



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>SEVERE</b>
FLUID CONDITION	<b>ATTENTION</b>

Machine Id  
**FREIGHTLINER 131**  
Component  
**Diesel Engine**  
Fluid  
**SHELL ROTELLA T5 10W30 (CJ4) (--- GAL)**

## RECOMMENDATION

We advise that you check for the source of the coolant leak. We recommend that you drain the oil from the component if this has not already been done. We advise that you flush the component thoroughly before re-filling with oil. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

## WEAR

All component wear rates are normal.

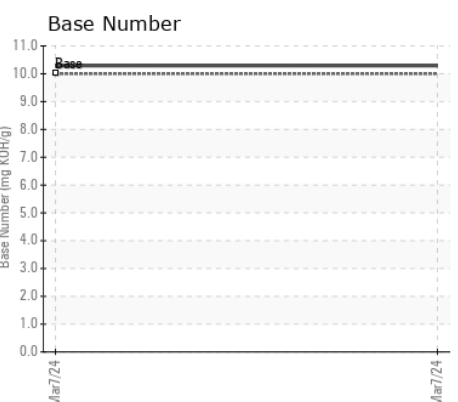
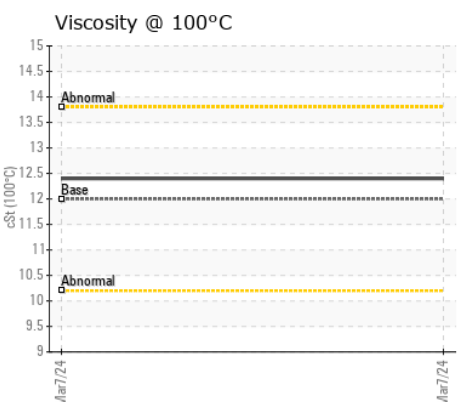
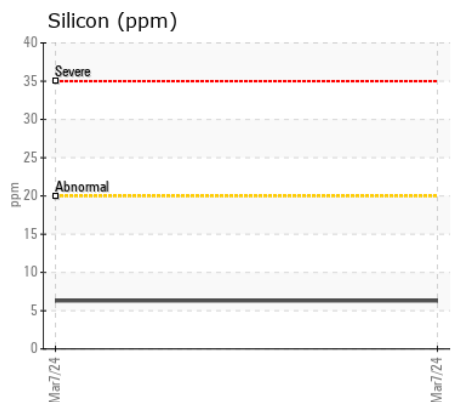
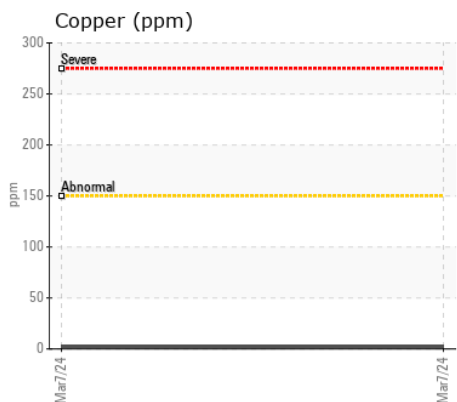
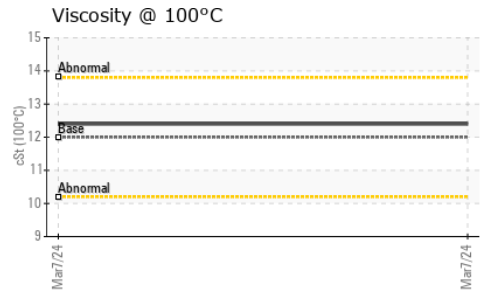
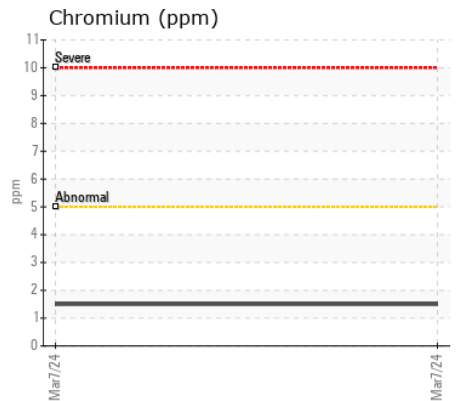
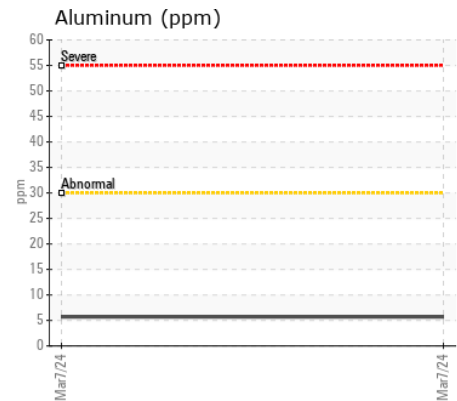
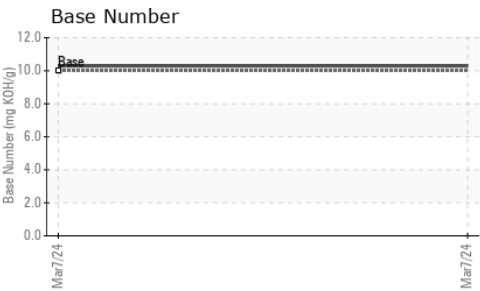
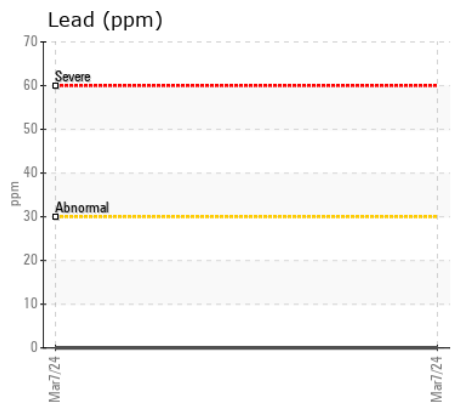
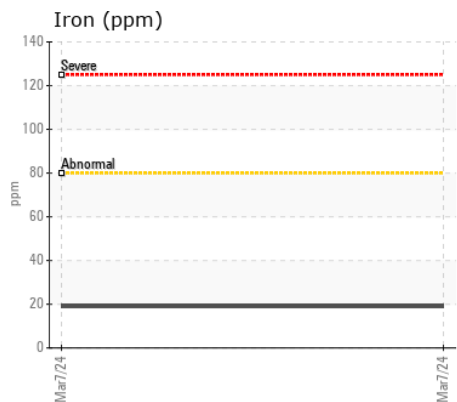
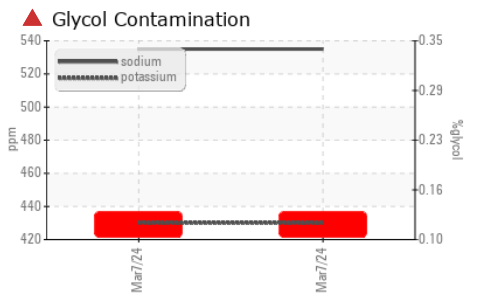
## CONTAMINATION

Test for glycol is positive. There is a high concentration of glycol present in the oil.

## FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PP0000506	---	---
Sample Date		Client Info		07 Mar 2024	---	---
Machine Age	kms	Client Info		1580235	---	---
Oil Age	kms	Client Info		8000	---	---
Filter Age	kms	Client Info		8000	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		Not Changd	---	---
Sample Status				SEVERE	---	---
Iron	ppm	ASTM D5185(m)	>80	19	---	---
Chromium	ppm	ASTM D5185(m)	>5	2	---	---
Nickel	ppm	ASTM D5185(m)	>2	<1	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)	>3	0	---	---
Aluminum	ppm	ASTM D5185(m)	>30	6	---	---
Lead	ppm	ASTM D5185(m)	>30	0	---	---
Copper	ppm	ASTM D5185(m)	>150	3	---	---
Tin	ppm	ASTM D5185(m)	>5	0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
Silicon	ppm	ASTM D5185(m)	>20	6	---	---
Potassium	ppm	ASTM D5185(m)	>20	▲ 430	---	---
Fuel		WC Method	>5	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol	%	ASTM D7922*		▲ 0.135	---	---
Soot %	%	ASTM D7844*	>3	0.6	---	---
Nitration	Abs/cm	ASTM D7624*	>20	11.4	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.9	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---
Sodium	ppm	ASTM D5185(m)		● 535	---	---
Boron	ppm	ASTM D5185(m)		20	---	---
Barium	ppm	ASTM D5185(m)	0	0	---	---
Molybdenum	ppm	ASTM D5185(m)		73	---	---
Manganese	ppm	ASTM D5185(m)		<1	---	---
Magnesium	ppm	ASTM D5185(m)		32	---	---
Calcium	ppm	ASTM D5185(m)		2069	---	---
Phosphorus	ppm	ASTM D5185(m)		948	---	---
Zinc	ppm	ASTM D5185(m)		1086	---	---
Sulfur	ppm	ASTM D5185(m)		2911	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.0	---	---
Base Number (BN)	mg KOH/g	ASTM D2896*	10.0	10.29	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	12.0	12.4	---	---



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PP0000506 **Received** : 08 Mar 2024  
**Lab Number** : 02620720 **Tested** : 11 Mar 2024  
**Unique Number** : 5737830 **Diagnosed** : 11 Mar 2024 - Wes Davis  
**Test Package** : MOB 2 ( Additional Tests: Glycol )

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 T: 647633898  
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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.