



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR LH30M 112545-1253
Component
Front Left Wheel Hub
Fluid
GEAR OIL SAE 75W90 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0291258	LH0247420	LH0239581
Sample Date		Client Info		06 May 2024	13 Dec 2022	14 Aug 2022
Machine Age	hrs	Client Info		15168	10473	9604
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		None	None	None
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>450	6	2	7
Chromium	ppm	ASTM D5185(m)	>4	0	0	0
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>15	0	0	0
Lead	ppm	ASTM D5185(m)	>4	0	0	0
Copper	ppm	ASTM D5185(m)	>75	<1	<1	2
Tin	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	VLITE	NONE	NONE

CONTAMINATION

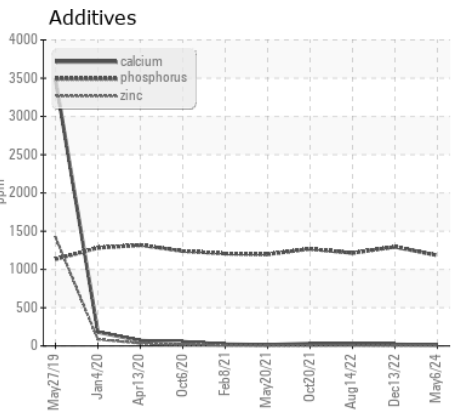
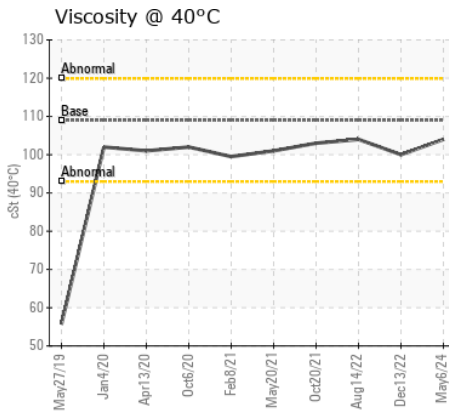
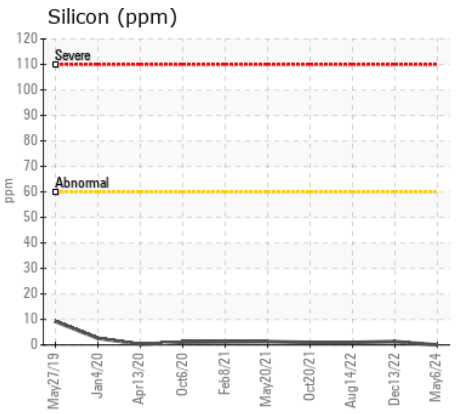
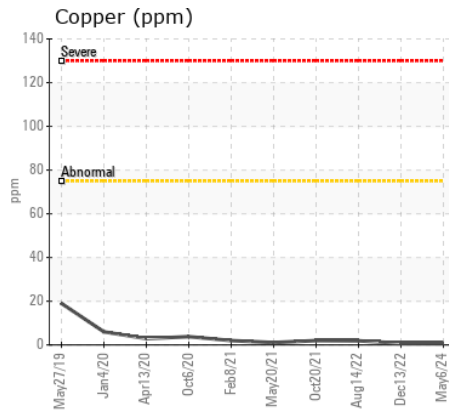
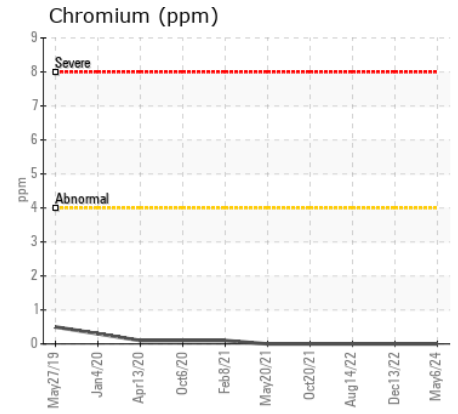
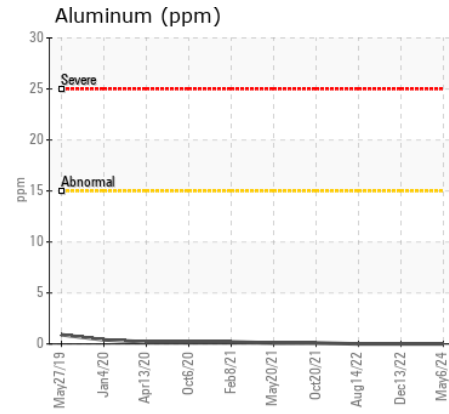
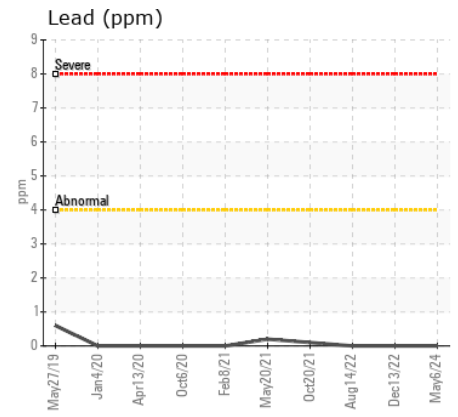
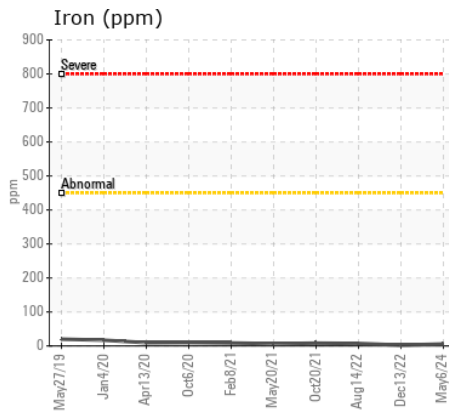
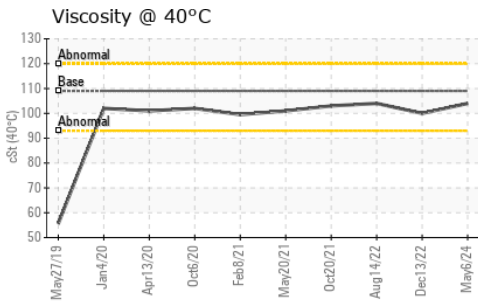
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>60	0	1	1
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1
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

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		1	1	2
Boron	ppm	ASTM D5185(m)	400	308	316	307
Barium	ppm	ASTM D5185(m)	200	0	0	0
Molybdenum	ppm	ASTM D5185(m)	12	0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	<1
Magnesium	ppm	ASTM D5185(m)	12	1	2	1
Calcium	ppm	ASTM D5185(m)	150	15	20	19
Phosphorus	ppm	ASTM D5185(m)	1650	1184	1295	1215
Zinc	ppm	ASTM D5185(m)	125	9	7	10
Sulfur	ppm	ASTM D5185(m)	22500	20390	21219	21585
Visc @ 40°C	cSt	ASTM D7279(m)	109	104	100	104



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

Sample No. : LH0291258

Lab Number : 02633955

Unique Number : 5775108

Test Package : MOB 1

Received : 07 May 2024

Tested : 07 May 2024

Diagnosed : 07 May 2024 - Wes Davis

GREEN METALS CANADA

224 BEARDS LANE

WOODSTOCK, ON

CA N4S 7W3

Contact: Jamie Depotie

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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.