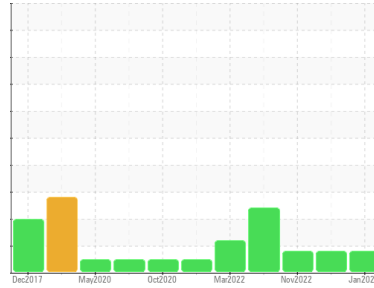


# OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id  
**FREIGHTLINER 484149**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 10W30 (20 QTS)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

Light fuel dilution occurring. No other contaminants were detected 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>PCA0112222</b>	PCA0114544	PCA0076768
Sample Date	Client Info		<b>10 Jan 2024</b>	27 Dec 2023	03 Nov 2022
Machine Age	mls	Client Info	<b>402123</b>	401775	110984
Oil Age	mls	Client Info	<b>400</b>	0	110984
Oil Changed	Client Info		<b>Not Chngd</b>	Changed	Changed
Sample Status			<b>MARGINAL</b>	ABNORMAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
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 >90	<b>7</b>	20	36
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m >2	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m >2	<b>4</b>	1	9
Silver	ppm	ASTM D5185m >2	<b>0</b>	<1	2
Aluminum	ppm	ASTM D5185m >20	<b>&lt;1</b>	3	5
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	<1	1
Copper	ppm	ASTM D5185m >330	<b>2</b>	4	2
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	<b>14</b>	5	10
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>54</b>	54	55
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 950	<b>837</b>	828	726
Calcium	ppm	ASTM D5185m 1050	<b>1124</b>	1044	1187
Phosphorus	ppm	ASTM D5185m 995	<b>983</b>	950	898
Zinc	ppm	ASTM D5185m 1180	<b>1177</b>	1197	1137
Sulfur	ppm	ASTM D5185m 2600	<b>2928</b>	2913	3629

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>3</b>	5	6
Sodium	ppm	ASTM D5185m	<b>6</b>	23	55
Potassium	ppm	ASTM D5185m >20	<b>3</b>	13	24
Fuel	%	ASTM D3524 >3.0	<b>▲ 1.8</b>	▲ 4.8	▲ 3.7

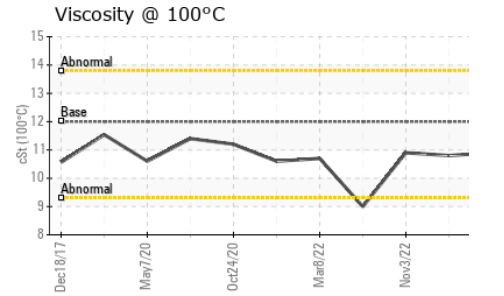
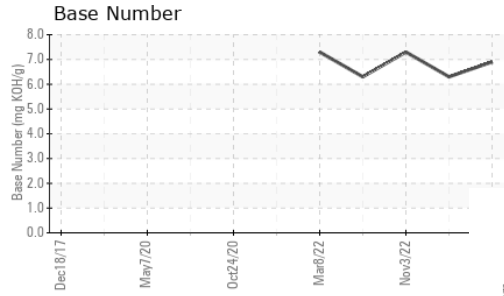
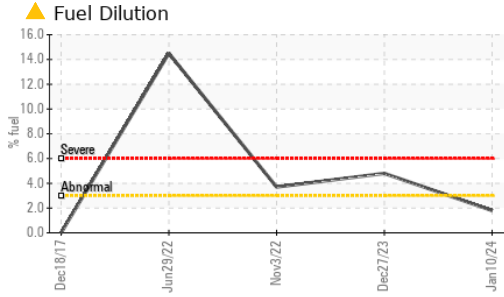
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >6	<b>0.3</b>	0.8	0.9
Nitration	Abs/cm	*ASTM D7624 >20	<b>6.6</b>	11.9	13.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>17.6</b>	22.4	25.2

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>13.8</b>	19.2	22.6
Base Number (BN)	mg KOH/g	ASTM D2896	<b>6.9</b>	6.3	7.3

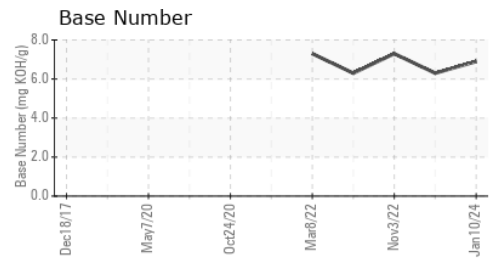
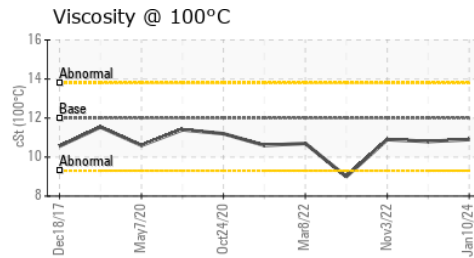
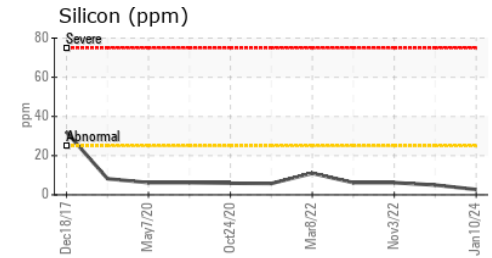
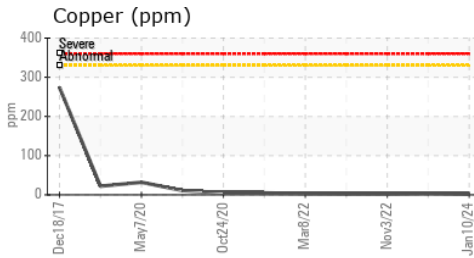
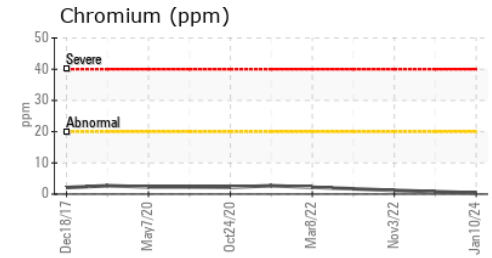
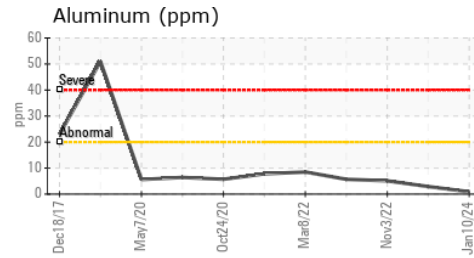
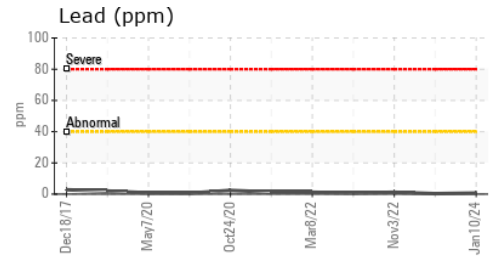
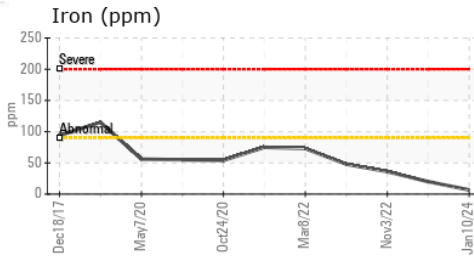
# OIL ANALYSIS REPORT



PARAMETER	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	10.9	10.8

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0112222 **Received** : 26 Jan 2024  
**Lab Number** : 06071385 **Diagnosed** : 29 Jan 2024  
**Unique Number** : 10848062 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: PercentFuel, 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)