

LIEBHERR

CONSTRUCTION EQUIPMENT



[(343446)] LIEBHERR LH60M 124381-1217 - Hydraulic System

Sample No: LH0296544

Oil Type: AW HYDRAULIC OIL ISO 32



Sample Information

Sample Number	LH0296544	LH0289733	LH0289699	LH0285015
Sample Date	07 Jul 2024	27 May 2024	16 Apr 2024	12 Feb 2024
Machine Hours	14056	13670	13245	12500
Oil Hours	0	0	0	0
Oil Changed	Changed	Not Changd	Changed	Not Changd
Sample Status	NORMAL	ABNORMAL	ABNORMAL	ABNORMAL

RAM IRON AND METAL

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Oil Condition

Visc @ 40°C	cSt	33.1	33.0	32.9	37.2



Contamination

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		835	5524	6420	5380
Particles >6µm		178	1106	1500	1414
Particles >14µm		13	41	82	89
ISO 4406:1999 (c)		17/15/11	20/17/13	20/18/14	20/18/14
Silicon	ppm	0	0	0	<1
Sodium	ppm	<1	<1	2	<1
Potassium	ppm	<1	0	0	<1

Diagnosis

Resample at the next service interval to monitor. 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.



Wear Metals

Iron	ppm	7	7	7	8
Copper	ppm	1	1	1	1
Lead	ppm	0	0	0	0
Tin	ppm	0	0	0	0
Aluminum	ppm	<1	0	0	<1
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	0	0	0	0
Nickel	ppm	<1	0	0	<1
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	0	0	0	0
Vanadium	ppm	0	0	0	0



Additives

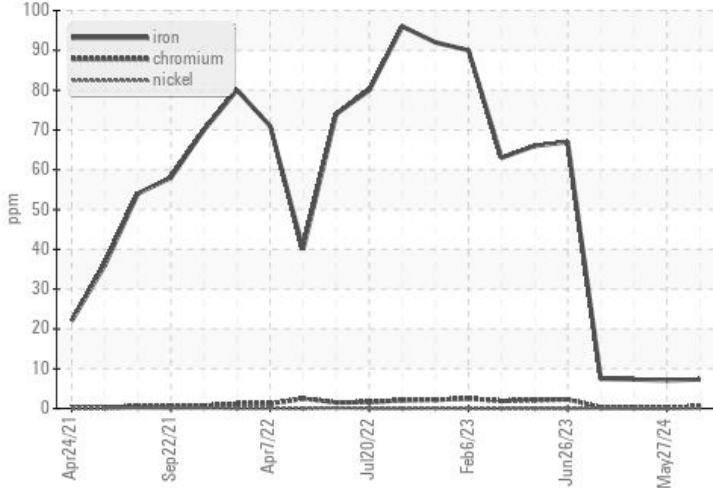
Calcium	ppm	54	57	57	69
Magnesium	ppm	2	2	1	2
Zinc	ppm	337	345	345	361
Phosphorus	ppm	269	280	276	295
Barium	ppm	0	0	0	0
Boron	ppm	1	<1	<1	<1

Depot: RAMTOR
Unique No: 5811845
Signed: Kevin Marson
Report Date: 09 Jul 2024

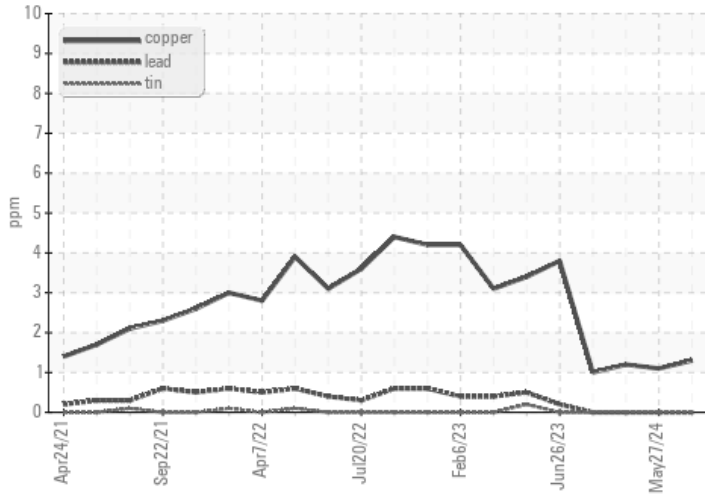


Graphs

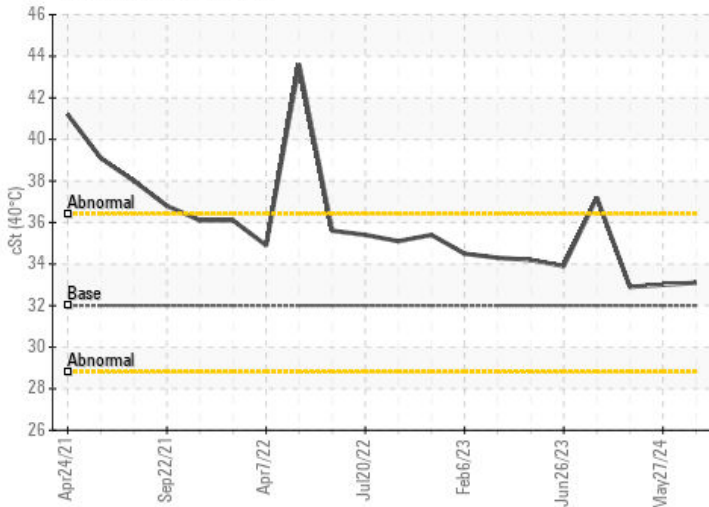
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Particle Count

