



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
FREIGHTLINER 2-252
Component
Diesel Engine
Fluid
{not provided} (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0778991	WC0778962	WCM2316804
Sample Date		Client Info		08 Mar 2024	01 Apr 2023	08 Jun 2021
Machine Age	mls	Client Info		167380	143873	96066
Oil Age	mls	Client Info		23507	0	10000
Filter Age	mls	Client Info		0	0	10000
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	24	16	26
Chromium	ppm	ASTM D5185m	>5	0	1	2
Nickel	ppm	ASTM D5185m	>2	0	<1	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	<1	<1
Aluminum	ppm	ASTM D5185m	>30	9	8	30
Lead	ppm	ASTM D5185m	>30	0	0	<1
Copper	ppm	ASTM D5185m	>150	4	6	22
Tin	ppm	ASTM D5185m	>5	0	<1	2
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

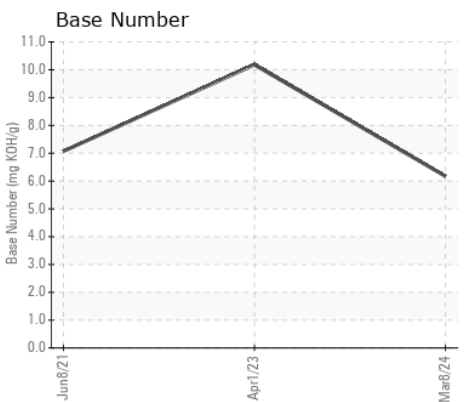
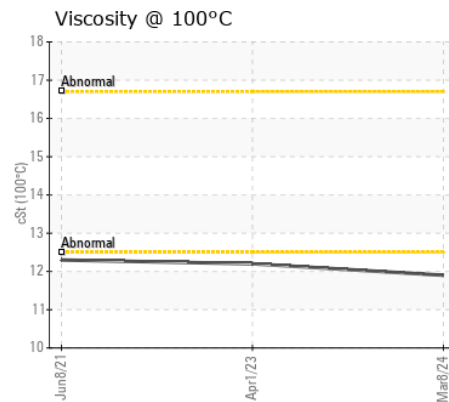
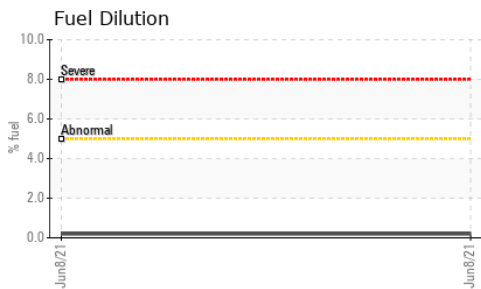
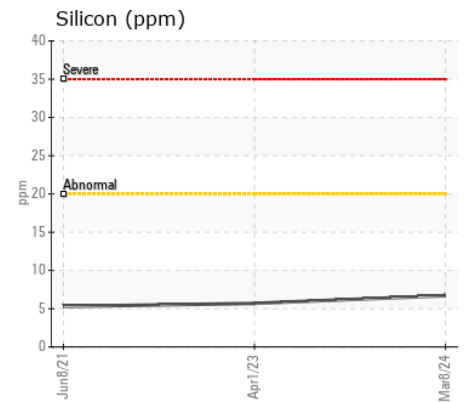
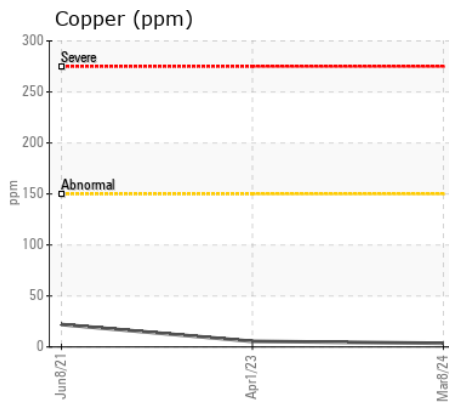
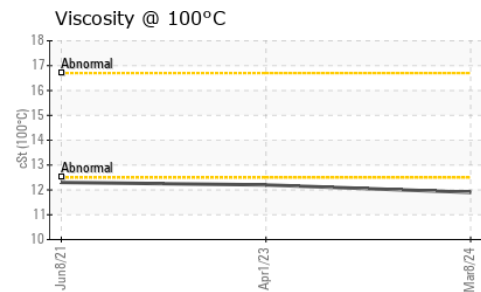
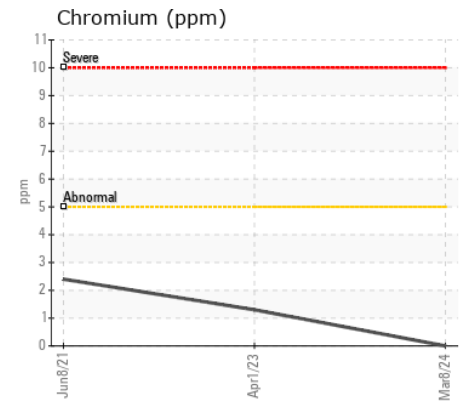
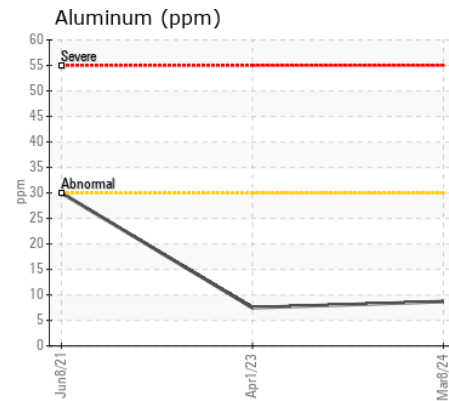
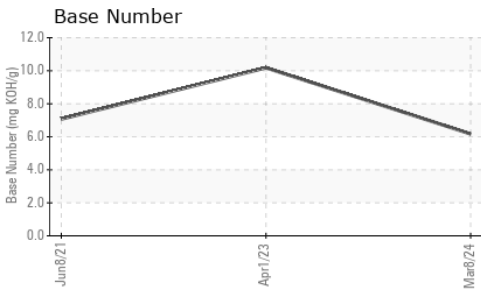
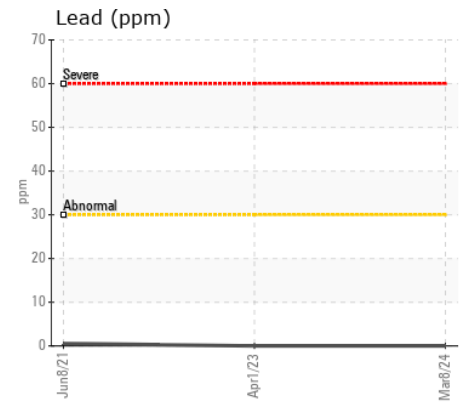
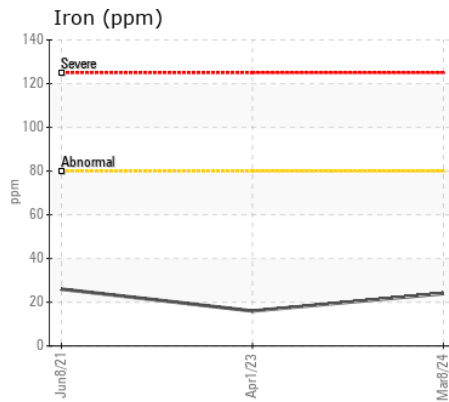
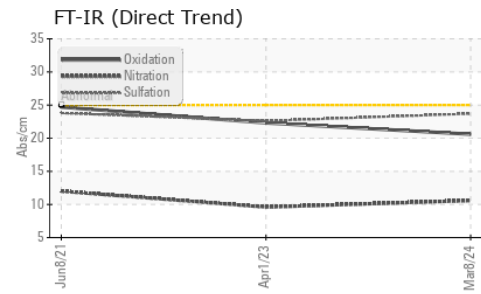
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	7	6	5
Potassium	ppm	ASTM D5185m	>20	15	10	51
Fuel	%	ASTM D3524	>5	<1.0	<1.0	0.2
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.4	0.5
Nitration	Abs/cm	*ASTM D7624	>20	10.6	9.6	12
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.7	22.6	23.8
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

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.

Sodium	ppm	ASTM D5185m		3	3	3
Boron	ppm	ASTM D5185m		30	31	28
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		17	38	37
Manganese	ppm	ASTM D5185m		0	1	1
Magnesium	ppm	ASTM D5185m		774	625	564
Calcium	ppm	ASTM D5185m		1599	1749	1588
Phosphorus	ppm	ASTM D5185m		800	780	698
Zinc	ppm	ASTM D5185m		912	981	916
Sulfur	ppm	ASTM D5185m		3532	3206	1997
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.6	22.3	24.7
Base Number (BN)	mg KOH/g	ASTM D2896		6.17	10.18	7.07
Visc @ 100°C	cSt	ASTM D445		11.9	12.2	12.3



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0778991 **Received** : 11 Apr 2024
Lab Number : 06146746 **Tested** : 15 Apr 2024
Unique Number : 10976824 **Diagnosed** : 15 Apr 2024 - Sean Felton
Test Package : MOB 2 (Additional Tests: FuelDilution)

LYNDEN TRANSPORT - FIFE
 5410 12TH STREET EAST
 FIFE, WA
 US 98424

Contact: CHESTER ANGLEMYER
 chestera@ltia.lynden.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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