



LIEBHERR

OIL ANALYSIS REPORT



Area
[600259]
 Machine Id
LIEBHERR LH60M 117099
 Component
Hydraulic System
 Fluid
{not provided} (400 LTR)

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

RECOMMENDATION

Resample at the next service interval to monitor. 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		LH0270187	LH0261432	LH0256881
Sample Date		Client Info		03 Mar 2024	24 Apr 2023	09 Mar 2023
Machine Age	hrs	Client Info		0	1986	1785
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Not Changd	Not Changd
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>60	58	22	13
Chromium	ppm	ASTM D5185(m)	>40	1	<1	<1
Nickel	ppm	ASTM D5185(m)	>10	0	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>5	<1	<1	<1
Lead	ppm	ASTM D5185(m)	>5	1	<1	<1
Copper	ppm	ASTM D5185(m)	>15	8	7	6
Tin	ppm	ASTM D5185(m)	>5	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

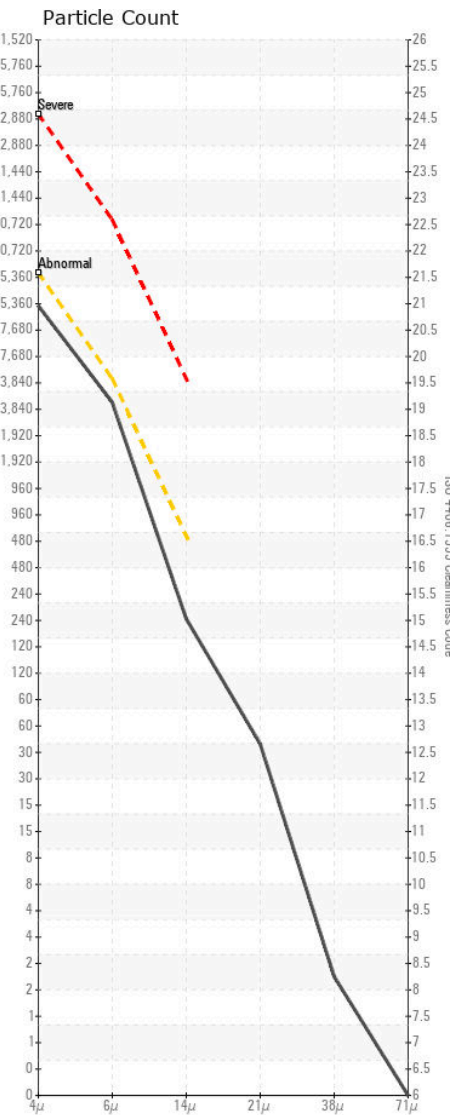
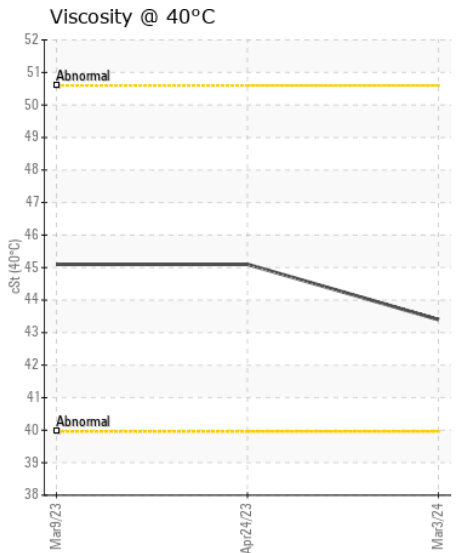
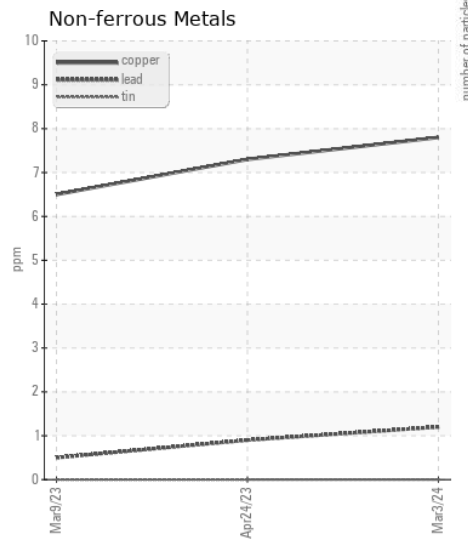
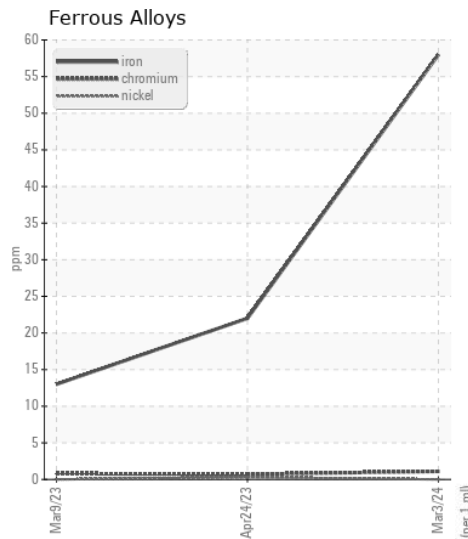
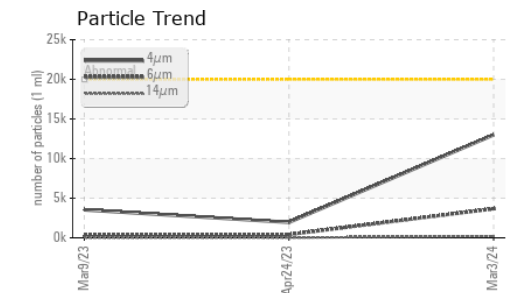
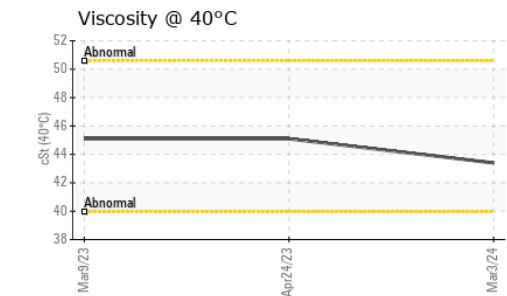
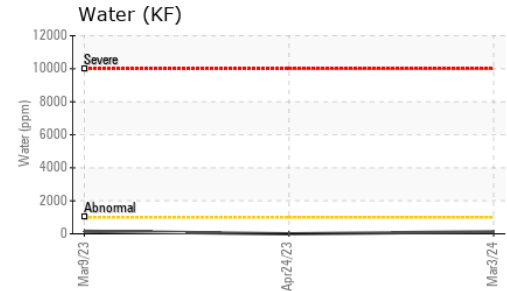
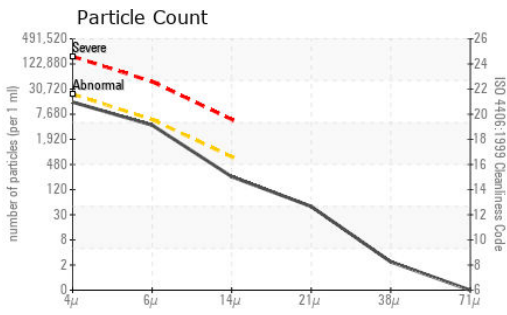
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185(m)	>15	1	2	1
Potassium	ppm	ASTM D5185(m)	>20	<1	1	0
Water	%	ASTM D6304*	>0.1	0.012	---	0.015
ppm Water	ppm	ASTM D6304*	>1000	128	---	152.8
Particles >4µm		ASTM D7647	>20000	12996	1954	3532
Particles >6µm		ASTM D7647	>5000	3667	410	441
Particles >14µm		ASTM D7647	>640	216	17	15
Particles >21µm		ASTM D7647	>160	42	4	3
Particles >38µm		ASTM D7647	>40	2	0	1
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	21/19/15	18/16/11	19/16/11
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	VLITE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	.2%	NEG	.2%

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		<1	<1	<1
Boron	ppm	ASTM D5185(m)		<1	<1	<1
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		0	<1	<1
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)		20	33	34
Calcium	ppm	ASTM D5185(m)		213	332	345
Phosphorus	ppm	ASTM D5185(m)		459	438	432
Zinc	ppm	ASTM D5185(m)		569	478	485
Sulfur	ppm	ASTM D5185(m)		1493	1575	1568
Visc @ 40°C	cSt	ASTM D7279(m)		43.4	45.1	45.1



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0270187 **Received** : 04 Mar 2024
Lab Number : 02619582 **Tested** : 05 Mar 2024
Unique Number : 5736692 **Diagnosed** : 05 Mar 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: KF, PrtCount)

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.

GERDAU AMERISTEEL
 2025 RIVER RD.
 LONDON, ON
 CA N5W 6C4
 Contact: Scott MacDonald

T: (519)455-4639
 F: (519)451-3623