

LIEBHERR

CONSTRUCTION EQUIPMENT



116431-1217 - Hydraulic System

Sample No: LH0173444

Oil Type: LIEBHERR HYDRAULIC HVI



SAMPLE INFORMATION

Sample Number	LH0173444	LH0195493	LH0153848	---
Sample Date	22 Apr 2021	08 Apr 2021	23 Dec 2019	---
Machine Hours	3269	3172	559	---
Oil Hours	0	0	0	---
Oil Changed	Not Changd	Not Changd	Not Changd	---
Sample Status	ABNORMAL	ABNORMAL	ATTENTION	---

American Iron and Metal

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OIL CONDITION

Visc @ 40°C	cSt	42.0	41.7	44.9	---
Acid Number (AN)	mg KOH/g	---	---	1.42	---



CONTAMINATION

Particles >4µm		359	41483	23075	---
Particles >6µm		108	8265	237	---
Particles >14µm		12	97	5	---
ISO 4406:1999 (c)		16/14/11	23/20/14	22/15/10	---
Silicon	ppm	2	2	1	---
Sodium	ppm	2	2	0	---
Potassium	ppm	<1	1	1	---

Diagnosis

No corrective action is recommended at this time. We recommend an early resample to monitor this condition. Iron ppm levels are abnormal. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. 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

PQ		0	3	---	---
Iron	ppm	65	68	24	---
Copper	ppm	4	4	2	---
Lead	ppm	<1	<1	<1	---
Tin	ppm	0	<1	0	---
Aluminum	ppm	<1	<1	<1	---
Chromium	ppm	<1	<1	<1	---
Molybdenum	ppm	<1	<1	<1	---
Nickel	ppm	<1	0	0	---
Titanium	ppm	0	0	<1	---
Silver	ppm	<1	<1	0	---
Manganese	ppm	1	1	<1	---
Vanadium	ppm	<1	<1	0	---



ADDITIVES

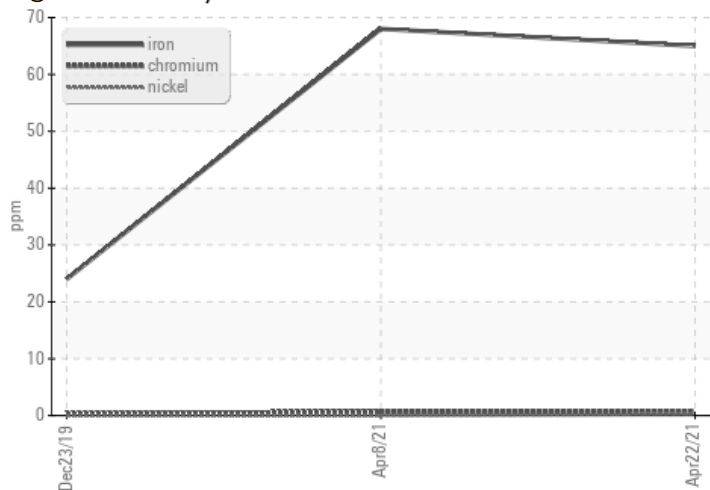
Calcium	ppm	1141	1166	1241	---
Magnesium	ppm	7	7	8	---
Zinc	ppm	715	705	721	---
Phosphorus	ppm	591	577	620	---
Barium	ppm	<1	<1	<1	---
Boron	ppm	<1	<1	<1	---

Depot: BAKOTT
Unique No: 5212623
Signed: Kevin Marson
Report Date: 27 Apr 2021

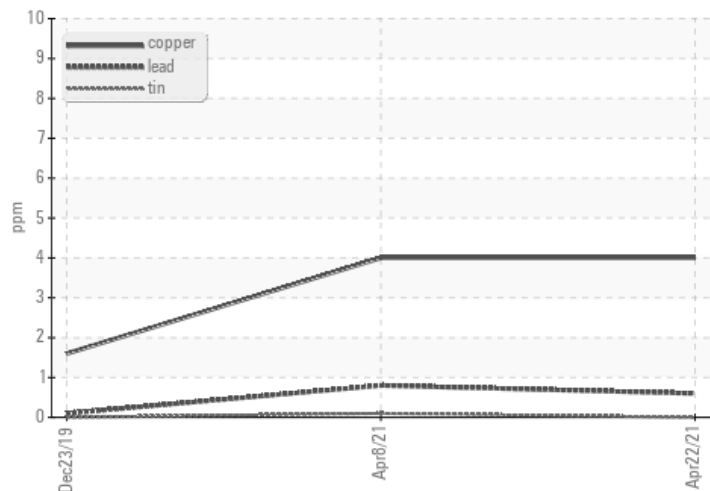


GRAPHS

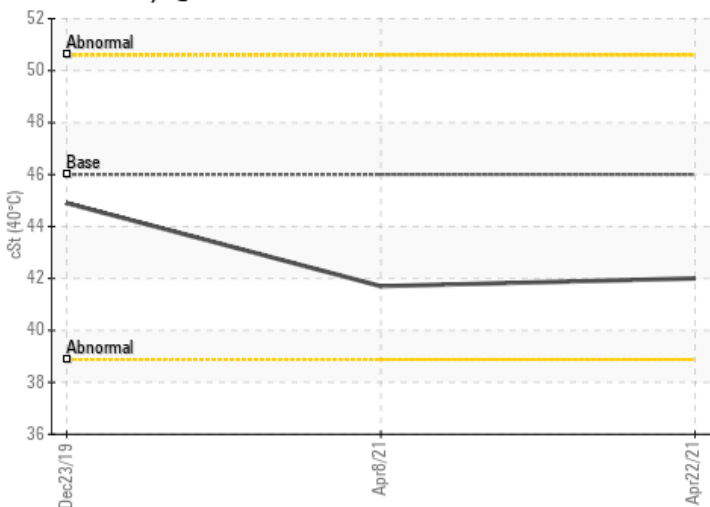
● Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Particle Count

