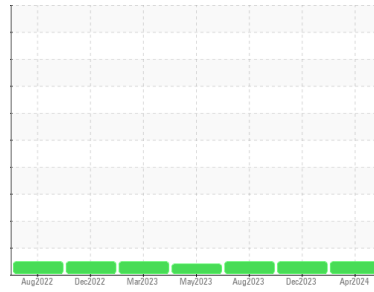


# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**631553**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (--- 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>PCA0123919</b>	PCA0115177	PCA0019366
Sample Date	Client Info			<b>15 Apr 2024</b>	21 Dec 2023	24 Aug 2023
Machine Age	mls	Client Info		<b>121178</b>	102040	83003
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>98</b>	63	45
Chromium	ppm	ASTM D5185m	>20	<b>6</b>	4	3
Nickel	ppm	ASTM D5185m	>4	<b>2</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>34</b>	30	30
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>90</b>	78	93
Tin	ppm	ASTM D5185m	>15	<b>5</b>	4	4
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	<b>6</b>	9	11
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	50	<b>69</b>	65	62
Manganese	ppm	ASTM D5185m	0	<b>4</b>	3	2
Magnesium	ppm	ASTM D5185m	950	<b>852</b>	878	889
Calcium	ppm	ASTM D5185m	1050	<b>1291</b>	1288	1298
Phosphorus	ppm	ASTM D5185m	995	<b>865</b>	1001	967
Zinc	ppm	ASTM D5185m	1180	<b>1197</b>	1207	1252
Sulfur	ppm	ASTM D5185m	2600	<b>2127</b>	2018	2819

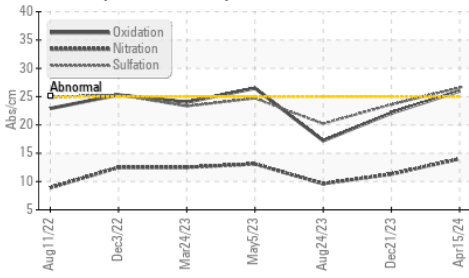
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>11</b>	8	6
Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	2	2
Potassium	ppm	ASTM D5185m	>20	<b>80</b>	66	63

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>1.7</b>	1.3	0.8
Nitration	Abs/cm	*ASTM D7624	>20	<b>14.0</b>	11.3	9.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>26.6</b>	23.6	20.2

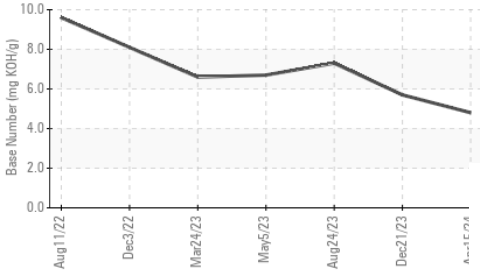
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>26.0</b>	22.1	17.2
Base Number (BN)	mg KOH/g	ASTM D2896		<b>4.8</b>	5.7	7.3

# OIL ANALYSIS REPORT

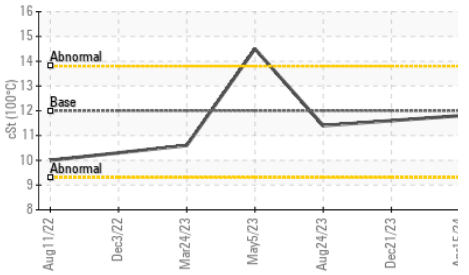
FT-IR (Direct Trend)



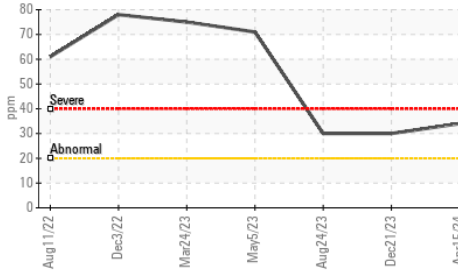
Base Number



Viscosity @ 100°C



Aluminum (ppm)

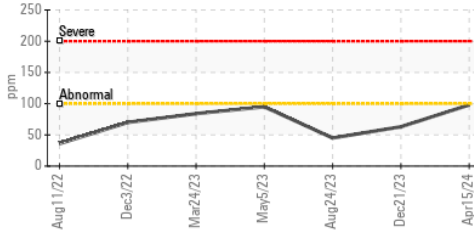


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

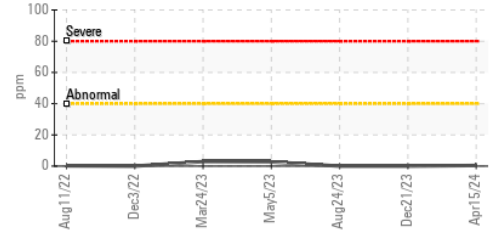
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	11.8	11.6

## GRAPHS

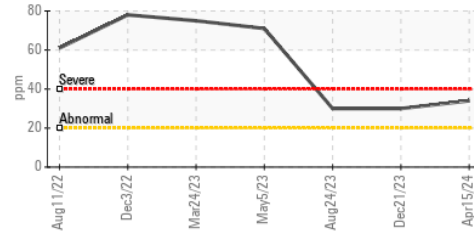
Iron (ppm)



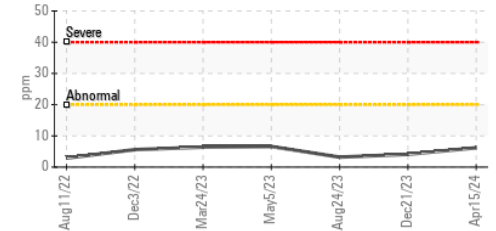
Lead (ppm)



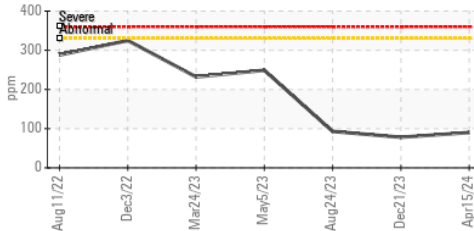
Aluminum (ppm)



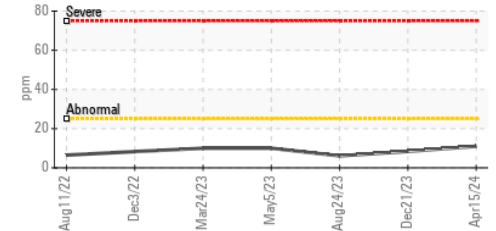
Chromium (ppm)



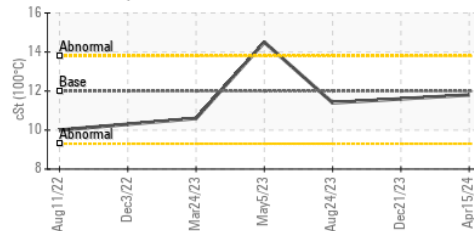
Copper (ppm)



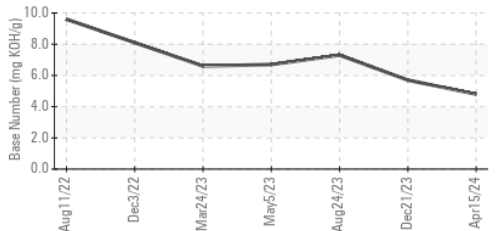
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0123919 **Received** : 23 Apr 2024  
**Lab Number** : 06157245 **Tested** : 24 Apr 2024  
**Unique Number** : 10992668 **Diagnosed** : 25 Apr 2024 - Jonathan Hester  
**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)

F: (201)528-7053