

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR R938 050886-1650 - Hydraulic System

Sample No: LH0258963

Oil Type: LIEBHERR HYDRAULIC HVI



M&F CONCRETE PRODUCTS CO
 4002 CATLETT RD
 CATLETT, VA
 US 20119
 Contact: Service Manager



SAMPLE INFORMATION

Sample Number	LH0258963	LH0243979	---	---
Sample Date	09 Aug 2023	31 Jan 2023	---	---
Machine Hours	1993	575	---	---
Oil Hours	0	0	---	---
Oil Changed	Not Chngd	Not Chngd	---	---
Sample Status	ABNORMAL	NORMAL	---	---



OIL CONDITION

Visc @ 40°C	cSt	41.7	44.2	---	---
Acid Number (AN)	mg KOH/g	1.17	---	---	---

T:
F:



CONTAMINATION

Particles >4µm		46388	18439	---	---
Particles >6µm		10916	2284	---	---
Particles >14µm		425	46	---	---
ISO 4406:1999 (c)		23/21/16	21/18/13	---	---
Silicon	ppm	8	4	---	---
Sodium	ppm	3	1	---	---
Potassium	ppm	2	1	---	---

Diagnosis

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.



WEAR METALS

Iron	ppm	16	9	---	---
Copper	ppm	7	4	---	---
Lead	ppm	1	<1	---	---
Tin	ppm	0	0	---	---
Aluminum	ppm	2	<1	---	---
Chromium	ppm	<1	<1	---	---
Molybdenum	ppm	0	0	---	---
Nickel	ppm	0	0	---	---
Titanium	ppm	0	0	---	---
Silver	ppm	0	<1	---	---
Manganese	ppm	<1	<1	---	---
Vanadium	ppm	0	0	---	---



ADDITIVES

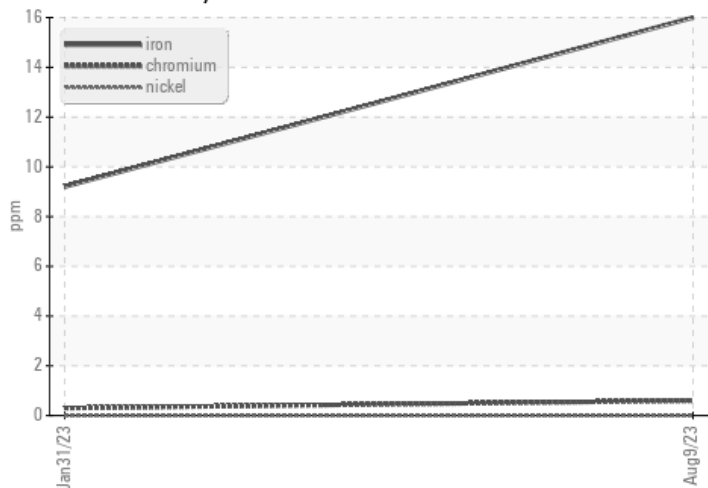
Calcium	ppm	1859	1244	---	---
Magnesium	ppm	8	4	---	---
Zinc	ppm	993	663	---	---
Phosphorus	ppm	821	560	---	---
Barium	ppm	0	0	---	---
Boron	ppm	0	0	---	---

Depot: MECCAT
 Unique No: 10608705
 Signed: Wes Davis
 Report Date: 21 Aug 2023

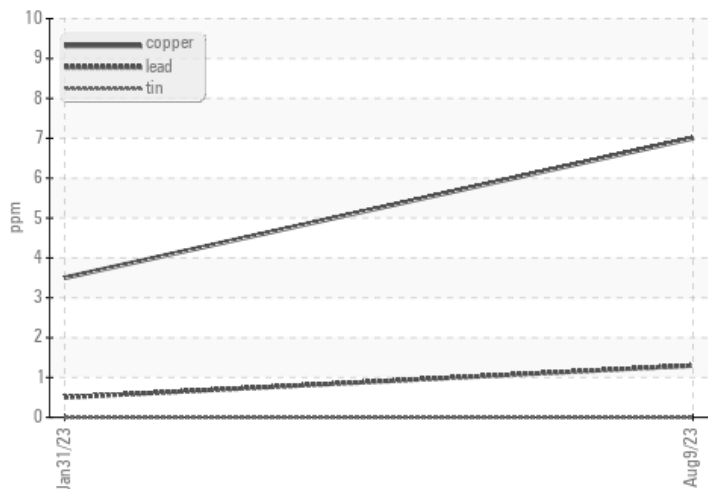


GRAPHS

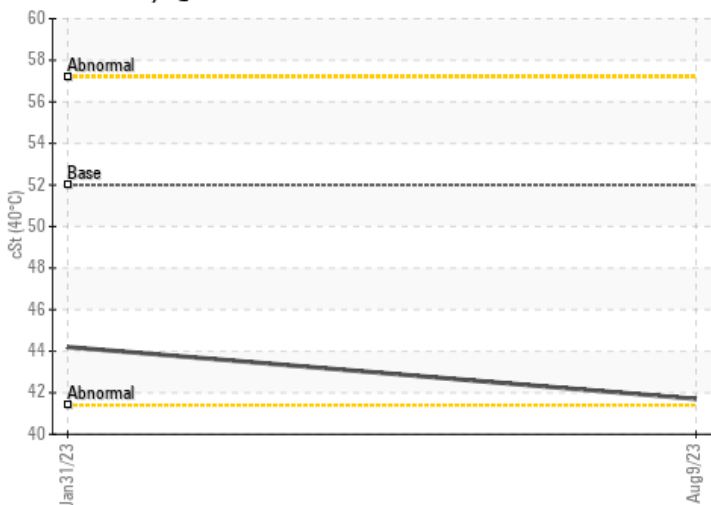
Ferrous Alloys



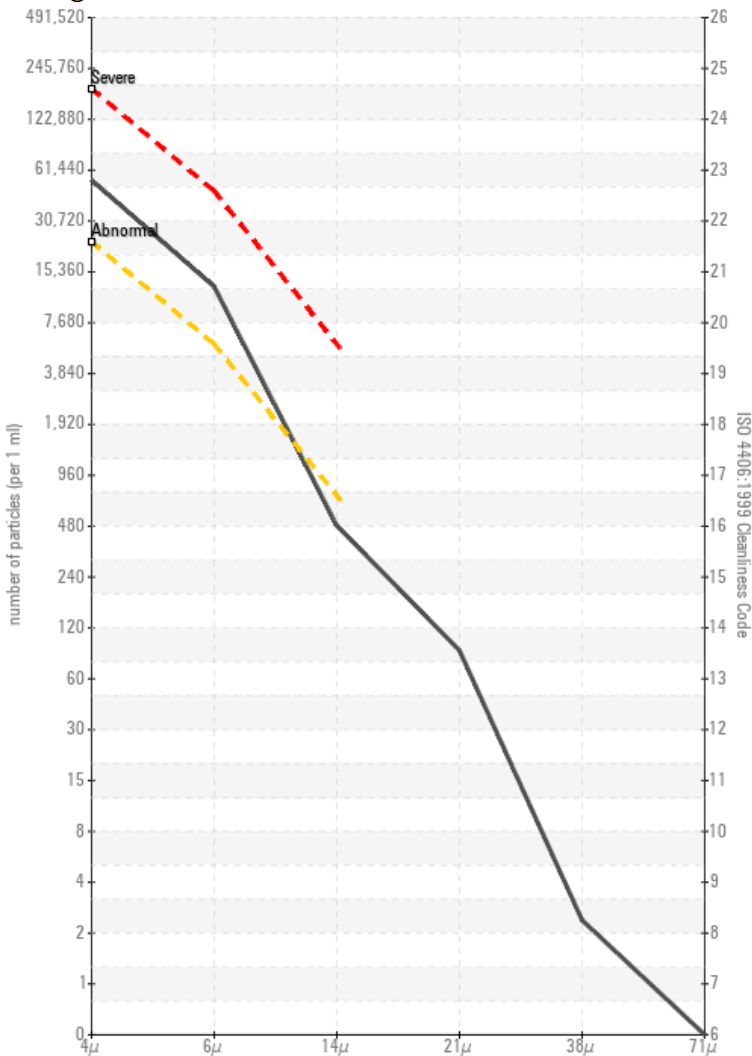
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

