

LIEBHERR

CONSTRUCTION EQUIPMENT



021388-783 LIEBHERR R954 021388-783 - Hydraulic System

Sample No: DJJ0017614

Oil Type: MV 46



SAMPLE INFORMATION

Sample Number	DJJ0017614	DJJ0016561	DJJ0004619	DJJ0004070
Sample Date	25 Oct 2023	15 Feb 2023	14 Jun 2021	24 Jan 2021
Machine Hours	4778	3842	1322	2007
Oil Hours	0	0	0	0
Oil Changed	Not Changd	Not Changd	Not Changd	Not Changd
Sample Status	NORMAL	ATTENTION	NORMAL	NORMAL

RIVER METALS RECYCLING - NEWPORT
P.O. BOX 72-220
NEWPORT, KY
US 41072
Contact: RYAN BOWDEN



OIL CONDITION

Visc @ 40°C	cSt	43.2	43.3	43.6	46.2
Acid Number (AN)	mg KOH/g	0.37	0.37	0.321	0.389

T:
F: (859)291-0086



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		7149	20450	6421	2527
Particles >6µm		1291	3501	546	526
Particles >14µm		81	119	16	47
ISO 4406:1999 (c)		20/17/14	22/19/14	20/16/11	19/16/13
Silicon	ppm	<1	<1	<1	<1
Sodium	ppm	0	0	<1	0
Potassium	ppm	2	2	0	0

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



WEAR METALS

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



ADDITIVES

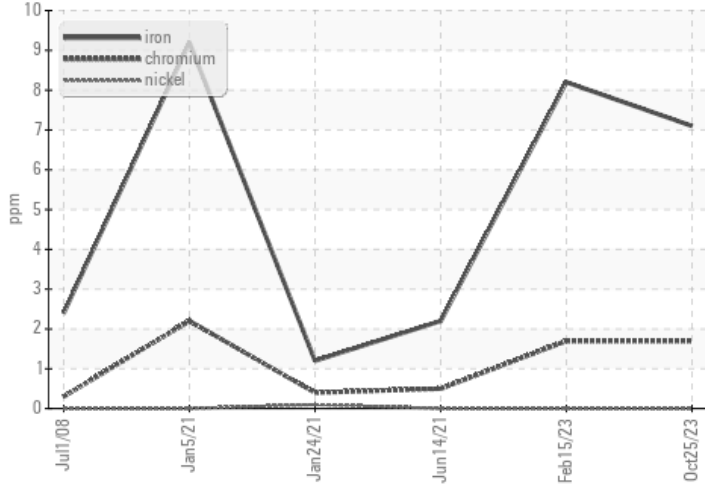
Calcium	ppm	83	88	85	70
Magnesium	ppm	9	12	12	11
Zinc	ppm	464	466	464	454
Phosphorus	ppm	370	355	364	351
Barium	ppm	0	0	0	0
Boron	ppm	0	1	7	0

Depot: RIVNEW
Unique No: 10715459
Signed: Wes Davis
Report Date: 31 Oct 2023

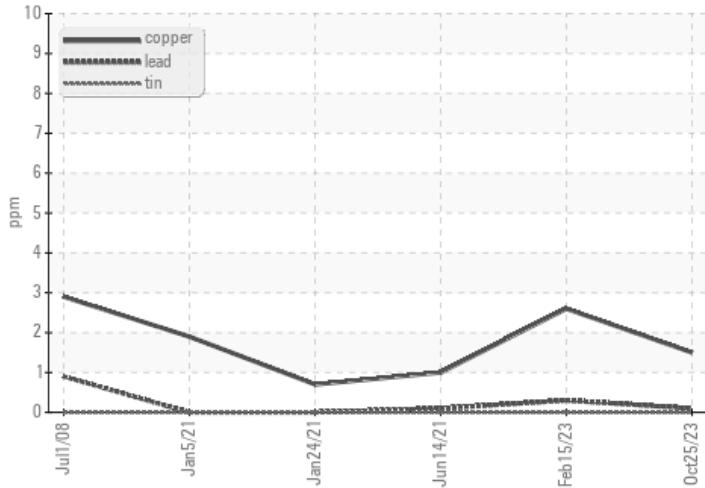


GRAPHS

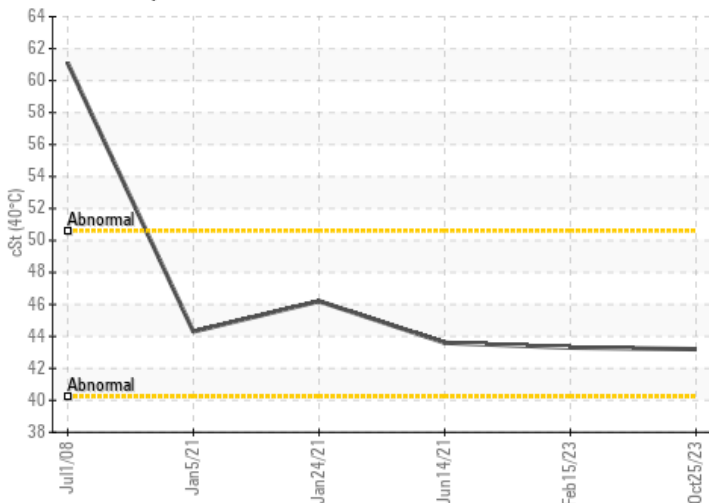
Ferrous Alloys



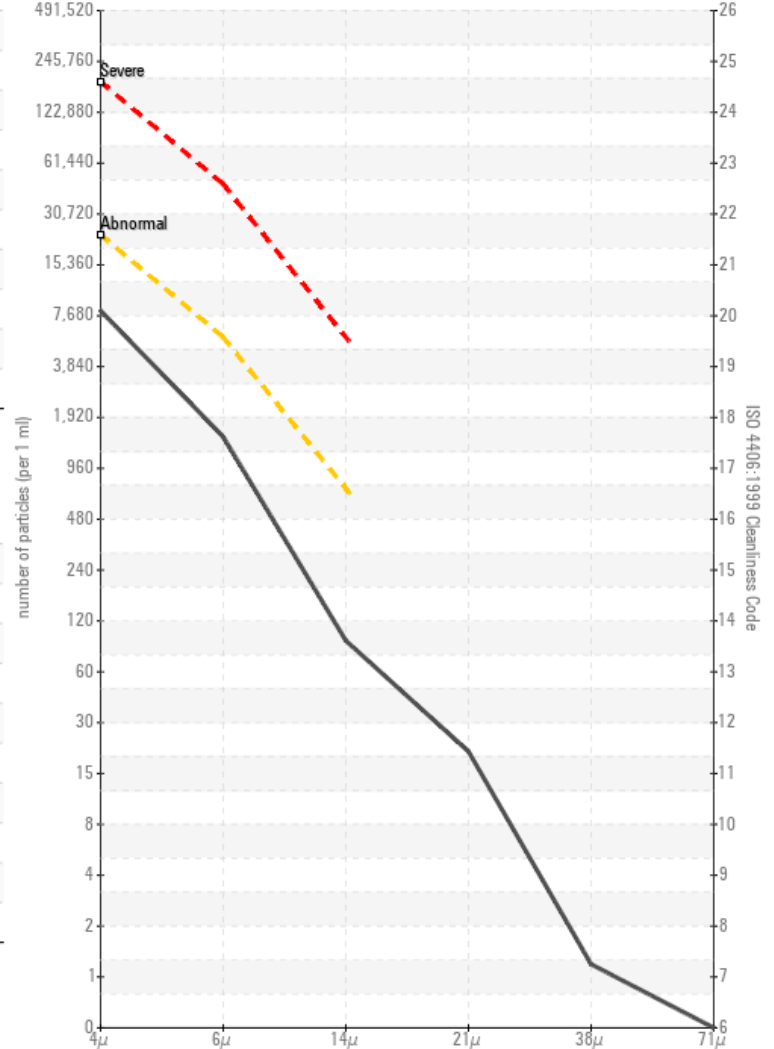
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

