



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
(341437)
Machine Id
LIEBHERR LH50M 128335-1216
Component
Swing Drive
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		LH0274726	LH0270148	LH0266033
Sample Date		Client Info		03 Mar 2024	27 Sep 2023	25 Jul 2023
Machine Age	hrs	Client Info		12359	10573	9871
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	N/A	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)	>1450	59	29	69
Chromium	ppm	ASTM D5185(m)	>11	<1	0	<1
Nickel	ppm	ASTM D5185(m)	>3	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>4	<1	0	<1
Lead	ppm	ASTM D5185(m)	>4	<1	<1	<1
Copper	ppm	ASTM D5185(m)	>542	24	15	28
Tin	ppm	ASTM D5185(m)	>38	<1	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	VLITE	NONE	VLITE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

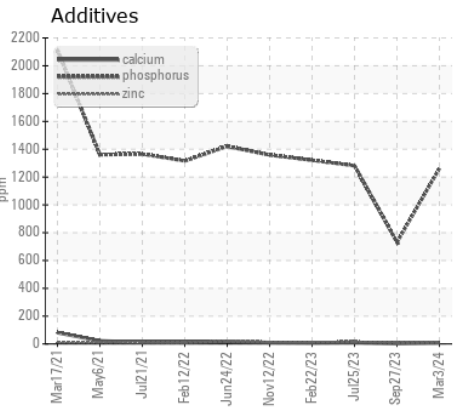
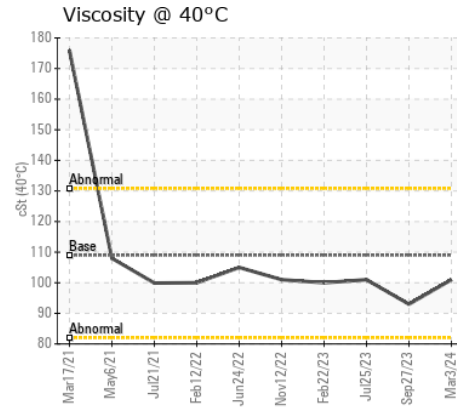
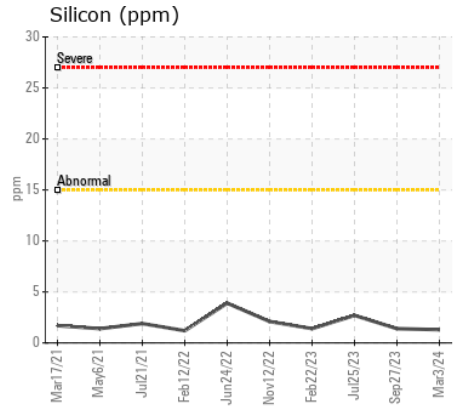
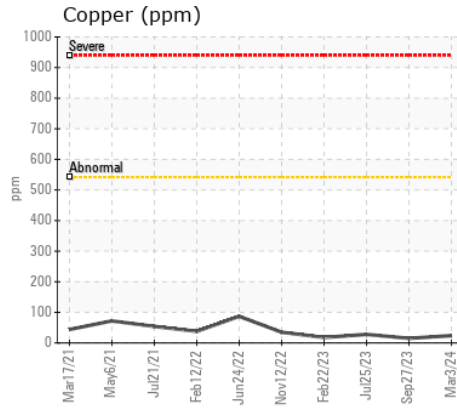
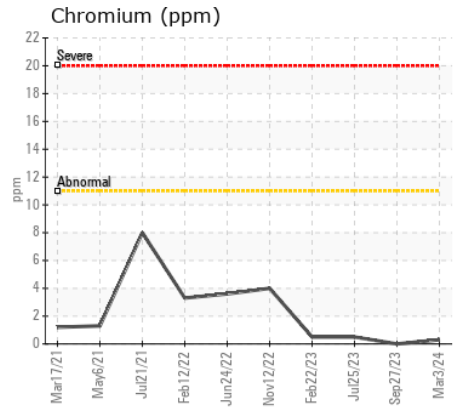
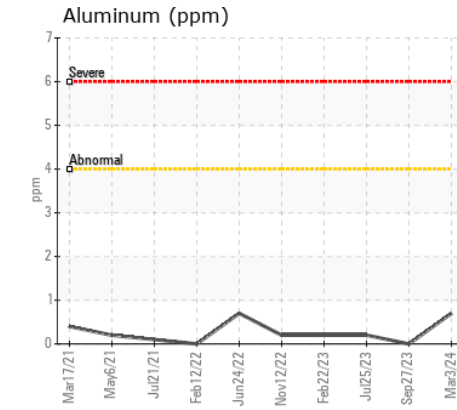
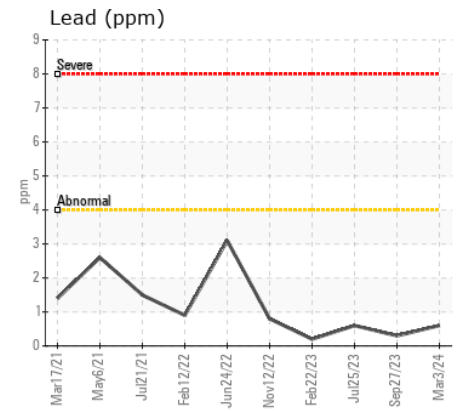
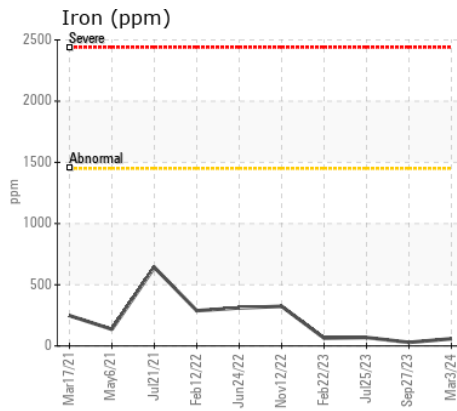
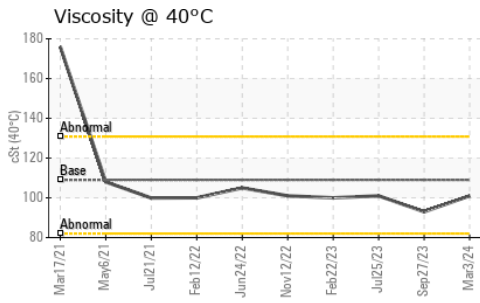
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	1	1	3
Potassium	ppm	ASTM D5185(m)	>20	<1	<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	VLITE	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)		3	<1	<1
Boron	ppm	ASTM D5185(m)	400	293	42	299
Barium	ppm	ASTM D5185(m)	200	0	<1	<1
Molybdenum	ppm	ASTM D5185(m)	12	0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	<1
Magnesium	ppm	ASTM D5185(m)	12	2	1	3
Calcium	ppm	ASTM D5185(m)	150	9	4	11
Phosphorus	ppm	ASTM D5185(m)	1650	1263	732	1281
Zinc	ppm	ASTM D5185(m)	125	10	7	16
Sulfur	ppm	ASTM D5185(m)	22500	21357	18996	20351
Visc @ 40°C	cSt	ASTM D7279(m)	109	101	93.0	101



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0274726
Lab Number : 02619679
Unique Number : 5736789
Test Package : MOB 1

Received : 04 Mar 2024
Tested : 04 Mar 2024
Diagnosed : 04 Mar 2024 - Kevin Marson

COMBINED METAL INDUSTRIES-PUBLIC YARD
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 CA M9L 1M7
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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.