



# LIEBHERR

## OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Machine Id  
**LIEBHERR LH50M 1203-88008**  
Component  
**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		<b>LH0272189</b>	LH0229243	LH0207356
Sample Date		Client Info		<b>01 Feb 2024</b>	20 Jul 2022	11 Nov 2021
Machine Age	hrs	Client Info		<b>10000</b>	7000	5159
Oil Age	hrs	Client Info		<b>3000</b>	1841	459
Filter Age	hrs	Client Info		<b>0</b>	0	459
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>148	<b>15</b>	19	22
Chromium	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	1
Aluminum	ppm	ASTM D5185m	>5	<b>1</b>	2	2
Lead	ppm	ASTM D5185m	>203	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>520	<b>14</b>	23	33
Tin	ppm	ASTM D5185m	>7	<b>&lt;1</b>	1	1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	▲ MODER
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

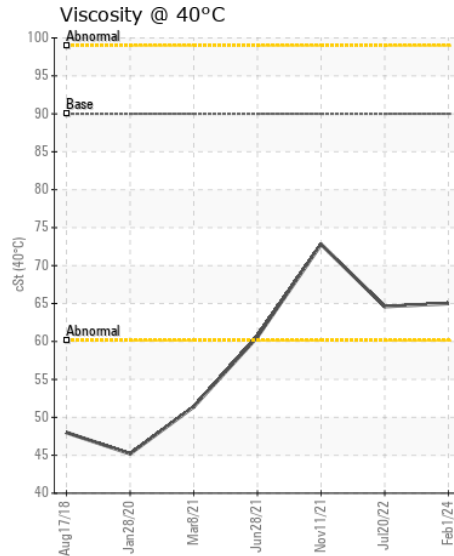
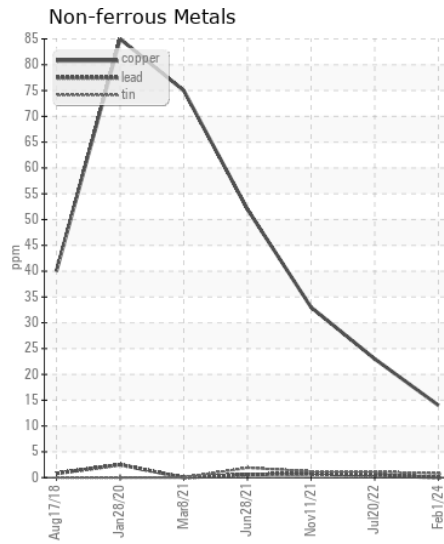
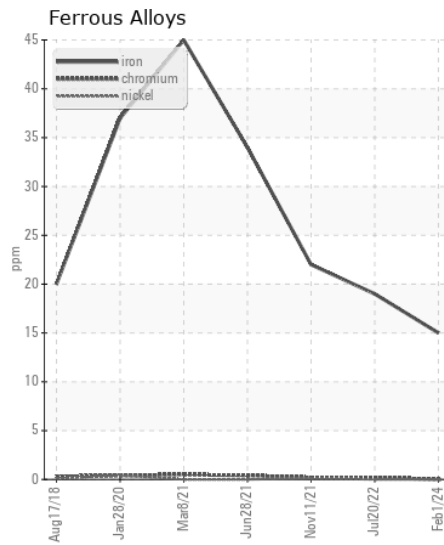
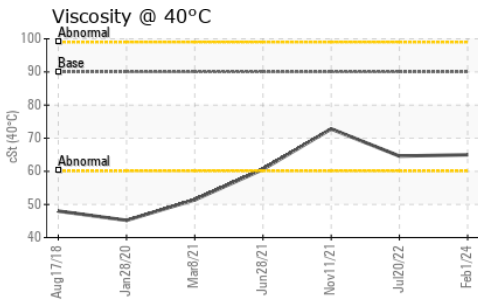
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>15	<b>5</b>	5	2
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>LIGHT</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		<b>4</b>	5	9
Boron	ppm	ASTM D5185m	245	<b>229</b>	202	121
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>6</b>	10	22
Manganese	ppm	ASTM D5185m	<1	<b>5</b>	4	8
Magnesium	ppm	ASTM D5185m	36	<b>725</b>	291	565
Calcium	ppm	ASTM D5185m	4401	<b>1621</b>	2974	1885
Phosphorus	ppm	ASTM D5185m	1067	<b>824</b>	854	786
Zinc	ppm	ASTM D5185m	1183	<b>882</b>	978	904
Sulfur	ppm	ASTM D5185m	2591	<b>3686</b>	4161	3502
Visc @ 40°C	cSt	ASTM D445	90	<b>65.0</b>	64.6	72.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LH0272189  
**Lab Number** : 06084406  
**Unique Number** : 10871851  
**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: