



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR L586 70612
Component
Front Right Wheel Hub
Fluid
LIEBHERR GEAR BASIC 90 LS (2 LTR)

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill.
Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0287852	LH0269598	---
Sample Date		Client Info		13 Apr 2024	21 Aug 2023	---
Machine Age	hrs	Client Info		1998	970	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>1625	121	184	---
Chromium	ppm	ASTM D5185(m)	>8	1	2	---
Nickel	ppm	ASTM D5185(m)	>4	<1	1	---
Titanium	ppm	ASTM D5185(m)		0	0	---
Silver	ppm	ASTM D5185(m)		0	0	---
Aluminum	ppm	ASTM D5185(m)	>25	1	3	---
Lead	ppm	ASTM D5185(m)	>8	<1	3	---
Copper	ppm	ASTM D5185(m)	>150	36	117	---
Tin	ppm	ASTM D5185(m)	>10	3	7	---
Vanadium	ppm	ASTM D5185(m)		0	<1	---
White Metal	scalar	Visual*	NONE	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	VLITE	LIGHT	---

CONTAMINATION

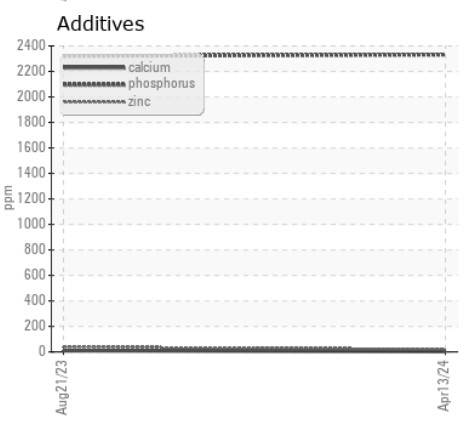
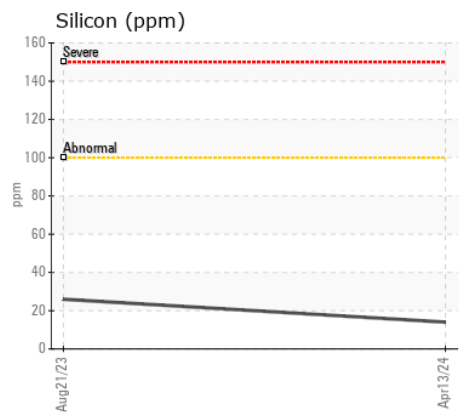
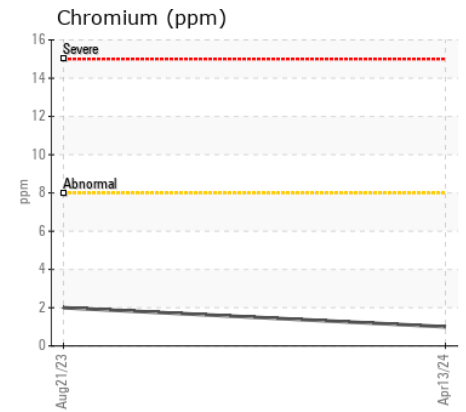
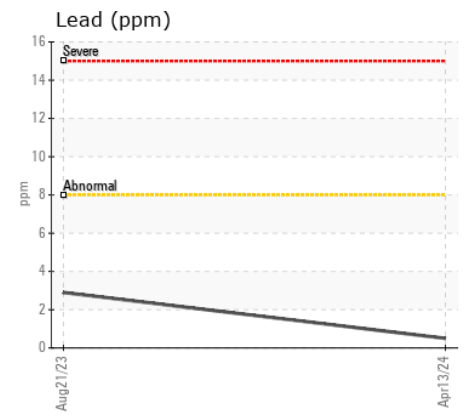
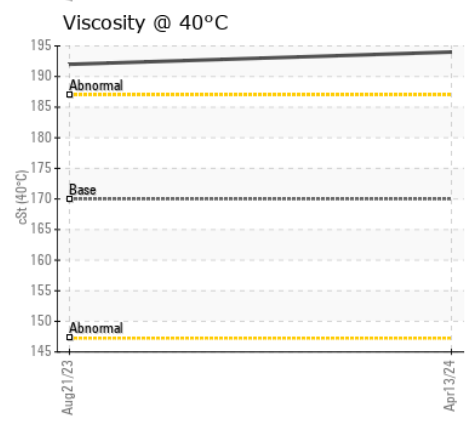
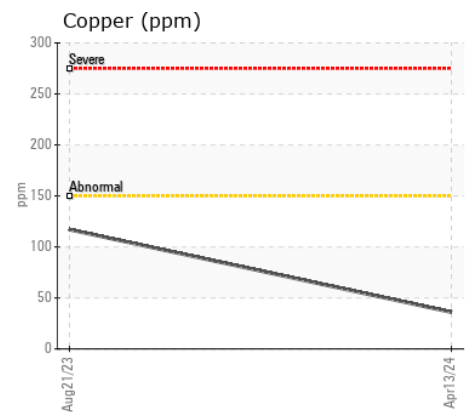
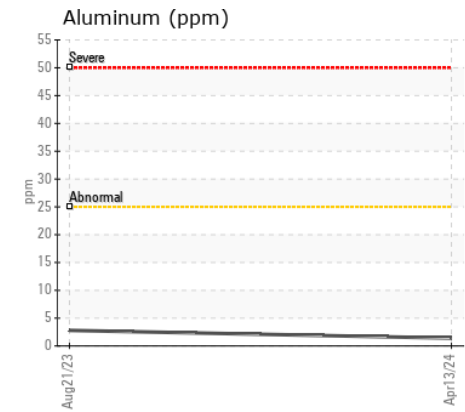
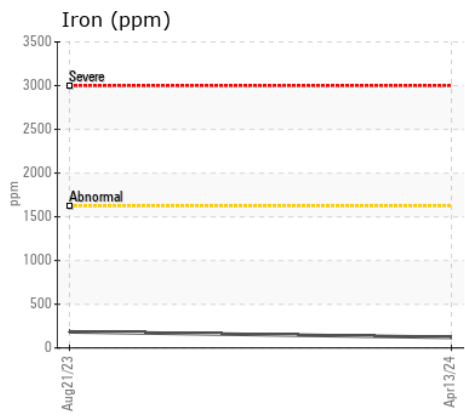
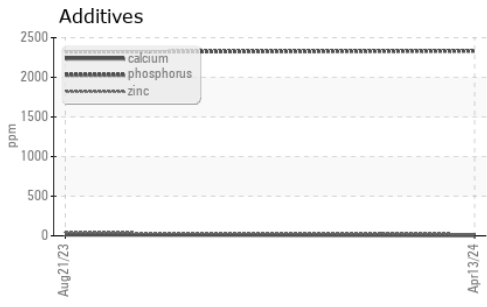
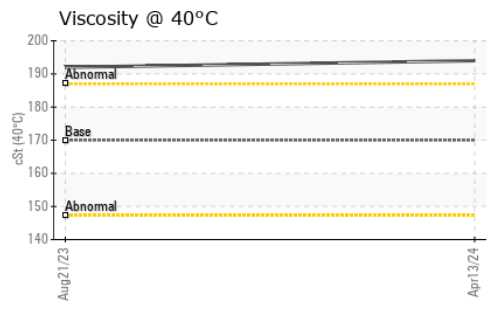
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>100	14	26	---
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	---
Water		WC Method	>0.2	NEG	NEG	---
Silt	scalar	Visual*	NONE	NONE	LIGHT	---
Debris	scalar	Visual*	NONE	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---

FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil.
Viscosity of sample indicates oil is within SAE 90 range, advise investigate. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		4	8	---
Boron	ppm	ASTM D5185(m)	0	<1	3	---
Barium	ppm	ASTM D5185(m)	0	0	0	---
Molybdenum	ppm	ASTM D5185(m)	0	0	0	---
Manganese	ppm	ASTM D5185(m)	0	20	41	---
Magnesium	ppm	ASTM D5185(m)	<1	<1	4	---
Calcium	ppm	ASTM D5185(m)	<1	4	12	---
Phosphorus	ppm	ASTM D5185(m)	2143	2331	2321	---
Zinc	ppm	ASTM D5185(m)	<1	21	40	---
Sulfur	ppm	ASTM D5185(m)	23468	26021	26672	---
Visc @ 40°C	cSt	ASTM D7279(m)	170	194	192	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0287852 **Received** : 19 Apr 2024
Lab Number : 02630331 **Tested** : 19 Apr 2024
Unique Number : 5763463 **Diagnosed** : 22 Apr 2024 - Kevin Marson
Test Package : MOB 1

GRAYMONT (NB) INC
 4634, ROUTE 880
 HAVELOCK, NB
 CA E4Z 5K8
 Contact: Dennis Wall

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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