



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR LH60M 146313-1217
Component
Rear 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		LH0278929	LH0274552	LH0247196
Sample Date		Client Info		21 Jan 2024	05 Sep 2023	14 Jun 2023
Machine Age	hrs	Client Info		2083	1114	530
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		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>150	23	9	25
Chromium	ppm	ASTM D5185(m)	>5	0	0	<1
Nickel	ppm	ASTM D5185(m)	>10	0	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>5	<1	0	<1
Lead	ppm	ASTM D5185(m)	>5	<1	<1	<1
Copper	ppm	ASTM D5185(m)	>125	15	37	17
Tin	ppm	ASTM D5185(m)	>5	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	LIGHT	VLITE
Yellow Metal	scalar	Visual*	NONE	NONE	VLITE	NONE

CONTAMINATION

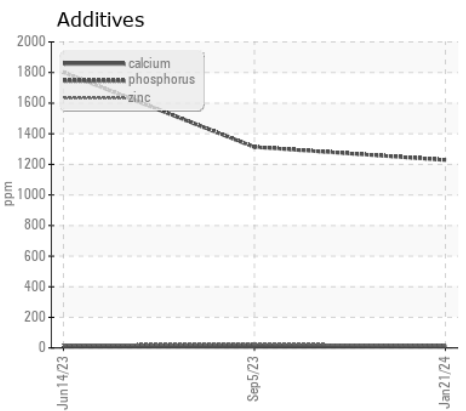
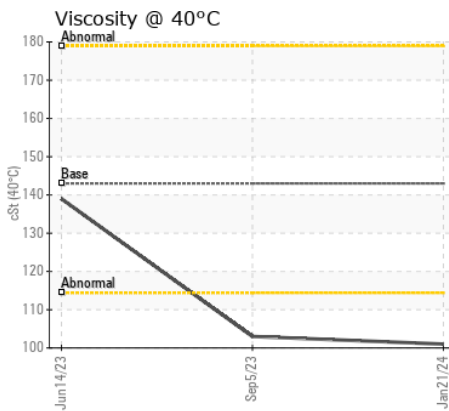
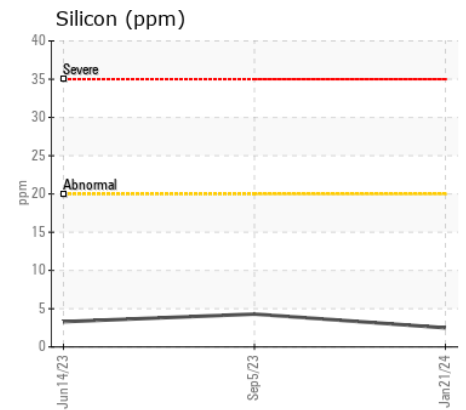
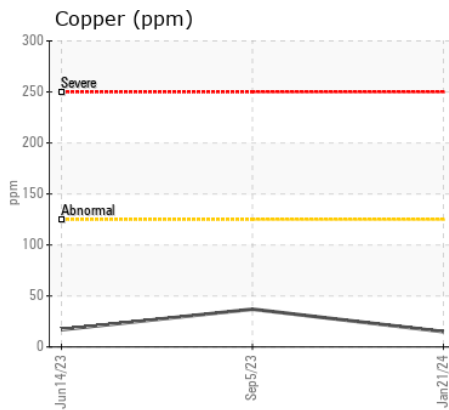
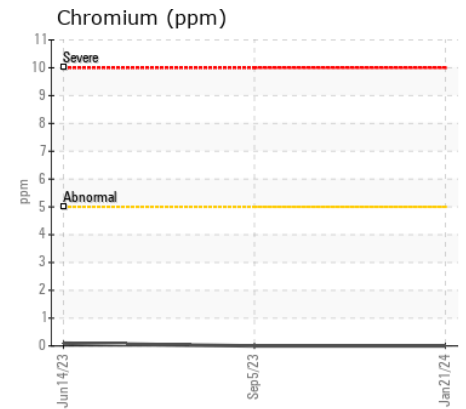
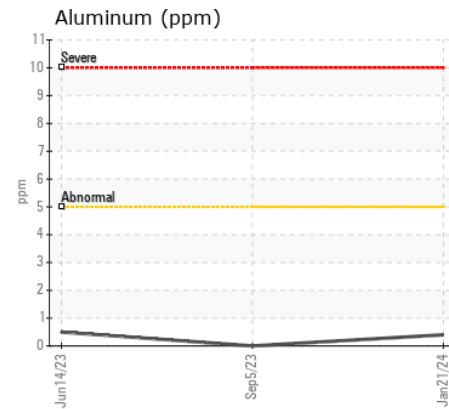
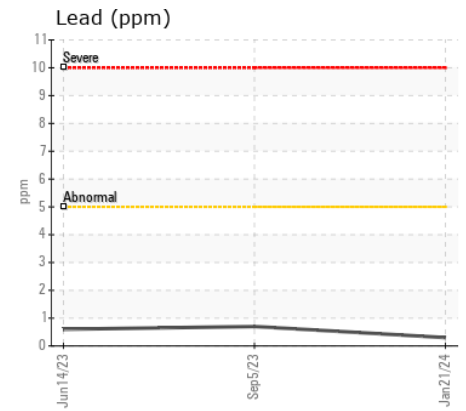
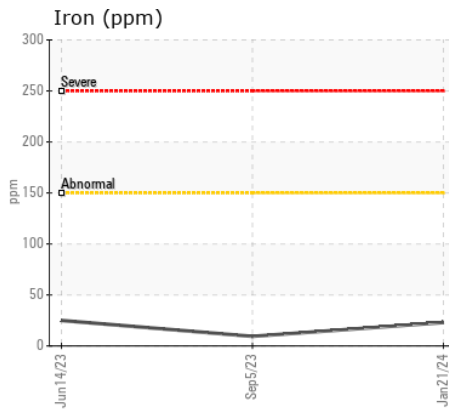
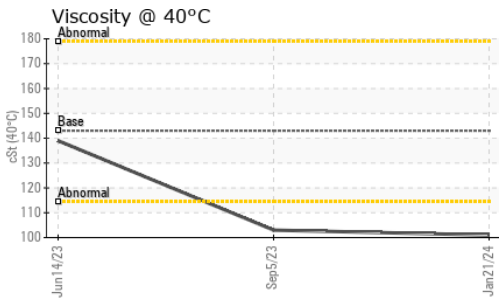
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	2	4	3
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	1
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	Visual*	NONE	NONE	VLITE	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	<1	<1	5
Boron	ppm	ASTM D5185(m)	400	306	314	129
Barium	ppm	ASTM D5185(m)	200	0	1	17
Molybdenum	ppm	ASTM D5185(m)	12	0	0	0
Manganese	ppm	ASTM D5185(m)		0	<1	1
Magnesium	ppm	ASTM D5185(m)	12	1	2	1
Calcium	ppm	ASTM D5185(m)	150	10	10	12
Phosphorus	ppm	ASTM D5185(m)	1650	1228	1313	1801
Zinc	ppm	ASTM D5185(m)	125	15	25	19
Sulfur	ppm	ASTM D5185(m)	22500	20931	21158	30330
Visc @ 40°C	cSt	ASTM D7279(m)	143	101	103	139



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0278929 **Received** : 22 Jan 2024
Lab Number : 02610389 **Diagnosed** : 22 Jan 2024
Unique Number : 5711475 **Diagnostician** : Wes Davis
Test Package : MOB 1

WENTWORTH METAL RECYCLING
 495 WENTWORTH STREET NORTH
 HAMILTON, ON
 CA L8L 5X1
 Contact: Jaason
 jaason@wentworthrecycling.com

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: