



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR LH50M 144587-1216
Component
Rear Right Wheel Hub
Fluid
GEAR OIL LS 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	LH0250069
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	17	32	38
Chromium	ppm	ASTM D5185(m)	>3	0	0	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)		0	<1	0
Aluminum	ppm	ASTM D5185(m)	>10	<1	<1	2
Lead	ppm	ASTM D5185(m)	>4	0	<1	<1
Copper	ppm	ASTM D5185(m)	>75	6	19	21
Tin	ppm	ASTM D5185(m)	>3	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	LIGHT
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	VLITE

CONTAMINATION

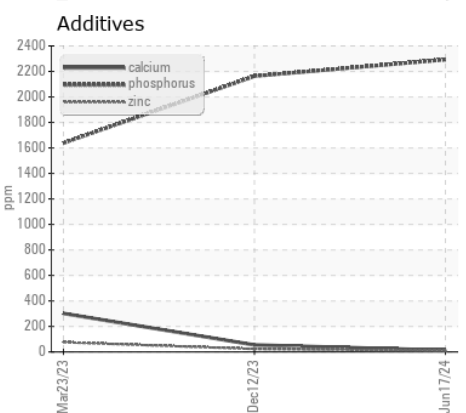
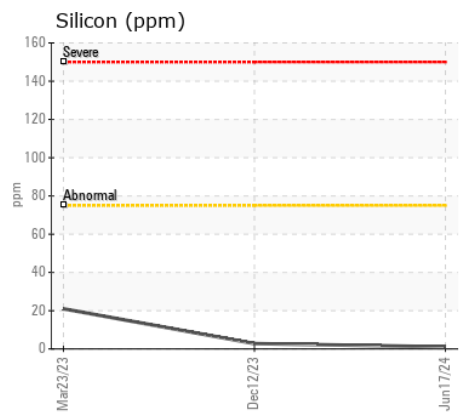
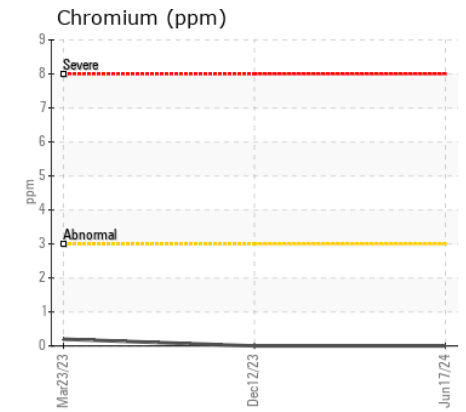
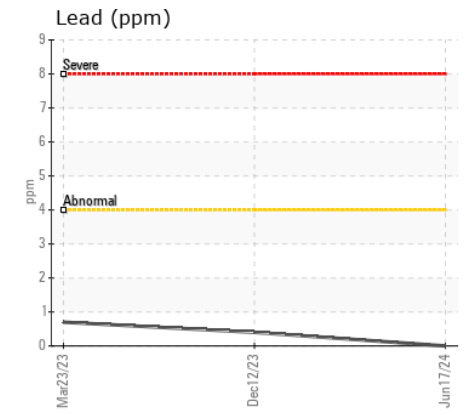
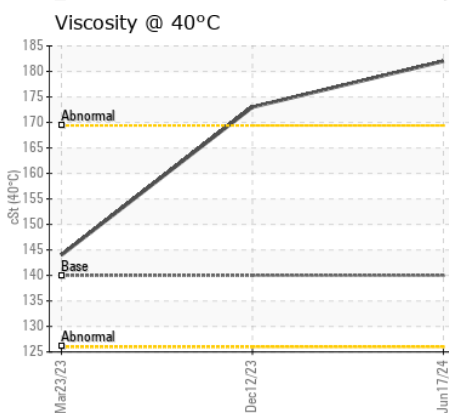
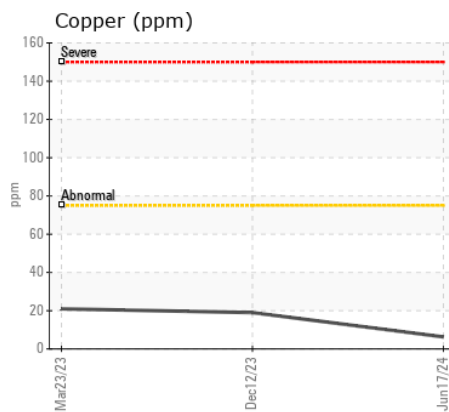
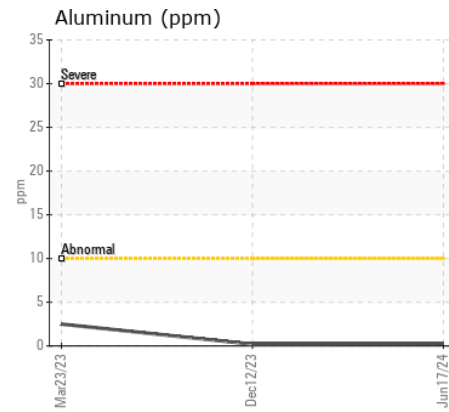
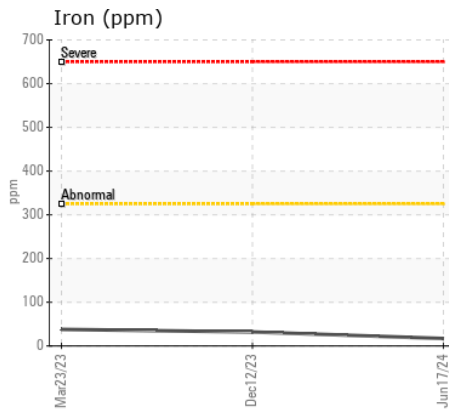
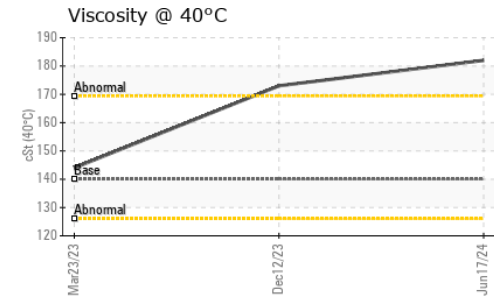
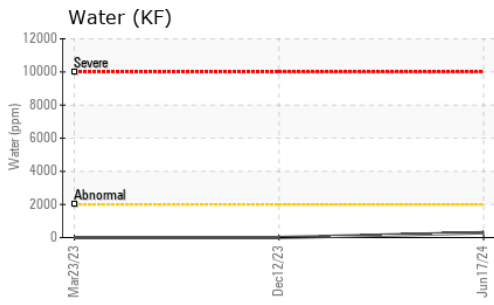
The water content is negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>75	1	3	21
Potassium	ppm	ASTM D5185(m)	>20	1	<1	3
Water	%	ASTM D6304*	>0.2	0.029	---	---
ppm Water	ppm	ASTM D6304*	>2000	293	---	---
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	.2%	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		2	4	5
Boron	ppm	ASTM D5185(m)	150	2	5	7
Barium	ppm	ASTM D5185(m)		<1	<1	<1
Molybdenum	ppm	ASTM D5185(m)		0	<1	8
Manganese	ppm	ASTM D5185(m)		<1	<1	2
Magnesium	ppm	ASTM D5185(m)	10	<1	<1	2
Calcium	ppm	ASTM D5185(m)	70	13	55	302
Phosphorus	ppm	ASTM D5185(m)	2000	2293	2163	1639
Zinc	ppm	ASTM D5185(m)	50	9	23	76
Sulfur	ppm	ASTM D5185(m)	20000	24620	25072	17784
Visc @ 40°C	cSt	ASTM D7279(m)	140	182	173	144



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH **Received** : 19 Jun 2024
Lab Number : 02643034 **Tested** : 21 Jun 2024
Unique Number : 5800573 **Diagnosed** : 21 Jun 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: KF)

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.

T:
F: