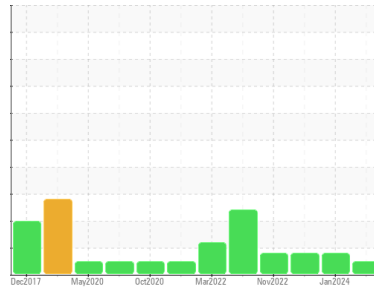


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
FREIGHTLINER 484149
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (20 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			PCA0125222	PCA0112222	PCA0114544
Sample Date	Client Info			13 May 2024	10 Jan 2024	27 Dec 2023
Machine Age	mls	Client Info		414450	402123	401775
Oil Age	mls	Client Info		414450	400	0
Oil Changed	Client Info			Changed	Not Changd	Changed
Sample Status				NORMAL	MARGINAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<1.0	▲ 1.8	▲ 4.8	
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	>90	23	7	20
Chromium	ppm	ASTM D5185m	>20	1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	<1
Titanium	ppm	ASTM D5185m	>2	5	4	1
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	3	<1	3
Lead	ppm	ASTM D5185m	>40	<1	<1	<1
Copper	ppm	ASTM D5185m	>330	2	2	4
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
Cadmium	ppm	ASTM D5185m		<1	0	0

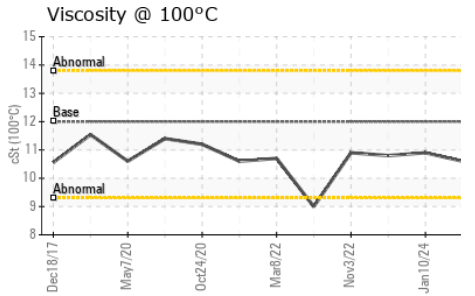
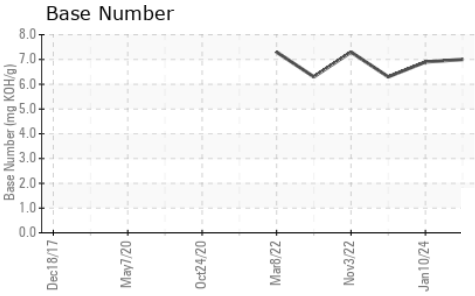
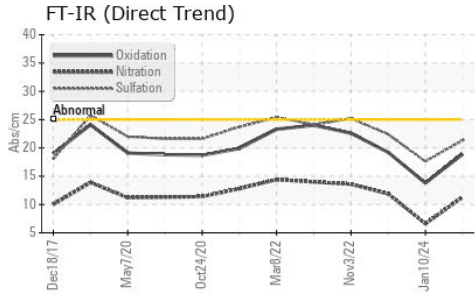
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	7	14	5
Barium	ppm	ASTM D5185m	0	1	0	0
Molybdenum	ppm	ASTM D5185m	50	55	54	54
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	950	812	837	828
Calcium	ppm	ASTM D5185m	1050	1067	1124	1044
Phosphorus	ppm	ASTM D5185m	995	1010	983	950
Zinc	ppm	ASTM D5185m	1180	1146	1177	1197
Sulfur	ppm	ASTM D5185m	2600	2895	2928	2913

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	6	3	5
Sodium	ppm	ASTM D5185m		11	6	23
Potassium	ppm	ASTM D5185m	>20	8	3	13

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>6	0.6	0.3	0.8
Nitration	Abs/cm	*ASTM D7624	>20	11.3	6.6	11.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.3	17.6	22.4

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.9	13.8	19.2
Base Number (BN)	mg KOH/g	ASTM D2896		7.0	6.9	6.3

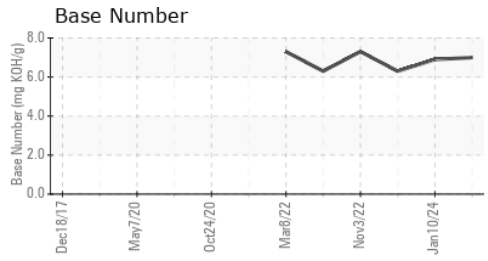
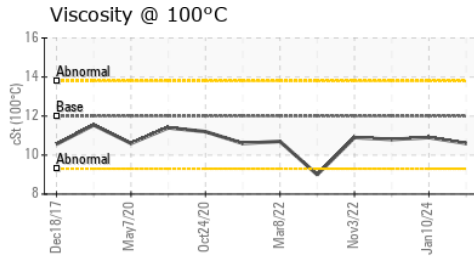
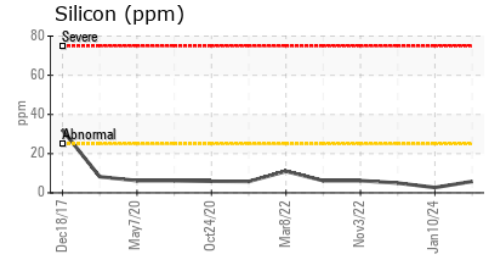
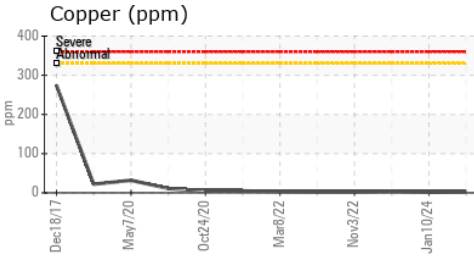
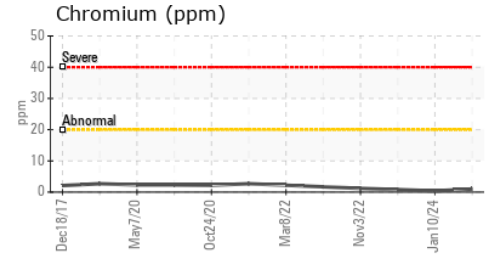
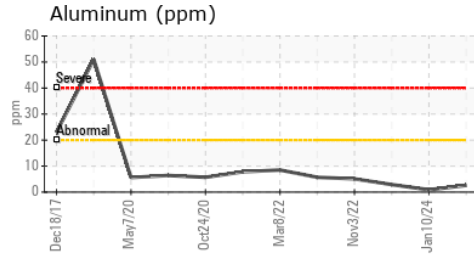
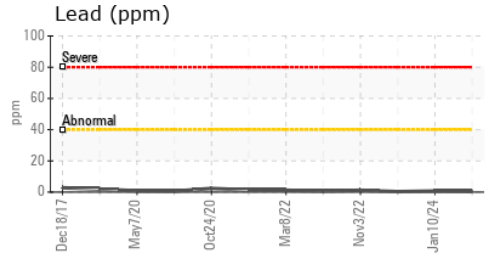
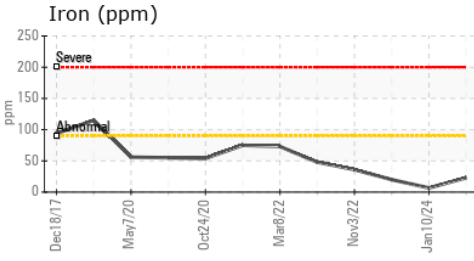
OIL ANALYSIS REPORT



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	10.6	10.9	10.8

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0125222 **Received** : 30 May 2024
Lab Number : **06194986** **Tested** : 31 May 2024
Unique Number : 11057109 **Diagnosed** : 31 May 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: TBN)

MILLER TRUCK LEASING #118
 2196 BENNETT ROAD
 PHILADELPHIA, PA
 US 19116

Contact: ROSTY VITER
 rviter@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)

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