

# LIEBHERR LH30 122037 - Hydraulic System

Sample No: LH0258296

Oil Type: AW HYDRAULIC OIL ISO 46

## **SAMPLE INFORMATION**

	Sample Number	LH0258296	 	
	Sample Date	14 Aug 2023	 	
	Machine Hours	4199	 	
	Oil Hours	0	 	
	Oil Changed	Not Changd	 	
	Sample Status	ABNORMAL	 	

OIL CO	<b>DNDITION</b>		
/isc @ 40°C	cSt	<b>42.4</b>	 
Acid Number (AN)	mg KOH/g	0 1.04	 

# CONTAMINATION

Particles >4µm		6649	 	
Particles >6µm		<b>2449</b>	 	
Particles >14µm		269	 	
ISO 4406:1999 (c)		20/18/15	 	
Silicon	ppm	2	 	
Sodium	ppm	<b>5</b>	 	
Potassium	ppm	01	 	

# WEAR METALS

Iron	ppm	<mark>)</mark> 90	 	
Copper	ppm	08	 	
Lead	ppm	02	 	
Tin	ppm	0 🔘	 	
Aluminum	ppm	<b>○</b> <1	 	
Chromium	ppm	01	 	
Molybdenum	ppm	<b>○</b> <1	 	
Nickel	ppm	0	 	
Titanium	ppm	0	 	
Silver	ppm	0	 	
Manganese	ppm	01	 	
Vanadium	ppm	0	 	

0

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Calcium	ppm	0 1404					
Magnesium	ppm	06					
Zinc	ppm	0 737					
Phosphorus	ppm	<b>582</b>					
Barium	ppm	0					
Boron	ppm	0					





### AMERICAN STATE EQUIPMENT CO.

2400 NORTH 14TH AVENUE WAUSAU, WI US 54401 Contact: CHRIS BARTNIK cbartnik@amstate.com T: (715)675-6900 F: (715)675-9748

#### Diagnosis

The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. The iron level is abnormal. All other component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

 Depot:
 LEC0008

 Unique No:
 10615568

 Signed:
 Jonathan Hester

 Report Date:
 23 Aug 2023

# **LEBHERR** CONSTRUCTION EQUIPMENT



GRAPHS

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#### Ferrous Alloys Particle Count 90 491.520 -26 iron 80 •• chromium 245,760 -25 nickel 70 122,880 -24 60 61,440 -23 50 30,720 -22 40 15,360 -21 30 20 7.680 20 10 3,840 -19 0. 1,920 18 🛛 Aug14/23 nber of particles (per 1 ml) 4/73 4406:1999 Cleanlines: 17 Aug1 960 Non-ferrous Metals 480 16 10 15 copper 240 9 lead 14 120 8 -13 60 ß 30 12 mdo Ę 15 -11 3 8 10 4 2 -8 0 Aug14/23 Aug14/23 0, 21µ 38µ $14\mu$ Viscosity @ 40°C Acid Number 52 1.1-Abnormal 1.0 50 Abnormal 0.9 48 (B/HO) 0.7 Ba (10°C) (10°C) tso (10°C) Ē 0.6 Base Junper 0.5 40,0 Munper 0.5 0.4 42 Abnorma 0.2 Abnorma 40. 0.1 0.0-38 Aug14/23 Aug14/23 Aug14/23 Aug14/23

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Contact/Location: CHRIS BARTNIK - LEC0008