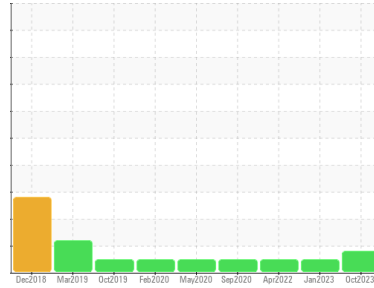


OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
698055
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (44 QTS)

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

The aluminum level is abnormal. All other 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 acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PCA0105822	PCA0090040	PCA0068482
Sample Date	Client Info			20 Oct 2023	10 Jan 2023	01 Apr 2022
Machine Age	mls	Client Info		423673	358237	0
Oil Age	mls	Client Info		0	0	0
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	64	46	55
Chromium	ppm	ASTM D5185m	>20	4	3	4
Nickel	ppm	ASTM D5185m	>4	<1	<1	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	▲ 25	15	17
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	11	9	10
Tin	ppm	ASTM D5185m	>15	<1	1	1
Antimony	ppm	ASTM D5185m		---	---	---
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	4	1	3
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	50	101	77	64
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	950	1234	907	992
Calcium	ppm	ASTM D5185m	1050	1545	1118	1130
Phosphorus	ppm	ASTM D5185m	995	1310	930	1066
Zinc	ppm	ASTM D5185m	1180	1691	1174	1305
Sulfur	ppm	ASTM D5185m	2600	3724	2857	2235

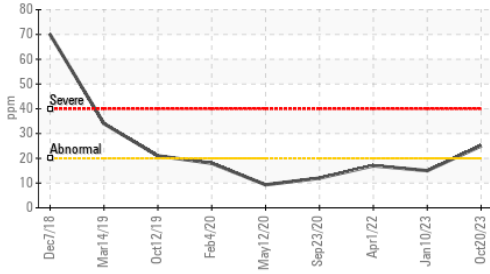
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	8	5	5
Sodium	ppm	ASTM D5185m		8	8	3
Potassium	ppm	ASTM D5185m	>20	37	47	18

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	1.8	1.8	1.5
Nitration	Abs/cm	*ASTM D7624	>20	12.5	12.5	13.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.8	26.3	27.2

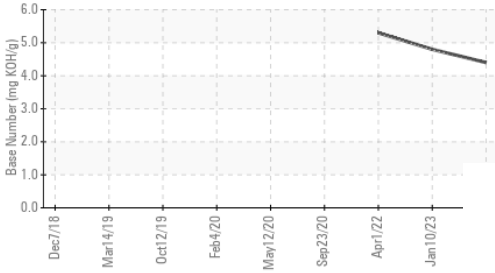
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.2	21.5	23.1
Base Number (BN)	mg KOH/g	ASTM D2896		4.4	4.8	5.3

OIL ANALYSIS REPORT

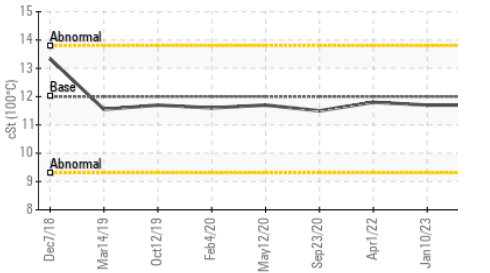
▲ Aluminum (ppm)



Base Number



Viscosity @ 100°C

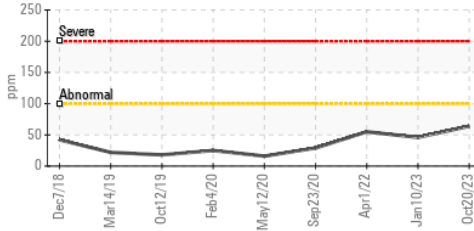


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

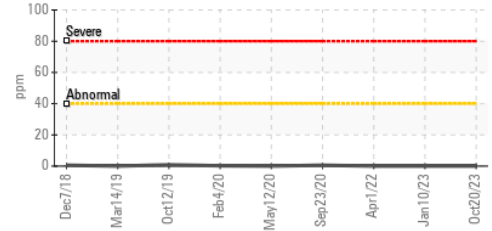
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	11.7	11.7

GRAPHS

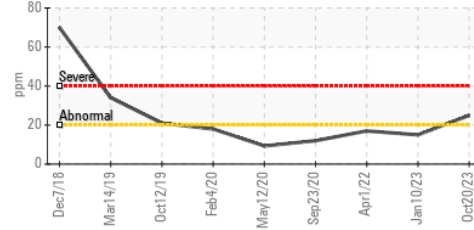
Iron (ppm)



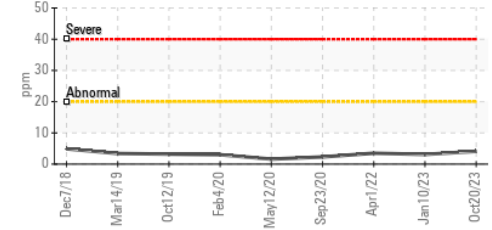
Lead (ppm)



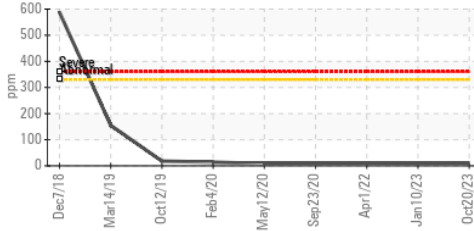
▲ Aluminum (ppm)



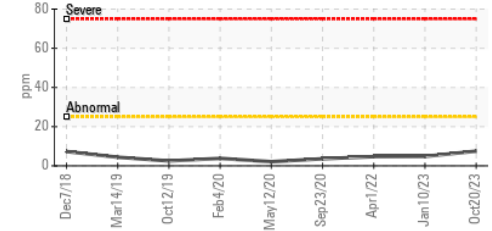
Chromium (ppm)



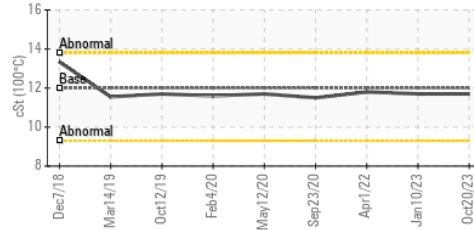
Copper (ppm)



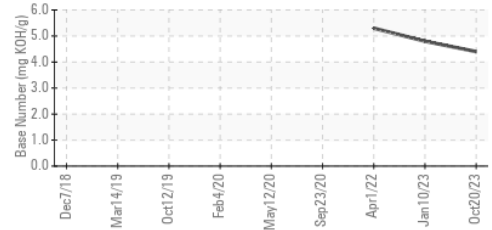
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0105822 **Received** : 08 Nov 2023
Lab Number : 06001269 **Diagnosed** : 09 Nov 2023
Unique Number : 10729629 **Diagnostician** : Jonathan Hester
Test Package : MOB 1 (Additional Tests: TBN)

MILLER TRUCK LEASING #114
 63 REPAUPO STATION ROAD
 LOGAN TOWNSHIP, NJ
 US 08085
 Contact: ED DAVIS
 edavis@millertransgroup.com
 T: (856)214-3521
 F: (856)214-3663

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)