



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
(341435)
Machine Id
LIEBHERR LH50M 128733-1216
Component
Transmission (Manual)
Fluid
SAE 10W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0289410	LH0286547	LH0277781
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)	>200	14	<1	13
Chromium	ppm	ASTM D5185(m)	>5	0	0	0
Nickel	ppm	ASTM D5185(m)	>5	0	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>7	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>25	1	0	2
Lead	ppm	ASTM D5185(m)	>45	0	0	<1
Copper	ppm	ASTM D5185(m)	>225	9	<1	9
Tin	ppm	ASTM D5185(m)	>10	<1	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	VLITE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

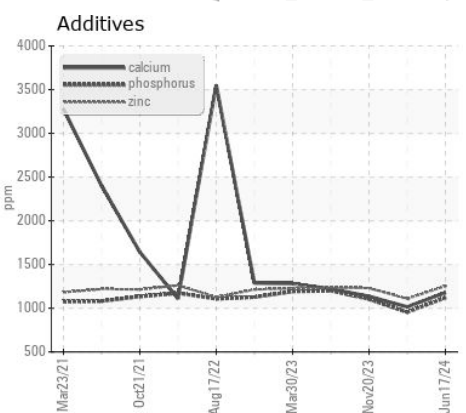
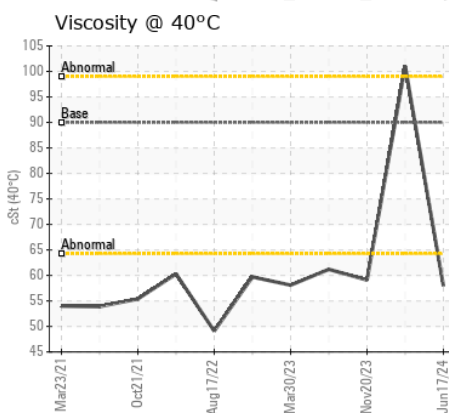
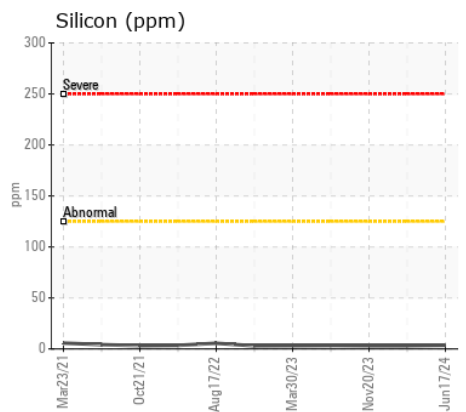
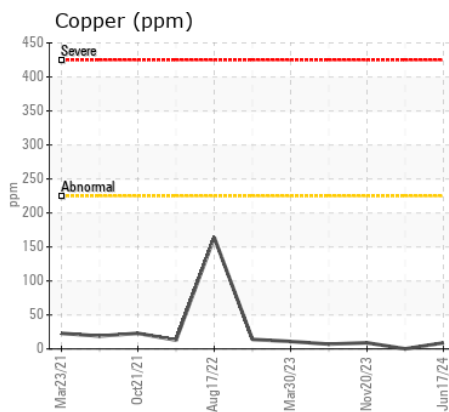
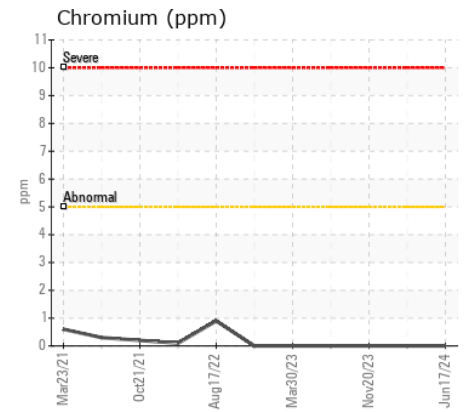
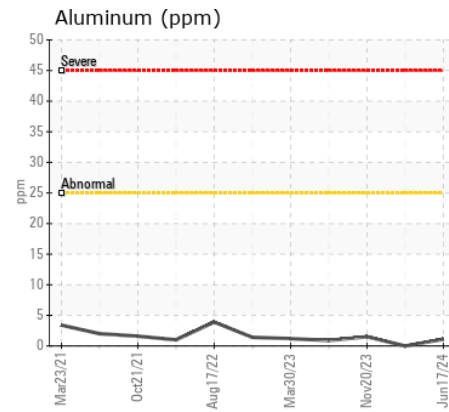
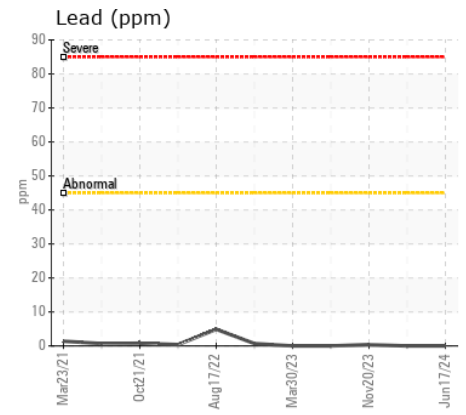
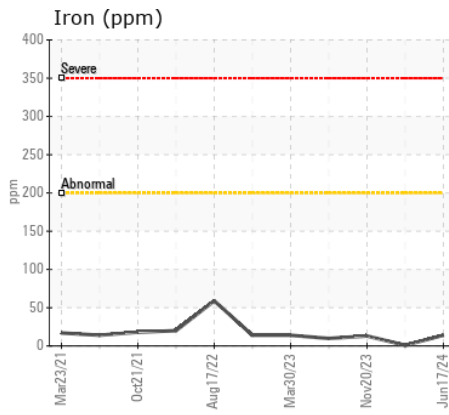
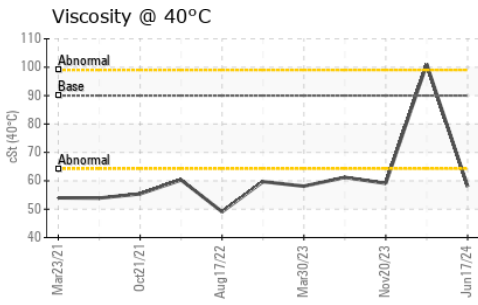
There is no indication of any contamination in the fluid.

Silicon	ppm	ASTM D5185(m)	>125	4	3	3
Potassium	ppm	ASTM D5185(m)	>20	0	0	0
Water		WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	Visual*	NONE	VLITE	NONE	VLITE
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*	>0.1	NEG	NEG	NEG

FLUID CONDITION

Viscosity of sample indicates oil is within SAE 20 range, advise investigate. The condition of the fluid is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)	>401	2	<1	2
Boron	ppm	ASTM D5185(m)		7	4	4
Barium	ppm	ASTM D5185(m)		<1	0	<1
Molybdenum	ppm	ASTM D5185(m)		63	54	62
Manganese	ppm	ASTM D5185(m)		2	0	2
Magnesium	ppm	ASTM D5185(m)		1001	926	1013
Calcium	ppm	ASTM D5185(m)		1177	1015	1136
Phosphorus	ppm	ASTM D5185(m)		1120	954	1104
Zinc	ppm	ASTM D5185(m)		1253	1108	1231
Sulfur	ppm	ASTM D5185(m)		3549	2505	2906
Visc @ 40°C	cSt	ASTM D7279(m)	90.0	58.0	101	59.1



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0289410
Lab Number : 02642669
Unique Number : 5800208
Test Package : MOB 1
Received : 18 Jun 2024
Tested : 18 Jun 2024
Diagnosed : 19 Jun 2024 - Kevin Marson

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: