

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR L580 032314 - Hydraulic System

Sample No: LH

Oil Type: IRVING HYDRAULIC OIL ISO 46



SAMPLE INFORMATION

Sample Number	LH	WC0218122	WC0218119	LH0208253
Sample Date	10 Nov 2023	22 Jun 2023	12 May 2023	16 Jan 2023
Machine Hours	15486	15240	15150	14000
Oil Hours	0	0	0	0
Oil Changed	Not Changd	Not Changd	Not Changd	Not Changd
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

HUBERT & FILS

474 ROUTE 105
BOIS-FRANC, QC
CA J9E 3A9

Contact: Eric Brisebois
ericbrisebois99@gmail.com

T:
F:



OIL CONDITION

Visc @ 40°C	cSt	43.5	43.4	44.0	43.7
Acid Number (AN)	mg KOH/g	---	---	---	0.75



CONTAMINATION

Particles >4µm		6001	---	---	11358
Particles >6µm		1388	---	---	823
Particles >14µm		103	---	---	40
ISO 4406:1999 (c)		20/18/14	---	---	21/17/12
Silicon	ppm	2	<1	<1	<1
Sodium	ppm	0	<1	<1	0
Potassium	ppm	0	<1	<1	0



WEAR METALS

Iron	ppm	2	2	1	5
Copper	ppm	<1	<1	<1	<1
Lead	ppm	<1	<1	0	<1
Tin	ppm	0	0	0	0
Aluminum	ppm	<1	<1	<1	<1
Chromium	ppm	0	0	0	<1
Molybdenum	ppm	0	<1	0	0
Nickel	ppm	<1	<1	<1	<1
Titanium	ppm	0	0	0	0
Silver	ppm	<1	0	0	0
Manganese	ppm	0	0	0	0
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	80	109	120	429
Magnesium	ppm	3	3	3	5
Zinc	ppm	432	456	456	533
Phosphorus	ppm	339	399	389	490
Barium	ppm	<1	0	0	0
Boron	ppm	<1	<1	1	0

Diagnosis

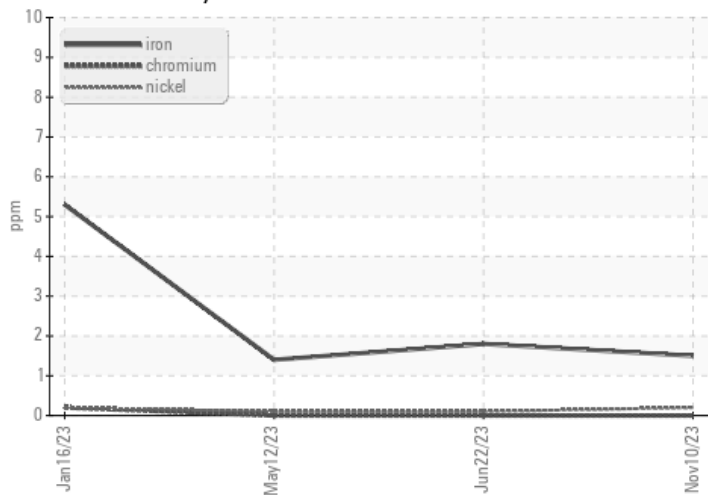
Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

Depot: HUBBOI
Unique No: 5681657
Signed: Wes Davis
Report Date: 16 Nov 2023

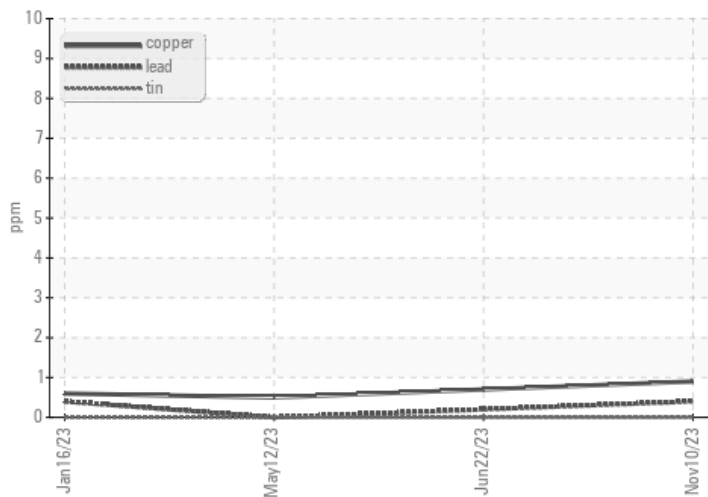


GRAPHS

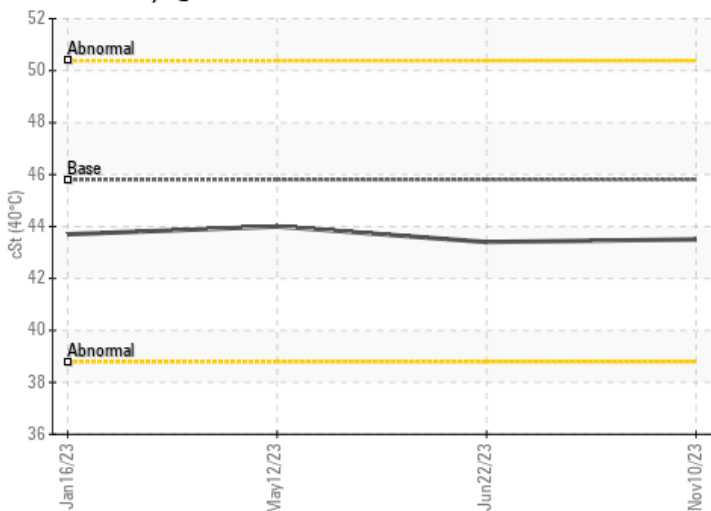
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Particle Count

