



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR R934C 037803-027
Component
Right Final 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		LH	LH	LH0242693
Sample Date		Client Info		15 Apr 2024	28 Apr 2023	03 Nov 2022
Machine Age	hrs	Client Info		22505	0	19122
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	None	N/A
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>1700	500	345	310
Chromium	ppm	ASTM D5185(m)	>30	15	7	7
Nickel	ppm	ASTM D5185(m)	>8	2	1	1
Titanium	ppm	ASTM D5185(m)	>10	2	2	1
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>100	45	41	22
Lead	ppm	ASTM D5185(m)	>10	1	1	1
Copper	ppm	ASTM D5185(m)	>100	17	11	12
Tin	ppm	ASTM D5185(m)	>8	<1	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	<1	<1
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

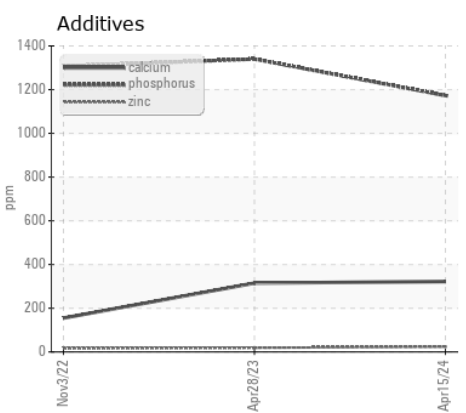
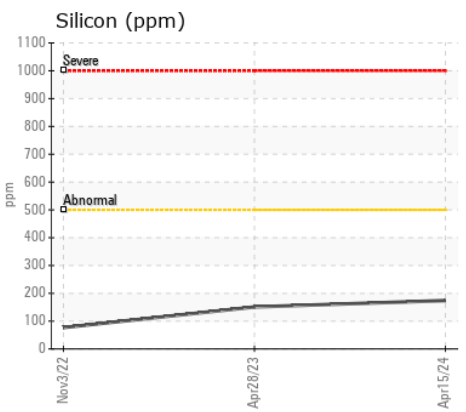
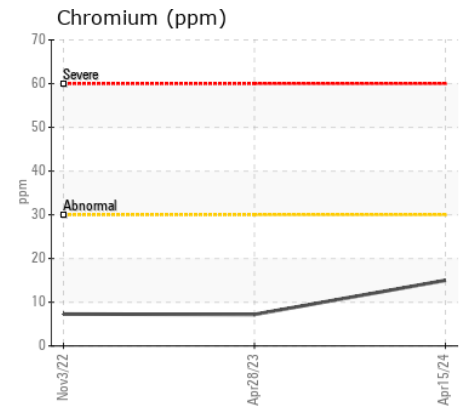
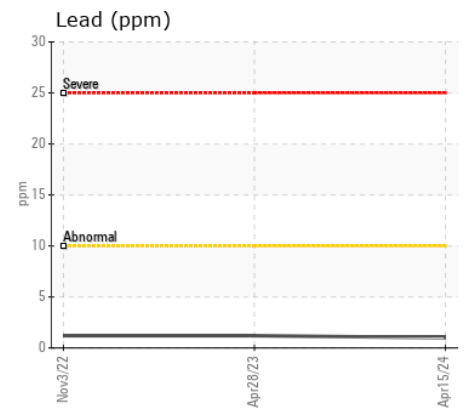
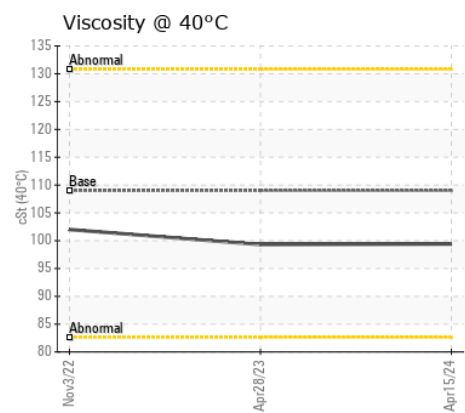
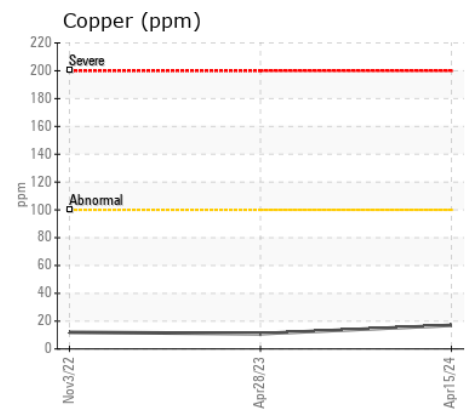
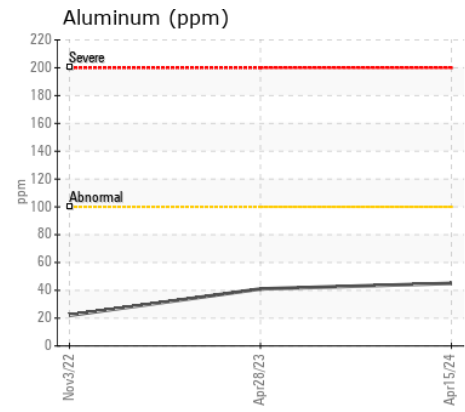
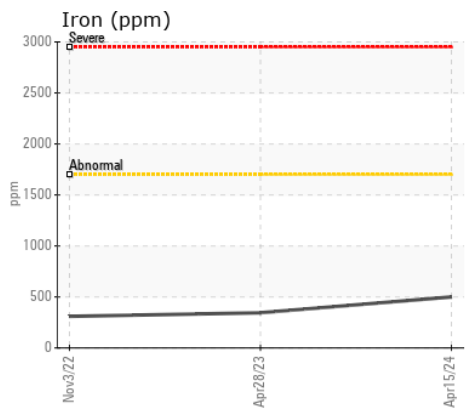
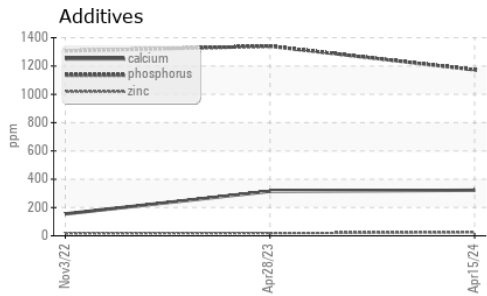
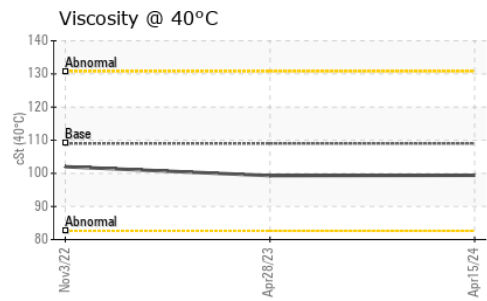
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>500	174	151	77
Potassium	ppm	ASTM D5185(m)	>20	17	11	6
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	Visual*	NONE	VLITE	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	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		13	10	8
Boron	ppm	ASTM D5185(m)	400	214	265	230
Barium	ppm	ASTM D5185(m)	200	<1	0	0
Molybdenum	ppm	ASTM D5185(m)	12	<1	<1	<1
Manganese	ppm	ASTM D5185(m)		6	4	4
Magnesium	ppm	ASTM D5185(m)	12	148	131	74
Calcium	ppm	ASTM D5185(m)	150	322	315	155
Phosphorus	ppm	ASTM D5185(m)	1650	1173	1340	1307
Zinc	ppm	ASTM D5185(m)	125	24	19	17
Sulfur	ppm	ASTM D5185(m)	22500	20029	21728	21730
Visc @ 40°C	cSt	ASTM D7279(m)	109	99.4	99.3	102



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH **Received** : 19 Apr 2024
Lab Number : 02630308 **Tested** : 19 Apr 2024
Unique Number : 5763440 **Diagnosed** : 22 Apr 2024 - Kevin Marson
Test Package : MOB 1

Urban Mine
 72 Rothwell Rd.
 Winnipeg, MB
 CA R3P 2H7
 Contact: SERVICE

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: