

LIEBHERR

CONSTRUCTION EQUIPMENT



- Hydraulic System

Sample No: LH0220983

Oil Type: {unknown}



Sample Information

Sample Number	LH0220983	LH0220980	LH0220759	---
Sample Date	15 May 2024	24 Jul 2023	19 Aug 2022	---
Machine Hours	2940	2006	995	---
Oil Hours	0	0	0	---
Oil Changed	Not Changd	Not Changd	Not Changd	---
Sample Status	SEVERE	ABNORMAL	ABNORMAL	---

WIMME SAND AND GRAVEL

PO BOX 195

PLOVER, MI

US 54467

Contact: Service Manager



Oil Condition

Visc @ 40°C	cSt	41.2	41.3	41.3	---
Acid Number (AN)	mg KOH/g	0.53	0.65	0.99	---

T:

F:



Contamination

Water	%	NEG	NEG	NEG	---
Particles >4µm		395	2491	969	---
Particles >6µm		74	873	150	---
Particles >14µm		8	84	17	---
ISO 4406:1999 (c)		16/13/10	18/17/14	17/14/11	---
Silicon	ppm	4	3	6	---
Sodium	ppm	4	<1	1	---
Potassium	ppm	0	1	<1	---

Diagnosis

We recommend you service the filters on this component. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. The iron level is severe. 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.



Wear Metals

Iron	ppm	199	80	75	---
Copper	ppm	4	3	3	---
Lead	ppm	0	<1	<1	---
Tin	ppm	0	0	<1	---
Aluminum	ppm	<1	<1	2	---
Chromium	ppm	2	1	1	---
Molybdenum	ppm	2	2	<1	---
Nickel	ppm	0	<1	0	---
Titanium	ppm	<1	<1	0	---
Silver	ppm	<1	0	<1	---
Manganese	ppm	3	1	2	---
Vanadium	ppm	<1	0	<1	---



Additives

Calcium	ppm	474	477	1094	---
Magnesium	ppm	17	18	5	---
Zinc	ppm	480	509	640	---
Phosphorus	ppm	401	407	527	---
Barium	ppm	0	0	0	---
Boron	ppm	2	4	3	---

Depot: WIMPLO

Unique No: 11046474

Signed: Jonathan Hester

Report Date: 30 May 2024



Graphs

