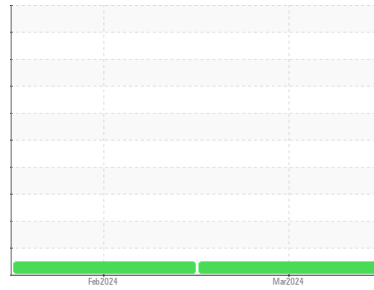




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
FREIGHTLINER COLUMBIA 2132
 Component
Diesel Engine
 Fluid
MOBIL 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 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			WC0906090	WC0893818	---
Sample Date	Client Info			13 Mar 2024	02 Feb 2024	---
Machine Age	mls	Client Info		114848	107173	---
Oil Age	mls	Client Info		0	0	---
Oil Changed	Client Info			Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	7	10	---
Chromium	ppm	ASTM D5185m	>5	<1	<1	---
Nickel	ppm	ASTM D5185m	>2	0	0	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>30	3	3	---
Lead	ppm	ASTM D5185m	>30	0	0	---
Copper	ppm	ASTM D5185m	>150	4	4	---
Tin	ppm	ASTM D5185m	>5	0	<1	---
Vanadium	ppm	ASTM D5185m		<1	<1	---
Cadmium	ppm	ASTM D5185m		0	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	<1	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		63	56	---
Manganese	ppm	ASTM D5185m		0	<1	---
Magnesium	ppm	ASTM D5185m		1051	911	---
Calcium	ppm	ASTM D5185m		1212	1042	---
Phosphorus	ppm	ASTM D5185m		1150	928	---
Zinc	ppm	ASTM D5185m		1347	1110	---
Sulfur	ppm	ASTM D5185m		3876	3224	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	3	3	---
Sodium	ppm	ASTM D5185m	>118	0	3	---
Potassium	ppm	ASTM D5185m	>20	5	7	---

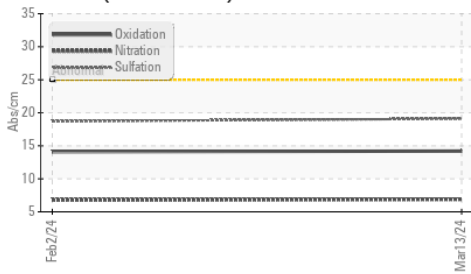
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.5	0.5	---
Nitration	Abs/cm	*ASTM D7624	>20	6.9	6.8	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.1	18.7	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.2	14.1	---
Base Number (BN)	mg KOH/g	ASTM D2896		8.8	8.8	---

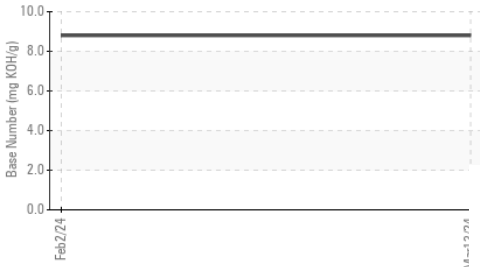


OIL ANALYSIS REPORT

FT-IR (Direct Trend)



Base Number



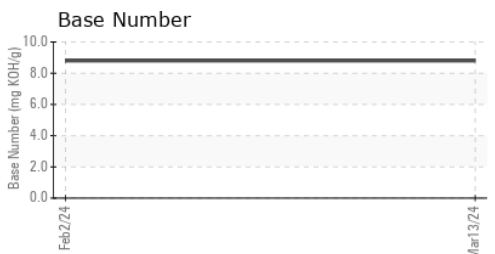
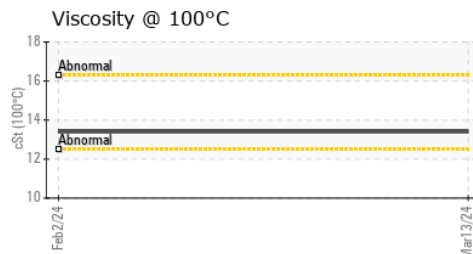
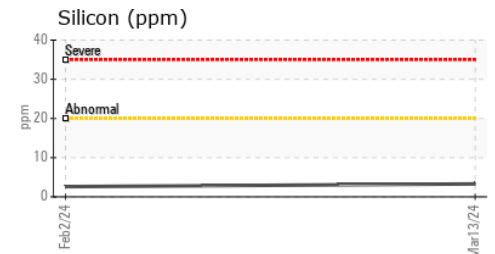
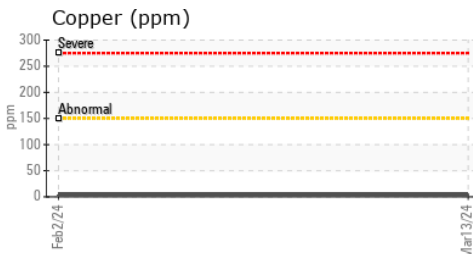
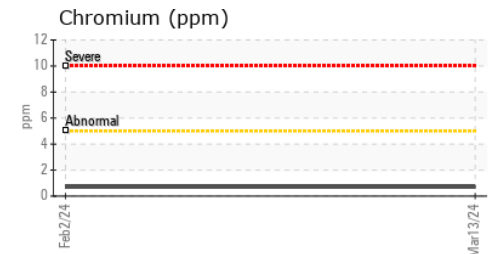
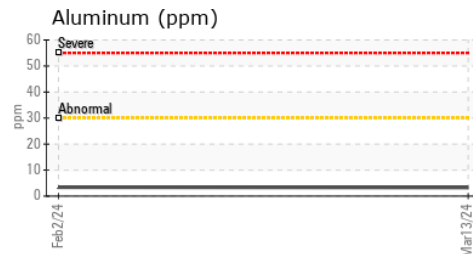
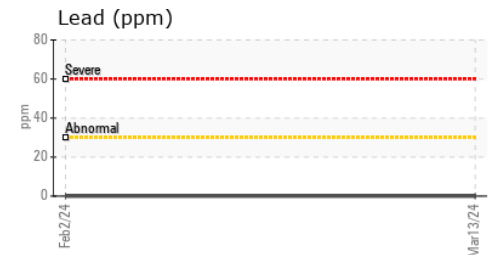
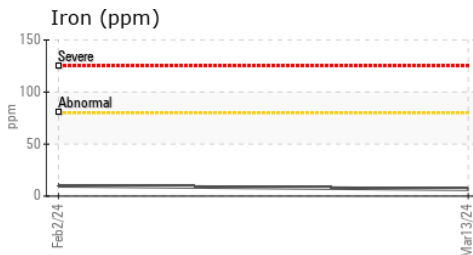
Viscosity @ 100°C



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	13.4	13.4	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0906090
Lab Number : 06142760
Unique Number : 10967568
Test Package : MOB 1 (Additional Tests: TBN)

Received : 09 Apr 2024
Tested : 09 Apr 2024
Diagnosed : 09 Apr 2024 - Wes Davis

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

Contact: BRYAN VANNIMAN
 bryanvanniman@fayblock.com
 T: (800)326-9198

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)

F: