

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH50 11551-1216 - 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

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



OIL CONDITION

Visc @ 40°C	cSt	135	84.7	120	95.9
-------------	-----	-----	------	-----	------



CONTAMINATION

Silicon	ppm	5	<1	1	3
Sodium	ppm	<1	<1	<1	2
Potassium	ppm	0	<1	0	2



WEAR METALS

Iron	ppm	1576	24	19	181
Copper	ppm	167	0	<1	4
Lead	ppm	1	0	<1	<1
Tin	ppm	12	0	0	0
Aluminum	ppm	3	<1	0	<1
Chromium	ppm	24	0	<1	2
Molybdenum	ppm	2	1	<1	<1
Nickel	ppm	2	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	ppm	31	49	25	65
Magnesium	ppm	3	10	2	7
Zinc	ppm	26	134	68	55
Phosphorus	ppm	845	848	1326	993
Barium	ppm	0	0	0	1
Boron	ppm	13	56	215	10

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



GRAPHS

