



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR LH50M 144587-1216
Component
Front Right Wheel Hub
Fluid
GEAR OIL SAE 80W90 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH	LH	LH0250066
Sample Date		Client Info		17 Jun 2024	12 Dec 2023	23 Mar 2023
Machine Age	hrs	Client Info		3191	2050	500
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		None	None	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>325	63	70	21
Chromium	ppm	ASTM D5185(m)	>3	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)		0	<1	0
Aluminum	ppm	ASTM D5185(m)	>10	2	2	<1
Lead	ppm	ASTM D5185(m)	>4	0	<1	<1
Copper	ppm	ASTM D5185(m)	>75	14	18	7
Tin	ppm	ASTM D5185(m)	>3	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	VLITE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

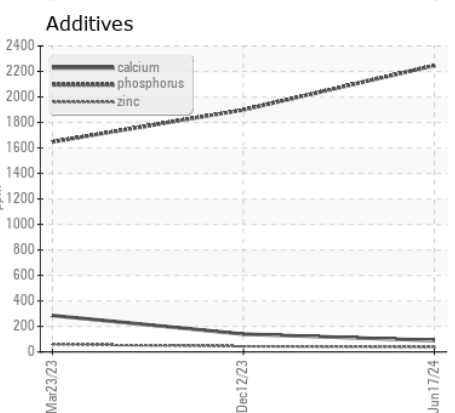
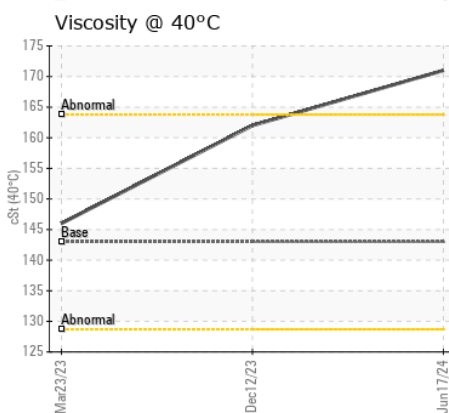
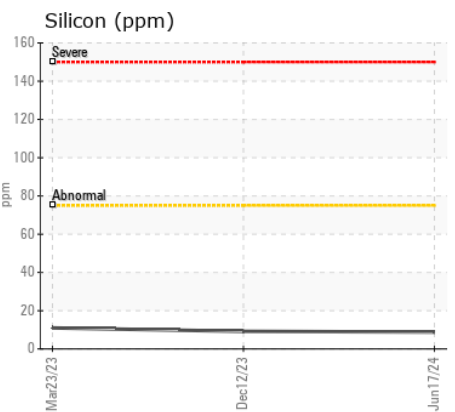
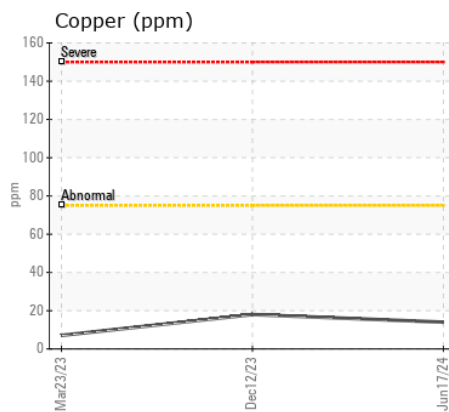
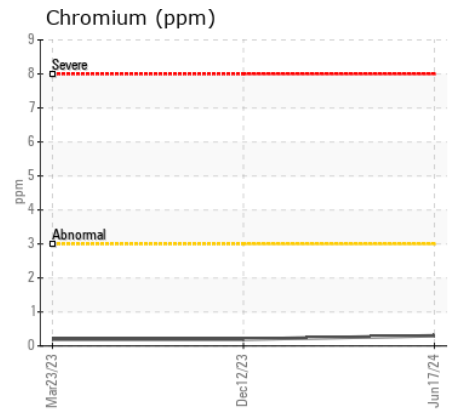
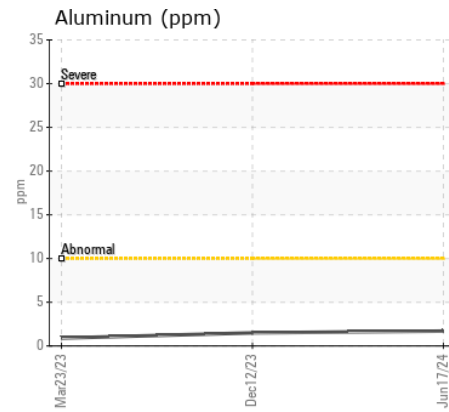
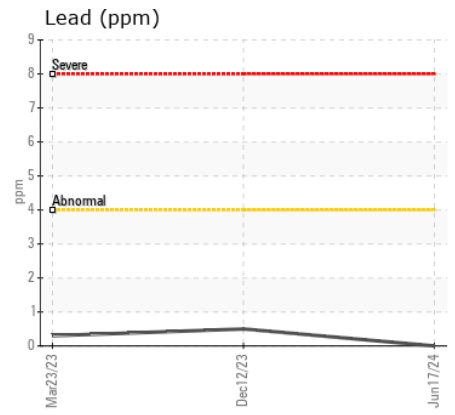
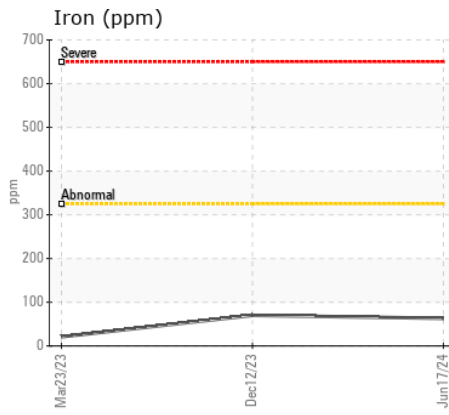
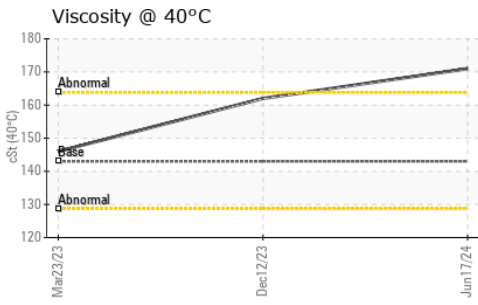
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>75	9	9	11
Potassium	ppm	ASTM D5185(m)	>20	2	2	<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)	>170	5	6	3
Boron	ppm	ASTM D5185(m)	400	3	3	10
Barium	ppm	ASTM D5185(m)	200	<1	<1	1
Molybdenum	ppm	ASTM D5185(m)	12	2	3	7
Manganese	ppm	ASTM D5185(m)		2	2	1
Magnesium	ppm	ASTM D5185(m)	12	2	1	2
Calcium	ppm	ASTM D5185(m)	150	90	140	286
Phosphorus	ppm	ASTM D5185(m)	1650	2246	1898	1647
Zinc	ppm	ASTM D5185(m)	125	37	44	59
Sulfur	ppm	ASTM D5185(m)	22500	24131	22206	18248
Visc @ 40°C	cSt	ASTM D7279(m)	143	171	162	146



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH
Lab Number : 02643031
Unique Number : 5800570
Test Package : MOB 1
Received : 19 Jun 2024
Tested : 19 Jun 2024
Diagnosed : 19 Jun 2024 - Wes Davis

Industrial Metals
 550 Messier St.
 Winnipeg, MB
 CA R2J 0G5
 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: