CONSTRUCTION EQUIPMENT

[(341435)] LIEBHERR LH50M 128733-1216 - Hydraulic System

Sample No: LH0278633

Oil Type:

SAMPLE INFORMATION

{unknown}

Sample Number	LH0278633	LH0277774	LH0274633	LH0256934		
Sample Date	17 Jan 2024	20 Nov 2023	16 Aug 2023	11 Jun 2023		
Machine Hours	8647	8180	7832	14253		
Oil Hours	0	0	0	0		
Oil Changed	Not Changd	Not Changd	Changed	Not Changd		
Sample Status	SEVERE	SEVERE	SEVERE	SEVERE		
OIL CONDITION						
Visc @ 40°C cSt	41.1	0 41.4	0 40.9	0 41.2		

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		0 3341	0 1666	65082	3986
Particles >6µm		0 876	0 448	0 19821	0 1081
Particles >14µm		58	23	0 851	86
ISO 4406:1999 (c))	19/17/13	18/16/12	23/21/17	19/17/14
Silicon	ppm	0 2	02	2	02
Sodium	ppm	0 2	2	2	01
Potassium	ppm	01	0	◯ <1	◯ <1

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WEAR METALS					
PQ		9	0	0 9	6
Iron	ppm	0 124	0 123	126	0 116
Copper	ppm	04	0 4	0 4	0 4
Lead	ppm	○ <1	○ <1	◯ <1	○ <1
Tin	ppm	0	0	0	0
Aluminum	ppm	○ <1	○ <1	0 1	○ <1
Chromium	ppm	01	01	0 1	01
Molybdenum	ppm	0	0	0	0
Nickel	ppm	○ <1	0	0	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	<1	4	0
Manganese	ppm	2	2	2	2
Vanadium	ppm	0	0	0	<1

ADDITIVES

ADDITIVES					
Calcium	ppm	415	434	480	536
Magnesium	ppm	3	2	3	2
Zinc	ppm	779	806	797	774
Phosphorus	ppm	635	634	674	699
Barium	ppm	0	0	0	0
Boron	ppm	0	<1	<1	<1



COMBINED METAL INDUSTRIES 454 DOBBIE DRIVE CAMBRIDGE, ON CA N1T 1S7 Contact: Service Manager

T: F:

Diagnosis

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample. Iron ppm levels are severe. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. NOTE: An increase in the particle count is noted. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

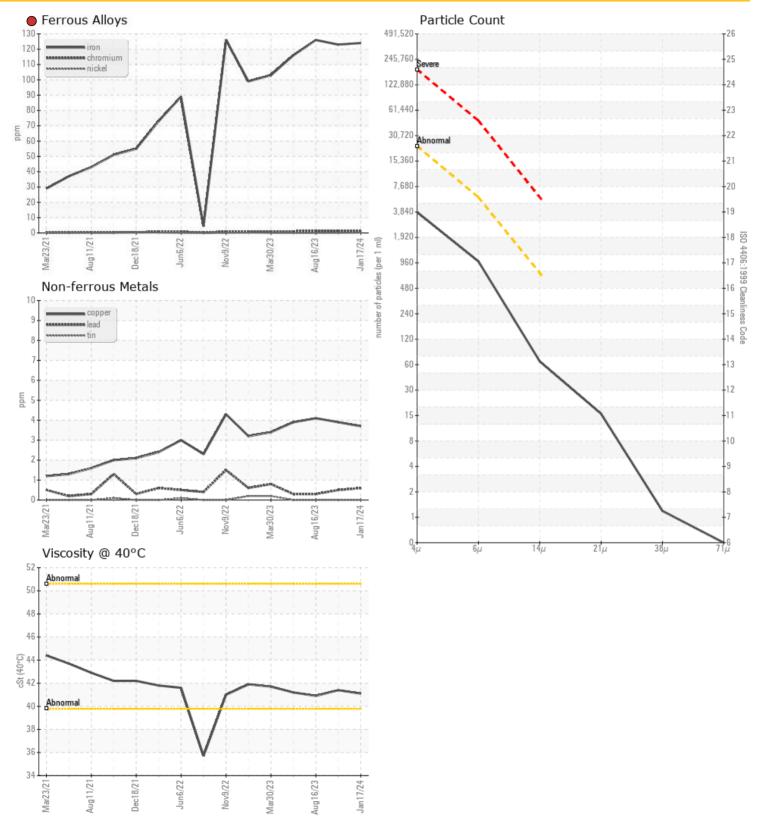
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