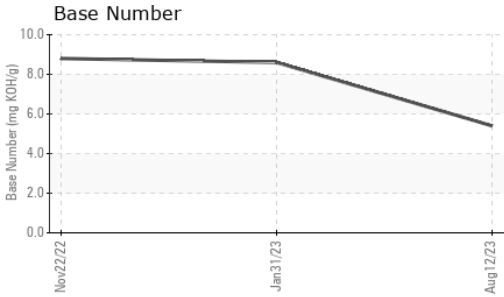
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>1.7</b>	1.3	1.2
Nitration	Abs/cm	*ASTM D7624 >20	<b>12.6</b>	12.1	11.2
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>25.4</b>	22.1	25.7

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>22.5</b>	19.5	23.9
Base Number (BN)	mg KOH/g	ASTM D2896	<b>5.4</b>	8.6	8.8

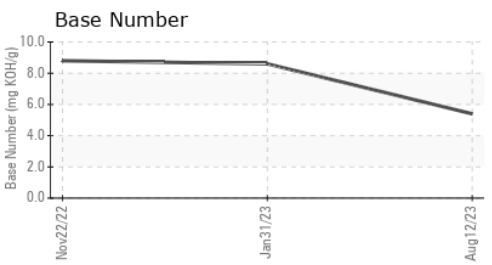
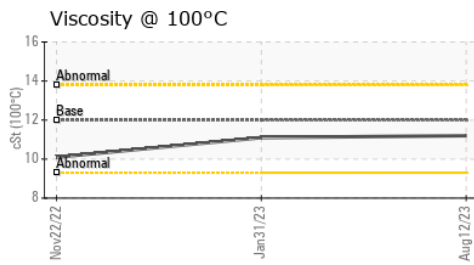
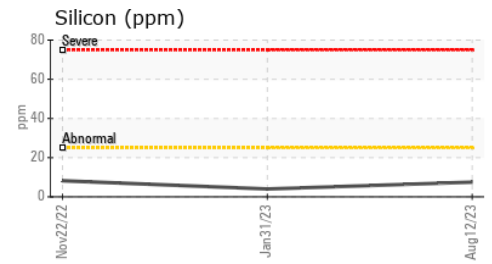
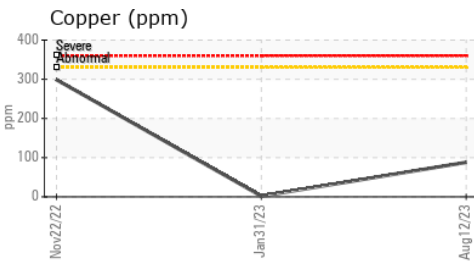
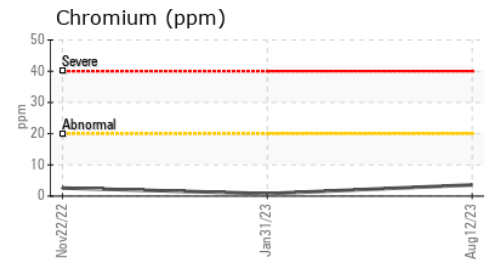
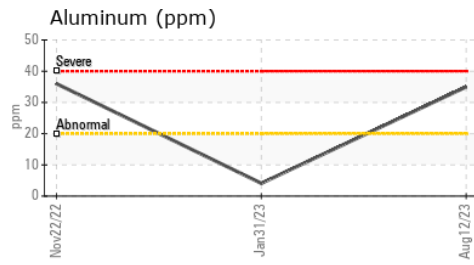
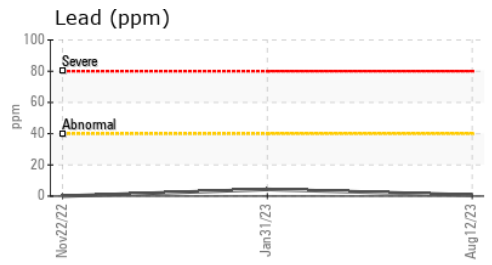
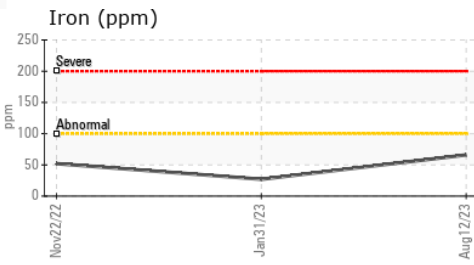
# OIL ANALYSIS REPORT



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	11.1

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0102901 **Received** : 21 Aug 2023  
**Lab Number** : 05929240 **Diagnosed** : 24 Aug 2023  
**Unique Number** : 10609187 **Diagnostician** : 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)