



LIEBHERR

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR LH30M 1253-117759
Component
Hydraulic System
Fluid
LIEBHERR (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0210945	LH0210903	---
Sample Date		Client Info		02 Feb 2024	29 Jul 2023	---
Machine Age	hrs	Client Info		7907	5000	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	N/A	---
Filter Changed		Client Info		Changed	N/A	---
Sample Status				ABNORMAL	ABNORMAL	---

WEAR

The iron level is abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	▲ 73	▲ 98	---
Chromium	ppm	ASTM D5185m	>5	1	2	---
Nickel	ppm	ASTM D5185m	>2	0	<1	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>2	0	0	---
Lead	ppm	ASTM D5185m	>4	0	3	---
Copper	ppm	ASTM D5185m	>10	4	10	---
Tin	ppm	ASTM D5185m	>2	0	<1	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

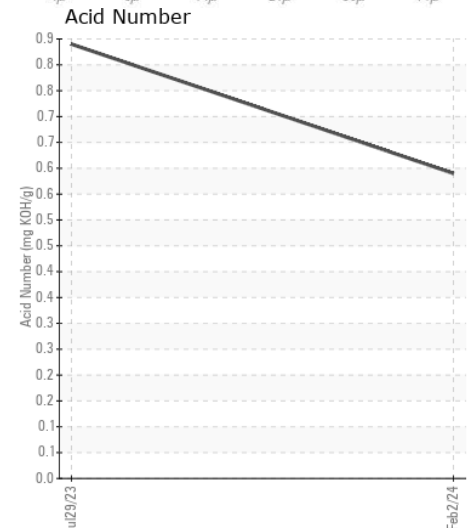
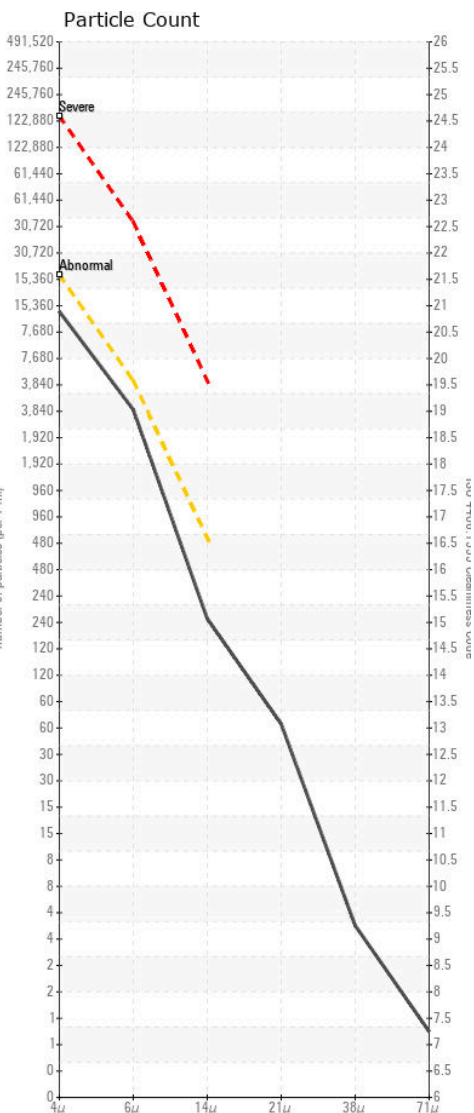
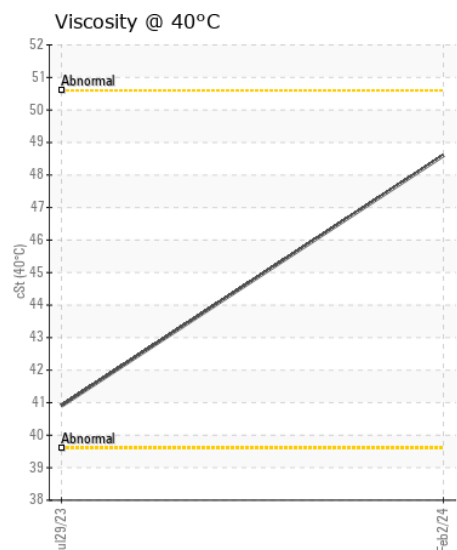
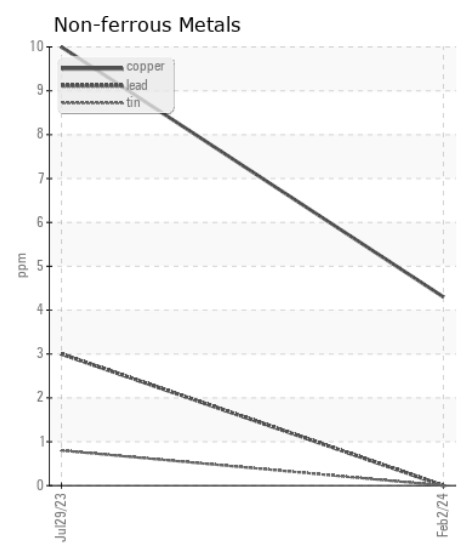
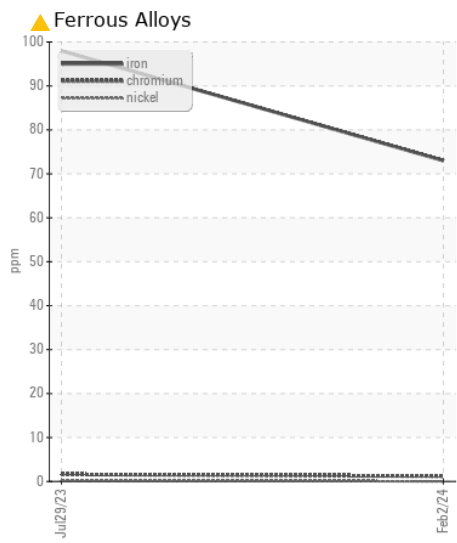
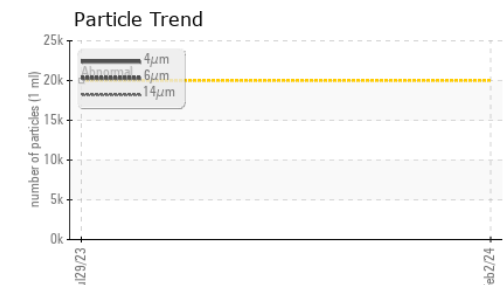
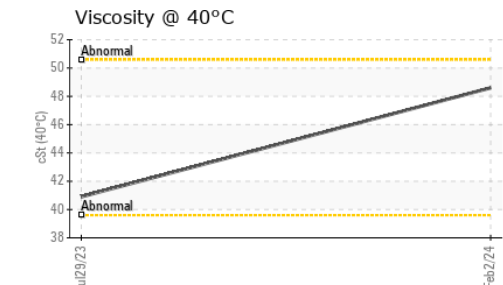
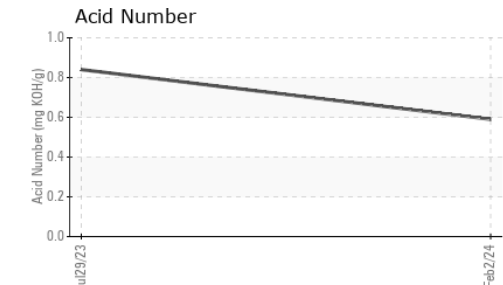
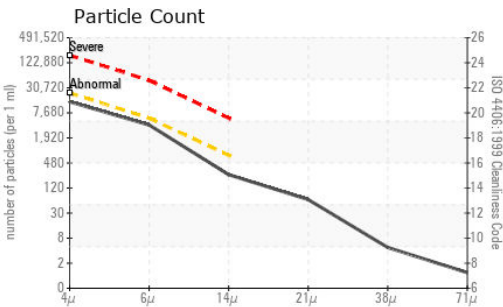
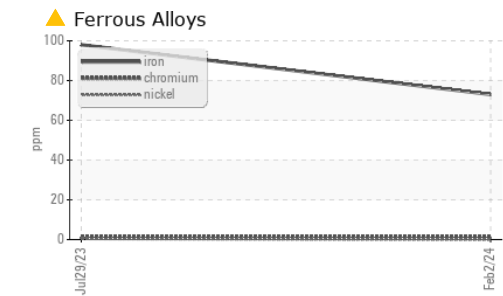
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>17	2	5	---
Potassium	ppm	ASTM D5185m	>20	0	3	---
Water		WC Method	>0.1	NEG	NEG	---
Particles >4µm		ASTM D7647	>20000	12366	---	---
Particles >6µm		ASTM D7647	>5000	3427	---	---
Particles >14µm		ASTM D7647	>640	222	---	---
Particles >21µm		ASTM D7647	>160	56	---	---
Particles >38µm		ASTM D7647	>40	4	---	---
Particles >71µm		ASTM D7647	>10	1	---	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	21/19/15	---	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	▲ MODER	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	---

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		2	7	---
Boron	ppm	ASTM D5185m		0	0	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		0	2	---
Manganese	ppm	ASTM D5185m		1	3	---
Magnesium	ppm	ASTM D5185m		1	4	---
Calcium	ppm	ASTM D5185m		367	706	---
Phosphorus	ppm	ASTM D5185m		411	410	---
Zinc	ppm	ASTM D5185m		492	490	---
Sulfur	ppm	ASTM D5185m		2040	3482	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.59	0.84	---
Visc @ 40°C	cSt	ASTM D445		48.6	40.9	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LH0210945 **Received** : 09 Feb 2024
Lab Number : 06084711 **Tested** : 12 Feb 2024
Unique Number : 10872156 **Diagnosed** : 12 Feb 2024 - Jonathan Hester
Test Package : MOBCE

RECO EQUIPMENT INC.
 1615 JP HENESSY DRIVE
 LAVERGNE, TN
 US 37086
 Contact: KEN FISCHER

To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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