



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR LH40C 113524-1527
Component
Left Final Drive
Fluid
GEAR OIL SAE 80W90 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

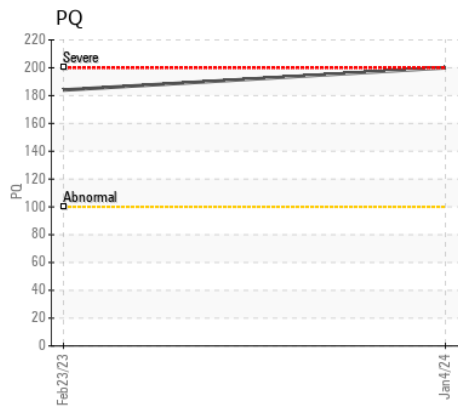
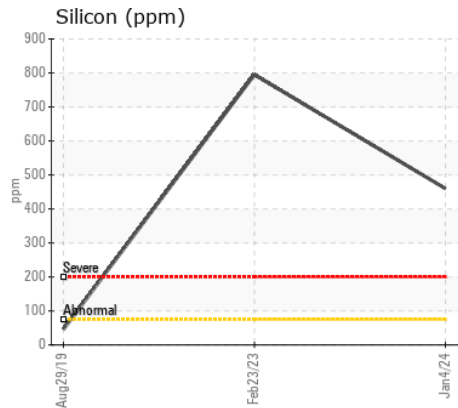
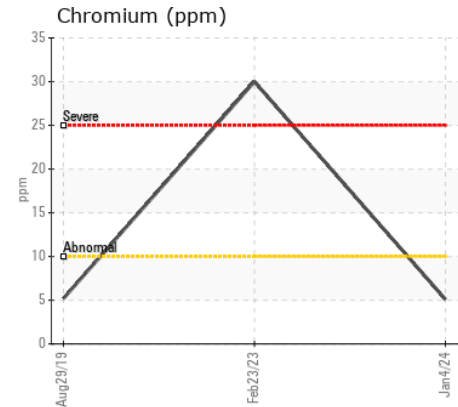
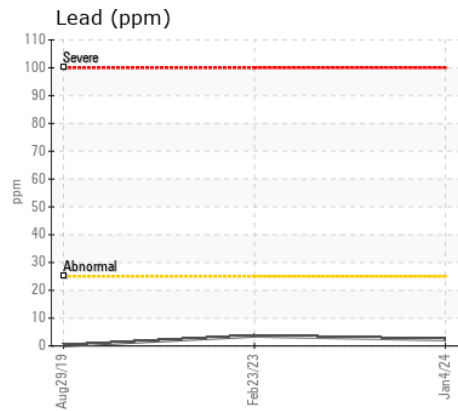
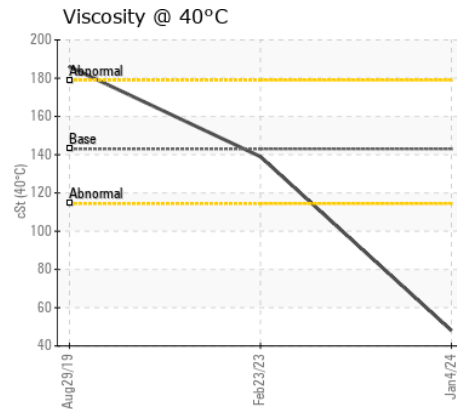
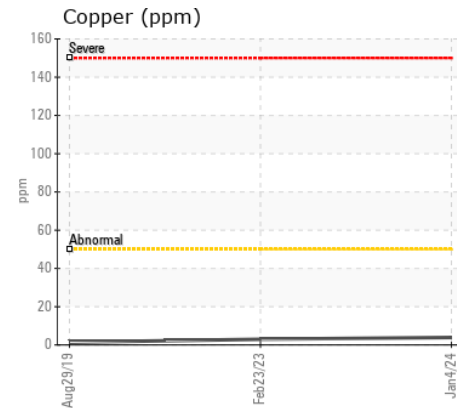
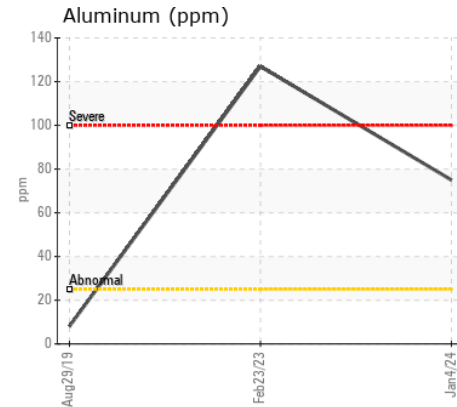
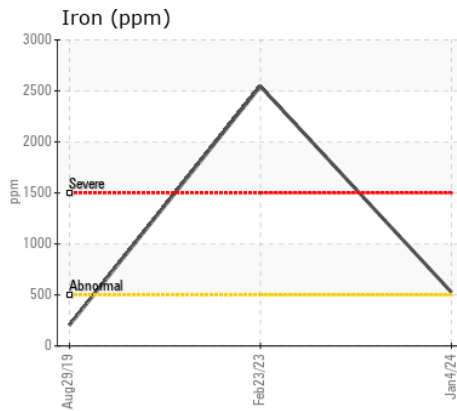
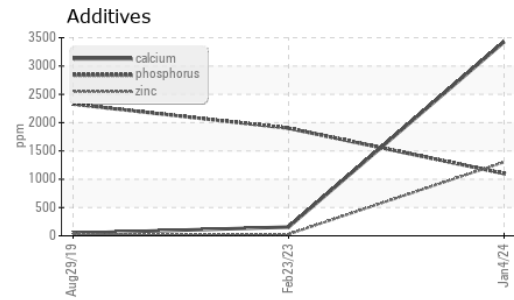
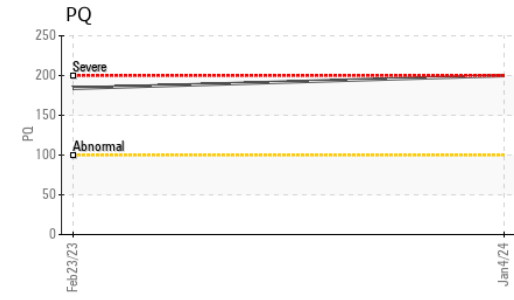
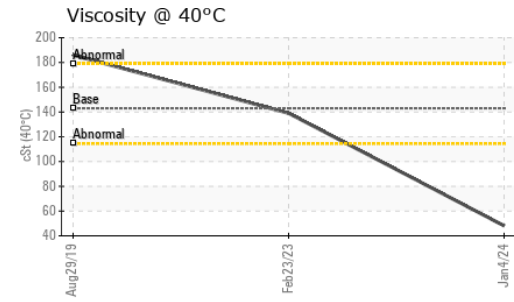
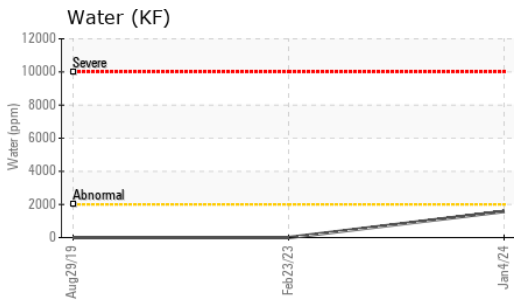
CONTAMINATION

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

FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil. Viscosity of sample indicates oil is within SAE 75W80 range, advise investigate. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0269745	LH0238659	LH0110731
Sample Date		Client Info		04 Jan 2024	23 Feb 2023	29 Aug 2019
Machine Age	hrs	Client Info		0	8256	575
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	SEVERE	NORMAL
PQ		ASTM D8184*		200	184	---
Iron	ppm	ASTM D5185(m)	>500	527	🔴 2545	204
Chromium	ppm	ASTM D5185(m)	>10	5	🔴 30	5
Nickel	ppm	ASTM D5185(m)	>10	2	🔴 20	1
Titanium	ppm	ASTM D5185(m)		4	9	<1
Silver	ppm	ASTM D5185(m)		0	0	<1
Aluminum	ppm	ASTM D5185(m)	>25	75	▲ 127	8
Lead	ppm	ASTM D5185(m)	>25	2	4	<1
Copper	ppm	ASTM D5185(m)	>50	4	3	1
Tin	ppm	ASTM D5185(m)	>10	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	<1	<1
White Metal	scalar	Visual*	NONE	VLITE	VLITE	LIGHT
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185(m)	>75	460	🔴 795	46
Potassium	ppm	ASTM D5185(m)	>20	21	37	6
Water	%	ASTM D6304*	>0.2	0.157	---	---
ppm Water	ppm	ASTM D6304*	>2000	1580	---	---
Silt	scalar	Visual*	NONE	NONE	NONE	LIGHT
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
Sodium	ppm	ASTM D5185(m)	>170	14	22	6
Boron	ppm	ASTM D5185(m)	400	89	280	6
Barium	ppm	ASTM D5185(m)	200	4	1	13
Molybdenum	ppm	ASTM D5185(m)	12	0	3	<1
Manganese	ppm	ASTM D5185(m)		5	19	4
Magnesium	ppm	ASTM D5185(m)	12	28	25	4
Calcium	ppm	ASTM D5185(m)	150	3425	155	45
Phosphorus	ppm	ASTM D5185(m)	1650	1100	1901	2326
Zinc	ppm	ASTM D5185(m)	125	1302	28	31
Sulfur	ppm	ASTM D5185(m)	22500	7134	20188	25427
Visc @ 40°C	cSt	ASTM D7279(m)	143	48.1	139	186



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0269745 **Received** : 09 Jan 2024
Lab Number : 02607561 **Diagnosed** : 10 Jan 2024
Unique Number : 5708647 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (Additional Tests: KF, PQ)

RICHMOND STEEL RECYCLING
 9623 78TH STREET
 Fort St.John, BC
 CA V1J 4J8
 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: