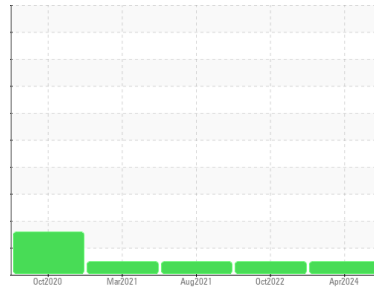


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
429455
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (--- QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

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. 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		PCA0121717	PCA0082223	PCA0055342
Sample Date	Client Info		11 Apr 2024	19 Oct 2022	17 Aug 2021
Machine Age	mls	Client Info	0	78621	44840
Oil Age	mls	Client Info	0	0	0
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	<1.0
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	55	22	12
Chromium	ppm	ASTM D5185m >20	2	<1	<1
Nickel	ppm	ASTM D5185m >4	<1	<1	1
Titanium	ppm	ASTM D5185m	<1	<1	<1
Silver	ppm	ASTM D5185m >3	0	0	<1
Aluminum	ppm	ASTM D5185m >20	29	23	13
Lead	ppm	ASTM D5185m >40	1	<1	0
Copper	ppm	ASTM D5185m >330	12	2	3
Tin	ppm	ASTM D5185m >15	1	1	0
Antimony	ppm	ASTM D5185m	---	---	1
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	<1	0	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	40	28	5
Barium	ppm	ASTM D5185m 0	2	0	0
Molybdenum	ppm	ASTM D5185m 50	70	52	58
Manganese	ppm	ASTM D5185m 0	1	<1	<1
Magnesium	ppm	ASTM D5185m 950	767	502	970
Calcium	ppm	ASTM D5185m 1050	1288	1620	1112
Phosphorus	ppm	ASTM D5185m 995	967	812	1065
Zinc	ppm	ASTM D5185m 1180	1200	971	1107
Sulfur	ppm	ASTM D5185m 2600	2716	2767	2572

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	8	8	6
Sodium	ppm	ASTM D5185m	4	2	1
Potassium	ppm	ASTM D5185m >20	87	63	41

INFRA-RED

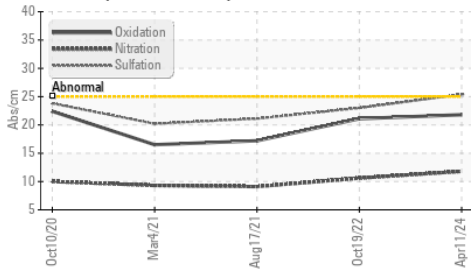
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	1	0.6	0.4
Nitration	Abs/cm	*ASTM D7624 >20	11.8	10.6	9.1
Sulfation	Abs/.1mm	*ASTM D7415 >30	25.4	23	21.1

FLUID DEGRADATION

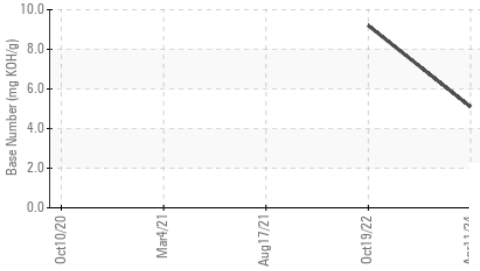
	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	21.8	21.1	17.2
Base Number (BN)	mg KOH/g	ASTM D2896	5.1	9.2	---

OIL ANALYSIS REPORT

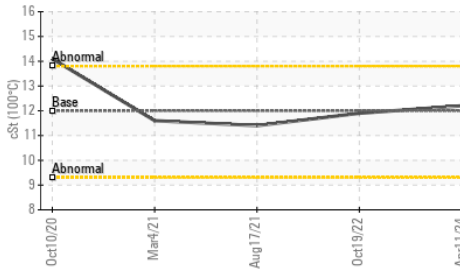
FT-IR (Direct Trend)



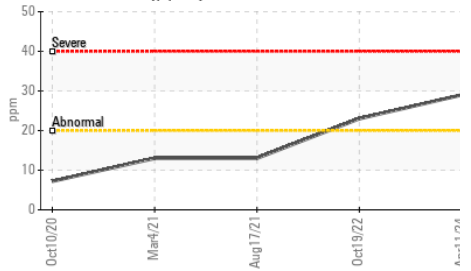
Base Number



Viscosity @ 100°C



Aluminum (ppm)

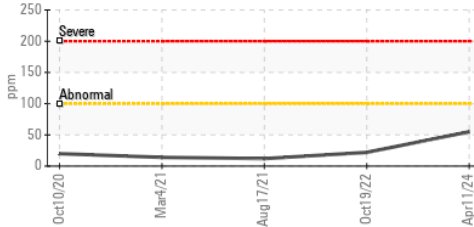


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

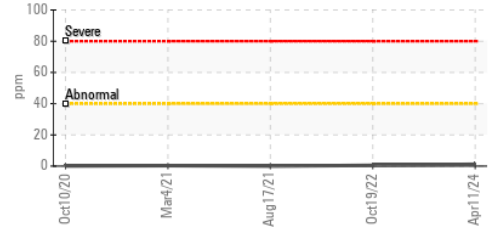
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	12.2	11.9

GRAPHS

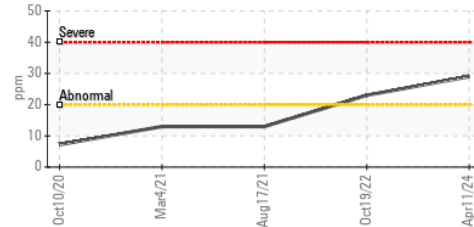
Iron (ppm)



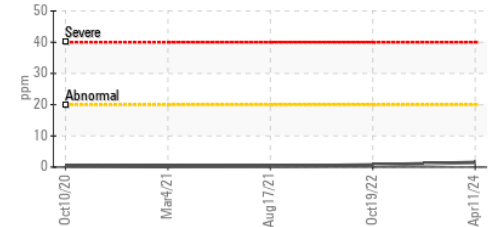
Lead (ppm)



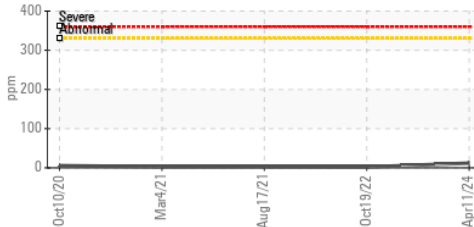
Aluminum (ppm)



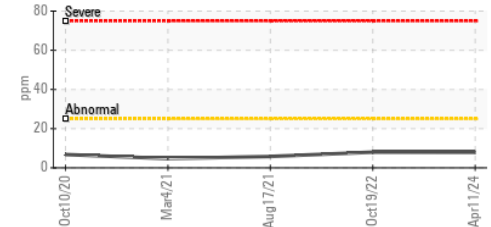
Chromium (ppm)



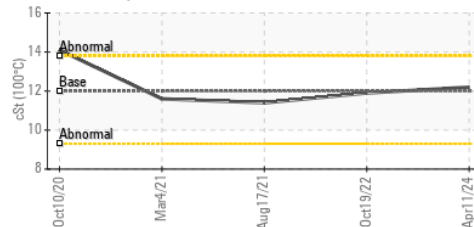
Copper (ppm)



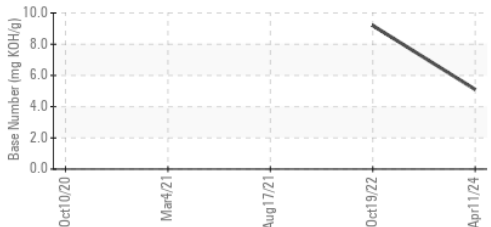
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0121717 **Received** : 26 Apr 2024
Lab Number : 06161241 **Tested** : 27 Apr 2024
Unique Number : 10996664 **Diagnosed** : 27 Apr 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: TBN)

MILLER TRUCK LEASING #112
 1504 MAINLINE DR
 CINNAMINSON, NJ
 US 08077

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)

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