



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Machine Id
FREIGHTLINER 1222

Component
Diesel Engine

Fluid
{not provided} (--- GAL)

RECOMMENDATION

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0878798	---	---
Sample Date		Client Info		02 Jan 2024	---	---
Machine Age	mls	Client Info		255833	---	---
Oil Age	mls	Client Info		0	---	---
Filter Age	mls	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				SEVERE	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	23	---	---
Chromium	ppm	ASTM D5185m	>5	1	---	---
Nickel	ppm	ASTM D5185m	>2	0	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>30	1	---	---
Lead	ppm	ASTM D5185m	>30	6	---	---
Copper	ppm	ASTM D5185m	>150	1	---	---
Tin	ppm	ASTM D5185m	>5	1	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

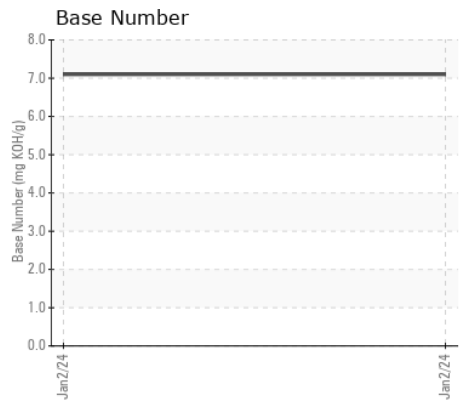
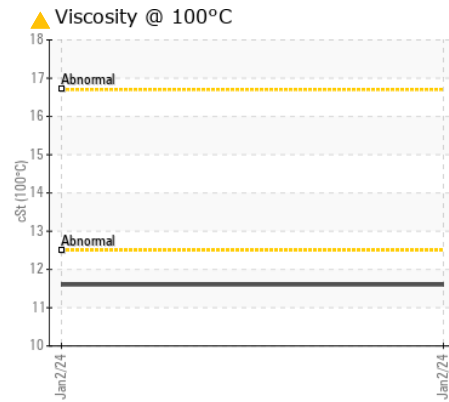
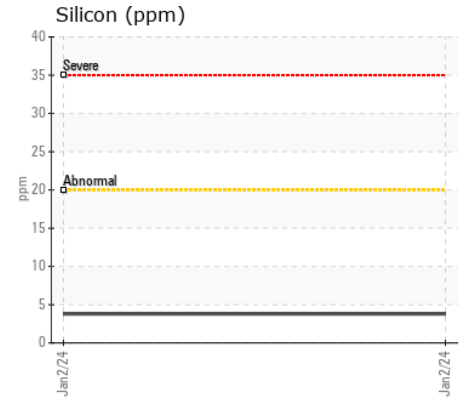
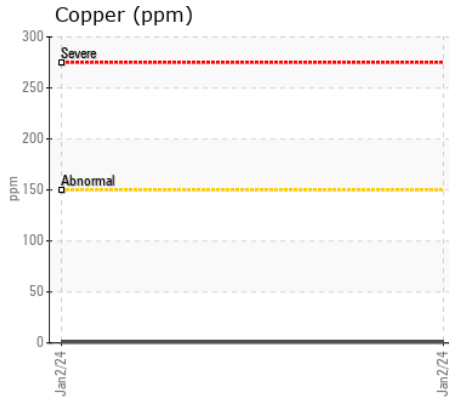
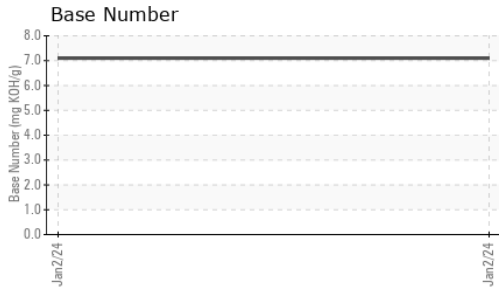
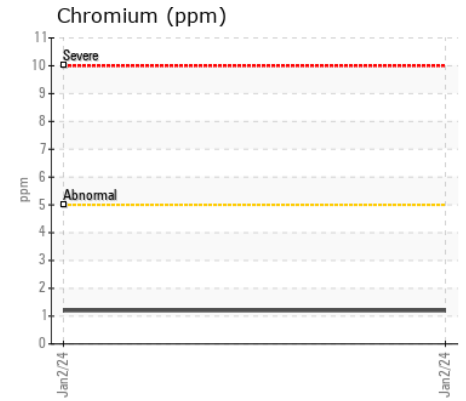
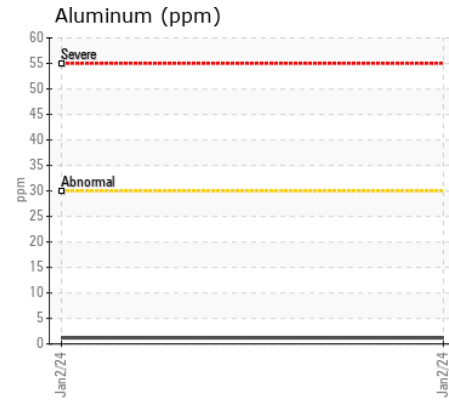
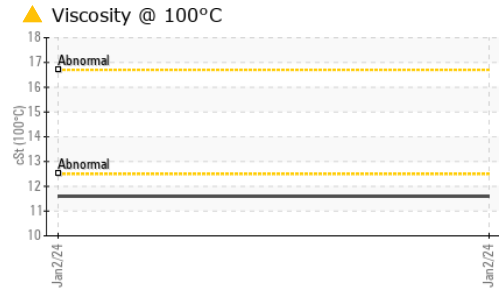
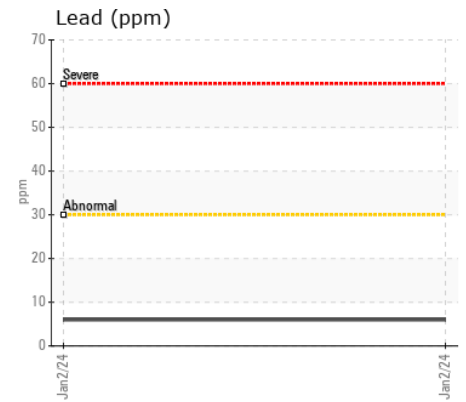
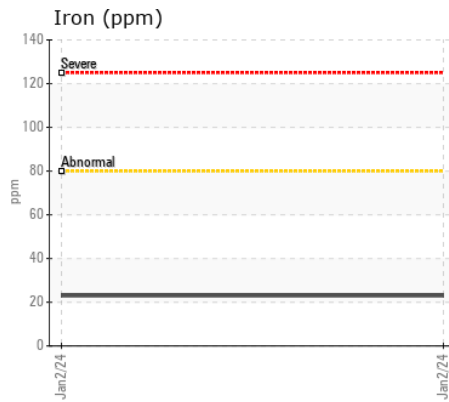
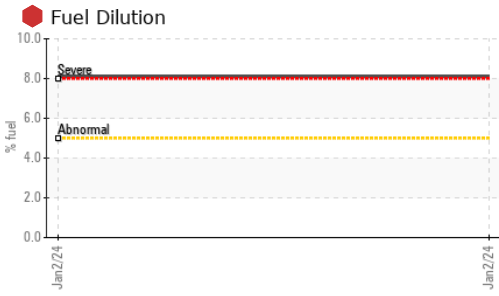
There is a high amount of fuel present in the oil.

Silicon	ppm	ASTM D5185m	>20	4	---	---
Potassium	ppm	ASTM D5185m	>20	1	---	---
Fuel	%	ASTM D3524	>5	8.1	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.3	---	---
Nitration	Abs/cm	*ASTM D7624	>20	8.7	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.9	---	---
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	---	---

FLUID CONDITION

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m		2	---	---
Boron	ppm	ASTM D5185m		11	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		50	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		871	---	---
Calcium	ppm	ASTM D5185m		958	---	---
Phosphorus	ppm	ASTM D5185m		953	---	---
Zinc	ppm	ASTM D5185m		1086	---	---
Sulfur	ppm	ASTM D5185m		3039	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.8	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		7.1	---	---
Visc @ 100°C	cSt	ASTM D445		11.6	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0878798 **Received** : 31 Jan 2024
Lab Number : 06075400 **Diagnosed** : 02 Feb 2024
Unique Number : 10857491 **Diagnostician** : Jonathan Hester
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN)

CONCRETE SERVICE CO
 161 BUILDERS BLVD
 FAYETTEVILLE, NC
 US 28301
 Contact: Service Manager

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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F: