



# LIEBHERR

## OIL ANALYSIS REPORT

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



Machine Id  
**LIEBHERR LH30M 117414-1253**  
Component  
**Front Left Wheel Hub**  
Fluid  
**GEAR OIL SAE 80W90 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LH0272893</b>	LH0235753	LH0217606
Sample Date		Client Info		<b>10 Jan 2024</b>	26 Sep 2023	14 Jul 2022
Machine Age	hrs	Client Info		<b>8285</b>	7700	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	N/A
Filter Changed		Client Info		<b>N/A</b>	Not Changed	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>450	<b>58</b>	56	61
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<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	>15	<b>2</b>	<1	0
Lead	ppm	ASTM D5185m	>4	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>75	<b>2</b>	4	2
Tin	ppm	ASTM D5185m		<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

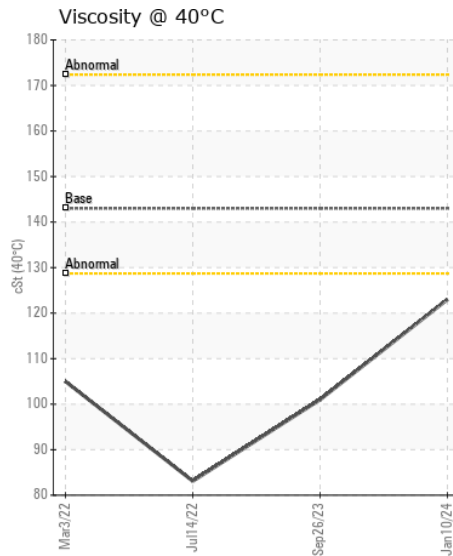
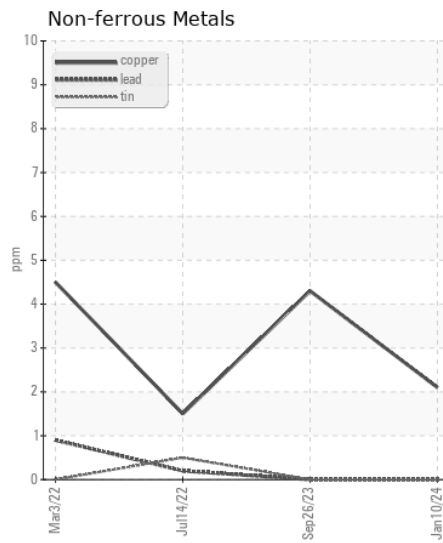
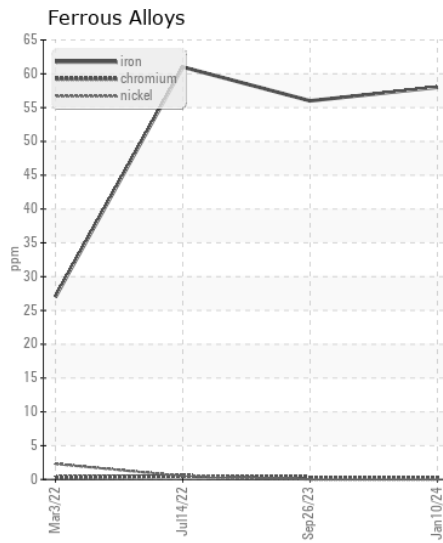
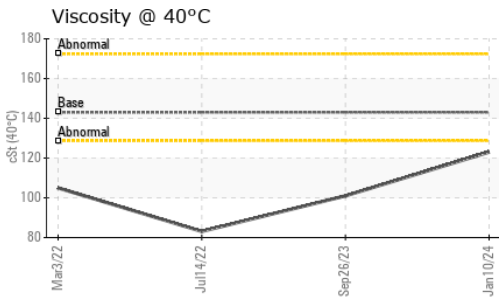
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>60	<b>2</b>	4	4
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	2	<1
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	MODER	NONE
Debris	scalar	*Visual	NONE	<b>NONE</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	>0.2	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

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

Sodium	ppm	ASTM D5185m	>170	<b>&lt;1</b>	1	2
Boron	ppm	ASTM D5185m	400	<b>0</b>	0	3
Barium	ppm	ASTM D5185m	200	<b>3</b>	0	0
Molybdenum	ppm	ASTM D5185m	12	<b>&lt;1</b>	1	1
Manganese	ppm	ASTM D5185m		<b>0</b>	1	1
Magnesium	ppm	ASTM D5185m	12	<b>5</b>	7	7
Calcium	ppm	ASTM D5185m	150	<b>60</b>	67	29
Phosphorus	ppm	ASTM D5185m	1650	<b>322</b>	263	281
Zinc	ppm	ASTM D5185m	125	<b>0</b>	49	12
Sulfur	ppm	ASTM D5185m	22500	<b>16812</b>	16113	17290
Visc @ 40°C	cSt	ASTM D445	143	<b>123</b>	101	83.1



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LH0272893 **Received** : 17 Jan 2024  
**Lab Number** : 06063168 **Diagnosed** : 19 Jan 2024  
**Unique Number** : 10834550 **Diagnostician** : Don Baldrige  
**Test Package** : CONST

**SPARTAN RECYCLING**  
 3071 HOWARD ST  
 SPARTANBURG, SC  
 US 29303  
 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)

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F: