

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH60M 117421-1217 - Hydraulic System

Sample No: LH0244335

Oil Type: LIEBHERR HYDRAULIC HVI



SAMPLE INFORMATION

Sample Number	LH0244335	LH0247838	LH0229344	LH0208186
Sample Date	27 Jun 2023	24 Feb 2023	13 Jun 2022	01 Mar 2022
Machine Hours	4239	3454	1958	1190
Oil Hours	4000	3400	2000	1190
Oil Changed	Not Changd	Not Changd	Not Changd	Not Changd
Sample Status	NORMAL	NORMAL	NORMAL	ATTENTION

TT & E IRON

1529 WEST GARNER RD
GARNER, NC
US 27529
Contact: MICHAEL STANCIL
culaterprowler@aol.com
T: (919)524-4326
F:



OIL CONDITION

Visc @ 40°C	cSt	38.5	42.5	43.6	45.0
Acid Number (AN)	mg KOH/g	0.51	0.54	0.59	1.07



CONTAMINATION

Particles >4µm		15338	15147	6898	27502
Particles >6µm		4362	2420	1061	2688
Particles >14µm		247	169	64	136
ISO 4406:1999 (c)		21/19/15	21/18/15	20/17/13	22/19/14
Silicon	ppm	2	2	1	2
Sodium	ppm	0	0	1	0
Potassium	ppm	6	0	0	2

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. 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. The condition of the oil is suitable for further service.



WEAR METALS

Iron	ppm	13	35	21	55
Copper	ppm	3	5	2	5
Lead	ppm	<1	<1	0	<1
Tin	ppm	0	0	0	0
Aluminum	ppm	<1	1	<1	<1
Chromium	ppm	<1	2	<1	1
Molybdenum	ppm	<1	2	2	<1
Nickel	ppm	2	0	0	0
Titanium	ppm	0	0	0	0
Silver	ppm	<1	0	0	0
Manganese	ppm	<1	<1	<1	1
Vanadium	ppm	<1	0	0	0



ADDITIVES

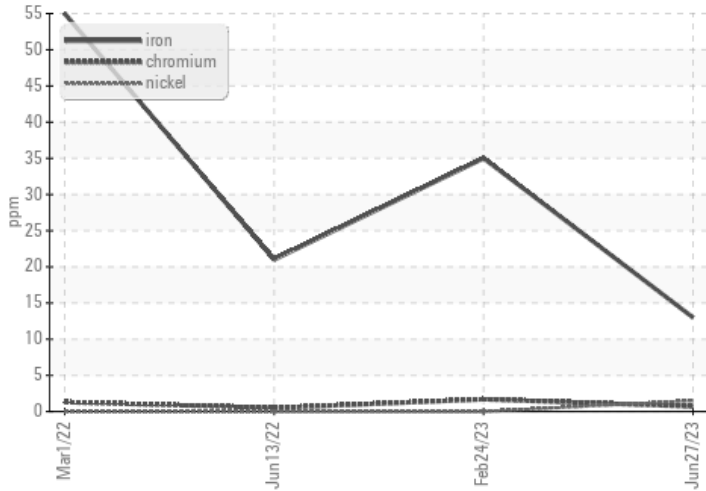
Calcium	ppm	127	241	304	1061
Magnesium	ppm	8	8	8	7
Zinc	ppm	213	436	409	655
Phosphorus	ppm	128	339	338	532
Barium	ppm	0	0	0	0
Boron	ppm	0	1	3	<1

Depot: TTENEW
Unique No: 10561202
Signed: Don Baldrige
Report Date: 18 Jul 2023

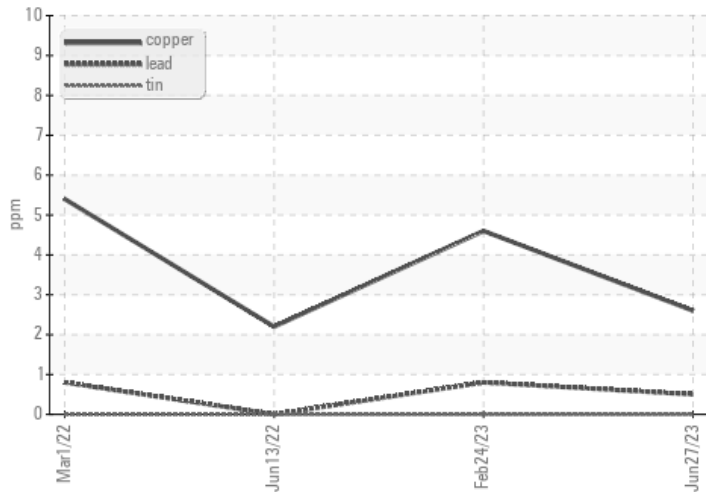


GRAPHS

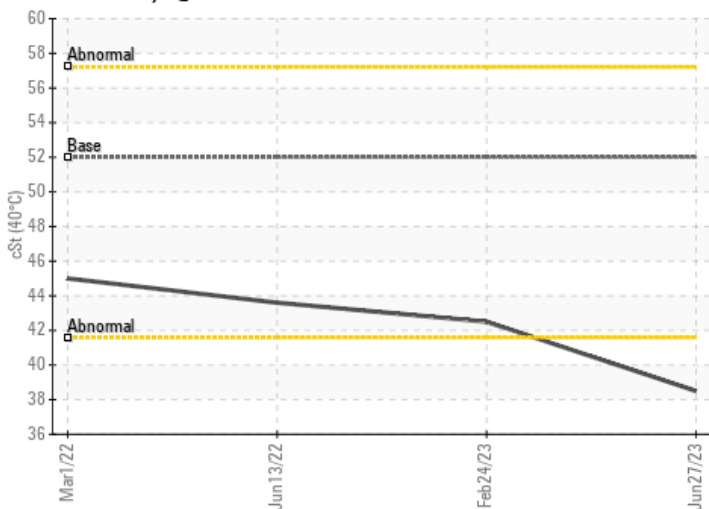
Ferrous Alloys



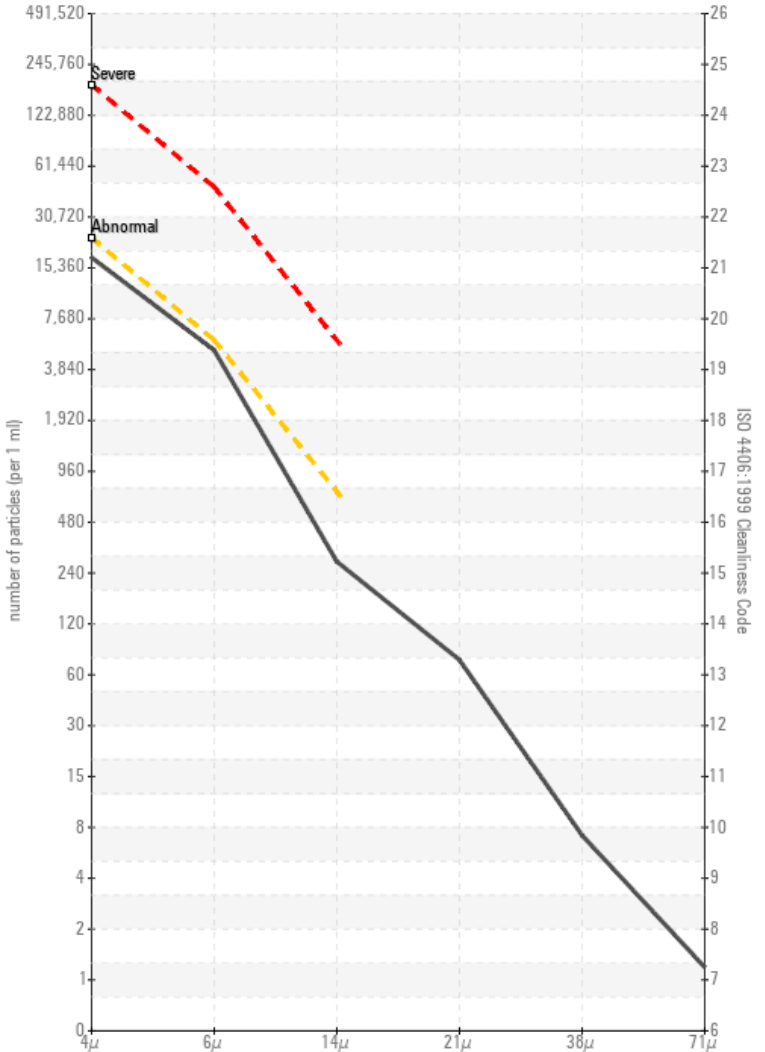
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

