

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR A934CHD 062713-1419 - Hydraulic System

Sample No: LH0229492

Oil Type: NOT GIVEN



METAL RECYCLING SERVICES - GASTONIA
5401 S YORK HWY
GASTONIA, NC
US 28052
Contact: RYAN BOWDEN

T:
F: (704)864-9863



SAMPLE INFORMATION

Sample Number	LH0229492	DJJ0011188	DJJ0011067	DJJ028815
Sample Date	12 Jul 2023	09 Feb 2023	01 Sep 2021	22 Jun 2018
Machine Hours	12515	12363	10921	8148
Oil Hours	0	12363	500	0
Oil Changed	N/A	Not Changd	Not Changd	N/A
Sample Status	NORMAL	NORMAL	ABNORMAL	ABNORMAL



OIL CONDITION

Visc @ 40°C	cSt	46.7	47.9	66.3	60.34
Acid Number (AN)	mg KOH/g	0.51	0.46	0.502	0.600



CONTAMINATION

Particles >4µm		5505	8028	75742	63757
Particles >6µm		1243	1318	7281	4105
Particles >14µm		81	104	136	91
ISO 4406:1999 (c)		20/17/14	20/18/14	23/20/14	23/19/14
Silicon	ppm	2	2	6	3
Sodium	ppm	6	4	12	22
Potassium	ppm	14	16	35	74



WEAR METALS

Iron	ppm	7	7	6	18
Copper	ppm	1	<1	<1	2
Lead	ppm	0	0	<1	0
Tin	ppm	0	0	0	<1
Aluminum	ppm	2	0	1	<1
Chromium	ppm	0	<1	<1	1
Molybdenum	ppm	19	19	42	24
Nickel	ppm	0	0	0	<1
Titanium	ppm	<1	0	<1	<1
Silver	ppm	0	0	<1	0
Manganese	ppm	<1	0	<1	<1
Vanadium	ppm	<1	0	<1	0



ADDITIVES

Calcium	ppm	410	382	953	989
Magnesium	ppm	54	47	106	55
Zinc	ppm	417	386	350	380
Phosphorus	ppm	368	331	357	329
Barium	ppm	0	1	0	<1
Boron	ppm	32	33	85	68

Diagnosis

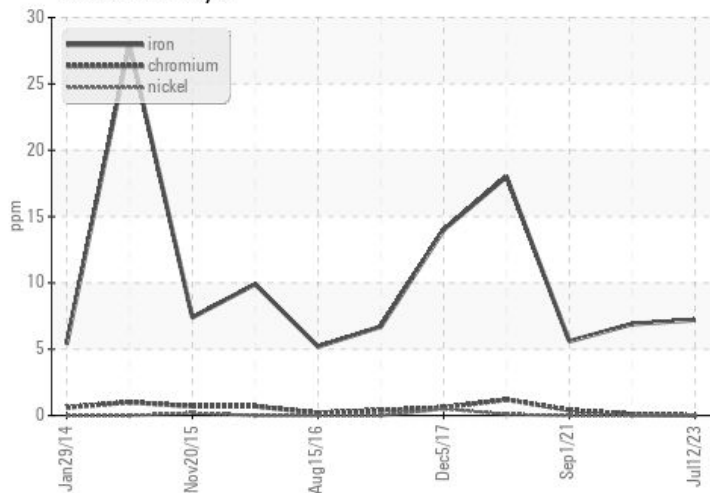
Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for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

Depot: METGAS
Unique No: 10562581
Signed: Angela Borella
Report Date: 19 Jul 2023

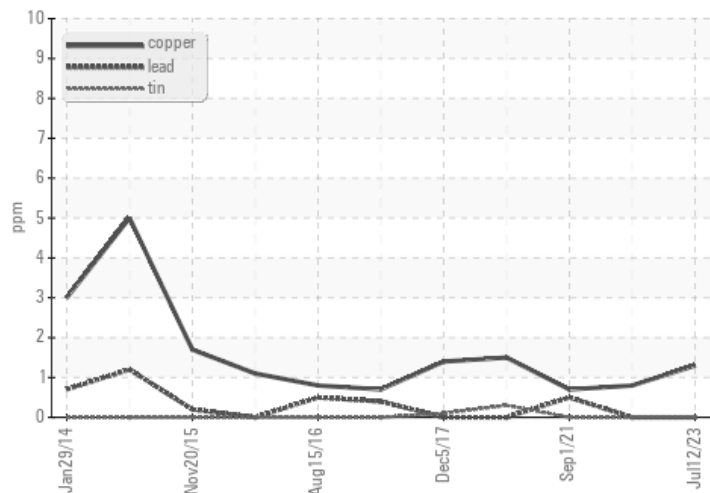


GRAPHS

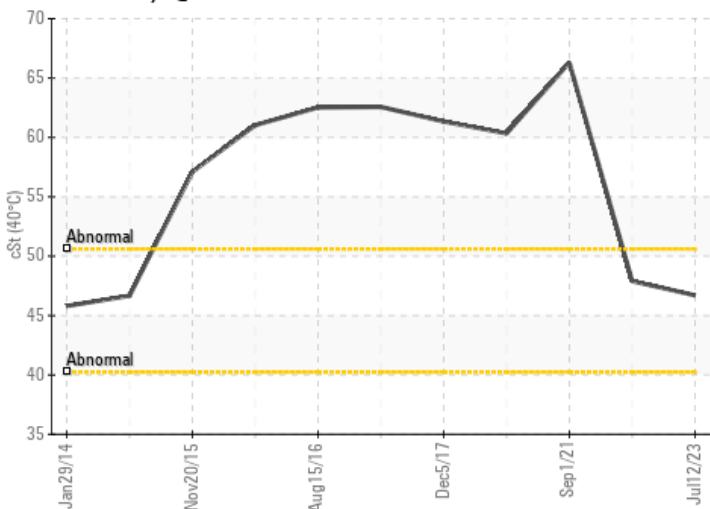
Ferrous Alloys



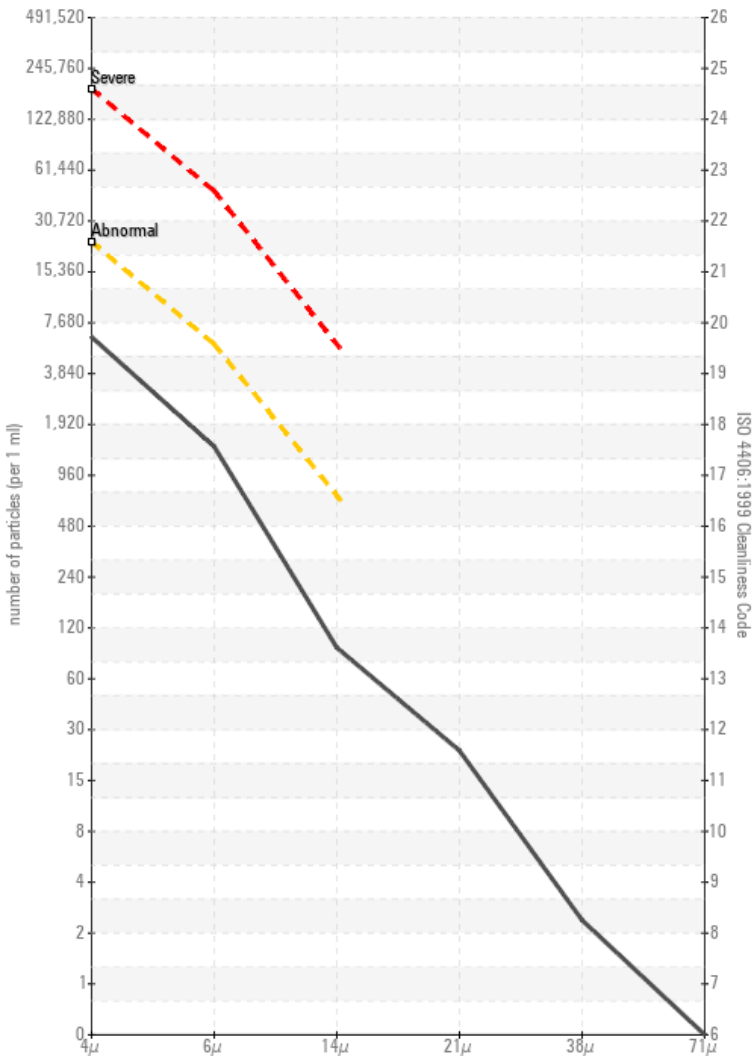
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

