MOB I

Dura-Check Fluid Analysis

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
FREIGHTLINER M31626
Component
Diesel Engine
Fluid
UNITED OIL DURALENE (18 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

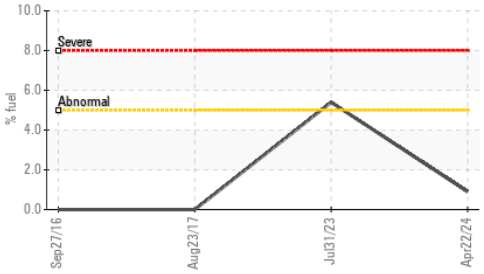
Fuel content negligible. There is no indication of any contamination in the oil.

FLUID CONDITION

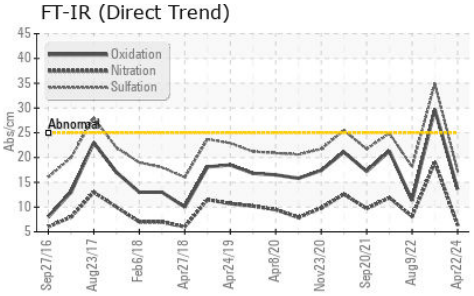
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DC0034131	DC0028313	DC0021173
Sample Date		Client Info		22 Apr 2024	31 Jul 2023	09 Aug 2022
Machine Age	mls	Client Info		223582	208612	183109
Oil Age	mls	Client Info		13400	12434	10964
Filter Age	mls	Client Info		13400	12434	10964
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185m	>80	14	▲ 103	10
Chromium	ppm	ASTM D5185m	>5	0	2	<1
Nickel	ppm	ASTM D5185m	>2	0	<1	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>30	4	17	3
Lead	ppm	ASTM D5185m	>30	<1	0	<1
Copper	ppm	ASTM D5185m	>150	2	4	1
Tin	ppm	ASTM D5185m	>5	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	4	9	4
Potassium	ppm	ASTM D5185m	>20	25	8	2
Fuel	%	ASTM D3524	>5	0.9	▲ 5.4	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	▲ 3.9	0.5
Nitration	Abs/cm	*ASTM D7624	>20	6.4	19.1	8.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.3	34.9	18.1
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		25	6	2
Boron	ppm	ASTM D5185m		12	2	10
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		65	60	10
Manganese	ppm	ASTM D5185m		<1	1	<1
Magnesium	ppm	ASTM D5185m		974	923	134
Calcium	ppm	ASTM D5185m		1072	1324	2227
Phosphorus	ppm	ASTM D5185m		1123	1074	887
Zinc	ppm	ASTM D5185m		1264	1327	1035
Sulfur	ppm	ASTM D5185m		3675	3526	3583
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.6	29.7	11.3
Base Number (BN)	mg KOH/g	ASTM D2896		9.8	4.0	8.9
Visc @ 100°C	cSt	ASTM D445		12.6	▲ 14.5	13.2

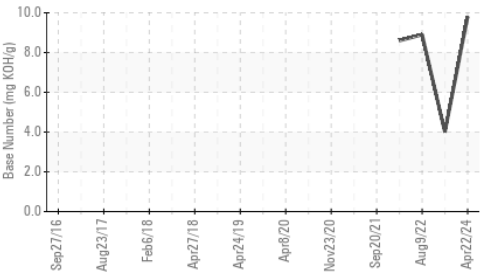
Fuel Dilution



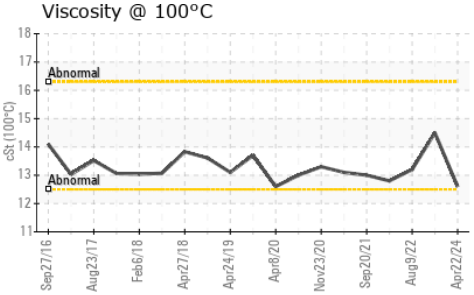
FT-IR (Direct Trend)



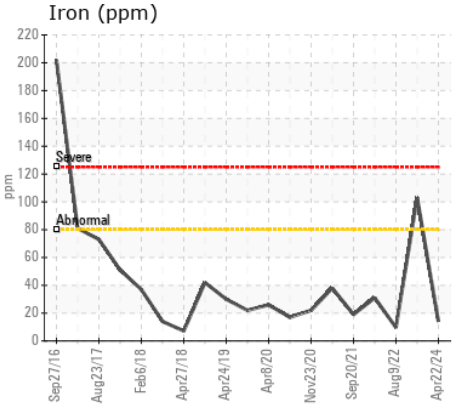
Base Number



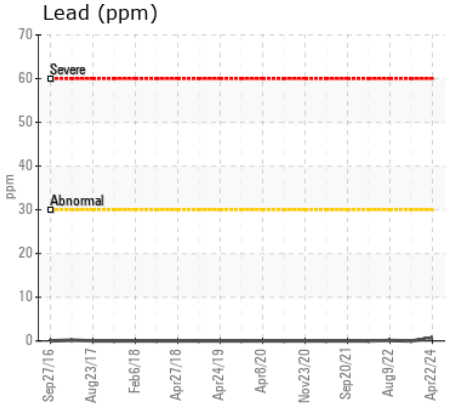
Viscosity @ 100°C



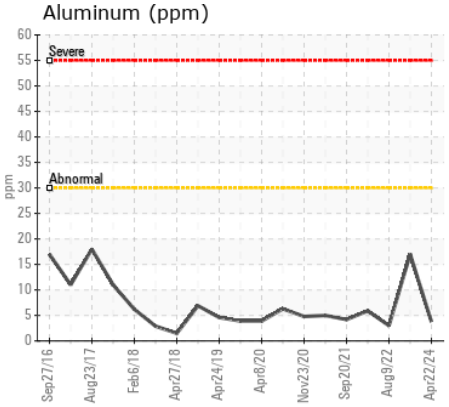
Iron (ppm)



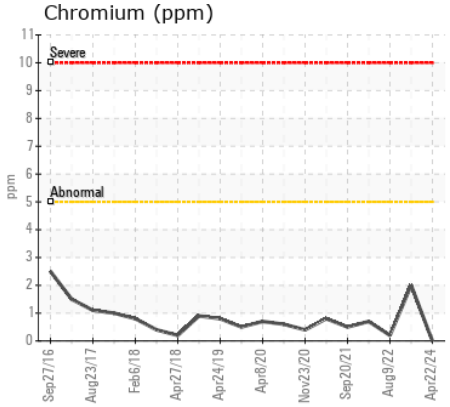
Lead (ppm)



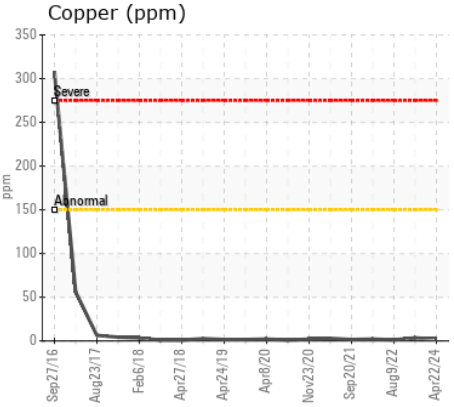
Aluminum (ppm)



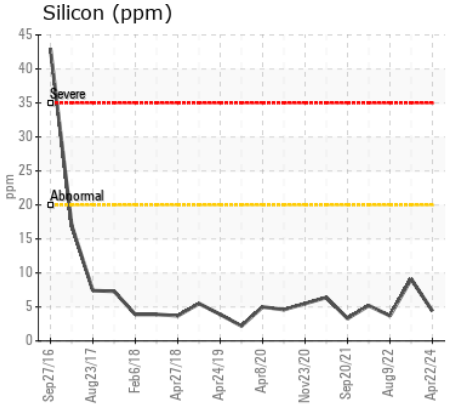
Chromium (ppm)



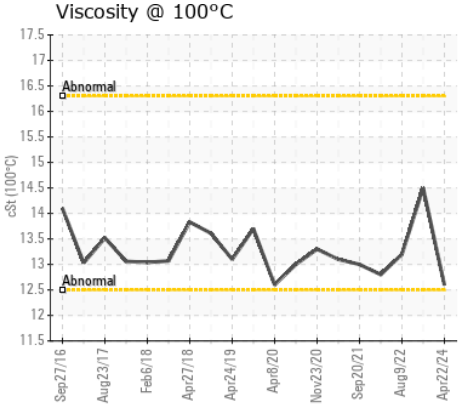
Copper (ppm)



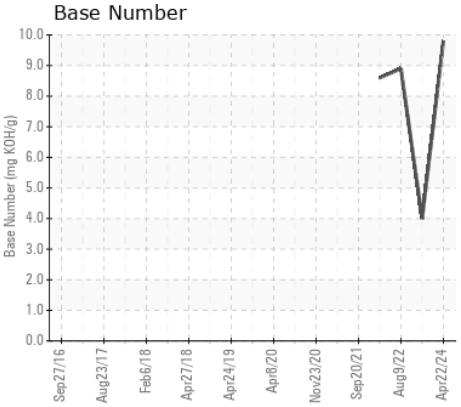
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DC0034131 **Received** : 21 May 2024
Lab Number : 06187154 **Tested** : 24 May 2024
Unique Number : 11043906 **Diagnosed** : 24 May 2024 - Jonathan Hester
Test Package : MOB 1 (Additional Tests: PercentFuel, TBN)

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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