

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH50 1216-131051 - Hydraulic System

Sample No: LH0213093

Oil Type: LIEBHERR HYDRAULIC HVI



SAMPLE INFORMATION

Sample Number	LH0213093	LH0213023	LH0213107	---
Sample Date	30 Aug 2023	25 Apr 2023	24 Jan 2023	---
Machine Hours	9786	0	7995	---
Oil Hours	0	0	0	---
Oil Changed	Not Changd	Not Changd	Not Changd	---
Sample Status	NORMAL	NORMAL	ATTENTION	---

BOISE WHITE PAPER

3RD AVE AND HWY 11, 400 2ND ST
INTERNATIONAL FALLS, MN
US 56649
Contact: GARY MANN
garymann@packagingcorp.com
T:
F: (218)285-5860



OIL CONDITION

Visc @ 40°C	cSt	30.6	31.9	31.2	---
Acid Number (AN)	mg KOH/g	0.39	0.35	0.35	---



CONTAMINATION

Particles >4µm		2275	7098	18498	---
Particles >6µm		616	2207	5564	---
Particles >14µm		43	201	399	---
ISO 4406:1999 (c)		18/16/13	20/18/15	21/20/16	---
Silicon	ppm	<1	<1	<1	---
Sodium	ppm	0	0	0	---
Potassium	ppm	<1	<1	<1	---

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	3	2	4	---
Copper	ppm	<1	<1	<1	---
Lead	ppm	<1	0	0	---
Tin	ppm	0	0	0	---
Aluminum	ppm	0	0	0	---
Chromium	ppm	0	0	0	---
Molybdenum	ppm	<1	<1	<1	---
Nickel	ppm	0	0	0	---
Titanium	ppm	0	0	0	---
Silver	ppm	0	0	0	---
Manganese	ppm	0	0	0	---
Vanadium	ppm	0	0	0	---



ADDITIVES

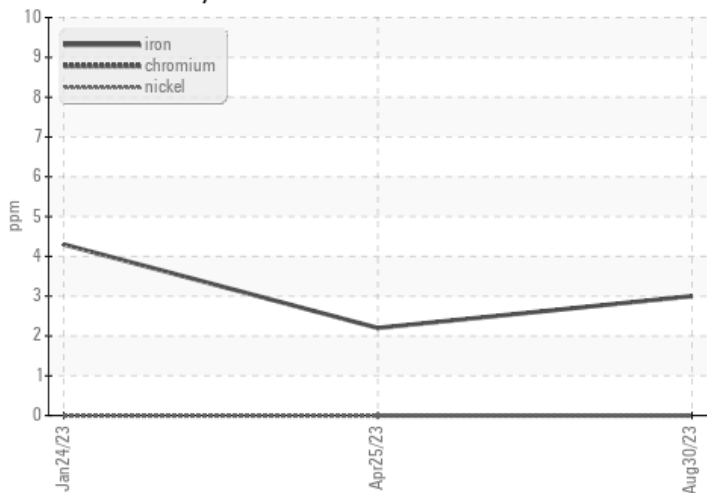
Calcium	ppm	61	65	79	---
Magnesium	ppm	4	4	6	---
Zinc	ppm	434	449	402	---
Phosphorus	ppm	327	327	310	---
Barium	ppm	2	0	<1	---
Boron	ppm	0	0	0	---

Depot: BOIINT
Unique No: 10633557
Signed: Don Baldrige
Report Date: 08 Sep 2023

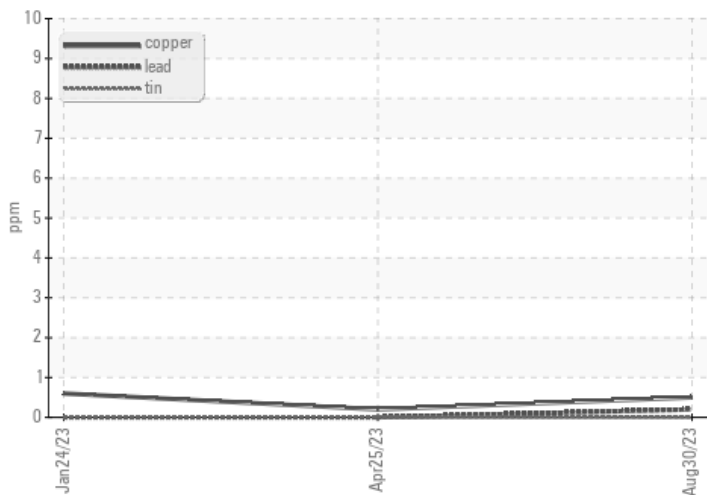


GRAPHS

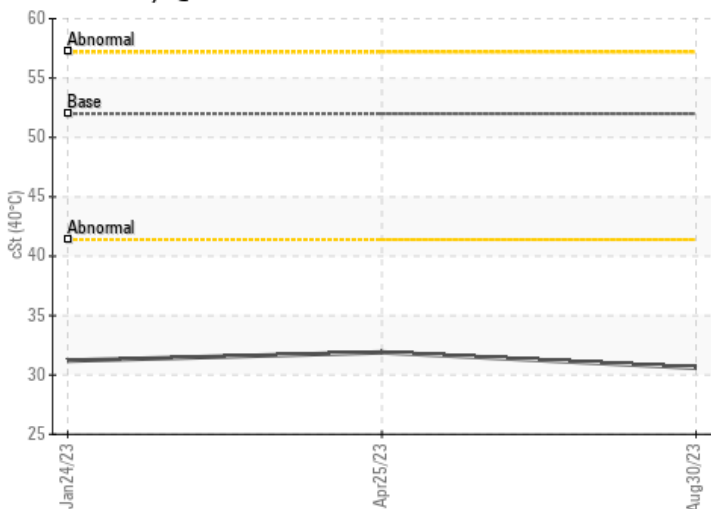
Ferrous Alloys



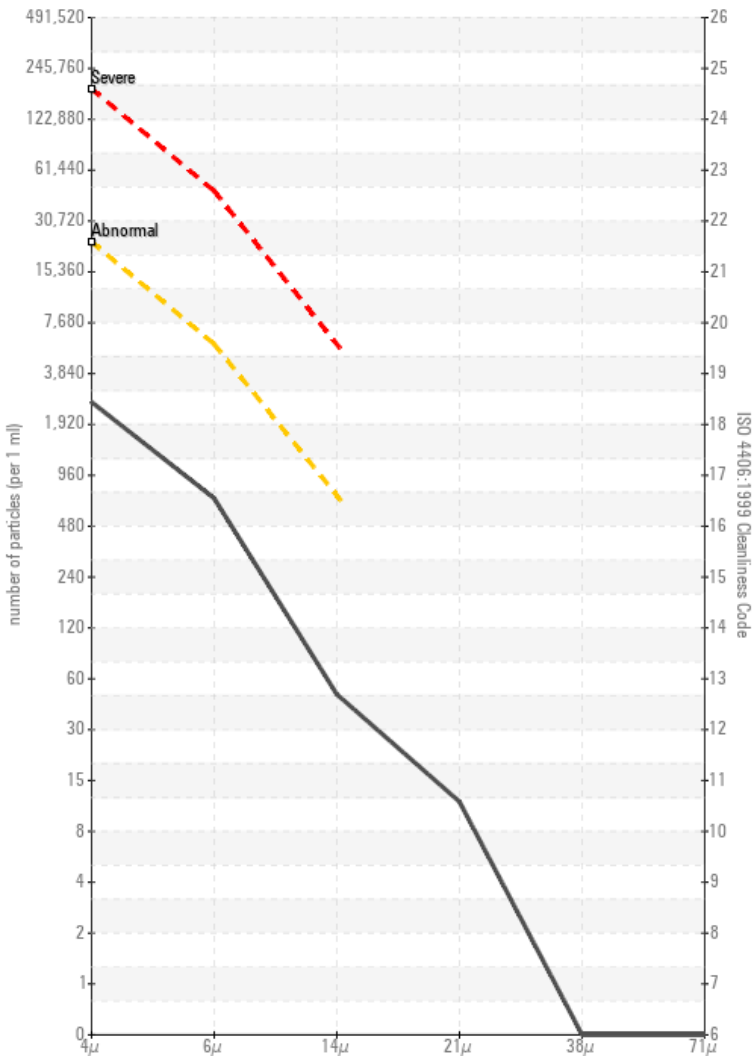
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

