



# LIEBHERR

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id  
**LIEBHERR LH40M MH-12 (S/N 142301)**  
Component  
**1 Transmission**  
Fluid  
**LIEBHERR MOTOROIL 10W-40 (3 LTR)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0272192	LH0258587	---
Sample Date		Client Info		01 Feb 2024	30 Oct 2023	---
Machine Age	hrs	Client Info		4277	1195	---
Oil Age	hrs	Client Info		1000	1195	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				NORMAL	NORMAL	---

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	15	10	---
Chromium	ppm	ASTM D5185m	>5	0	<1	---
Nickel	ppm	ASTM D5185m	>5	0	<1	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>10	2	2	---
Lead	ppm	ASTM D5185m	>150	0	<1	---
Copper	ppm	ASTM D5185m	>250	17	22	---
Tin	ppm	ASTM D5185m	>5	<1	<1	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

### CONTAMINATION

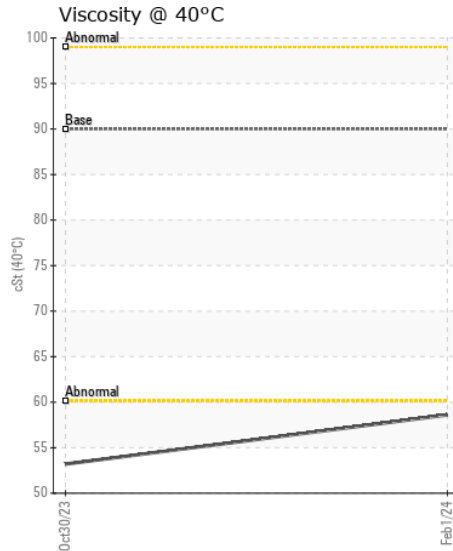
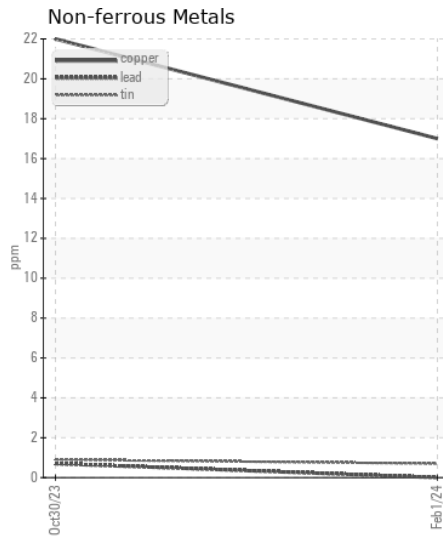
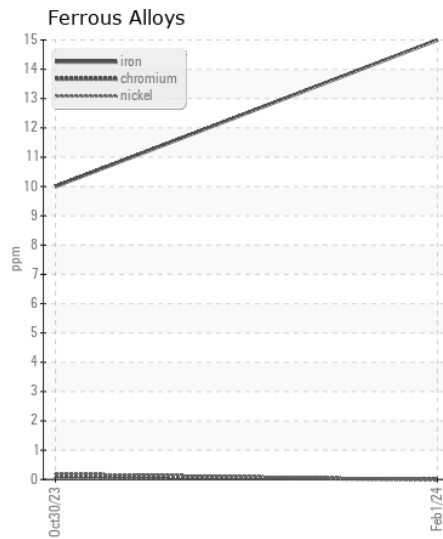
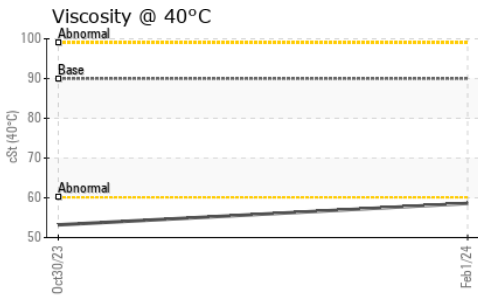
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>15	4	3	---
Potassium	ppm	ASTM D5185m	>20	1	3	---
Water		WC Method	>0.1	NEG	NEG	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
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 condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		20	33	---
Boron	ppm	ASTM D5185m	245	156	75	---
Barium	ppm	ASTM D5185m	0	0	0	---
Molybdenum	ppm	ASTM D5185m	0	0	0	---
Manganese	ppm	ASTM D5185m	<1	11	11	---
Magnesium	ppm	ASTM D5185m	36	481	267	---
Calcium	ppm	ASTM D5185m	4401	1911	2547	---
Phosphorus	ppm	ASTM D5185m	1067	902	997	---
Zinc	ppm	ASTM D5185m	1183	927	1071	---
Sulfur	ppm	ASTM D5185m	2591	5458	6843	---
Visc @ 40°C	cSt	ASTM D445	90	58.6	53.2	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LH0272192  
**Lab Number** : 06084405  
**Unique Number** : 10871850  
**Test Package** : CONST

**Received** : 08 Feb 2024  
**Tested** : 09 Feb 2024  
**Diagnosed** : 12 Feb 2024 - Sean Felton

**JR VINAGRO**  
 2208 PLAINFIELD PIKE  
 JOHNSTON, RI  
 US 02919  
 Contact: Service Manager

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)

T:  
F: