



LIEBHERR

OIL ANALYSIS REPORT



Machine Id
LIEBHERR LH30M 135986
Component
Hydraulic System
Fluid
NOT GIVEN (--- GAL)

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

RECOMMENDATION

We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH	LH0278490	LH
Sample Date		Client Info		07 May 2024	22 Dec 2023	04 Oct 2023
Machine Age	hrs	Client Info		4737	3966	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	N/A	Not Changd
Sample Status				ABNORMAL	ATTENTION	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>50	19	18	19
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	<1
Aluminum	ppm	ASTM D5185(m)	>2	<1	1	<1
Lead	ppm	ASTM D5185(m)	>4	<1	▲ 4	2
Copper	ppm	ASTM D5185(m)	>10	7	6	6
Tin	ppm	ASTM D5185(m)	>2	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

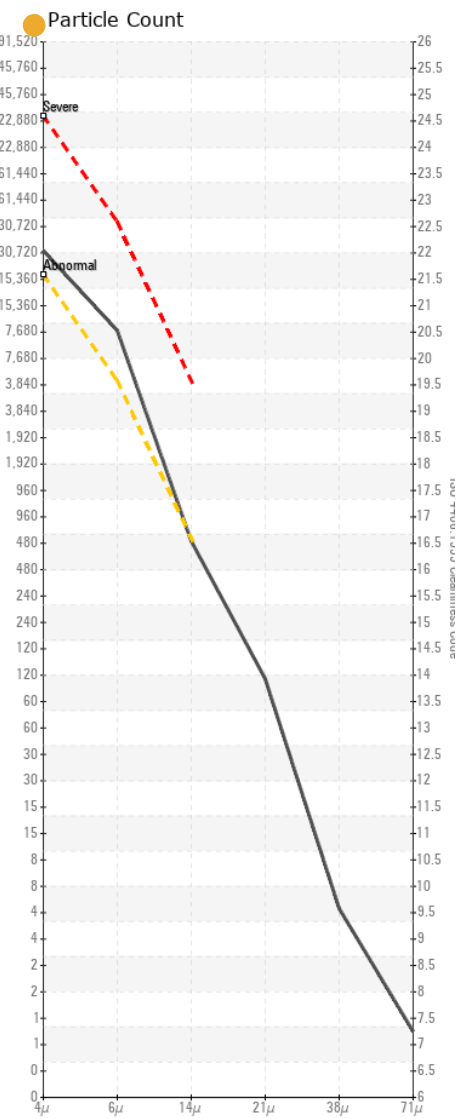
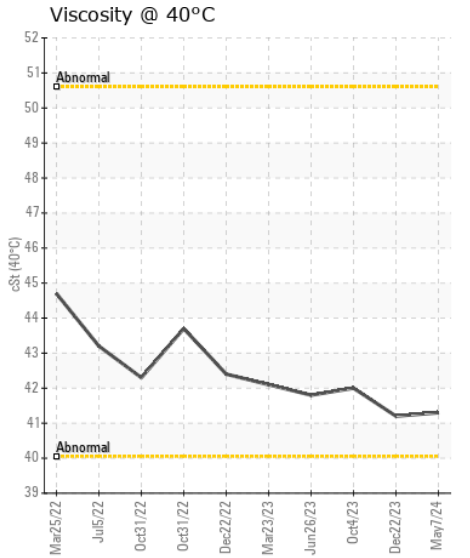
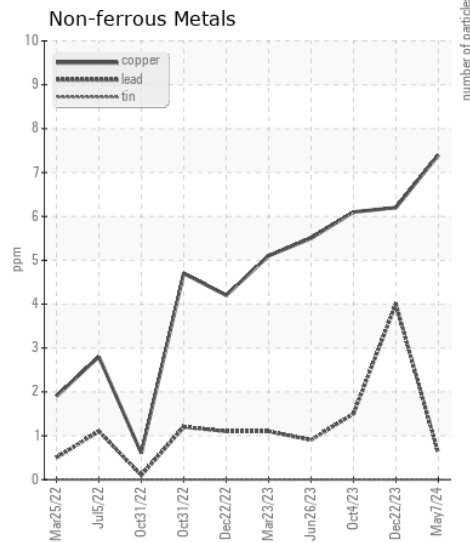
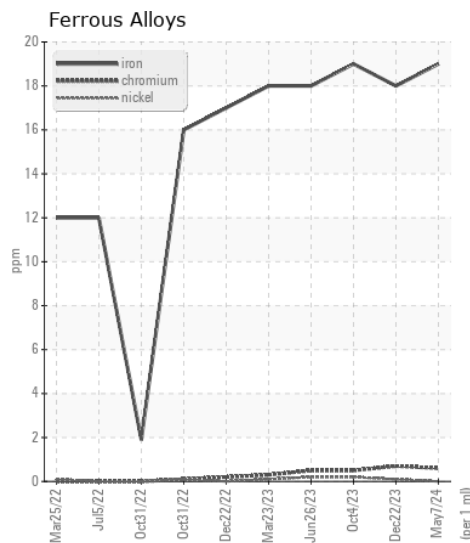
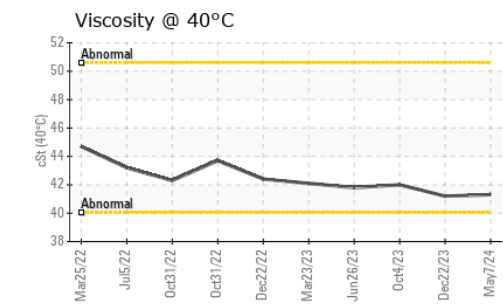
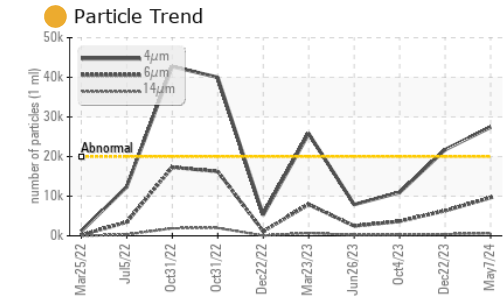
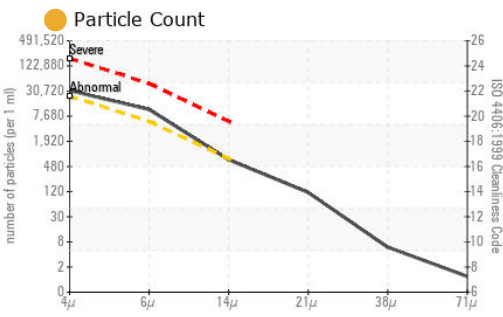
There is a light amount of silt (particulates < 14 microns in size) present in the oil. Free water present.

Silicon	ppm	ASTM D5185(m)	>17	2	2	2
Potassium	ppm	ASTM D5185(m)	>20	<1	0	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>20000	● 27421	● 21744	10953
Particles >6µm		ASTM D7647	>5000	● 9643	● 6317	3664
Particles >14µm		ASTM D7647	>640	613	398	264
Particles >21µm		ASTM D7647	>160	101	89	50
Particles >38µm		ASTM D7647	>40	5	4	2
Particles >71µm		ASTM D7647	>10	1	1	1
Oil Cleanliness		ISO 4406 (c)	>21/19/16	● 22/20/16	● 22/20/16	21/19/15
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	VLITE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	▲ WGOIL	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	.2%	.5%	NEG

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)		4	8	4
Boron	ppm	ASTM D5185(m)		<1	1	1
Barium	ppm	ASTM D5185(m)		<1	0	<1
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		<1	0	0
Magnesium	ppm	ASTM D5185(m)		6	5	5
Calcium	ppm	ASTM D5185(m)		1251	1259	1296
Phosphorus	ppm	ASTM D5185(m)		581	584	593
Zinc	ppm	ASTM D5185(m)		710	670	710
Sulfur	ppm	ASTM D5185(m)		4085	4280	4160
Visc @ 40°C	cSt	ASTM D7279(m)		41.3	41.2	42.0



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH **Received** : 10 May 2024
Lab Number : 02634579 **Tested** : 13 May 2024
Unique Number : 5775732 **Diagnosed** : 13 May 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: PrtCount)

Industrial Metals
 550 Messier St.
 Winnipeg, MB
 CA R2J 0G5
 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.

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