

LIEBHERR

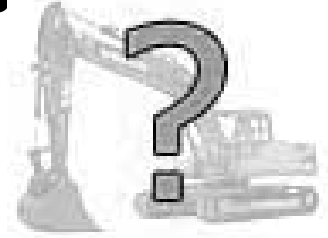
CONSTRUCTION EQUIPMENT



[[FH PACSHEM]] GRADALL XL4100II 140000450 - Hydraulic S

Sample No: LH0254398

Oil Type: THF



SAMPLE INFORMATION

Sample Number	LH0254398	---	---	---
Sample Date	19 Jun 2023	---	---	---
Machine Hours	1700	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Not Chngd	---	---	---
Sample Status	ABNORMAL	---	---	---

FINKBINER EQUIPMENT CO.

15 W 400 N FRONTAGE RD
BURR RIDGE, IL
US 60527
Contact: TROY MILLER
tmiller@finkbiner.com
T: (630)654-3700
F: (630)654-3792



OIL CONDITION

Visc @ 40°C	cSt	46.9	---	---	---
Acid Number (AN)	mg KOH/g	0.79	---	---	---



CONTAMINATION

Particles >4µm		20000	---	---	---
Particles >6µm		2616	---	---	---
Particles >14µm		66	---	---	---
ISO 4406:1999 (c)		21/19/13	---	---	---
Silicon	ppm	12	---	---	---
Sodium	ppm	<1	---	---	---
Potassium	ppm	2	---	---	---

Diagnosis

The filter change at the time of sampling has been noted. 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	6	---	---	---
Copper	ppm	2	---	---	---
Lead	ppm	0	---	---	---
Tin	ppm	<1	---	---	---
Aluminum	ppm	1	---	---	---
Chromium	ppm	<1	---	---	---
Molybdenum	ppm	3	---	---	---
Nickel	ppm	<1	---	---	---
Titanium	ppm	0	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	<1	---	---	---
Vanadium	ppm	0	---	---	---



ADDITIVES

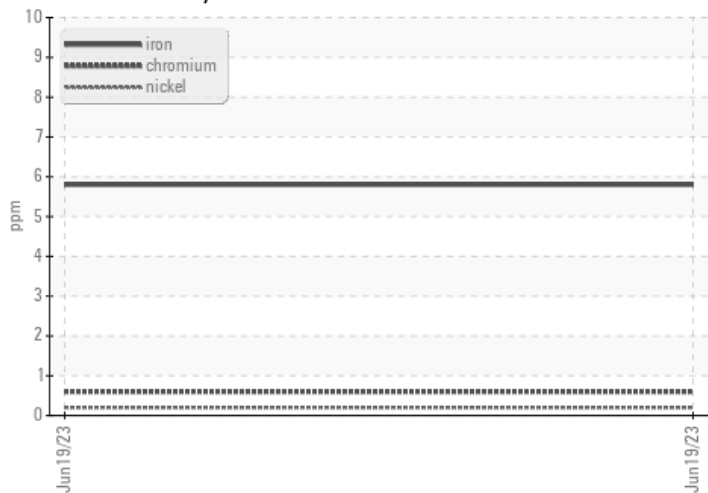
Calcium	ppm	3295	---	---	---
Magnesium	ppm	27	---	---	---
Zinc	ppm	1365	---	---	---
Phosphorus	ppm	1085	---	---	---
Barium	ppm	0	---	---	---
Boron	ppm	123	---	---	---

Depot: LEC0033
Unique No: 10548664
Signed: Wes Davis
Report Date: 10 Jul 2023

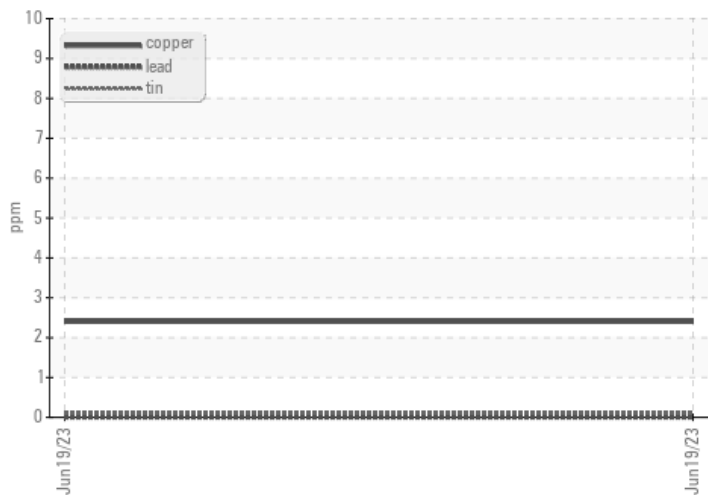


GRAPHS

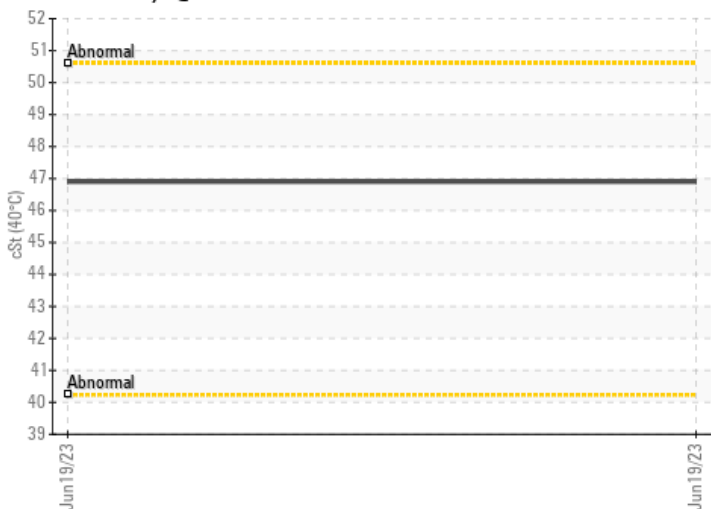
Ferrous Alloys



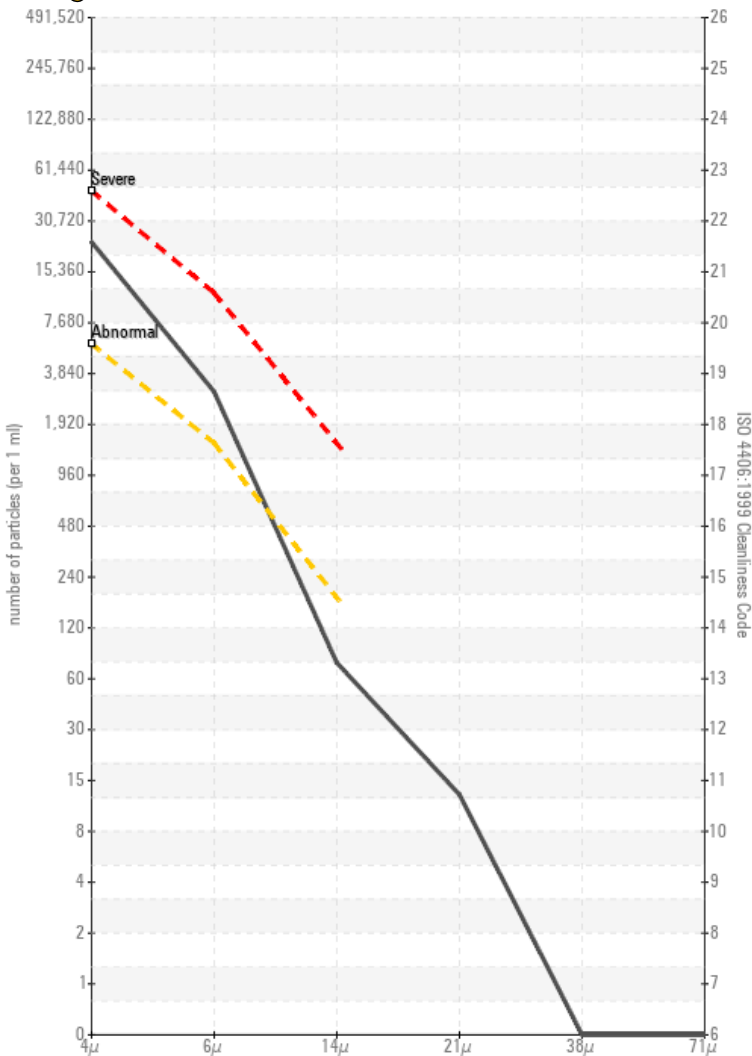
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

