



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**FREIGHTLINER 2119**  
Component  
**Diesel Engine**  
Fluid  
**MOBIL 15W40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0949243</b>	WC0917266	WC0893785
Sample Date		Client Info		<b>12 Jun 2024</b>	12 Apr 2024	31 Jan 2024
Machine Age	mls	Client Info		<b>404545</b>	0	377967
Oil Age	mls	Client Info		<b>0</b>	0	0
Filter Age	mls	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	N/A	Changed
Filter Changed		Client Info		<b>Changed</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	<b>29</b>	25	13
Chromium	ppm	ASTM D5185m	>5	<b>2</b>	1	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>30	<b>2</b>	0	2
Lead	ppm	ASTM D5185m	>30	<b>6</b>	11	5
Copper	ppm	ASTM D5185m	>150	<b>5</b>	2	<1
Tin	ppm	ASTM D5185m	>5	<b>1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

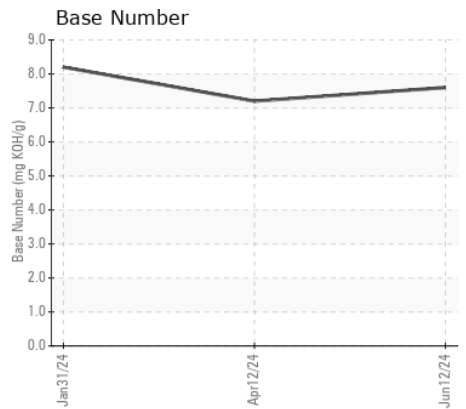
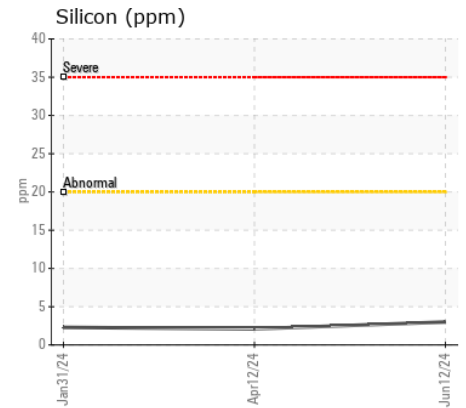
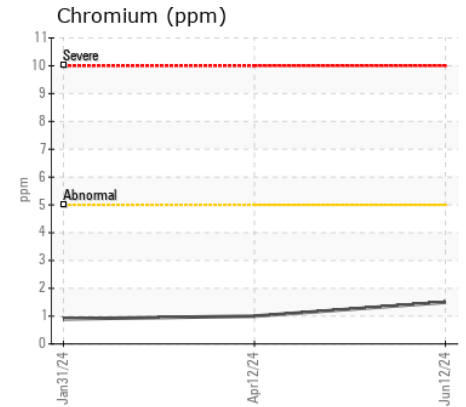
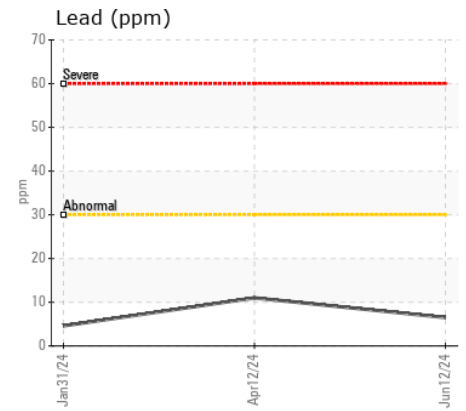
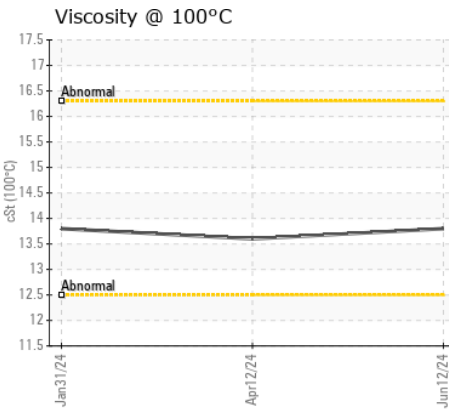
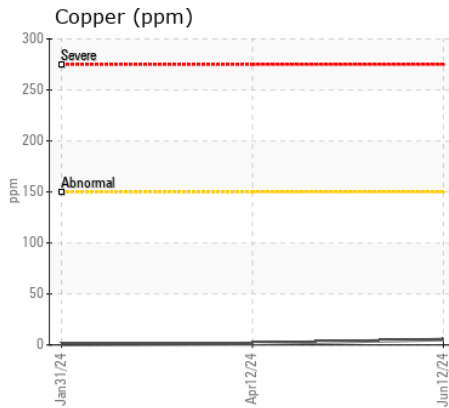
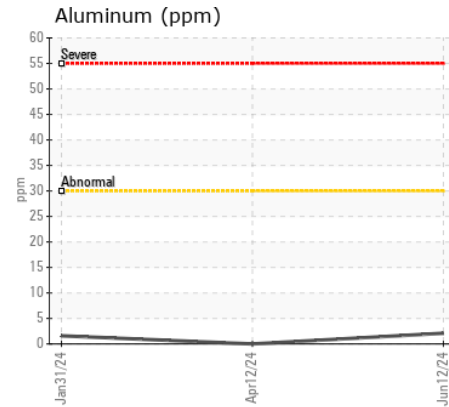
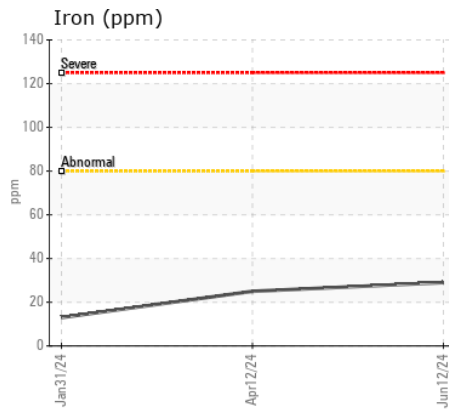
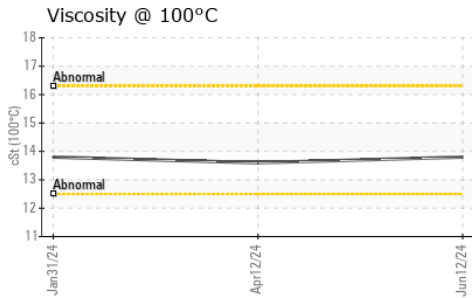
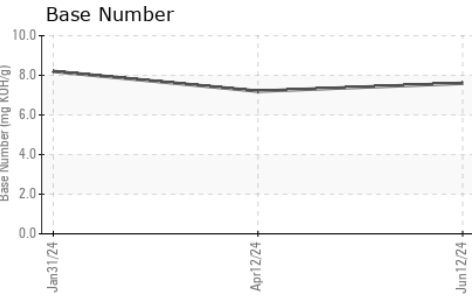
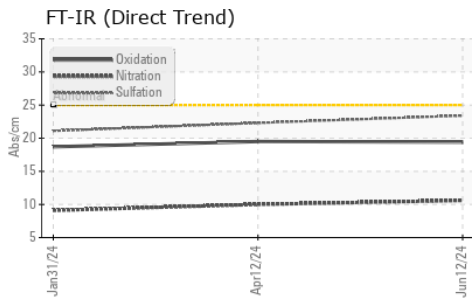
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>3</b>	2	2
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	0	<1
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>1.1</b>	0.8	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.6</b>	10.0	9.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.4</b>	22.3	21.1
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	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	>118	<b>1</b>	3	<1
Boron	ppm	ASTM D5185m		<b>8</b>	2	2
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>61</b>	58	60
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>923</b>	920	969
Calcium	ppm	ASTM D5185m		<b>1188</b>	1119	1037
Phosphorus	ppm	ASTM D5185m		<b>1117</b>	1007	1076
Zinc	ppm	ASTM D5185m		<b>1297</b>	1155	1265
Sulfur	ppm	ASTM D5185m		<b>2983</b>	3141	2927
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.4</b>	19.5	18.7
Base Number (BN)	mg KOH/g	ASTM D2896		<b>7.6</b>	7.2	8.2
Visc @ 100°C	cSt	ASTM D445		<b>13.8</b>	13.6	13.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0949243  
**Lab Number** : 06233013  
**Unique Number** : 11116506  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**Received** : 11 Jul 2024  
**Tested** : 11 Jul 2024  
**Diagnosed** : 11 Jul 2024 - Wes Davis

**CONCRETE SERVICE CO - FAY BLOCK**  
 161 BUILDERS BLVD  
 FAYETTEVILLE, NC  
 US 28301

Contact: BRYAN VANNIMAN  
 bryanvanniman@fayblock.com

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F:

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)