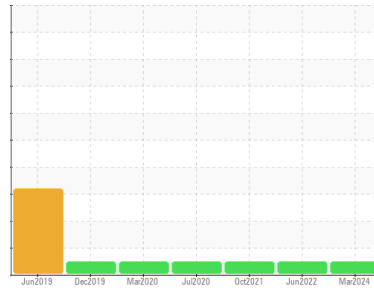


# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**FREIGHTLINER 698057**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (36 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>PCA0110674</b>	PCA0061069	PCA0053390
Sample Date	Client Info		<b>26 Mar 2024</b>	19 Jun 2022	07 Oct 2021
Machine Age	mls	Client Info	<b>277171</b>	180900	146188
Oil Age	mls	Client Info	<b>43766</b>	54323	19611
Oil Changed	Client Info		<b>Changed</b>	Changed	Not 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
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 >65	<b>37</b>	34	13
Chromium	ppm	ASTM D5185m >5	<b>2</b>	2	1
Nickel	ppm	ASTM D5185m >3	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m >5	<b>10</b>	<1	<1
Silver	ppm	ASTM D5185m >2	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m >35	<b>18</b>	19	11
Lead	ppm	ASTM D5185m >10	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m >180	<b>11</b>	17	13
Tin	ppm	ASTM D5185m >8	<b>1</b>	1	1
Antimony	ppm	ASTM D5185m >35	<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>2</b>	5	14
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>57</b>	53	55
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 950	<b>955</b>	811	807
Calcium	ppm	ASTM D5185m 1050	<b>1279</b>	1272	1222
Phosphorus	ppm	ASTM D5185m 995	<b>1066</b>	823	914
Zinc	ppm	ASTM D5185m 1180	<b>1291</b>	1103	1079
Sulfur	ppm	ASTM D5185m 2600	<b>3278</b>	2914	2392

### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>6</b>	7	6
Sodium	ppm	ASTM D5185m	<b>4</b>	4	2
Potassium	ppm	ASTM D5185m >20	<b>10</b>	21	14

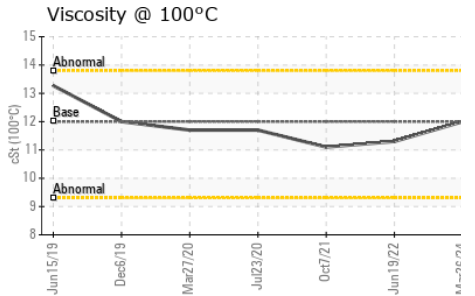
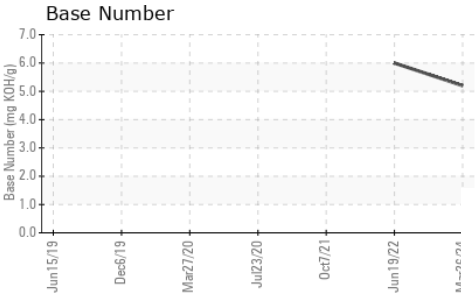
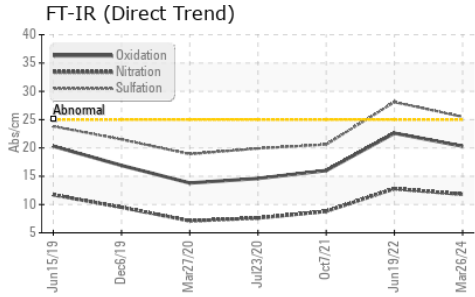
### INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>1.8</b>	1.7	0.7
Nitration	Abs/cm	*ASTM D7624 >20	<b>11.8</b>	12.8	8.8
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>25.5</b>	28.1	20.6

### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>20.3</b>	22.6	16
Base Number (BN)	mg KOH/g	ASTM D2896	<b>5.2</b>	6.0	---

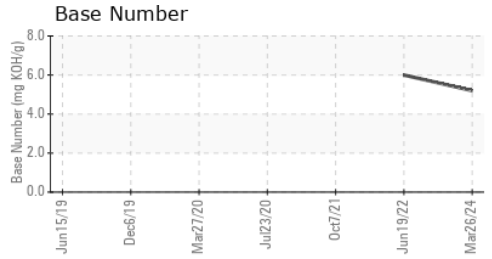
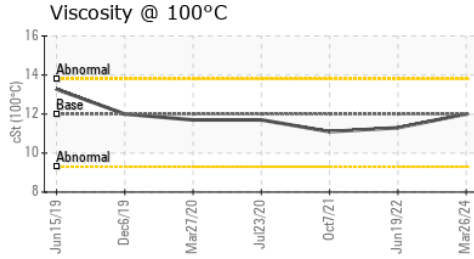
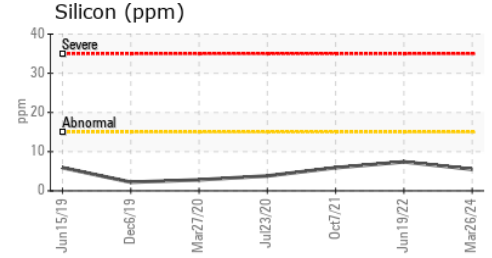
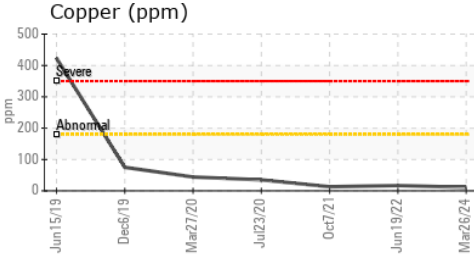
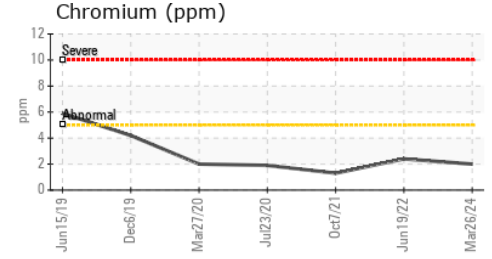
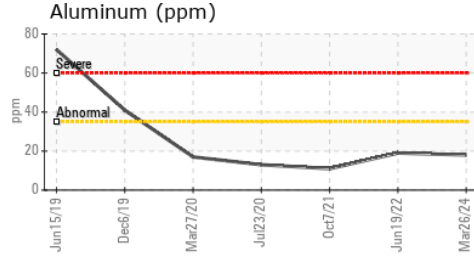
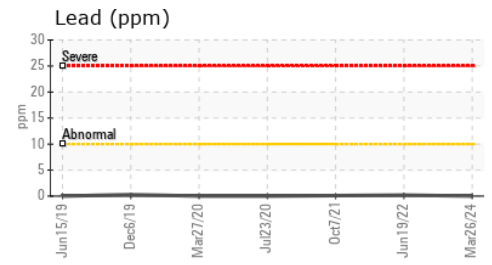
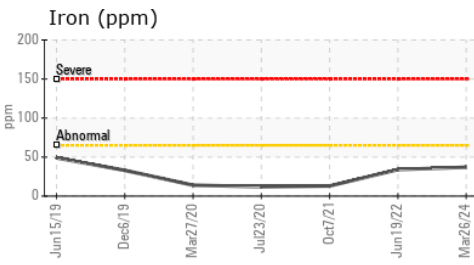
# OIL ANALYSIS REPORT



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	12.0	11.3	11.1

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0110674      **Received** : 08 Apr 2024  
**Lab Number** : **06140808**      **Tested** : 08 Apr 2024  
**Unique Number** : 10965616      **Diagnosed** : 08 Apr 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**MILLER TRUCK LEASING #123**  
 66 KELLER AVENUE  
 LANCASTER, PA  
 US 17601  
 Contact: RON ROBERTS  
 roberts@millertransgroup.com  
 T: (717)945-6205  
 F: (717)945-5818

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)