



LIEBHERR

OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR R936LC 042165-1148
Component
Splitter Box
Fluid
SAE 15W40 (--- GAL)

RECOMMENDATION

We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0135490	LH0135529	LH0135505
Sample Date		Client Info		04 Apr 2024	12 Aug 2020	03 Mar 2020
Machine Age	hrs	Client Info		8036	3416	2873
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	NORMAL	NORMAL

WEAR

Iron ppm levels are severe. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion.

PQ		ASTM D8184*	>80	0	---	---
Iron	ppm	ASTM D5185(m)	>100	▲ 235	25	37
Chromium	ppm	ASTM D5185(m)	>5	3	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)		0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	5	5	7
Lead	ppm	ASTM D5185(m)	>30	0	0	0
Copper	ppm	ASTM D5185(m)	>20	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>10	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

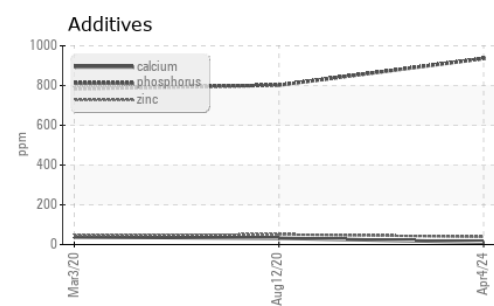
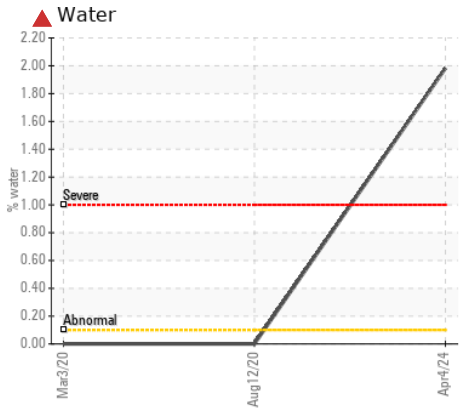
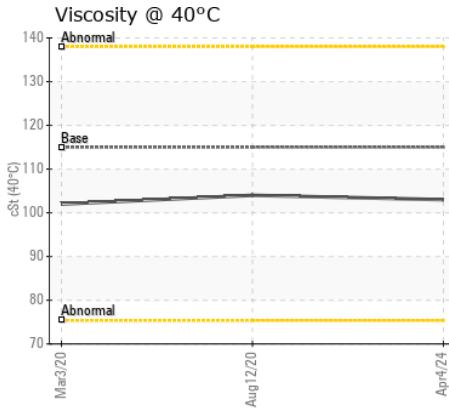
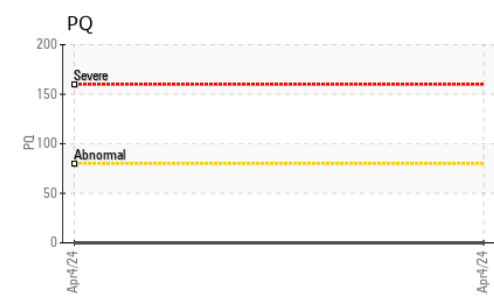
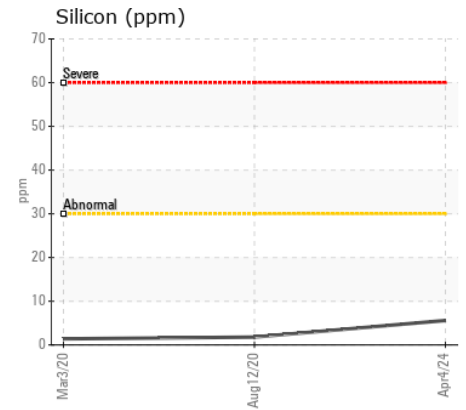
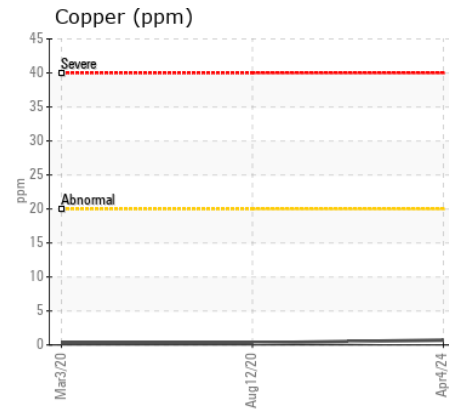
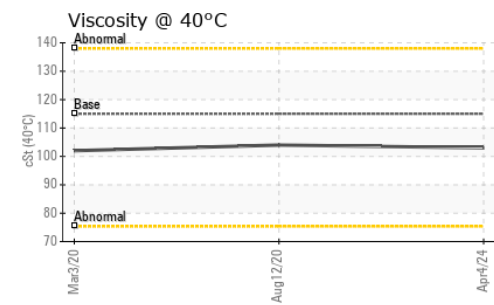
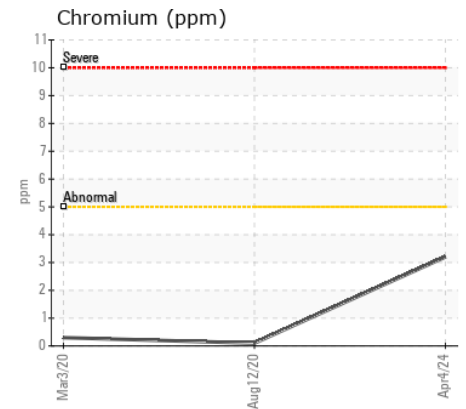
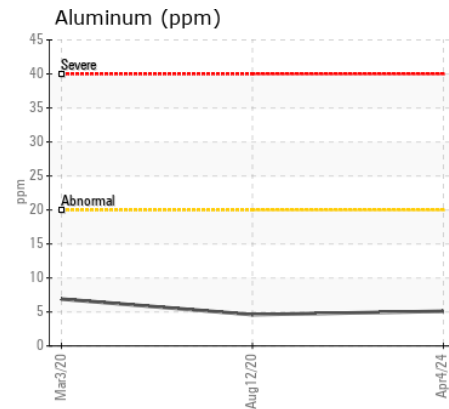
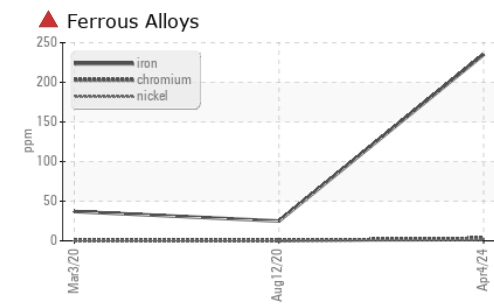
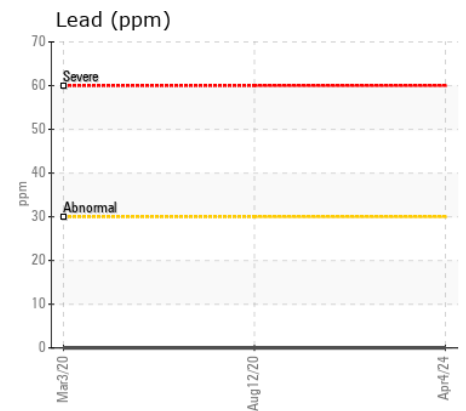
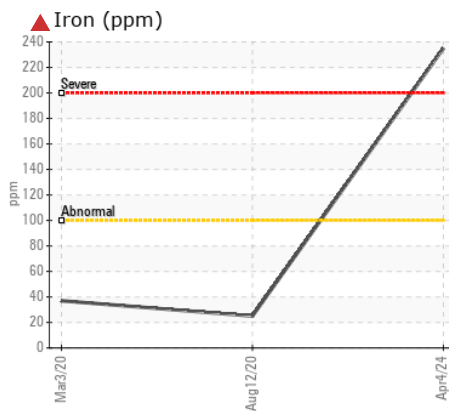
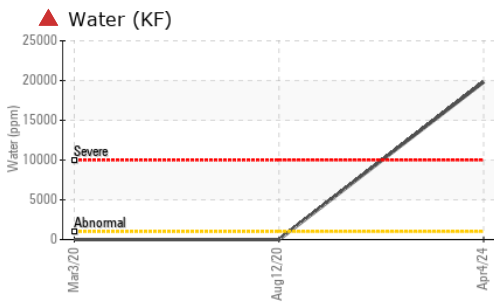
There is a high concentration of water present in the oil.

Silicon	ppm	ASTM D5185(m)	>30	6	2	1
Potassium	ppm	ASTM D5185(m)	>20	3	1	3
Water	%	ASTM D6304*	>0.1	▲ 1.982	---	---
ppm Water	ppm	ASTM D6304*	>1000	▲ 19821	---	---
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	VLITE	VLITE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	▲ MILKY	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	▲ .5%	NEG	NEG

FLUID CONDITION

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Sodium	ppm	ASTM D5185(m)	>57	<1	<1	0
Boron	ppm	ASTM D5185(m)		15	58	43
Barium	ppm	ASTM D5185(m)		0	<1	<1
Molybdenum	ppm	ASTM D5185(m)		0	<1	<1
Manganese	ppm	ASTM D5185(m)		1	<1	<1
Magnesium	ppm	ASTM D5185(m)		5	3	3
Calcium	ppm	ASTM D5185(m)		12	32	38
Phosphorus	ppm	ASTM D5185(m)		936	802	784
Zinc	ppm	ASTM D5185(m)		39	51	46
Sulfur	ppm	ASTM D5185(m)		23836	17517	17688
Visc @ 40°C	cSt	ASTM D7279(m)	115	103	104	102



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0135490 **Received** : 16 Apr 2024
Lab Number : 02629305 **Tested** : 17 Apr 2024
Unique Number : 5762437 **Diagnosed** : 18 Apr 2024 - Kevin Marson
Test Package : MOBCE (Additional Tests: KF, PQ, Visual)

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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.