

LIEBHERR

CONSTRUCTION EQUIPMENT



115070 - Hydraulic System

Sample No: LH0289456

Oil Type: LIEBHERR HYDRAULIC 37



Sample Information

Sample Number	LH0289456	LH0251625	LH0242621	---
Sample Date	04 Apr 2024	20 Jan 2023	17 Oct 2022	---
Machine Hours	1873	836	325	---
Oil Hours	0	0	0	---
Oil Changed	Not Changd	Not Changd	Not Changd	---
Sample Status	NORMAL	NORMAL	NORMAL	---

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Oil Condition

Visc @ 40°C	cSt	34.7	36.2	36.3	---
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Contamination

Water	%	NEG	NEG	NEG	---
Particles >4µm		4363	2445	2482	---
Particles >6µm		786	797	494	---
Particles >14µm		25	55	35	---
ISO 4406:1999 (c)		19/17/12	18/17/13	18/16/12	---
Silicon	ppm	0	<1	1	---
Sodium	ppm	<1	<1	<1	---
Potassium	ppm	1	1	2	---

Diagnosis

Confirm the source of the lubricant being utilized for top-up/fill. 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. Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.



Wear Metals

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



Additives

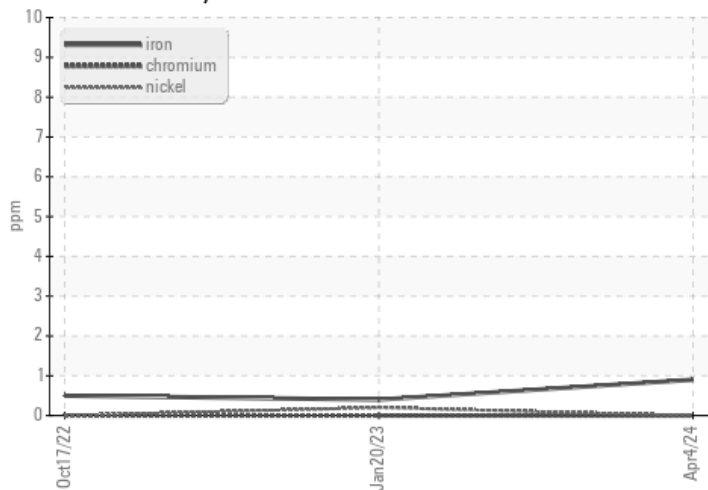
Calcium	ppm	180	107	108	---
Magnesium	ppm	36	<1	<1	---
Zinc	ppm	402	356	348	---
Phosphorus	ppm	315	307	307	---
Barium	ppm	0	0	0	---
Boron	ppm	5	2	2	---

Depot: LIEMIS
 Unique No: 5760846
 Signed: Wes Davis
 Report Date: 10 Apr 2024

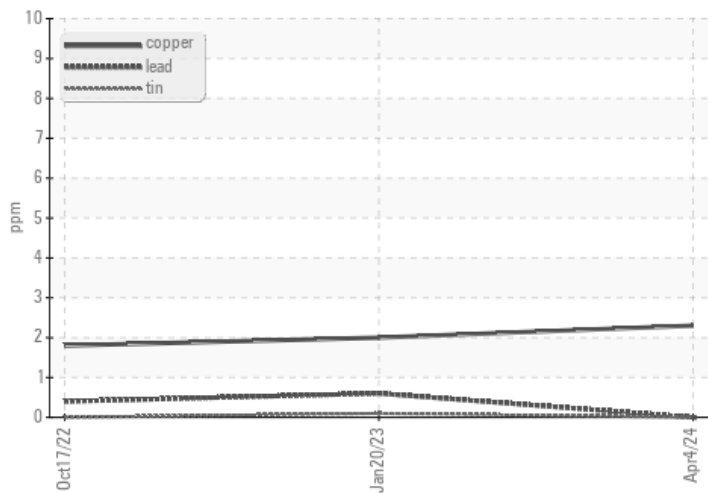


Graphs

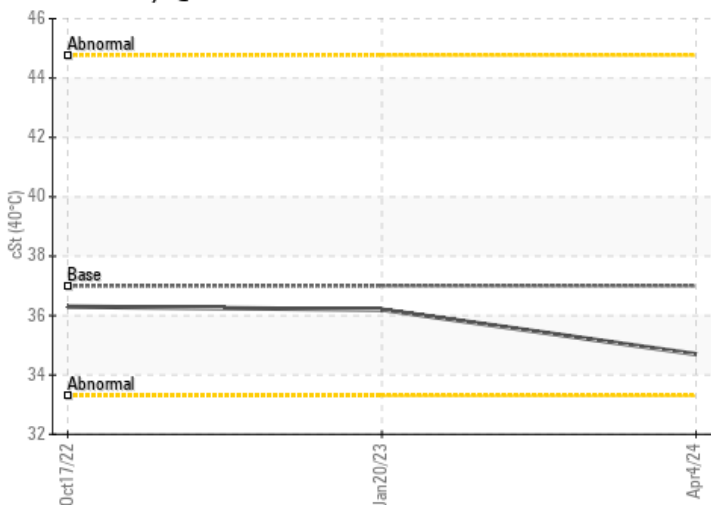
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Particle Count

