# **CONSTRUCTION EQUIPMENT**

### LIEBHERR LH50 111551-1216 - Splitter Box

Sample No: LHMC163230

Oil Type: HARTLAND 80W90 LS

## SAMPLE INFORMATION

Sample Number		LHMC163230	LH0156604	LHMC163608	LHMC163231
Sample Date		29 Aug 2023	25 Apr 2023	26 Jan 2023	03 Dec 2021
Machine Hours		17705	15697	14047	10215
Oil Hours		0	0	0	1882
Oil Changed		Changed	Changed	Changed	Changed
Sample Status		SEVERE	ATTENTION	NORMAL	ABNORMAL
OIL C	ONDITI	ON			
Visc @ 40°C	cSt	<b>0</b> 135	0 84.7	120	95.9
<b>111</b>					
CONTAMINATION					

	TAMINATI	ION				
Silicon	ppm	05	○ <1	01	3	
Sodium	ppm	<b>○</b> <1	○ <1	◯ <1	02	
Potassium	ppm	0	◯ <1	0	02	

<b>A</b>					
<b>WEA</b>	R META	LS			
Iron	ppm	<b>0</b> 1576	24	0 19	0 181
Copper	ppm	0 167	0 ()	◯ <1	0 4
Lead	ppm	01	0 (	◯ <1	○ <1
Tin	ppm	<mark>()</mark> 12	0 ()	0	0
Aluminum	ppm	03	◯ <1	0	○ <1
Chromium	ppm	<b>2</b> 4	0 0	◯ <1	2
Molybdenum	ppm	2	0 1	<1	<1
Nickel	ppm	02	0 (	0	○ <1
Titanium	ppm	<1	0	0	0
Silver	ppm	0	0	0	<1
Manganese	ppm	14	◯ <1	<1	5
Vanadium	ppm	<1	0	0	0

**ADDITIVES** Calcium 31 ppm 0 49 25 65 3 2 Magnesium ppm 0 10 7 Zinc 26 0 134 68 55 ppm 0 848 993 Phosphorus 845 1326 ppm Barium ppm 0 0 Boron 13 ppm 0 56 215





#### **BOISE WHITE PAPER**

3RD AVE AND HWY 11, 400 2ND ST INTERNATIONAL FALLS, MN US 56649 Contact: GARY MANN garymann@packagingcorp.com T: F: (218)285-5860

#### Diagnosis

The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.Bearing and/or gear wear is indicated. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot:	BOIINT
Unique No:	10633748
Signed:	Doug Bogart
Report Date:	08 Sep 2023

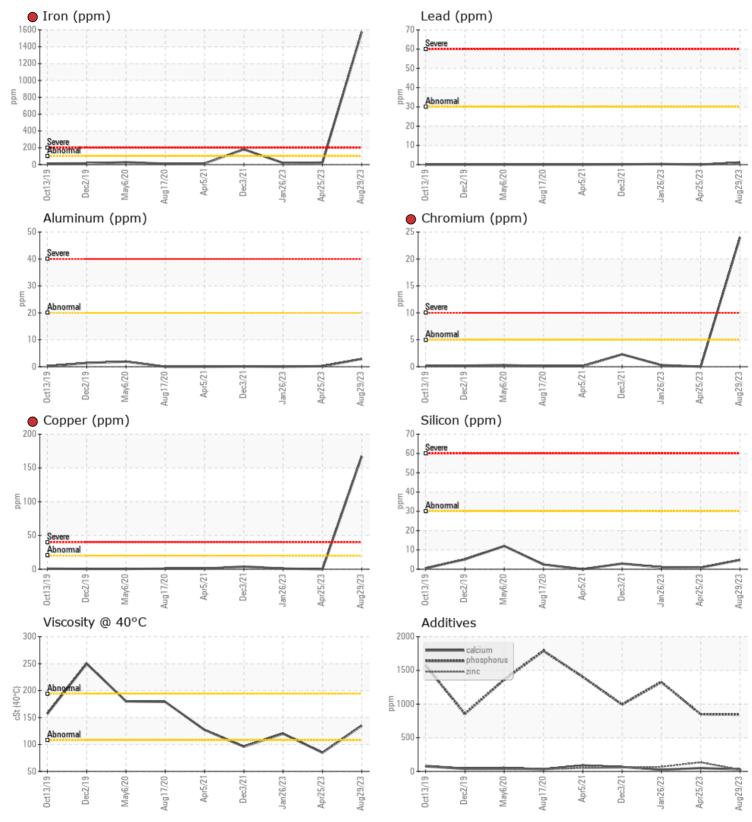
Contact/Location: GARY MANN - BOIINT





GRAPHS

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Report Id: BOIINT [WUSCAR] 05943136 (Generated: 09/08/2023 09:14:33) Rev: 1

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