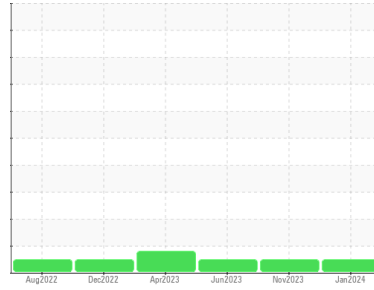


# OIL ANALYSIS REPORT

**Sample Rating Trend**

**NORMAL**

 Machine Id  
**328291**

 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**

All component wear rates are normal.

**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. 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>PCA0115190</b>	PCA0110494	PCA0101301
Sample Date	Client Info		<b>02 Jan 2024</b>	08 Nov 2023	30 Jun 2023
Machine Age	mls	Client Info	<b>84091</b>	78367	57640
Oil Age	mls	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	N/A	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
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 >100	<b>63</b>	53	31
Chromium	ppm	ASTM D5185m >20	<b>2</b>	2	2
Nickel	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>28</b>	24	13
Lead	ppm	ASTM D5185m >40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >330	<b>10</b>	9	7
Tin	ppm	ASTM D5185m >15	<b>2</b>	2	1
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

**ADDITIVES**

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	<b>4</b>	4	9
Barium	ppm	ASTM D5185m 0	<b>10</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>66</b>	62	64
Manganese	ppm	ASTM D5185m 0	<b>2</b>	2	1
Magnesium	ppm	ASTM D5185m 950	<b>875</b>	936	841
Calcium	ppm	ASTM D5185m 1050	<b>1182</b>	1213	1176
Phosphorus	ppm	ASTM D5185m 995	<b>1065</b>	910	1004
Zinc	ppm	ASTM D5185m 1180	<b>1185</b>	1220	1179
Sulfur	ppm	ASTM D5185m 2600	<b>3135</b>	2656	2945

**CONTAMINANTS**

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>5</b>	7	5
Sodium	ppm	ASTM D5185m	<b>0</b>	2	0
Potassium	ppm	ASTM D5185m >20	<b>48</b>	38	22

**INFRA-RED**

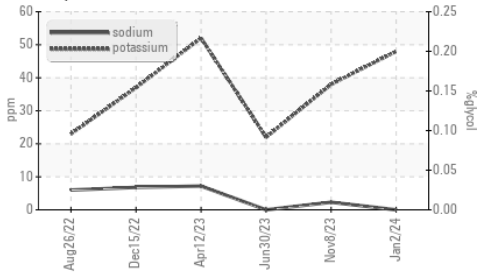
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>1</b>	0.9	0.6
Nitration	Abs/cm	*ASTM D7624 >20	<b>13.6</b>	12.6	10.9
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>26.8</b>	25.4	21.0

**FLUID DEGRADATION**

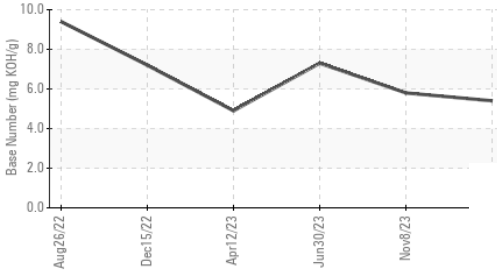
	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>25.7</b>	23.7	18.9
Base Number (BN)	mg KOH/g	ASTM D2896	<b>5.4</b>	5.8	7.3

# OIL ANALYSIS REPORT

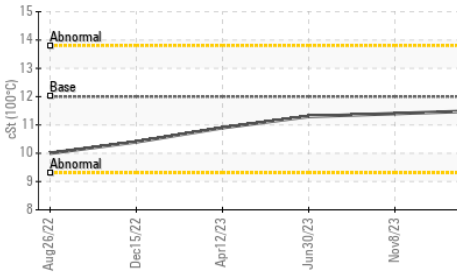
**Glycol Contamination**



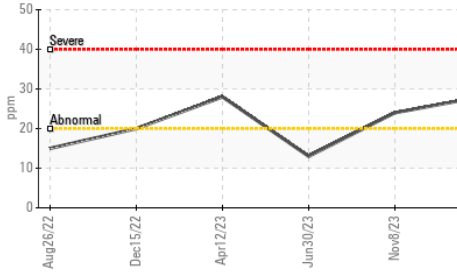
**Base Number**



**Viscosity @ 100°C**



**Aluminum (ppm)**

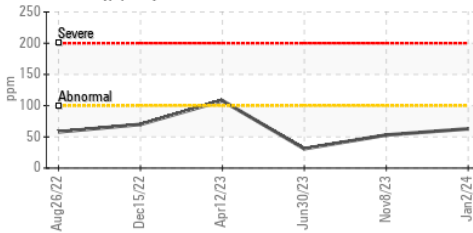


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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

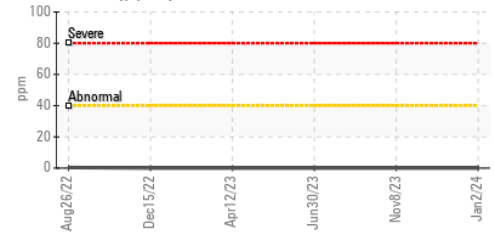
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445 12.00	<b>11.5</b>	11.4	11.3

## GRAPHS

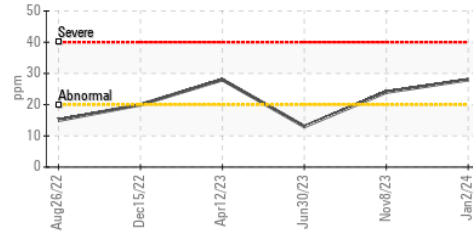
**Iron (ppm)**



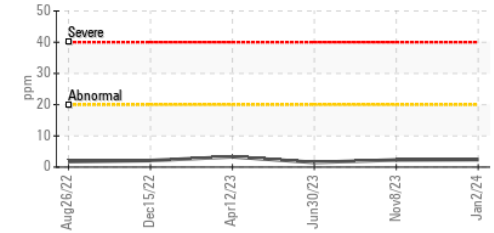
**Lead (ppm)**



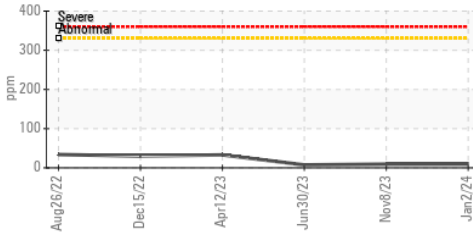
**Aluminum (ppm)**



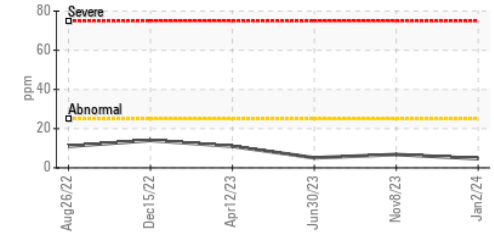
**Chromium (ppm)**



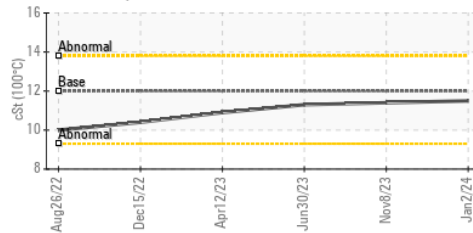
**Copper (ppm)**



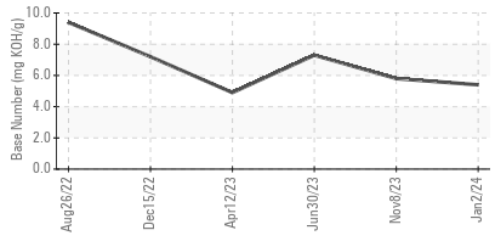
**Silicon (ppm)**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0115190 **Received** : 05 Jan 2024  
**Lab Number** : 06052567 **Diagnosed** : 08 Jan 2024  
**Unique Number** : 10818516 **Diagnostician** : Don Baldrige  
**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