

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH50 1216-115017 - Hydraulic System

Sample No: LH0263958

Oil Type: LIEBHERR HYDRAULIC HVI



SAMPLE INFORMATION

Sample Number	LH0263958	LH0243334	LH0263877	LH0243378
Sample Date	30 Jan 2024	29 Sep 2023	09 Aug 2023	03 Apr 2023
Machine Hours	8879	8189	7823	7172
Oil Hours	0	0	0	0
Oil Changed	Not Changd	Not Changd	Not Changd	Not Changd
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

ALTER RECYCLING

2175 BADGERLAND DR
GREEN BAY, WI
US 54303

Contact: LORI GRAVES

lori.graves@altertrading.com

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F:



OIL CONDITION

Visc @ 40°C	cSt	42.9	42.4	42.3	42.2
Acid Number (AN)	mg KOH/g	0.22	0.44	0.47	0.50



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		1119	772	894	10653
Particles >6µm		239	118	240	774
Particles >14µm		20	9	22	15
ISO 4406:1999 (c)		17/15/11	17/14/10	17/15/12	21/17/11
Silicon	ppm	0	1	1	<1
Sodium	ppm	0	2	<1	1
Potassium	ppm	3	4	4	4

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	17	23	25	23
Copper	ppm	2	3	2	2
Lead	ppm	0	0	0	0
Tin	ppm	0	0	0	0
Aluminum	ppm	2	0	<1	0
Chromium	ppm	<1	2	1	1
Molybdenum	ppm	4	6	6	6
Nickel	ppm	0	0	0	0
Titanium	ppm	<1	<1	0	<1
Silver	ppm	0	0	0	0
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	163	209	205	201
Magnesium	ppm	29	34	31	33
Zinc	ppm	486	488	511	495
Phosphorus	ppm	357	397	412	392
Barium	ppm	5	0	0	0
Boron	ppm	7	11	10	12

Depot: ALTGRE

Unique No: 10869405

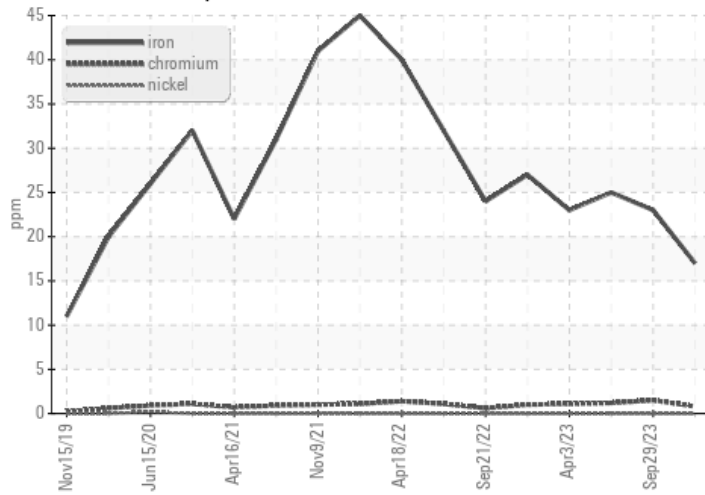
Signed: Don Baldrige

Report Date: 08 Feb 2024

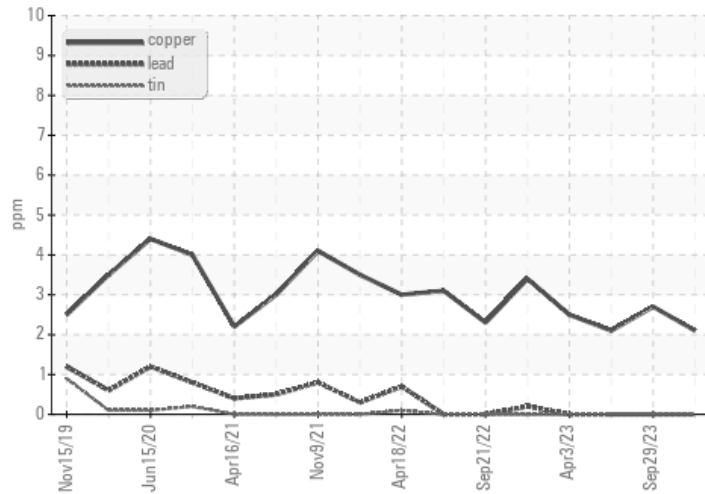


GRAPHS

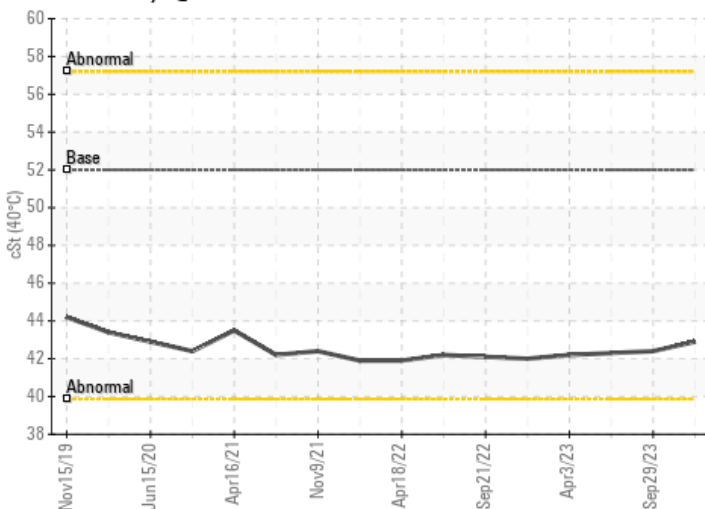
Ferrous Alloys



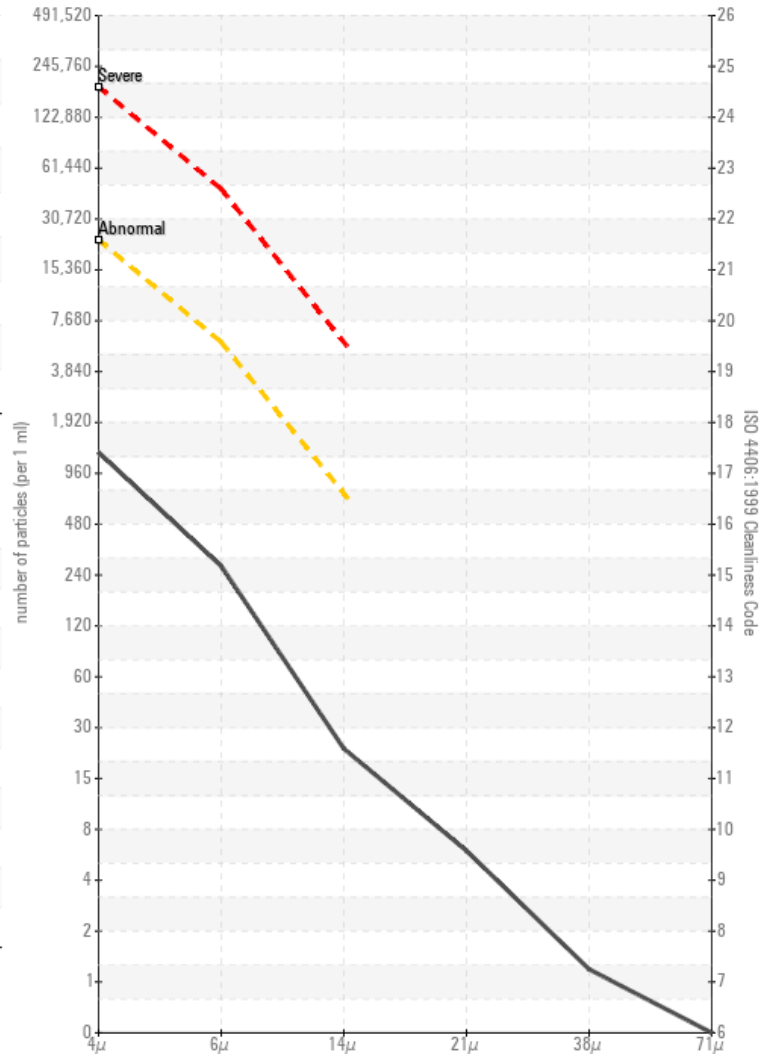
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

