



# LIEBHERR

## OIL ANALYSIS REPORT

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



Machine Id  
**LIEBHERR LH30 115841-1253**  
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>LH06063158</b>	LH0235738	LH0207559
Sample Date		Client Info		<b>11 Jan 2024</b>	28 Sep 2023	22 Mar 2023
Machine Age	hrs	Client Info		<b>11390</b>	10707	9140
Oil Age	hrs	Client Info		<b>0</b>	0	2000
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	N/A	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>450	<b>67</b>	87	22
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>15	<b>2</b>	3	0
Lead	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>75	<b>1</b>	3	<1
Tin	ppm	ASTM D5185m		<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

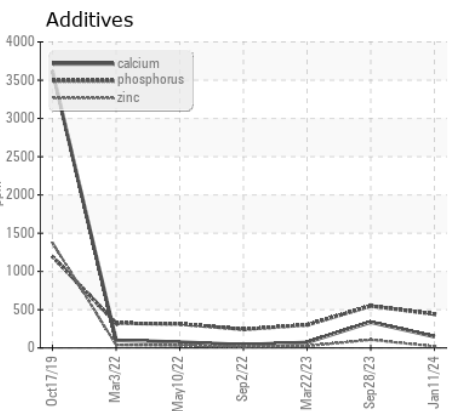
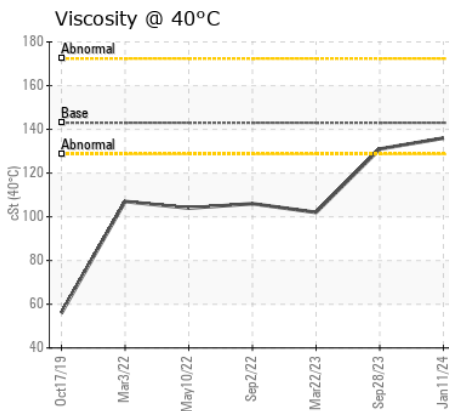
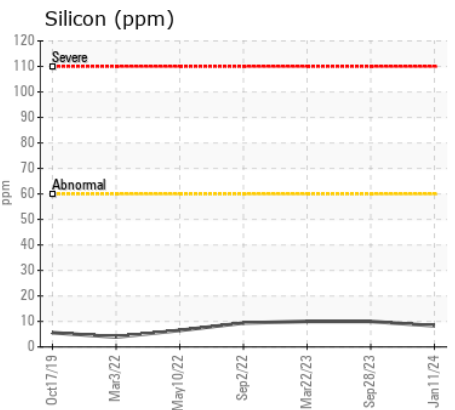
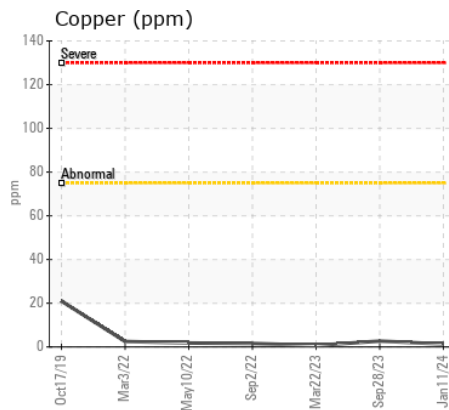
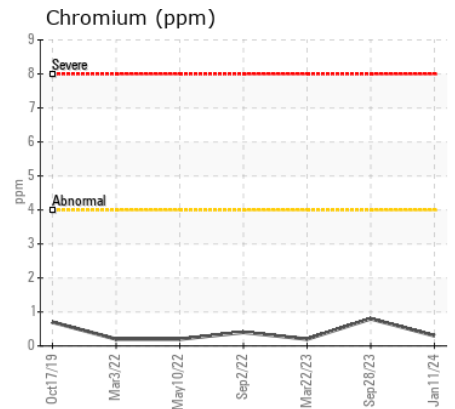
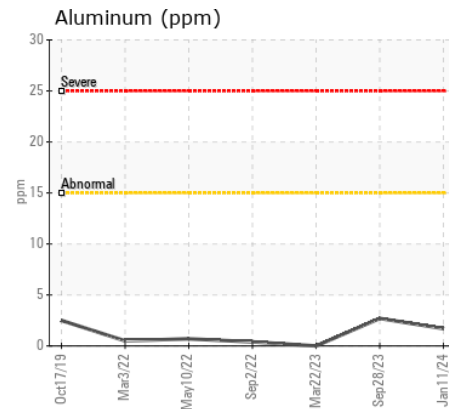
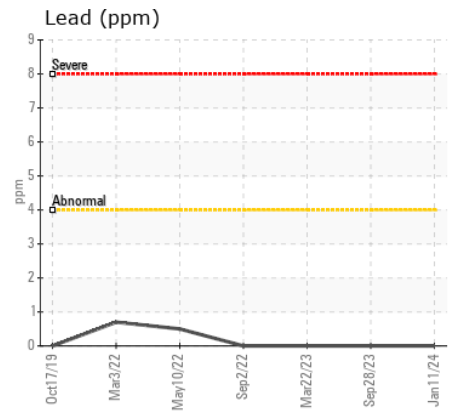
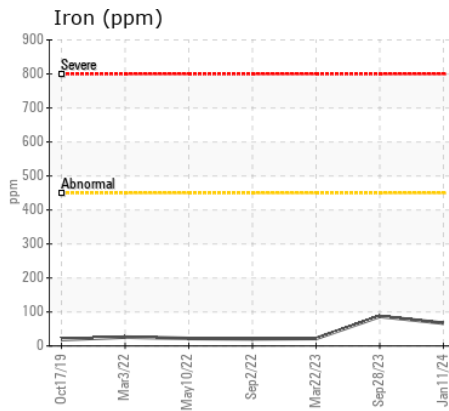
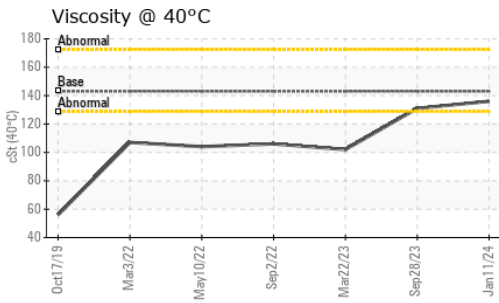
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>60	<b>8</b>	10	10
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	4	3
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	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>2</b>	3	2
Boron	ppm	ASTM D5185m	400	<b>0</b>	0	1
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>11</b>	26	8
Calcium	ppm	ASTM D5185m	150	<b>148</b>	337	72
Phosphorus	ppm	ASTM D5185m	1650	<b>442</b>	549	301
Zinc	ppm	ASTM D5185m	125	<b>20</b>	107	24
Sulfur	ppm	ASTM D5185m	22500	<b>14940</b>	14511	18362
Visc @ 40°C	cSt	ASTM D445	143	<b>136</b>	131	102



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : LH06063158      Recieved : 17 Jan 2024  
 Lab Number : 06063158      Diagnosed : 18 Jan 2024  
 Unique Number : 10834540      Diagnostician : Wes Davis  
 Test Package : MOB 1

**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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