



LIEBHERR

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR L580 069442-1762
Component
Front Right Wheel Hub
Fluid
GEAR OIL SAE 80W90 (--- GAL)

RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) GEAR OIL SAE 80W90. Please confirm.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0247603	---	---
Sample Date		Client Info		03 Jan 2024	---	---
Machine Age	hrs	Client Info		3567	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---

WEAR

Copper, lead and tin ppm levels are abnormal. Bearing and/or bushing wear is indicated.

Iron	ppm	ASTM D5185(m)	>500	353	---	---
Chromium	ppm	ASTM D5185(m)	>8	2	---	---
Nickel	ppm	ASTM D5185(m)	>5	<1	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)		0	---	---
Aluminum	ppm	ASTM D5185(m)	>5	2	---	---
Lead	ppm	ASTM D5185(m)	>5	▲ 6	---	---
Copper	ppm	ASTM D5185(m)	>50	▲ 235	---	---
Tin	ppm	ASTM D5185(m)		▲ 19	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	VLITE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

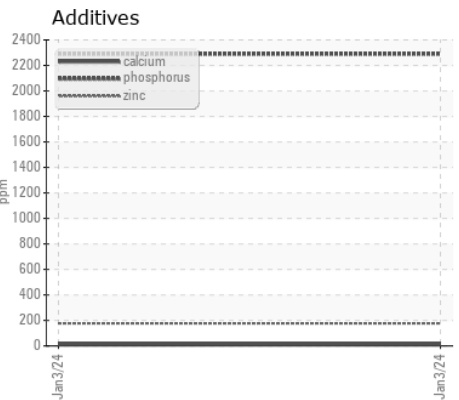
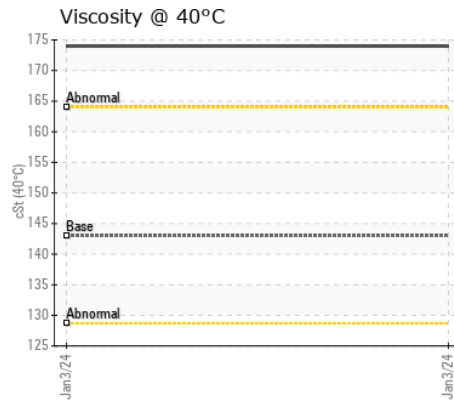
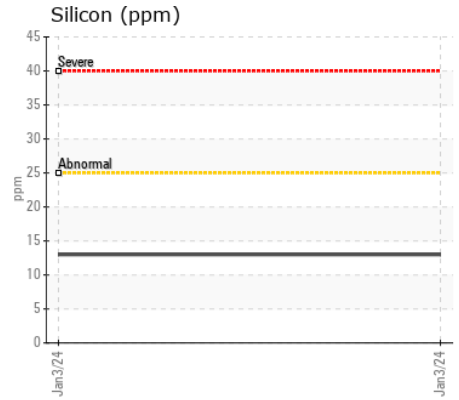
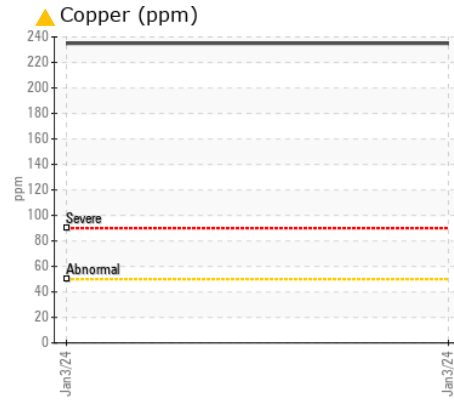
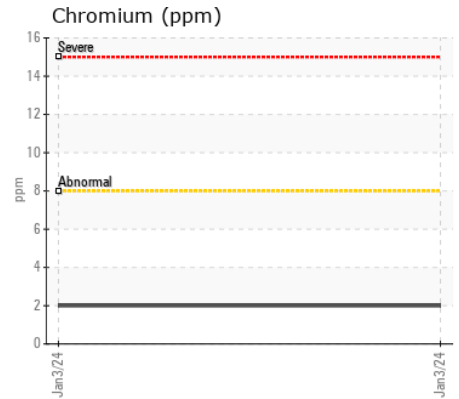
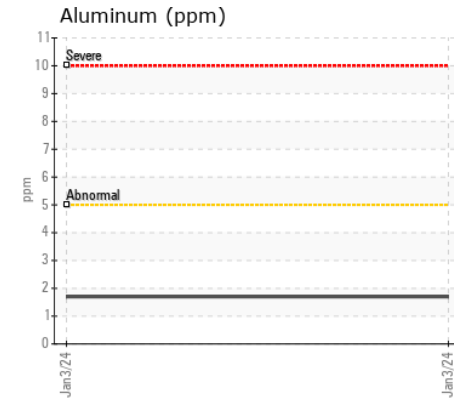
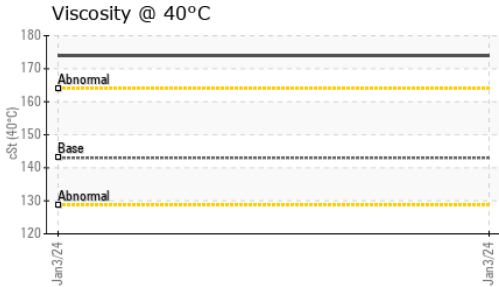
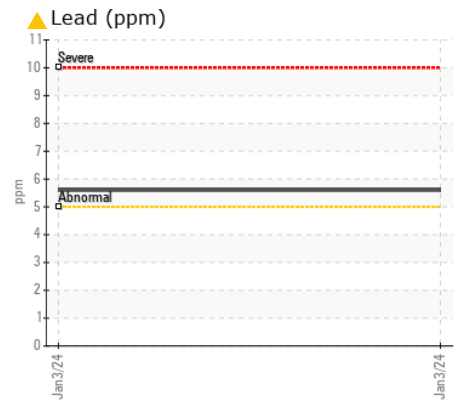
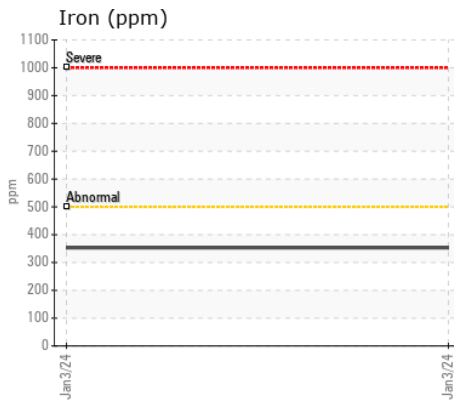
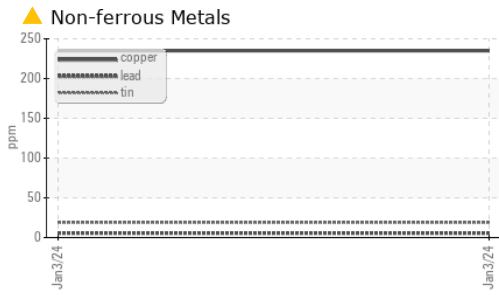
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	13	---	---
Potassium	ppm	ASTM D5185(m)	>20	0	---	---
Water		WC Method	>0.2	NEG	---	---
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

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

Sodium	ppm	ASTM D5185(m)	>170	4	---	---
Boron	ppm	ASTM D5185(m)	400	1	---	---
Barium	ppm	ASTM D5185(m)	200	0	---	---
Molybdenum	ppm	ASTM D5185(m)	12	0	---	---
Manganese	ppm	ASTM D5185(m)		34	---	---
Magnesium	ppm	ASTM D5185(m)	12	1	---	---
Calcium	ppm	ASTM D5185(m)	150	15	---	---
Phosphorus	ppm	ASTM D5185(m)	1650	2291	---	---
Zinc	ppm	ASTM D5185(m)	125	177	---	---
Sulfur	ppm	ASTM D5185(m)	22500	25202	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	143	174	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0247603 **Received** : 16 Jan 2024
Lab Number : 02609101 **Diagnosed** : 16 Jan 2024
Unique Number : 5710187 **Diagnostician** : Kevin Marson
Test Package : MOBCE (Additional Tests: Visual)

HUBERT ET FILS INC
 1012 CHEMIN DE PARC INDUSTRIEL
 BOIS-FRANC, QC
 CA J9E 3A9
 Contact: Service Manager

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.

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F: