



# OIL ANALYSIS REPORT

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

Machine Id  
**LIEBHERR LR1600 CR-6607 - OUTER (S/N 074580)**

Component  
**Front Right Final Drive**

Fluid  
**GEAR OIL ISO 220 (--- GAL)**

## RECOMMENDATION

The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0823567</b>	---	---
Sample Date		Client Info		<b>22 Feb 2024</b>	---	---
Machine Age	hrs	Client Info		<b>15138</b>	---	---
Oil Age	hrs	Client Info		<b>1397</b>	---	---
Filter Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>Changed</b>	---	---
Filter Changed		Client Info		<b>Changed</b>	---	---
Sample Status				<b>SEVERE</b>	---	---

## WEAR

Bearing and/or bushing wear is indicated.

Iron	ppm	ASTM D5185m	>500	<b>191</b>	---	---
Chromium	ppm	ASTM D5185m	>10	<b>2</b>	---	---
Nickel	ppm	ASTM D5185m	>10	<b>2</b>	---	---
Titanium	ppm	ASTM D5185m		<b>1</b>	---	---
Silver	ppm	ASTM D5185m		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>25	<b>7</b>	---	---
Lead	ppm	ASTM D5185m	>25	<b>▲ 57</b>	---	---
Copper	ppm	ASTM D5185m	>50	<b>▲ 1002</b>	---	---
Tin	ppm	ASTM D5185m	>10	<b>1</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
White Metal	scalar	*Visual	NONE	<b>MODER</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---

## CONTAMINATION

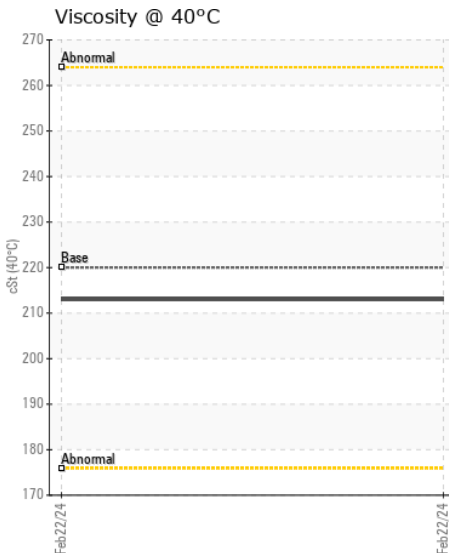
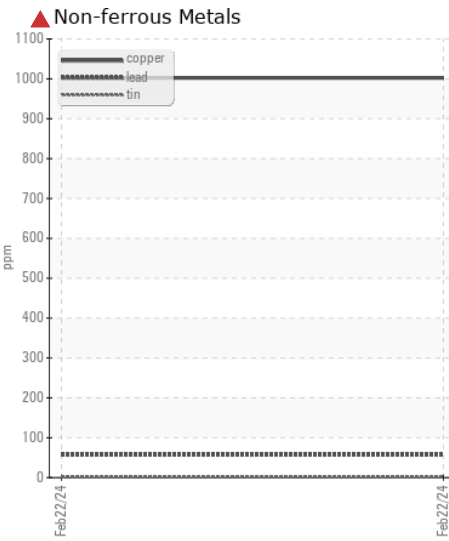
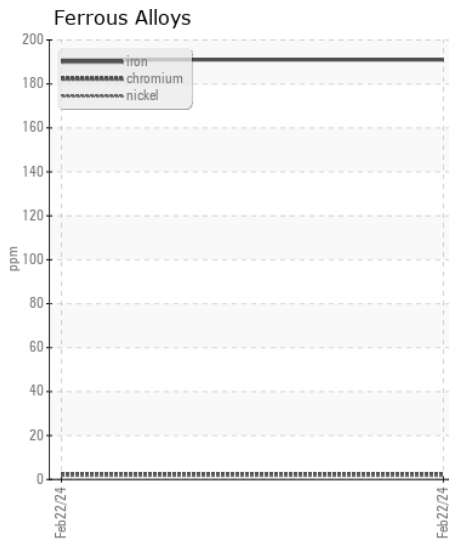
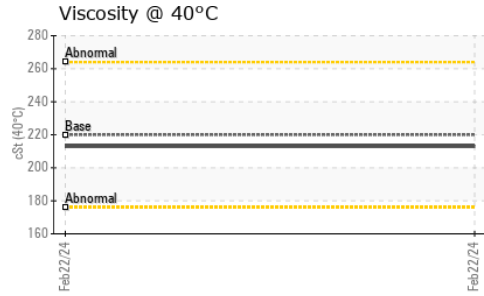
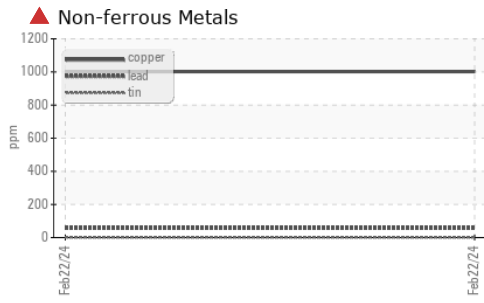
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	<b>41</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	---	---
Water		WC Method	>0.2	<b>NEG</b>	---	---
Silt	scalar	*Visual	NONE	<b>MODER</b>	---	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	---	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	---	---

## FLUID CONDITION

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Sodium	ppm	ASTM D5185m		<b>0</b>	---	---
Boron	ppm	ASTM D5185m	50	<b>20</b>	---	---
Barium	ppm	ASTM D5185m	15	<b>2</b>	---	---
Molybdenum	ppm	ASTM D5185m	15	<b>1</b>	---	---
Manganese	ppm	ASTM D5185m		<b>2</b>	---	---
Magnesium	ppm	ASTM D5185m	50	<b>1</b>	---	---
Calcium	ppm	ASTM D5185m	50	<b>12</b>	---	---
Phosphorus	ppm	ASTM D5185m	350	<b>420</b>	---	---
Zinc	ppm	ASTM D5185m	100	<b>632</b>	---	---
Sulfur	ppm	ASTM D5185m	12500	<b>7846</b>	---	---
Visc @ 40°C	cSt	ASTM D445	220	<b>213</b>	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : WC0823567

**Lab Number** : 06103886

**Unique Number** : 10902116

**Test Package** : CONST

**Received** : 28 Feb 2024

**Tested** : 29 Feb 2024

**Diagnosed** : 01 Mar 2024 - Don Baldrige

**BUCKNER HEAVY LIFT**

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GRAHAM, NC

US 27253-9215

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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)