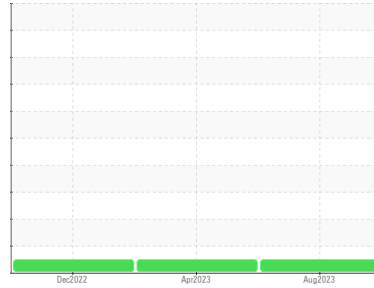


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**326758**

Component  
**Diesel Engine**

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

## DIAGNOSIS

### Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

Metal levels are typical for a new component breaking in.

### 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>PCA0019371</b>	PCA0095913	PCA0088092
Sample Date	Client Info		<b>25 Aug 2023</b>	14 Apr 2023	22 Dec 2022
Machine Age	mls	Client Info	<b>33692</b>	19647	11241
Oil Age	mls	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	Not Changd	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>99</b>	71	66
Chromium	ppm	ASTM D5185m >20	<b>3</b>	2	2
Nickel	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	1
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>26</b>	14	12
Lead	ppm	ASTM D5185m >40	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m >330	<b>30</b>	25	28
Tin	ppm	ASTM D5185m >15	<b>4</b>	2	3
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>24</b>	31	44
Barium	ppm	ASTM D5185m 0	<b>0</b>	2	0
Molybdenum	ppm	ASTM D5185m 50	<b>49</b>	48	44
Manganese	ppm	ASTM D5185m 0	<b>7</b>	6	6
Magnesium	ppm	ASTM D5185m 950	<b>667</b>	624	536
Calcium	ppm	ASTM D5185m 1050	<b>1743</b>	1496	1733
Phosphorus	ppm	ASTM D5185m 995	<b>804</b>	787	738
Zinc	ppm	ASTM D5185m 1180	<b>1075</b>	988	927
Sulfur	ppm	ASTM D5185m 2600	<b>2892</b>	2510	2506

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>10</b>	21	11
Sodium	ppm	ASTM D5185m	<b>7</b>	6	7
Potassium	ppm	ASTM D5185m >20	<b>46</b>	24	22

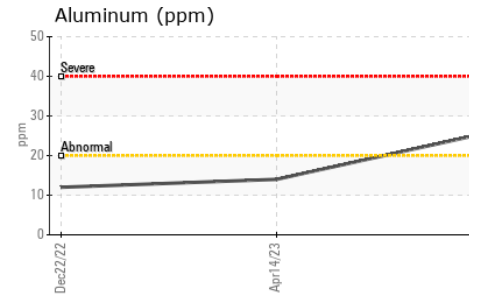
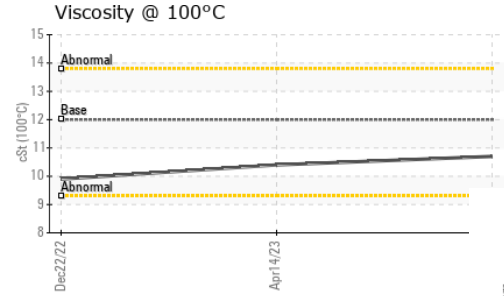
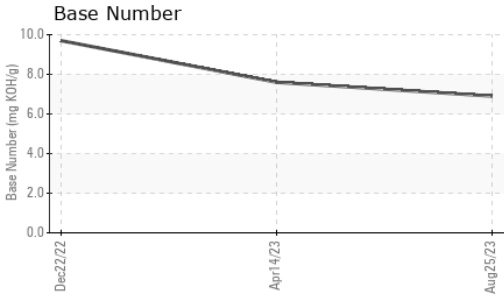
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.8</b>	0.4	0.3
Nitration	Abs/cm	*ASTM D7624 >20	<b>13.3</b>	9.3	9.1
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>24.9</b>	20.9	23

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>25.7</b>	20.9	21.8
Base Number (BN)	mg KOH/g	ASTM D2896	<b>6.9</b>	7.6	9.7

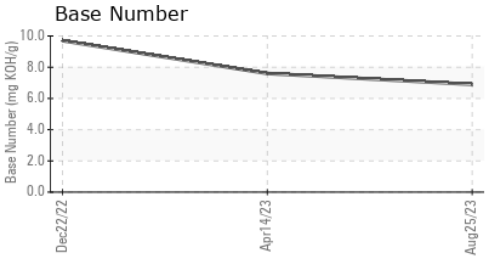
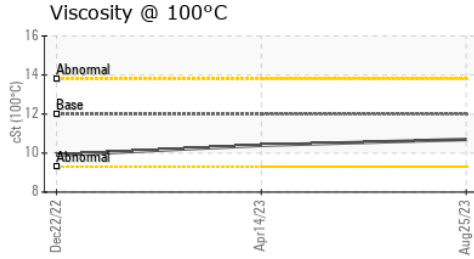
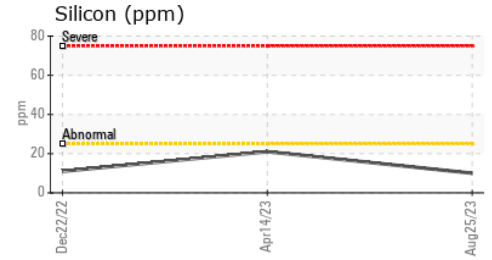
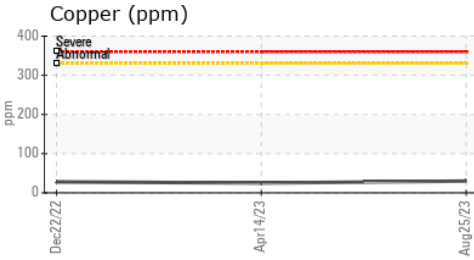
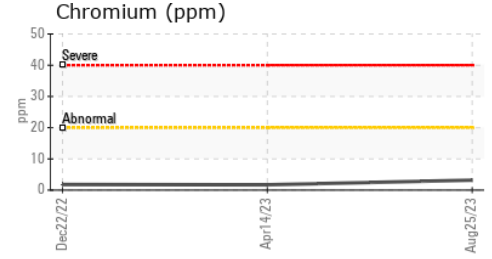
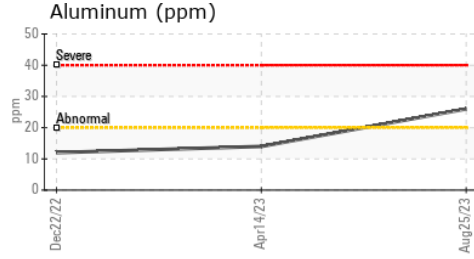
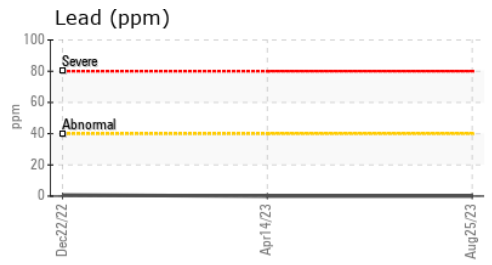
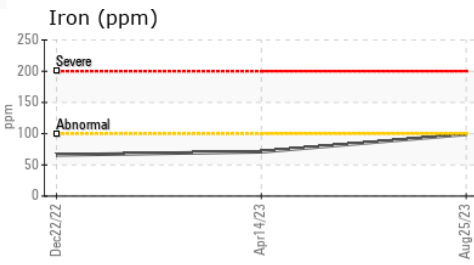
# OIL ANALYSIS REPORT



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	10.7	10.4

### GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0019371 **Received** : 30 Aug 2023  
**Lab Number** : 05938616 **Diagnosed** : 31 Aug 2023  
**Unique Number** : 10629228 **Diagnostician** : Sean Felton  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**MILLER TRUCK LEASING #119**  
 39 INDUSTRIAL AVE  
 HASBROUCK HEIGHTS, NJ  
 US 07604  
 Contact: MIKE LONGETTE  
 mlongette@millertransgroup.com

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)

T: (201)528-7053