

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR R944C 032007-793 - Hydraulic System

Sample No: LH0244633

Oil Type: AW HYDRAULIC OIL ISO 46



SAMPLE INFORMATION

Sample Number	LH0244633	LH0244380	LH0208103	LH0166519
Sample Date	22 Jun 2023	20 Dec 2022	20 Jun 2022	10 Nov 2021
Machine Hours	20967	18650	17245	15682
Oil Hours	0	0	0	0
Oil Changed	Not Changd	Not Changd	Not Changd	Not Changd
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

NILES IRON & METAL CO. INC.

P.O. BOX 166

NILES, OH

US 44446

Contact: CRAIG STINSON

cstinson529@gmail.com;canastasio@wearcheckusa.com

T: (330)652-2262

F: (330)652-1240



OIL CONDITION

Visc @ 40°C	cSt	43.2	44.0	43.4	43.4
Acid Number (AN)	mg KOH/g	0.43	0.43	0.42	0.401



CONTAMINATION

Particles >4µm		5468	19646	4662	3066
Particles >6µm		1002	3969	488	343
Particles >14µm		54	123	27	7
ISO 4406:1999 (c)		20/17/13	21/19/14	19/16/12	19/16/10
Silicon	ppm	<1	0	<1	1
Sodium	ppm	1	<1	2	1
Potassium	ppm	<1	0	0	0

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



WEAR METALS

Iron	ppm	2	3	6	7
Copper	ppm	2	2	3	4
Lead	ppm	0	0	<1	0
Tin	ppm	0	0	0	0
Aluminum	ppm	0	0	<1	<1
Chromium	ppm	4	4	7	8
Molybdenum	ppm	3	2	2	2
Nickel	ppm	0	0	0	0
Titanium	ppm	<1	<1	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	<1	0	<1	<1
Vanadium	ppm	<1	0	0	0



ADDITIVES

Calcium	ppm	143	112	143	179
Magnesium	ppm	43	14	19	25
Zinc	ppm	475	479	502	424
Phosphorus	ppm	388	390	389	369
Barium	ppm	0	0	0	0
Boron	ppm	5	<1	5	7

Depot: NILNIL

Unique No: 10559865

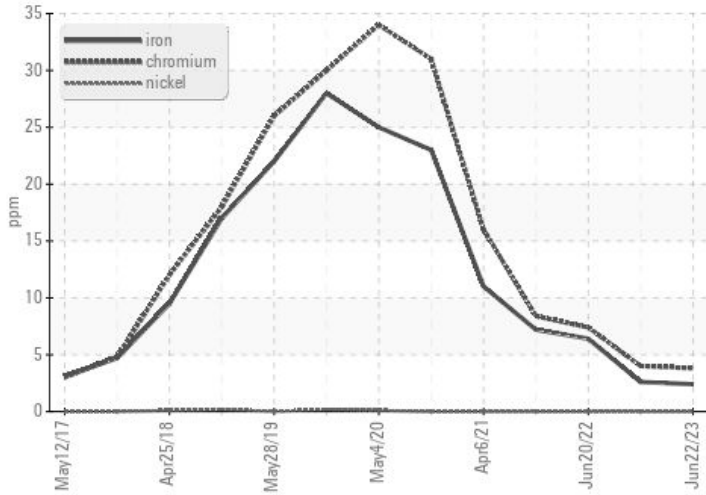
Signed: Jonathan Hester

Report Date: 17 Jul 2023

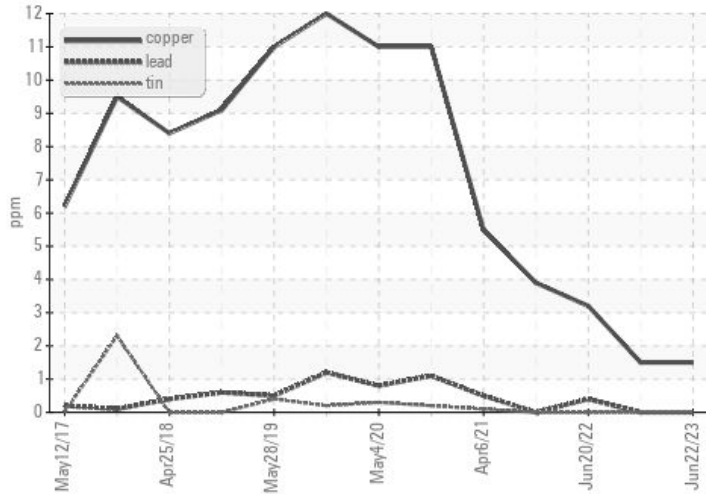


GRAPHS

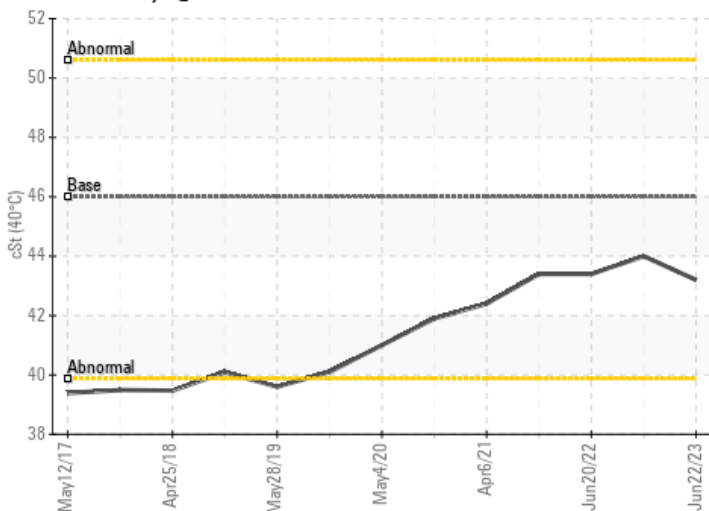
Ferrous Alloys



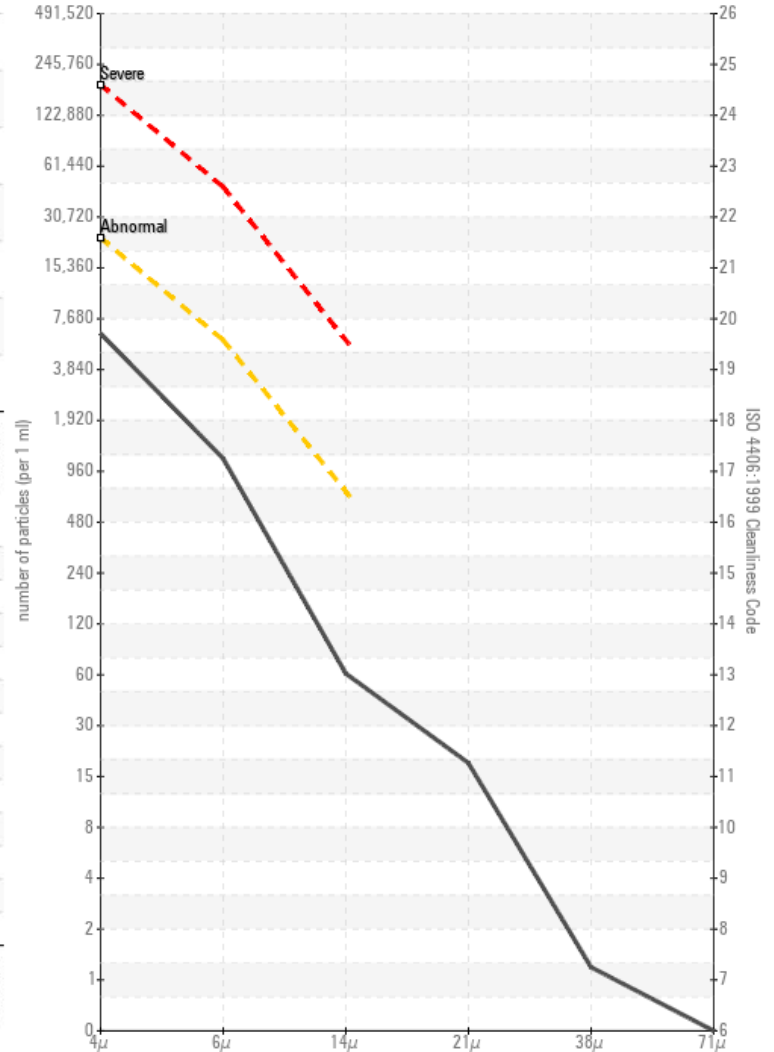
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

