

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR A904 052442-1071 - Hydraulic System

Sample No: LH0268147

Oil Type: LIEBHERR HYDRAULIC HVI



#### SAMPLE INFORMATION

Sample Number	LH0268147	LHMC133733	LHMC84194	LHMC84197
Sample Date	04 Mar 2024	09 May 2023	13 Dec 2017	13 Dec 2017
Machine Hours	14220	12694	4318	4318
Oil Hours	0	0	0	0
Oil Changed	N/A	Not Changd	Not Changd	Not Changd
Sample Status	ABNORMAL	ABNORMAL	NORMAL	NORMAL

#### SCRAP INTERNATIONAL

940 150TH ST  
HAMMOND, IN  
US 46327  
Contact: RICK BARLAGE



#### OIL CONDITION

Visc @ 40°C	cSt	43.6	42.6	43.76	43.53
Acid Number (AN)	mg KOH/g	0.34	0.23	0.624	0.675

T: (219)689-0412

F:



#### CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		43977	118132	9744	5774
Particles >6µm		1690	22419	948	776
Particles >14µm		16	372	37	39
ISO 4406:1999 (c)		23/18/11	24/22/16	20/17/12	20/17/12
Silicon	ppm	0	2	1	2
Sodium	ppm	<1	0	3	3
Potassium	ppm	0	2	1	8

#### Diagnosis

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present 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	11	27	11	11
Copper	ppm	2	8	10	10
Lead	ppm	0	<1	1	2
Tin	ppm	0	0	0	0
Aluminum	ppm	0	0	<1	<1
Chromium	ppm	14	21	5	5
Molybdenum	ppm	0	0	0	0
Nickel	ppm	<1	0	<1	0
Titanium	ppm	0	0	0	<1
Silver	ppm	0	0	0	0
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	0	0	0	0



#### ADDITIVES

Calcium	ppm	29	21	740	761
Magnesium	ppm	0	1	4	4
Zinc	ppm	410	380	489	500
Phosphorus	ppm	352	326	390	400
Barium	ppm	0	0	0	0
Boron	ppm	0	0	2	3

Depot: SCRHAM

Unique No: 10942790

Signed: Don Baldrige

Report Date: 28 Mar 2024

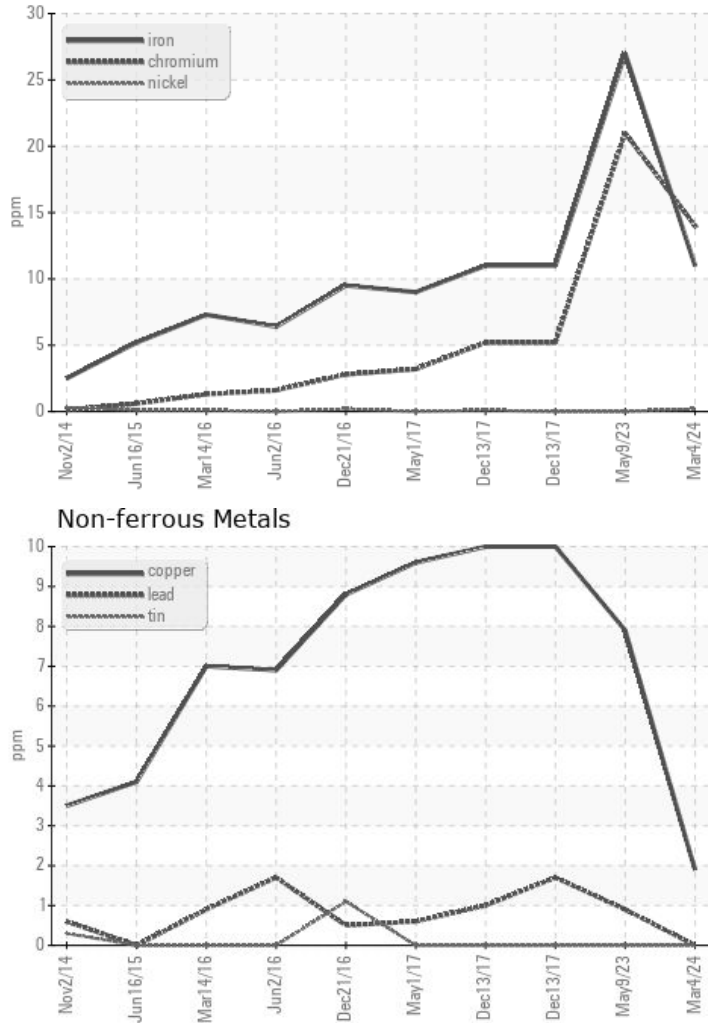
# LIEBHERR

## CONSTRUCTION EQUIPMENT

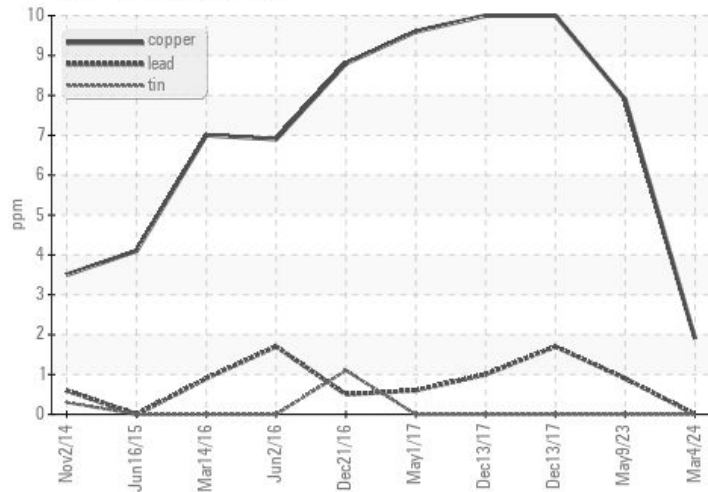


### GRAPHS

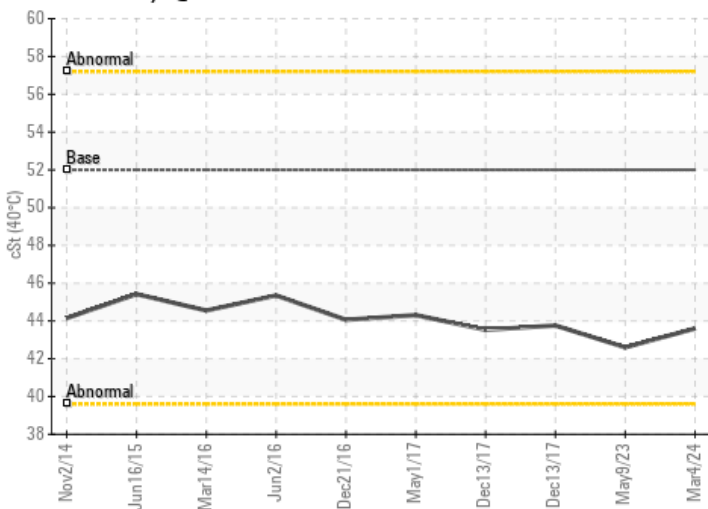
Ferrous Alloys



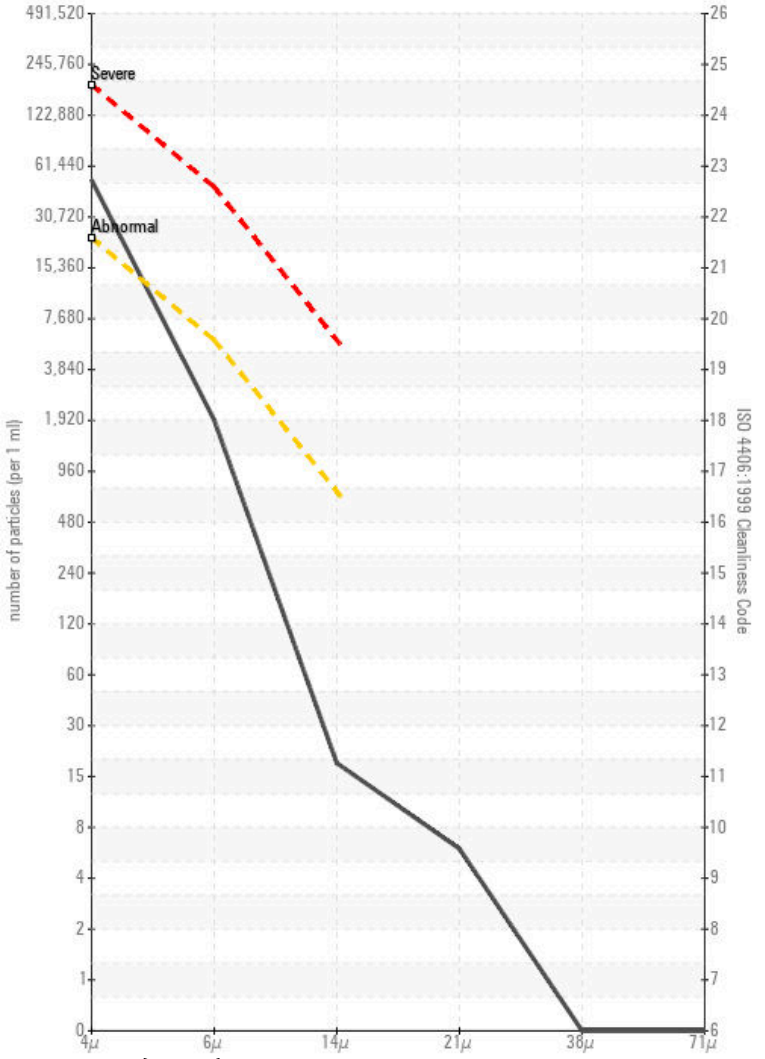
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

