



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
(341435)
Machine Id
LIEBHERR LH50M 128733-1216
Component
Front Differential
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		LH0289412	LH0286552	LH0277775
Sample Date		Client Info		17 Jun 2024	19 Mar 2024	20 Nov 2023
Machine Age	hrs	Client Info		10161	9241	8180
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)	>190	1	2	2
Chromium	ppm	ASTM D5185(m)	>2	0	0	0
Nickel	ppm	ASTM D5185(m)	>2	<1	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	<1
Aluminum	ppm	ASTM D5185(m)	>5	<1	0	0
Lead	ppm	ASTM D5185(m)	>15	0	0	<1
Copper	ppm	ASTM D5185(m)	>70	5	2	10
Tin	ppm	ASTM D5185(m)	>2	0	0	0
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

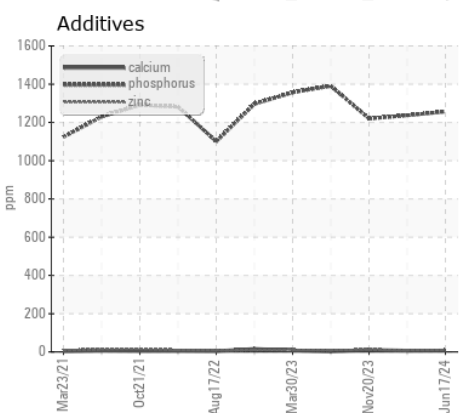
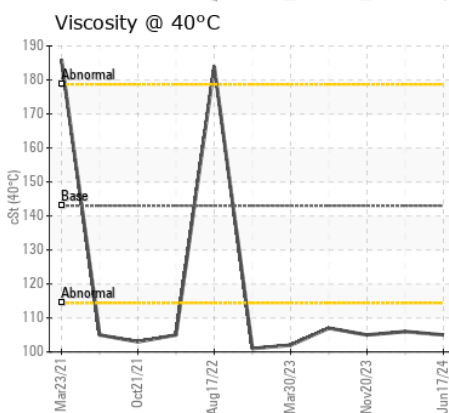
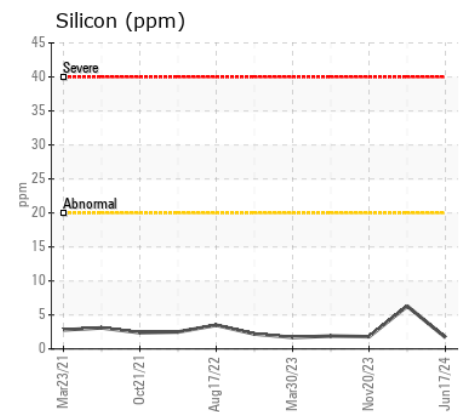
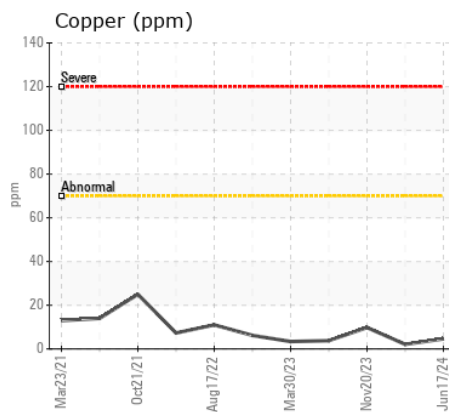
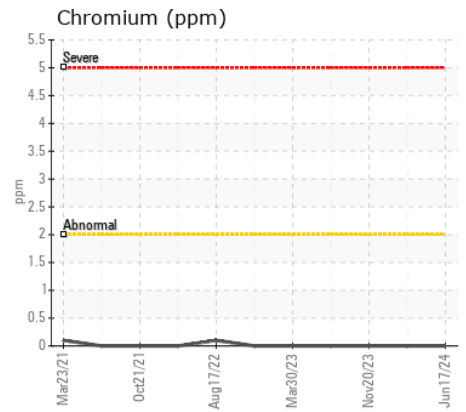
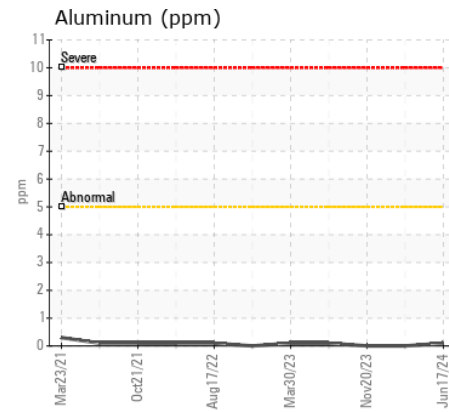
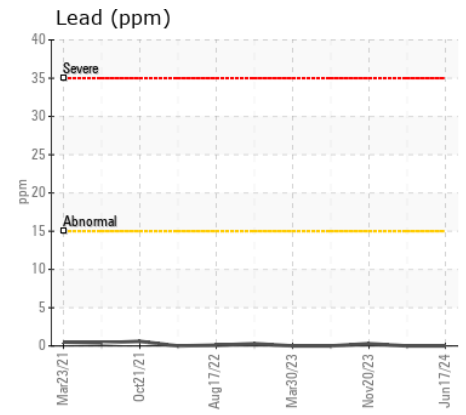
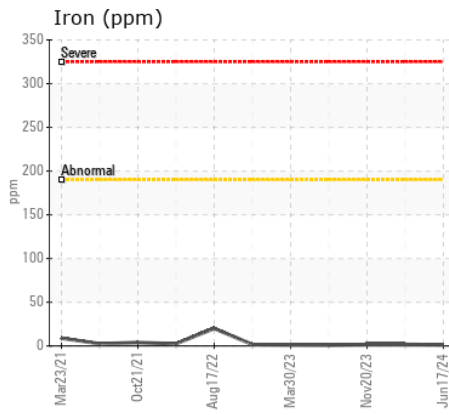
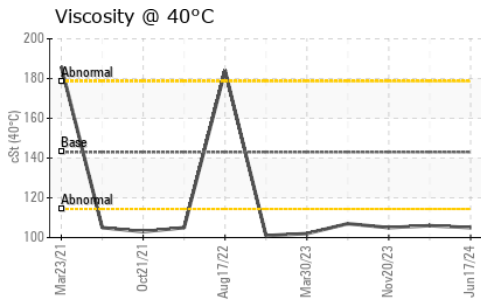
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	2	6	2
Potassium	ppm	ASTM D5185(m)	>20	<1	0	0
Water		WC Method	>.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*	>.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)	>170	<1	<1	<1
Boron	ppm	ASTM D5185(m)	400	309	309	313
Barium	ppm	ASTM D5185(m)	200	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	12	0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)	12	2	2	2
Calcium	ppm	ASTM D5185(m)	150	8	7	11
Phosphorus	ppm	ASTM D5185(m)	1650	1257	1237	1220
Zinc	ppm	ASTM D5185(m)	125	10	8	12
Sulfur	ppm	ASTM D5185(m)	22500	21488	21075	21151
Visc @ 40°C	cSt	ASTM D7279(m)	143	105	106	105



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0289412
Lab Number : 02642653
Unique Number : 5800192
Test Package : MOB 1
Received : 18 Jun 2024
Tested : 18 Jun 2024
Diagnosed : 18 Jun 2024 - Wes Davis

COMBINED METAL INDUSTRIES
 454 DOBBIE DRIVE
 CAMBRIDGE, ON
 CA N1T 1S7
 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: