



LIEBHERR

OIL ANALYSIS REPORT

WEAR	MARGINAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR LH30M 112545-1253
Component
Hydraulic System
Fluid
{not provided} (--- GAL)

RECOMMENDATION

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0242375	LH0289581	LH0274832
Sample Date		Client Info		10 May 2024	06 May 2024	04 Mar 2024
Machine Age	hrs	Client Info		0	15168	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	NORMAL

WEAR

Light concentration of visible metal present. All other component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>50	2	25	22
Chromium	ppm	ASTM D5185(m)	>5	0	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	0	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>2	<1	0	<1
Lead	ppm	ASTM D5185(m)	>4	0	0	<1
Copper	ppm	ASTM D5185(m)	>10	4	6	6
Tin	ppm	ASTM D5185(m)	>2	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	▲ VLITE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

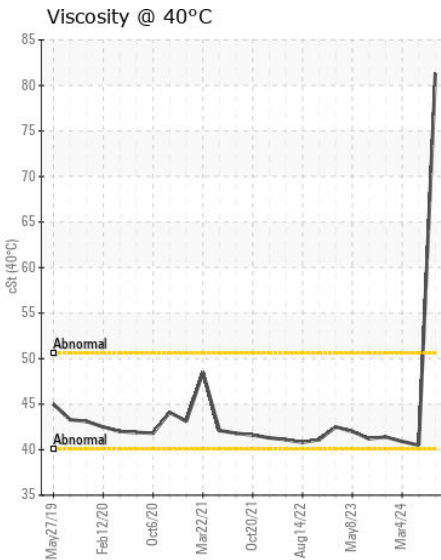
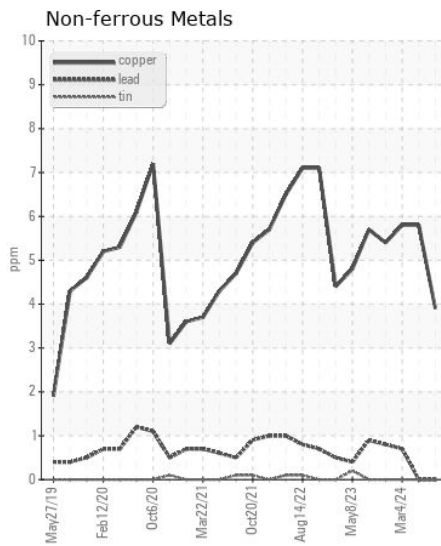
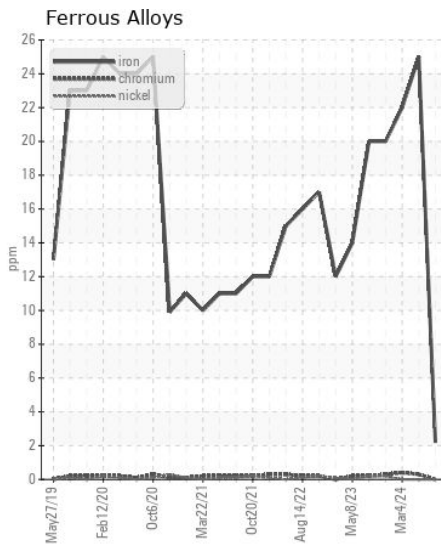
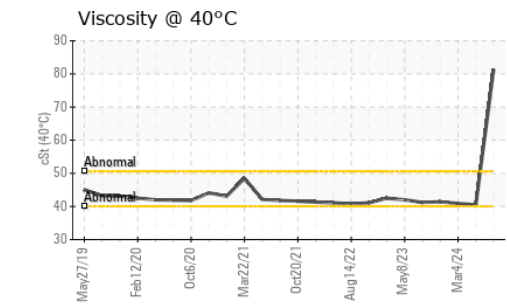
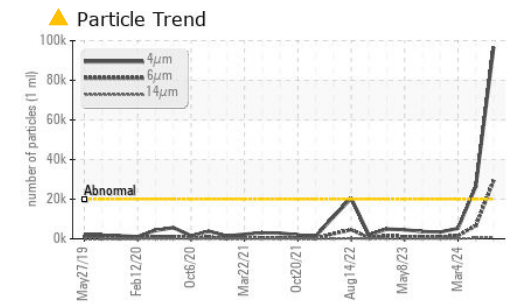
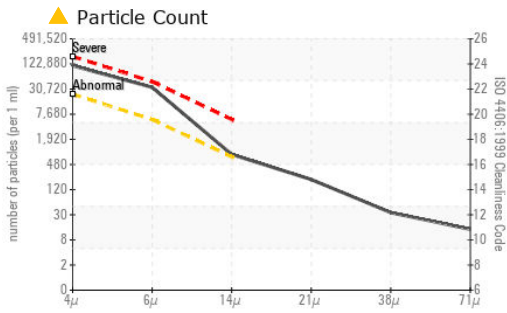
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185(m)	>17	2	0	<1
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>20000	▲ 96623	● 26508	5258
Particles >6µm		ASTM D7647	>5000	▲ 29254	● 6599	1586
Particles >14µm		ASTM D7647	>640	● 734	356	125
Particles >21µm		ASTM D7647	>160	185	68	37
Particles >38µm		ASTM D7647	>40	30	4	2
Particles >71µm		ASTM D7647	>10	12	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ 24/22/17	● 22/20/16	20/18/14
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	VLITE
Appearance	scalar	Visual*	NORML	NORML	▲ WGOIL	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	.2%	NEG

FLUID CONDITION

The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Sodium	ppm	ASTM D5185(m)		1	2	2
Boron	ppm	ASTM D5185(m)		5	<1	<1
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		55	0	0
Manganese	ppm	ASTM D5185(m)		<1	<1	0
Magnesium	ppm	ASTM D5185(m)		892	4	4
Calcium	ppm	ASTM D5185(m)		1013	290	293
Phosphorus	ppm	ASTM D5185(m)		973	606	634
Zinc	ppm	ASTM D5185(m)		1105	777	784
Sulfur	ppm	ASTM D5185(m)		2515	1898	2122
Visc @ 40°C	cSt	ASTM D7279(m)		81.3	40.5	40.9



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0242375 **Received** : 16 May 2024
Lab Number : 02636117 **Tested** : 17 May 2024
Unique Number : 5785279 **Diagnosed** : 21 May 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: Bottom, BottomAnalysis, FilterPatch, PrtCount, PrtFilter)

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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.