

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH50 1216-139058 - Hydraulic System

Sample No: LHMC82154

Oil Type: MOBIL DTE 10 EXCEL 46



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SAMPLE INFORMATION

Sample Number	LHMC82154	LHMC85450	LHMC85067	LHMC51606
Sample Date	30 Nov 2023	11 Oct 2023	17 Aug 2023	23 Jun 2023
Machine Hours	5101	4598	4098	3586
Oil Hours	1000	500	2000	1500
Oil Changed	Not Changd	Not Changd	Not Changd	Not Changd
Sample Status	ABNORMAL	ABNORMAL	NORMAL	ABNORMAL



OIL CONDITION

Visc @ 40°C	cSt	44.1	44.7	44.9	45.4
Acid Number (AN)	mg KOH/g	0.29	0.394	0.22	0.48



CONTAMINATION

Water	%	0.147	0.167	NEG	0.374
Particles >4µm		1149	---	1329	---
Particles >6µm		626	---	339	---
Particles >14µm		106	---	25	---
ISO 4406:1999 (c)		17/16/14	---	18/16/12	---
Silicon	ppm	<1	1	1	<1
Sodium	ppm	0	0	0	<1
Potassium	ppm	0	1	2	1



WEAR METALS

Iron	ppm	5	5	7	5
Copper	ppm	<1	<1	2	2
Lead	ppm	0	0	0	0
Tin	ppm	0	0	0	<1
Aluminum	ppm	0	<1	0	<1
Chromium	ppm	0	0	<1	<1
Molybdenum	ppm	0	0	<1	0
Nickel	ppm	0	<1	<1	<1
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	1	0
Manganese	ppm	0	0	<1	<1
Vanadium	ppm	0	0	<1	0



ADDITIVES

Calcium	ppm	312	361	429	448
Magnesium	ppm	4	4	2	2
Zinc	ppm	131	176	197	221
Phosphorus	ppm	216	257	252	279
Barium	ppm	0	0	0	<1
Boron	ppm	0	0	0	0

Diagnosis

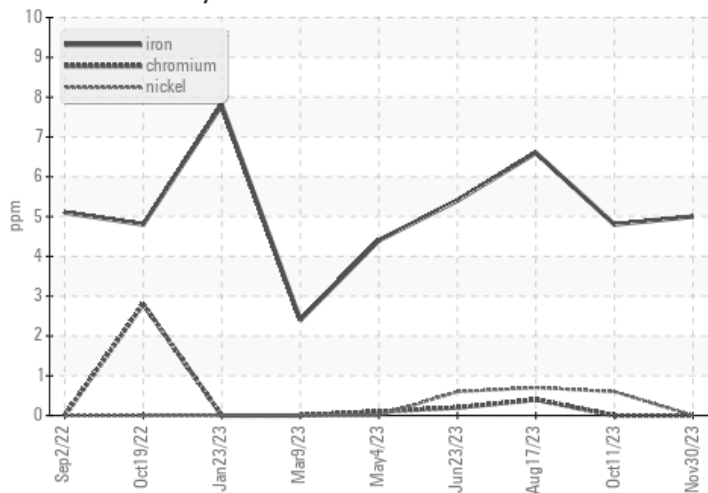
No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a light concentration of water present in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Depot: PACTOM
 Unique No: 10781178
 Signed: Jonathan Hester
 Report Date: 19 Dec 2023

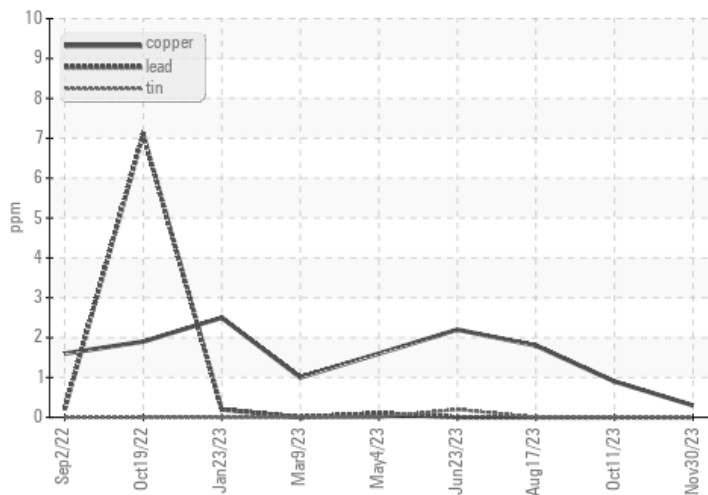


GRAPHS

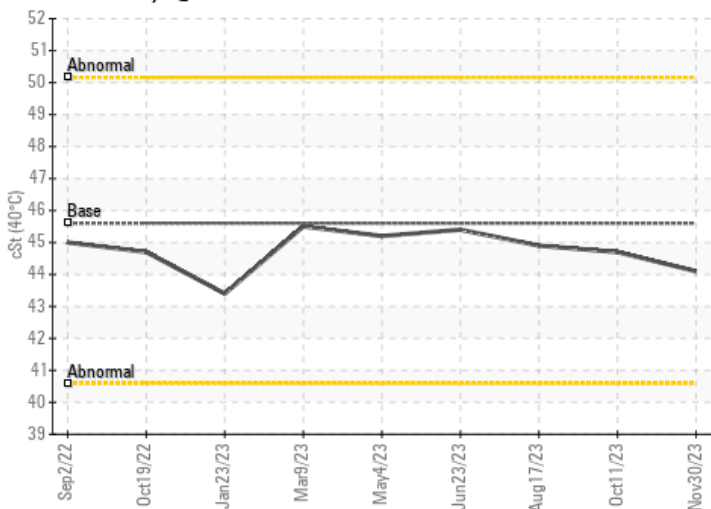
Ferrous Alloys



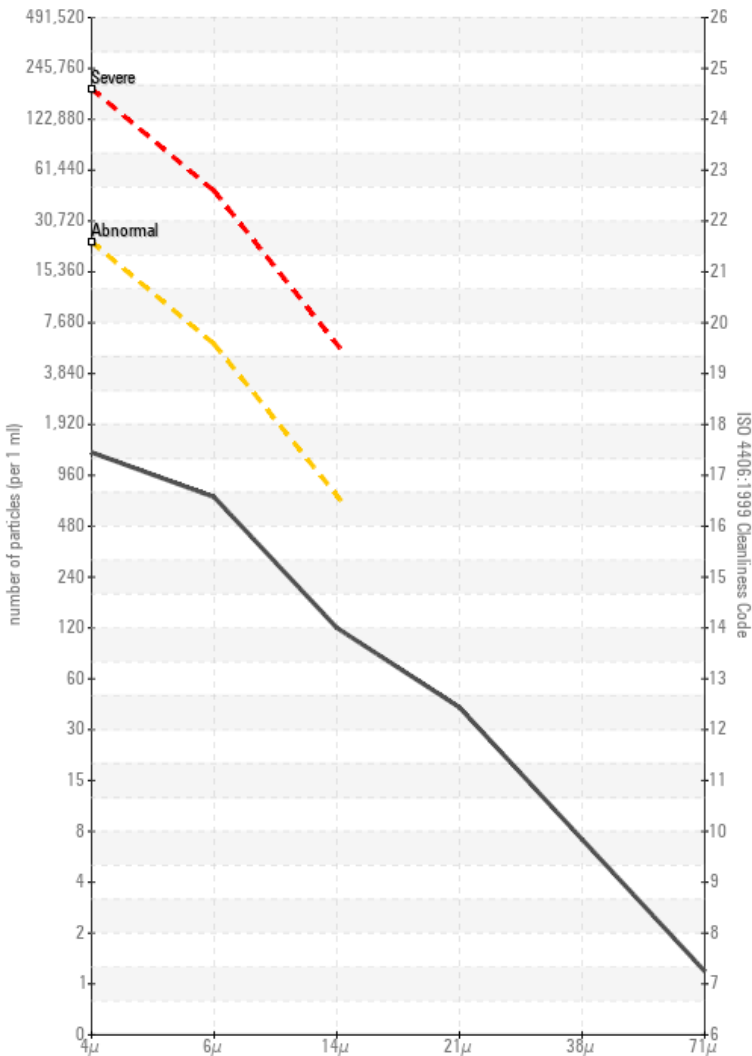
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

