

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR PR776 15946 - Hydraulic System

Sample No: LH0220568

Oil Type: SAE 10W



LIEBHERR MINING EQUIPMENT CO
 5800 S DOUGLAS HWY
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SAMPLE INFORMATION

Sample Number	LH0220568	LHMC147990	---	---
Sample Date	10 May 2023	18 Jul 2019	---	---
Machine Hours	9275	73	---	---
Oil Hours	0	73	---	---
Oil Changed	Not Changd	Not Changd	---	---
Sample Status	ABNORMAL	NORMAL	---	---



OIL CONDITION

Visc @ 40°C	cSt	● 46.2	● 50.0	---	---
Acid Number (AN)	mg KOH/g	● 0.51	● 1.593	---	---



CONTAMINATION

Particles >4µm		● 68544	● 17174	---	---
Particles >6µm		● 11828	● 1681	---	---
Particles >14µm		● 166	● 103	---	---
ISO 4406:1999 (c)		23/21/15	21/18/14	---	---
Silicon	ppm	● 5	● 2	---	---
Sodium	ppm	● 2	● 2	---	---
Potassium	ppm	● 0	● 1	---	---



WEAR METALS

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



ADDITIVES

Calcium	ppm	● 1026	● 1275	---	---
Magnesium	ppm	● 6	● 7	---	---
Zinc	ppm	● 684	● 648	---	---
Phosphorus	ppm	● 564	● 554	---	---
Barium	ppm	● 0	● 0	---	---
Boron	ppm	● 12	● <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.

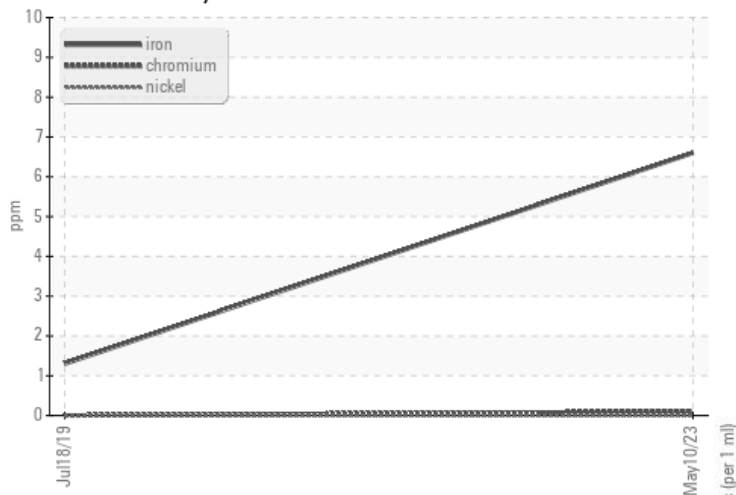
Depot: LIEGIL
 Unique No: 10486514
 Signed: Wes Davis
 Report Date: 26 May 2023

Contact/Location: TED PILZ - LIEGIL

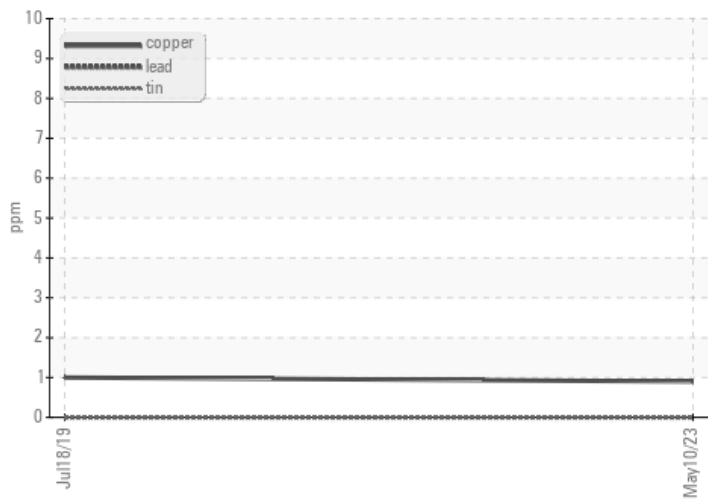


GRAPHS

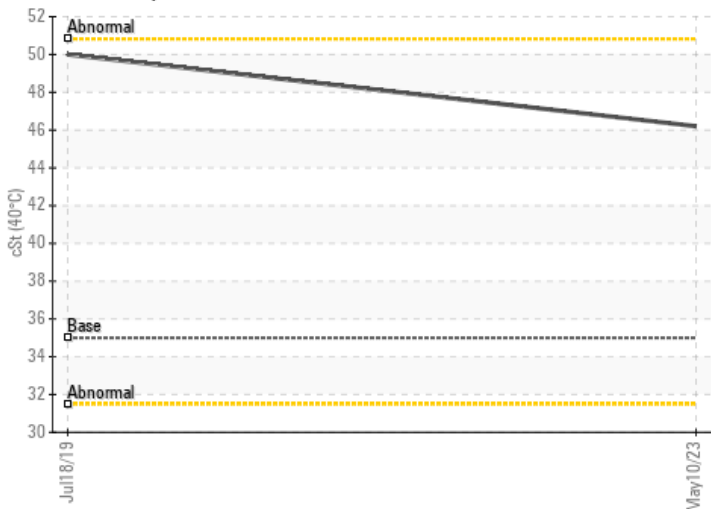
Ferrous Alloys



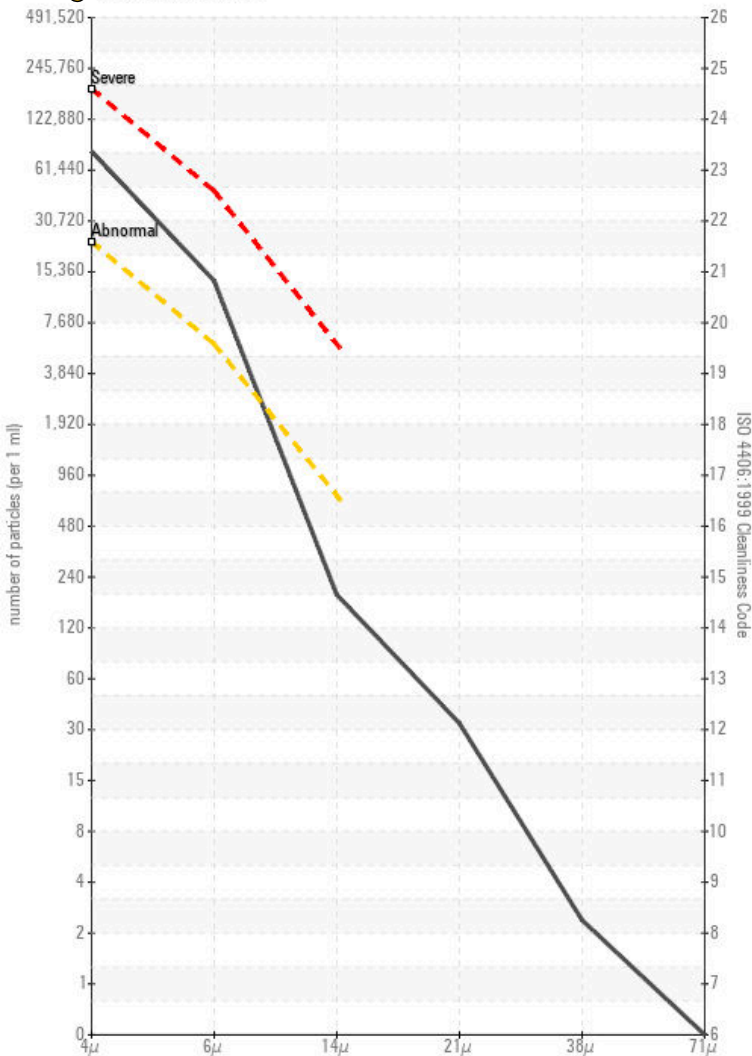
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

