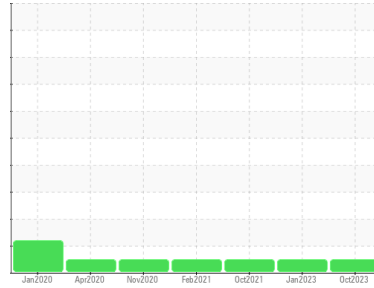


# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**FREIGHTLINER 403462**

Component  
**Diesel Engine**

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

### 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>PCA0098944</b>	PCA0082230	PCA0058648
Sample Date	Client Info			<b>09 Oct 2023</b>	09 Jan 2023	30 Oct 2021
Machine Age	mls Client Info			<b>184910</b>	161163	128962
Oil Age	mls Client Info			<b>0</b>	32201	17000
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		>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>40</b>	64	40
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	2	1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>30	<b>10</b>	18	14
Lead	ppm	ASTM D5185m	>30	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>30	<b>2</b>	4	3
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	2	1
Antimony	ppm	ASTM D5185m		<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

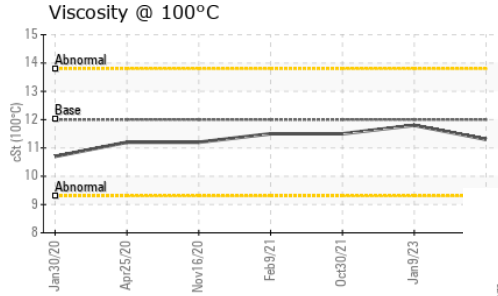
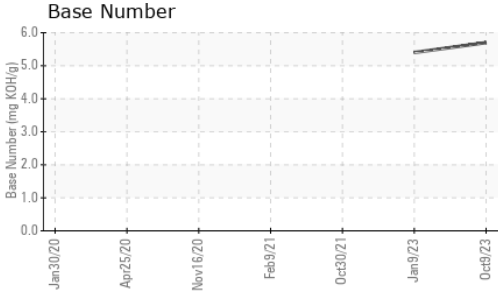
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	<b>5</b>	1	3
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	50	<b>65</b>	65	66
Manganese	ppm	ASTM D5185m	0	<b>0</b>	1	<1
Magnesium	ppm	ASTM D5185m	950	<b>845</b>	1009	1005
Calcium	ppm	ASTM D5185m	1050	<b>1039</b>	1271	1176
Phosphorus	ppm	ASTM D5185m	995	<b>916</b>	1028	1000
Zinc	ppm	ASTM D5185m	1180	<b>1125</b>	1279	1247
Sulfur	ppm	ASTM D5185m	2600	<b>2814</b>	3137	2768

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>30	<b>4</b>	6	4
Sodium	ppm	ASTM D5185m		<b>0</b>	5	3
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	0	7

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>1</b>	1.5	1
Nitration	Abs/cm	*ASTM D7624	>20	<b>13.0</b>	16.3	12.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.2</b>	29.7	24.7

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>21.5</b>	27.6	20.8
Base Number (BN)	mg KOH/g	ASTM D2896		<b>5.7</b>	5.4	---

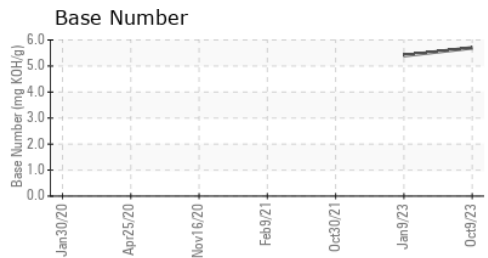
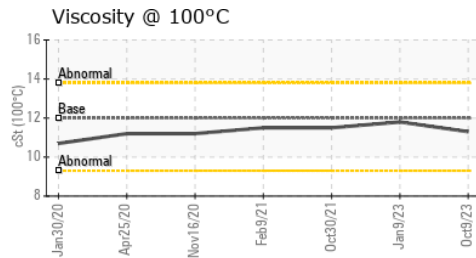
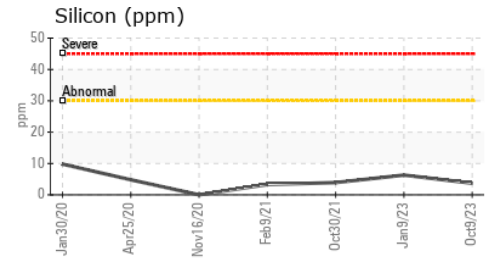
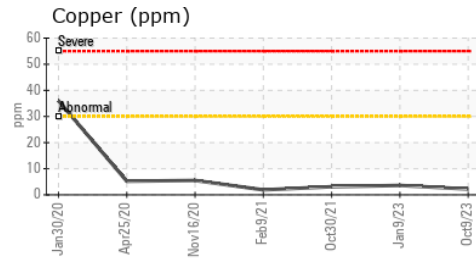
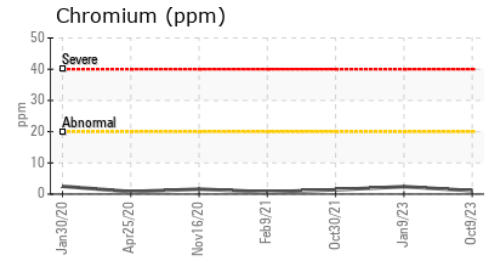
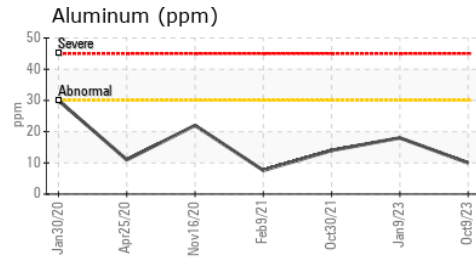
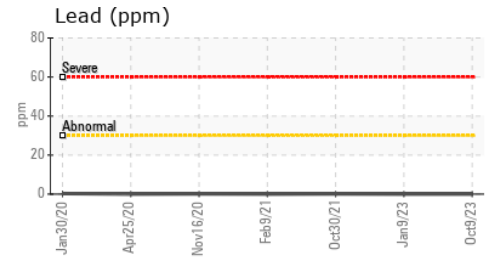
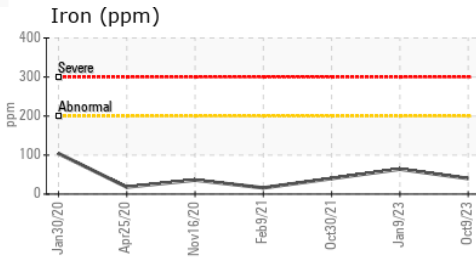
# OIL ANALYSIS REPORT



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>11.3</b>	11.8	11.5

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0098944 **Received** : 17 Oct 2023  
**Lab Number** : **05981034** **Diagnosed** : 17 Oct 2023  
**Unique Number** : 10698329 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**MILLER TRUCK LEASING #112**  
 1504 MAINLINE DR  
 CINNAMINSON, NJ  
 US 08077  
 Contact: MIKE BOYER  
 mboyer@millertransgroup.com  
 T: (856)662-4264  
 F: (856)663-4898

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)