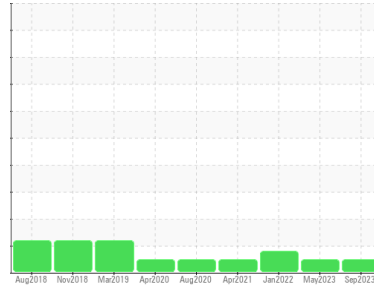


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
FREIGHTLINER 483545
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (18 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	PCA0105786	PCA0097767	PCA0064062	
Sample Date	Client Info	13 Sep 2023	20 May 2023	31 Jan 2022	
Machine Age	mls	Client Info	222678	200730	150122
Oil Age	mls	Client Info	13748	10000	16484
Oil Changed	Client Info	Changed	Changed	Changed	
Sample Status		NORMAL	NORMAL	ABNORMAL	

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >3.0	<1.0	<1.0	<1.0
Glycol	WC Method	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >130	52	45	98
Chromium	ppm ASTM D5185m >10	<1	<1	2
Nickel	ppm ASTM D5185m >4	<1	<1	0
Titanium	ppm ASTM D5185m >2	0	0	0
Silver	ppm ASTM D5185m >2	0	0	0
Aluminum	ppm ASTM D5185m >20	5	5	▲ 28
Lead	ppm ASTM D5185m >20	0	0	0
Copper	ppm ASTM D5185m >125	2	1	2
Tin	ppm ASTM D5185m >4	0	<1	<1
Antimony	ppm ASTM D5185m	---	---	0
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	13	14	6
Barium	ppm ASTM D5185m 0	0	2	0
Molybdenum	ppm ASTM D5185m 50	72	76	69
Manganese	ppm ASTM D5185m 0	0	<1	<1
Magnesium	ppm ASTM D5185m 950	846	848	1124
Calcium	ppm ASTM D5185m 1050	1378	1224	1270
Phosphorus	ppm ASTM D5185m 995	1080	1002	1099
Zinc	ppm ASTM D5185m 1180	1363	1212	1416
Sulfur	ppm ASTM D5185m 2600	3246	2904	2727

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	6	4	6
Sodium	ppm ASTM D5185m	<1	0	3
Potassium	ppm ASTM D5185m >20	7	6	13

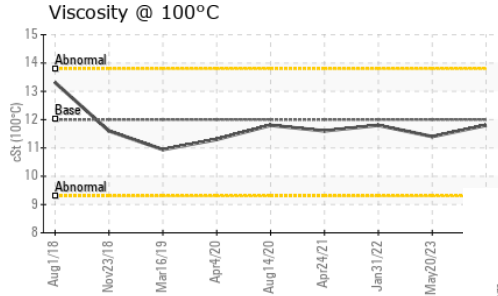
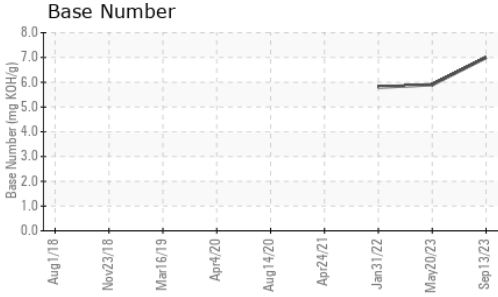
INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >6	1	0.8	1.2
Nitration	Abs/cm *ASTM D7624 >20	14.8	13.3	16.5
Sulfation	Abs/.1mm *ASTM D7415 >30	26.6	24.7	29.7

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	24.6	23.9	27.1
Base Number (BN)	mg KOH/g ASTM D2896	7.0	5.9	5.8

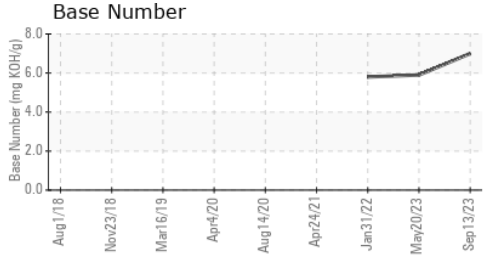
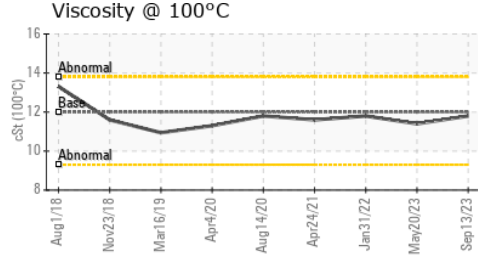
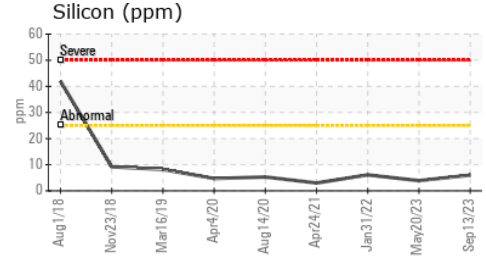
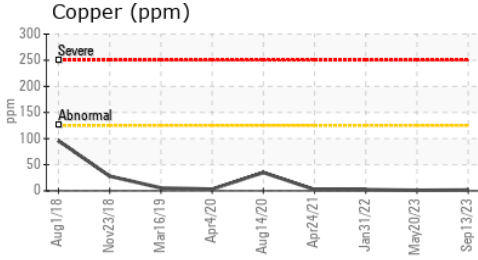
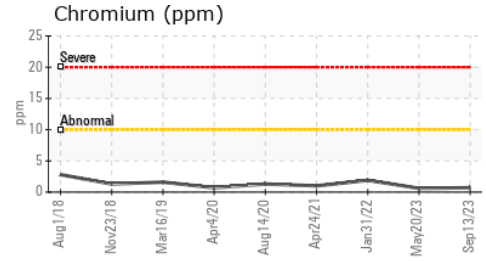
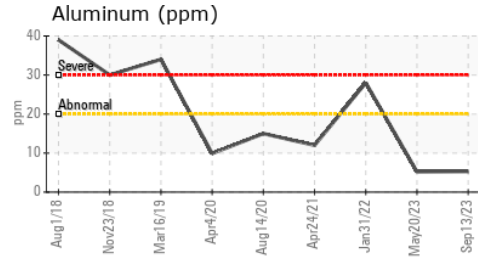
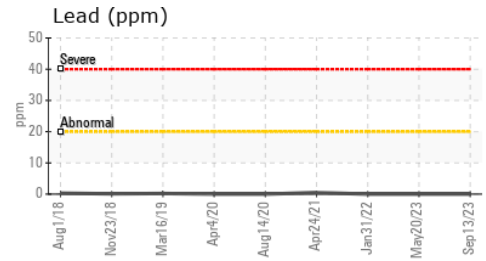
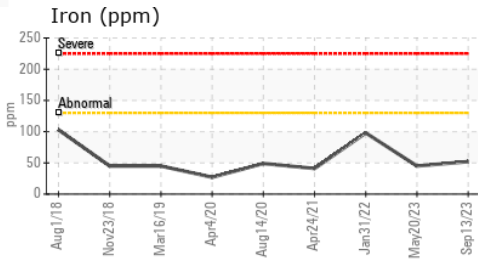
OIL ANALYSIS REPORT



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	11.8	11.4

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0105786 **Received** : 08 Nov 2023
Lab Number : 06001279 **Diagnosed** : 08 Nov 2023
Unique Number : 10729639 **Diagnostician** : Wes Davis
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)