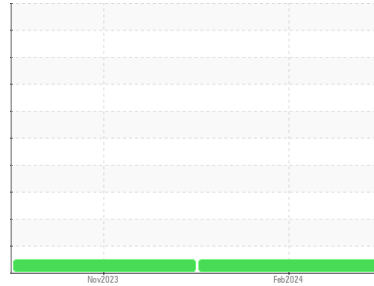




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**FREIGHTLINER 1906**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

## 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 condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>WC0889862</b>	WC0776227	---
Sample Date	Client Info			<b>09 Feb 2024</b>	08 Nov 2023	---
Machine Age	kms	Client Info		<b>285034</b>	0	---
Oil Age	kms	Client Info		<b>0</b>	0	---
Oil Changed	Client Info			<b>Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	NORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<b>&lt;1.0</b>	<1.0	---
Water	WC Method	>0.2		<b>NEG</b>	NEG	---
Glycol	WC Method			<b>NEG</b>	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	<b>10</b>	17	---
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	---
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	0	---
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	<1	---
Aluminum	ppm	ASTM D5185(m)	>20	<b>4</b>	5	---
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	<1	---
Copper	ppm	ASTM D5185(m)	>330	<b>6</b>	14	---
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	<1	---
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	---

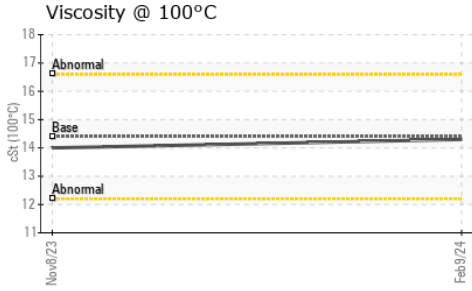
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	250	<b>54</b>	18	---
Barium	ppm	ASTM D5185(m)	10	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185(m)	100	<b>91</b>	93	---
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	---
Magnesium	ppm	ASTM D5185(m)	450	<b>30</b>	27	---
Calcium	ppm	ASTM D5185(m)	3000	<b>2230</b>	2249	---
Phosphorus	ppm	ASTM D5185(m)	1150	<b>998</b>	990	---
Zinc	ppm	ASTM D5185(m)	1350	<b>1167</b>	1194	---
Sulfur	ppm	ASTM D5185(m)	4250	<b>3142</b>	2915	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	<b>3</b>	5	---
Sodium	ppm	ASTM D5185(m)	>158	<b>2</b>	2	---
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	2	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	<b>0.1</b>	0.3	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.3</b>	9.8	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>18.4</b>	22.7	---



# OIL ANALYSIS REPORT



FLUID DEGRADATION		method	limit/base	current	history1	history2
-------------------	--	--------	------------	---------	----------	----------

Oxidation	Abs./1mm	ASTM D7414*	>25	<b>13.8</b>	17.4	---
-----------	----------	-------------	-----	-------------	------	-----

VISUAL		method	limit/base	current	history1	history2
--------	--	--------	------------	---------	----------	----------

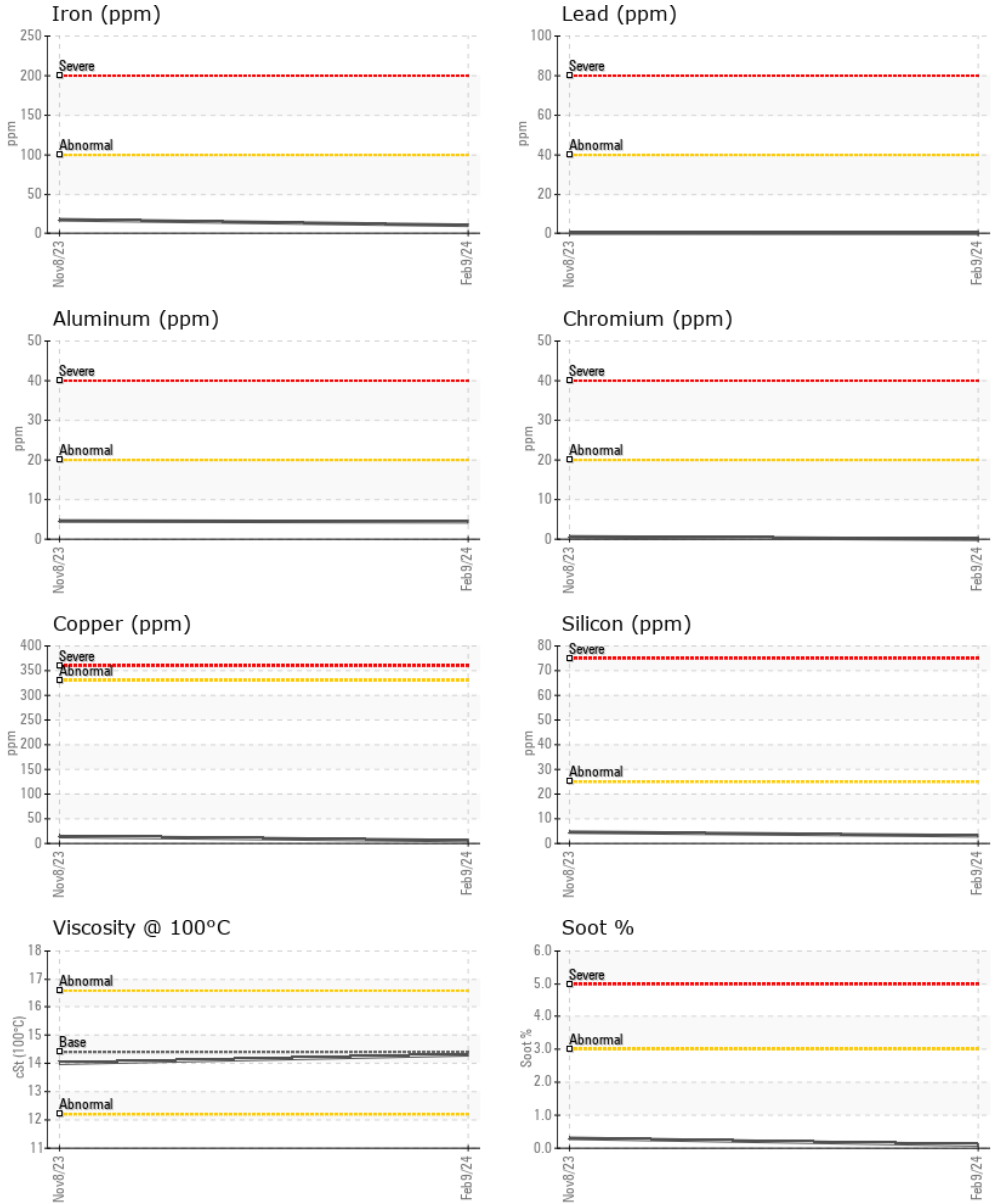
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	---
------------------	--------	---------	------	------------	-----	-----

Free Water	scalar	Visual*		<b>NEG</b>	NEG	---
------------	--------	---------	--	------------	-----	-----

FLUID PROPERTIES		method	limit/base	current	history1	history2
------------------	--	--------	------------	---------	----------	----------

Visc @ 100°C	cSt	ASTM D7279(m)	14.4	<b>14.3</b>	14.0	---
--------------	-----	---------------	------	-------------	------	-----

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0889862      **Received** : 22 Mar 2024  
**Lab Number** : **02623919**      **Tested** : 22 Mar 2024  
**Unique Number** : 5749038      **Diagnosed** : 22 Mar 2024 - Wes Davis  
**Test Package** : MOB 1

**BRITANNIA FLEET SERVICES**  
 1831 SHAWSON DRIVE (SHOP)  
 MISSISSAUGA, ON  
 CA L4W 1T9  
 Contact: Tania Henriques  
 tania.henriques@britanniafleet.ca  
 T: (905)670-4545  
 F: (905)670-9036

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.