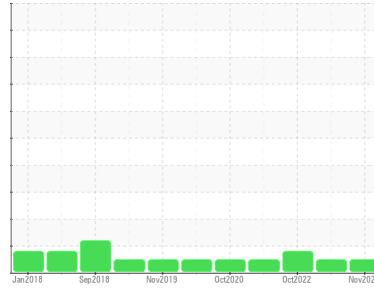


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**FREIGHTLINER 685328**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 10W30 (40 QTS)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

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>PCA0105757</b>	PCA0100905	PCA0055179
Sample Date	Client Info		<b>07 Nov 2023</b>	27 Jul 2023	20 Oct 2022
Machine Age	mls	Client Info	<b>285328</b>	225810	248864
Oil Age	mls	Client Info	<b>0</b>	0	12623
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<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 >200	<b>32</b>	38	39
Chromium	ppm	ASTM D5185m >20	<b>2</b>	2	2
Nickel	ppm	ASTM D5185m >2	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m >2	<b>2</b>	<1	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >30	<b>9</b>	9	11
Lead	ppm	ASTM D5185m >30	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m >30	<b>11</b>	8	▲ 37
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	<1
Antimony	ppm	ASTM D5185m	<b>---</b>	---	---
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>2</b>	4	6
Barium	ppm	ASTM D5185m 0	<b>0</b>	2	0
Molybdenum	ppm	ASTM D5185m 50	<b>55</b>	72	62
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 950	<b>882</b>	946	916
Calcium	ppm	ASTM D5185m 1050	<b>1203</b>	1199	1085
Phosphorus	ppm	ASTM D5185m 995	<b>859</b>	1012	974
Zinc	ppm	ASTM D5185m 1180	<b>1131</b>	1248	1163
Sulfur	ppm	ASTM D5185m 2600	<b>2586</b>	2864	3186

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >30	<b>5</b>	4	5
Sodium	ppm	ASTM D5185m	<b>4</b>	0	2
Potassium	ppm	ASTM D5185m >20	<b>6</b>	16	8

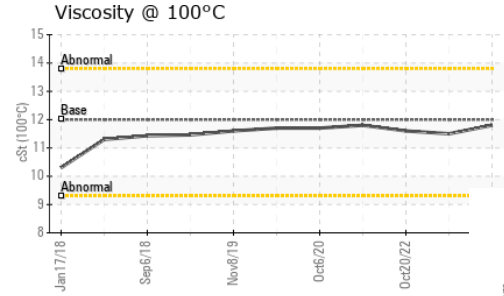
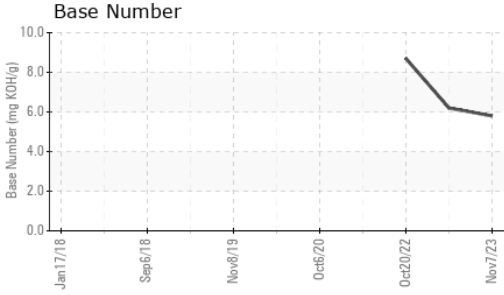
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>1.2</b>	1	0.6
Nitration	Abs/cm	*ASTM D7624 >20	<b>10.1</b>	10.2	9.1
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>23.2</b>	22.3	21.1

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>19.3</b>	18.0	16.7
Base Number (BN)	mg KOH/g	ASTM D2896	<b>5.8</b>	6.2	8.7

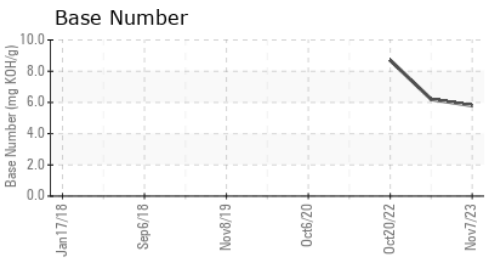
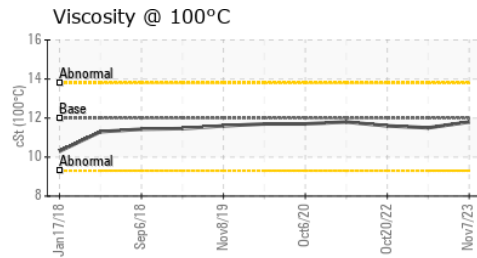
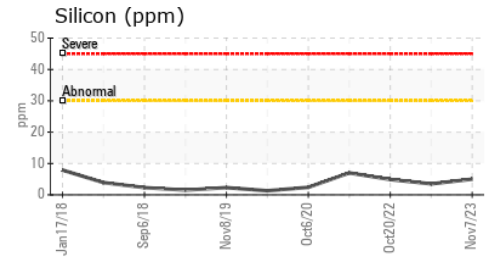
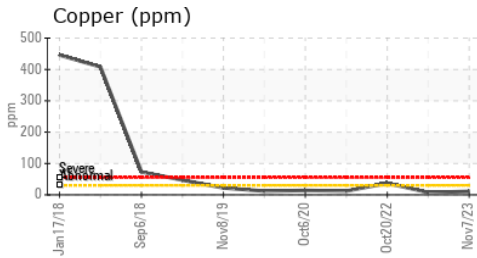
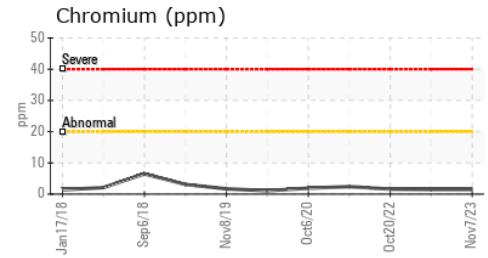
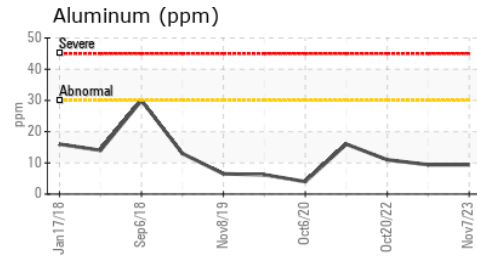
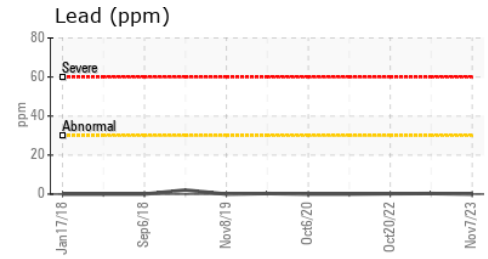
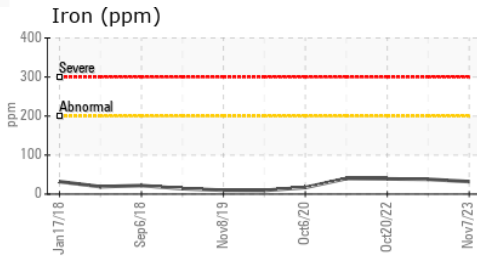
# OIL ANALYSIS REPORT



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>11.8</b>	11.5	11.6

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0105757 **Received** : 08 Nov 2023  
**Lab Number** : 06001324 **Diagnosed** : 09 Nov 2023  
**Unique Number** : 10729684 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**MILLER TRUCK LEASING #114**  
 63 REPAUPO STATION ROAD  
 LOGAN TOWNSHIP, NJ  
 US 08085  
 Contact: ED DAVIS  
 edavis@millertransgroup.com  
 T: (856)214-3521  
 F: (856)214-3663

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)