

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH60M 145111-1217 - Hydraulic System

Sample No: LH0296537

Oil Type: {unknown}



RAM IRON AND METAL

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Sample Information

Sample Number	LH0296537	LH0284998	LH0261761	LH0266080
Sample Date	07 Jul 2024	12 Feb 2024	06 Sep 2023	20 Jun 2023
Machine Hours	4008	2972	2048	1188
Oil Hours	0	0	0	0
Oil Changed	Not Changd	Not Changd	Not Changd	Not Changd
Sample Status	NORMAL	NORMAL	MARGINAL	NORMAL



Oil Condition

Visc @ 40°C	cSt	36.1	37.4	37.7	41.2
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Contamination

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		4849	7595	5063	4632
Particles >6µm		1078	1939	1285	1052
Particles >14µm		91	88	73	37
ISO 4406:1999 (c)		19/17/14	20/18/14	20/17/13	19/17/12
Silicon	ppm	2	3	4	3
Sodium	ppm	2	2	2	2
Potassium	ppm	2	1	<1	1



Wear Metals

Iron	ppm	59	53	54	35
Copper	ppm	9	12	10	6
Lead	ppm	<1	<1	<1	<1
Tin	ppm	0	0	0	0
Aluminum	ppm	<1	<1	<1	<1
Chromium	ppm	1	<1	<1	<1
Molybdenum	ppm	0	0	0	0
Nickel	ppm	<1	<1	0	<1
Titanium	ppm	0	0	0	0
Silver	ppm	<1	0	0	0
Manganese	ppm	1	<1	1	<1
Vanadium	ppm	0	0	0	0



Additives

Calcium	ppm	552	714	961	1087
Magnesium	ppm	4	5	6	6
Zinc	ppm	489	519	613	649
Phosphorus	ppm	401	456	554	616
Barium	ppm	<1	0	0	2
Boron	ppm	10	<1	1	<1

Diagnosis

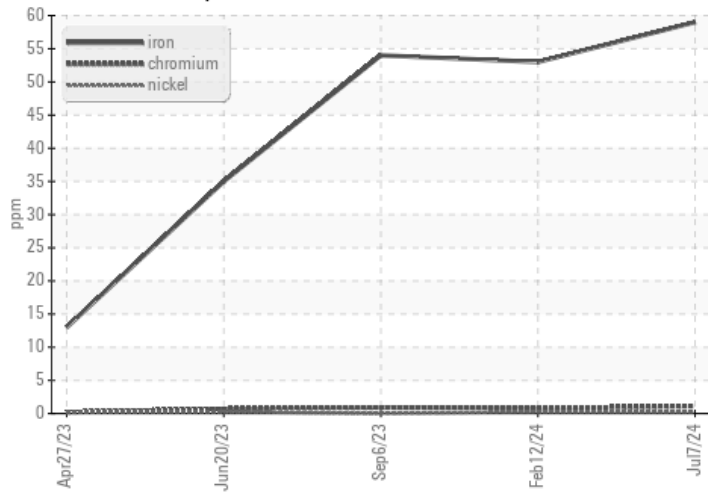
Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The condition of the oil is acceptable for the time in service.

Depot: RAMTOR
Unique No: 5811865
Signed: Wes Davis
Report Date: 09 Jul 2024

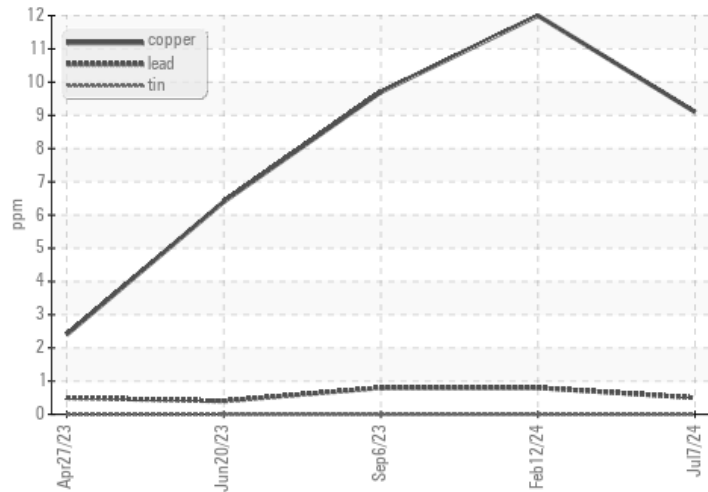


Graphs

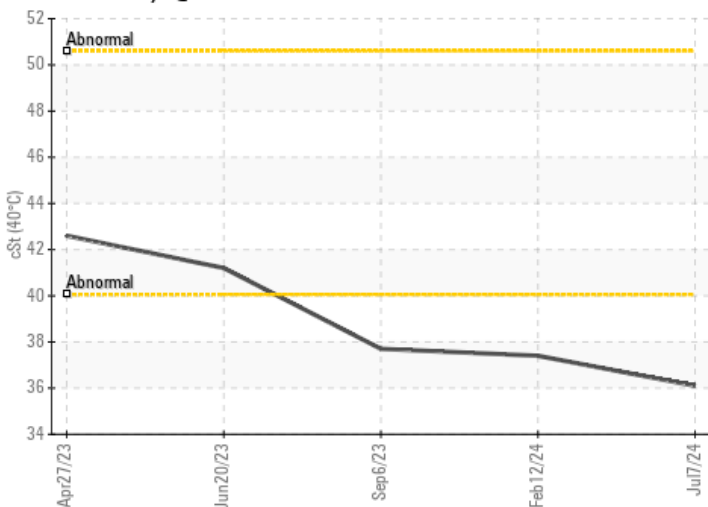
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Particle Count

