



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR LH18M 133780-1840
Component
Front Differential
Fluid
LIEBHERR GEAR BASIC 90 LS (--- GAL)

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		LH0282605	LH0261201	LH0250901
Sample Date		Client Info		24 Apr 2024	01 Sep 2023	30 Jan 2023
Machine Age	hrs	Client Info		3952	2973	1835
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>150	14	13	7
Chromium	ppm	ASTM D5185(m)	>5	0	<1	0
Nickel	ppm	ASTM D5185(m)	>10	0	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	1
Aluminum	ppm	ASTM D5185(m)	>5	0	<1	0
Lead	ppm	ASTM D5185(m)	>5	0	0	<1
Copper	ppm	ASTM D5185(m)	>125	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>5	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

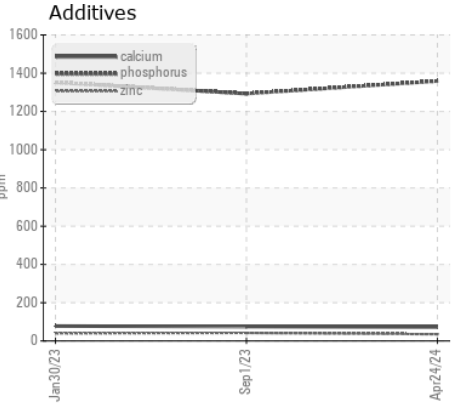
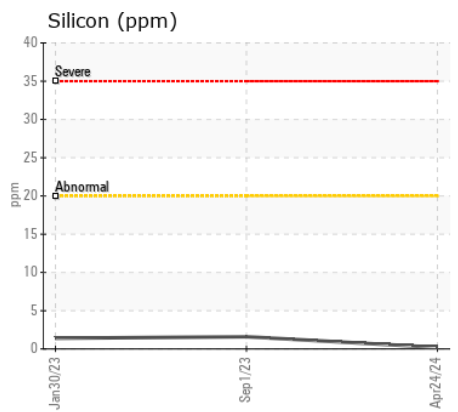
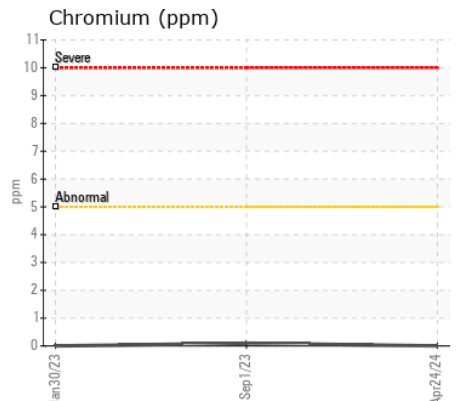
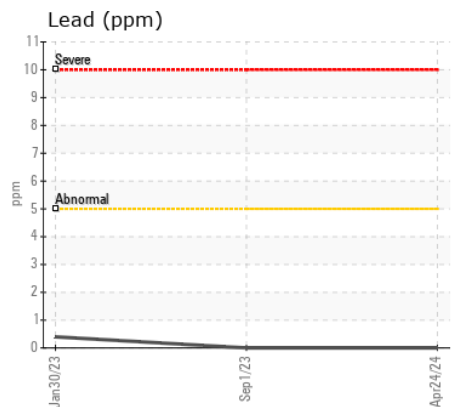
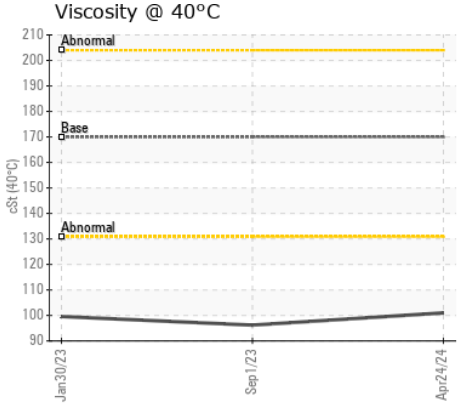
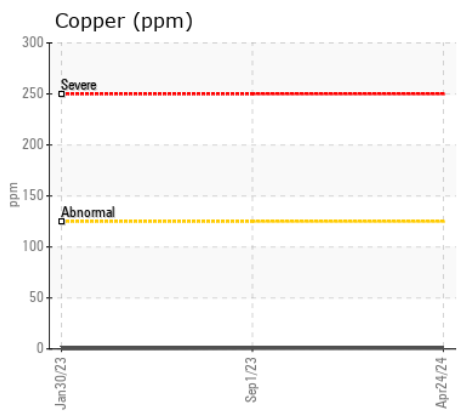
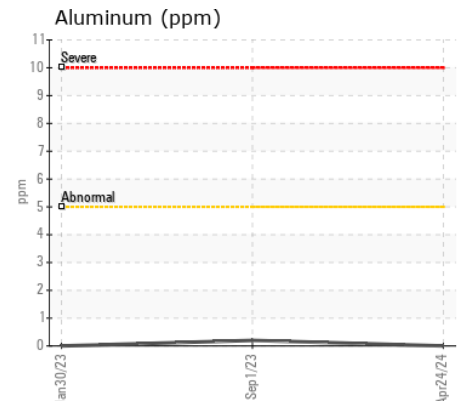
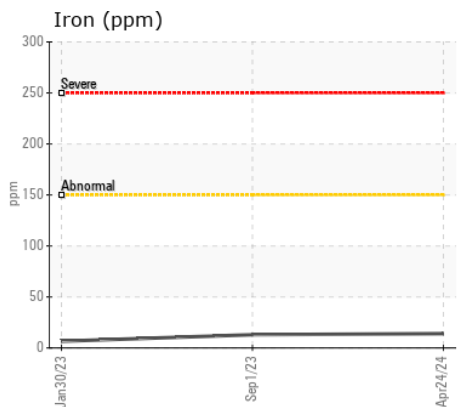
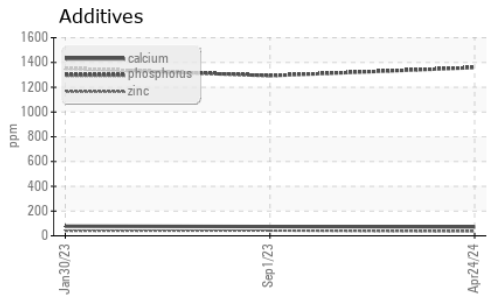
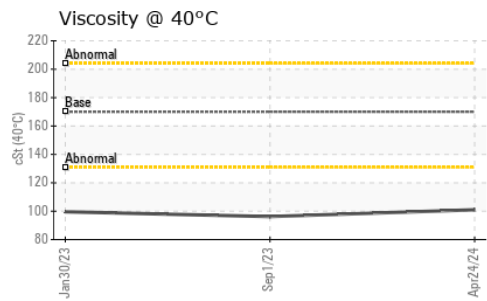
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	<1	2	1
Potassium	ppm	ASTM D5185(m)	>20	6	<1	0
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil.
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		4	<1	<1
Boron	ppm	ASTM D5185(m)	0	261	312	325
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0	0
Manganese	ppm	ASTM D5185(m)	0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	<1	2	3	2
Calcium	ppm	ASTM D5185(m)	<1	72	75	78
Phosphorus	ppm	ASTM D5185(m)	2143	1359	1293	1352
Zinc	ppm	ASTM D5185(m)	<1	35	42	40
Sulfur	ppm	ASTM D5185(m)	23468	20818	20079	21418
Visc @ 40°C	cSt	ASTM D7279(m)	170	101	96.2	99.6



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0282605 **Received** : 02 May 2024
Lab Number : 02632854 **Tested** : 02 May 2024
Unique Number : 5774007 **Diagnosed** : 02 May 2024 - Wes Davis
Test Package : MOB 1

SERVICES SANITAIRES ST-ANTOINE INC
 16600 RTE SIR WILFRID-LAURIER
 MIRABEL, QC
 CA J7J 2G3
 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: