

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH50 1216-139058 - Hydraulic System

Sample No: LHMC51606

Oil Type: MOBIL DTE 10 EXCEL 46



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SAMPLE INFORMATION

Sample Number	LHMC51606	LHMC51595	LHMC62872	LHMC62874
Sample Date	23 Jun 2023	04 May 2023	09 Mar 2023	23 Jan 2023
Machine Hours	3586	3081	2575	2000
Oil Hours	1500	1000	500	2000
Oil Changed	Not Changd	Not Changd	Not Changd	Changed
Sample Status	ABNORMAL	ABNORMAL	ABNORMAL	ABNORMAL



OIL CONDITION

Visc @ 40°C	cSt	45.4	45.2	45.5	43.4
Acid Number (AN)	mg KOH/g	0.48	0.39	0.57	1.08



CONTAMINATION

Water	%	0.374	0.125	0.188	0.075
Particles >4µm		---	522	3026	---
Particles >6µm		---	284	276	---
Particles >14µm		---	48	14	---
ISO 4406:1999 (c)		---	16/15/13	19/15/11	---
Silicon	ppm	<1	1	1	2
Sodium	ppm	<1	0	<1	0
Potassium	ppm	1	1	0	2



WEAR METALS

Iron	ppm	5	4	2	8
Copper	ppm	2	2	1	2
Lead	ppm	0	<1	0	<1
Tin	ppm	<1	0	0	0
Aluminum	ppm	<1	0	<1	0
Chromium	ppm	<1	<1	0	0
Molybdenum	ppm	0	0	0	0
Nickel	ppm	<1	0	0	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	<1	0
Manganese	ppm	<1	0	<1	0
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	448	480	505	1106
Magnesium	ppm	2	2	4	3
Zinc	ppm	221	228	217	568
Phosphorus	ppm	279	279	283	508
Barium	ppm	<1	0	0	0
Boron	ppm	0	0	0	0

Diagnosis

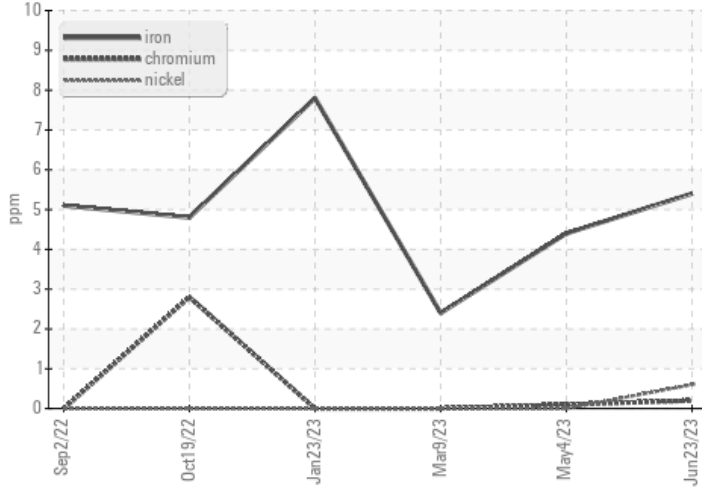
We advise that you check for the source of water entry. We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. There is a moderate amount of visible silt present in the sample. There is a light concentration of water present in the oil. Free water present. The AN level is acceptable for this fluid.

Depot: PACTOM
 Unique No: 10537868
 Signed: Don Baldrige
 Report Date: 03 Jul 2023

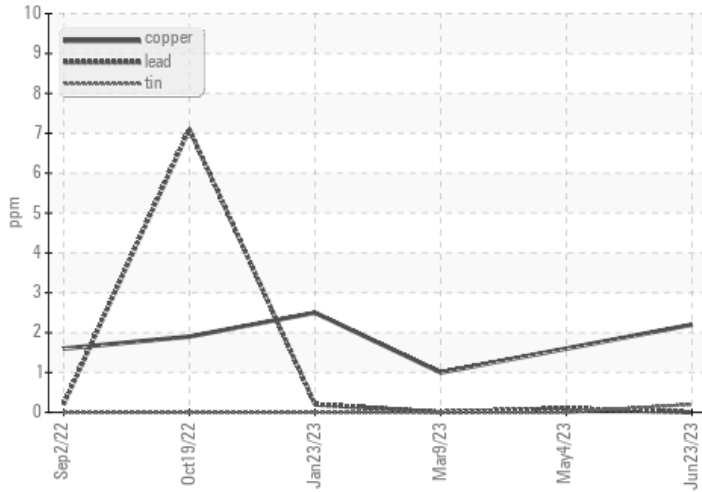


GRAPHS

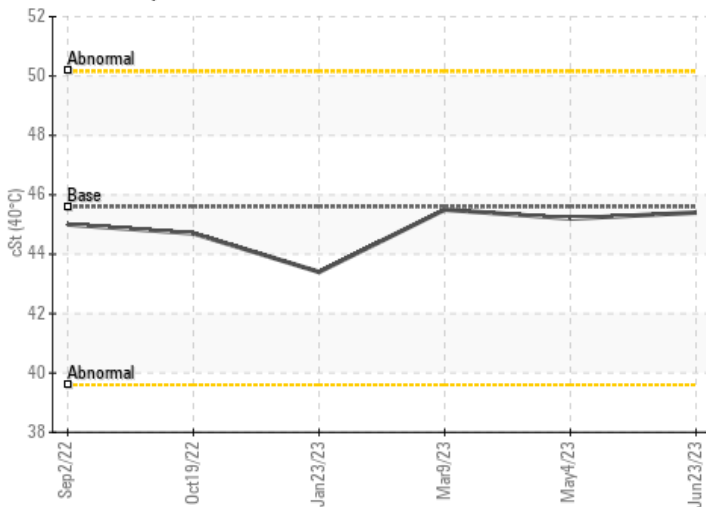
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Acid Number

