

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR L556 055501-1332 - Hydraulic System

Sample No: LH0254716

Oil Type: LIEBHERR HYDRAULIC HVI



SAMPLE INFORMATION

Sample Number	LH0254716	LH0254851	LH0220832	LH0207902
Sample Date	24 Sep 2023	22 Feb 2023	12 Aug 2022	27 Jan 2022
Machine Hours	6554	5381	4360	3121
Oil Hours	0	0	0	0
Oil Changed	N/A	Not Changd	Not Changd	Not Changd
Sample Status	NORMAL	ATTENTION	ABNORMAL	ABNORMAL

INTERSTATE POWER SYSTEMS

407 ADVENTURLAND DR NE
ALTOONA, IA

US 50009

Contact: DALTON JOHNSON

dalton.johnson@istate.com

T: (515)957-3300

F:



OIL CONDITION

Visc @ 40°C	cSt	42.2	40.3	43.0	42.0
Acid Number (AN)	mg KOH/g	0.51	0.71	0.64	0.52



CONTAMINATION

Particles >4µm		19181	27685	52959	47385
Particles >6µm		4427	2715	6925	8591
Particles >14µm		215	91	311	686
ISO 4406:1999 (c)		21/19/15	22/19/14	23/20/15	23/20/17
Silicon	ppm	4	3	3	4
Sodium	ppm	4	0	<1	<1
Potassium	ppm	1	1	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	8	7	10	16
Copper	ppm	2	1	2	3
Lead	ppm	<1	<1	2	3
Tin	ppm	<1	0	0	<1
Aluminum	ppm	<1	1	1	2
Chromium	ppm	2	2	2	2
Molybdenum	ppm	6	6	5	5
Nickel	ppm	0	0	0	0
Titanium	ppm	0	0	0	<1
Silver	ppm	0	0	<1	0
Manganese	ppm	<1	0	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	453	397	406	442
Magnesium	ppm	55	49	68	61
Zinc	ppm	572	535	535	535
Phosphorus	ppm	461	432	454	432
Barium	ppm	0	2	0	0
Boron	ppm	11	8	0	11

Depot: INTALT

Unique No: 10661744

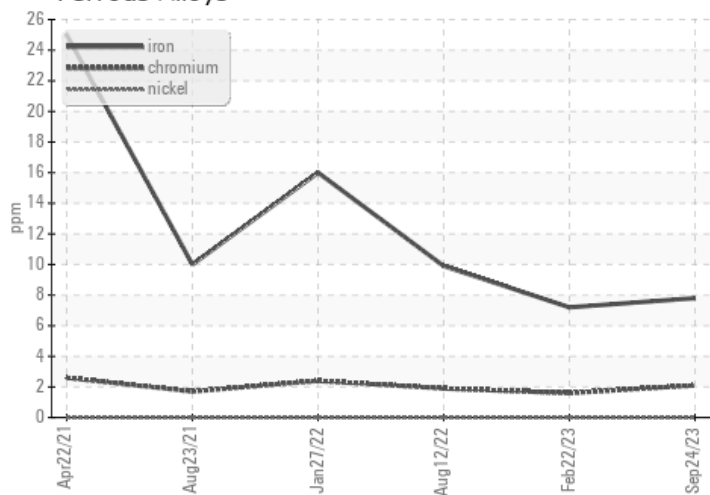
Signed: Don Baldrige

Report Date: 27 Sep 2023

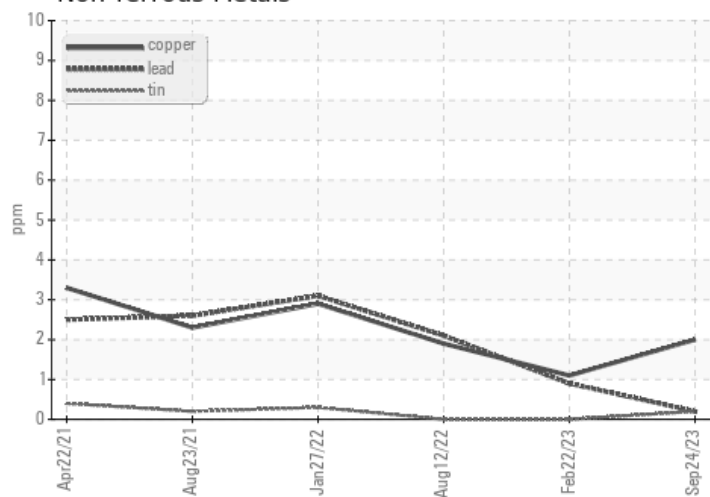


GRAPHS

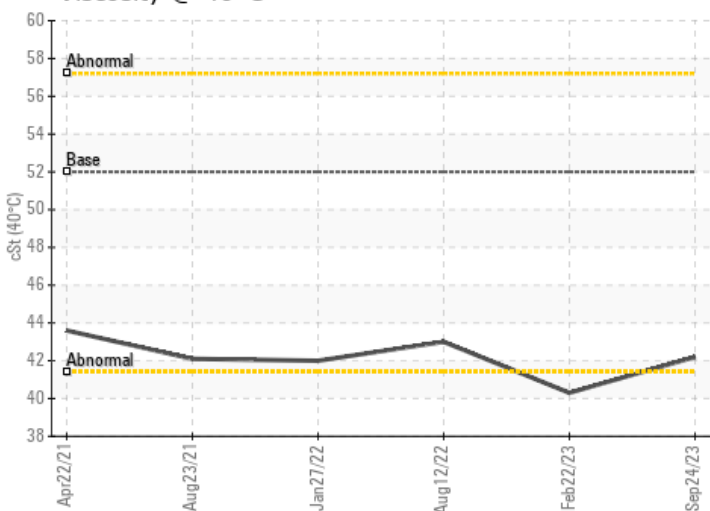
Ferrous Alloys



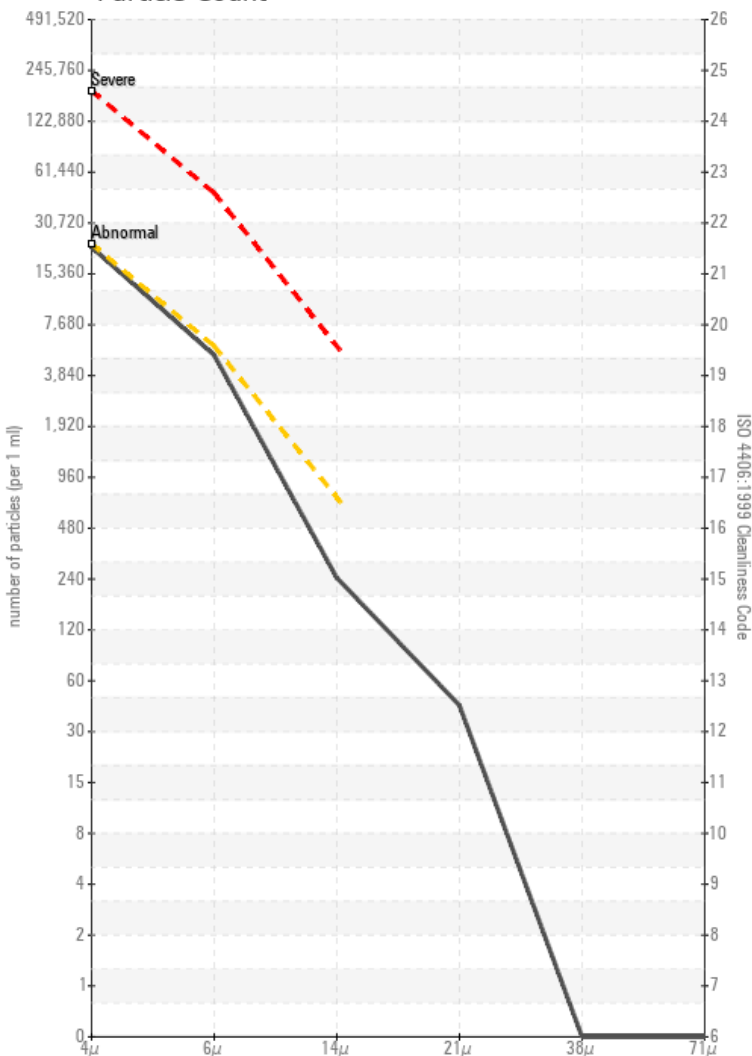
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

