

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR L566 1332-62108 - Hydraulic System

Sample No: LH0264011

Oil Type: CHEVRON RANDO HD 46



SAMPLE INFORMATION

Sample Number	LH0264011	LH0176283	LH0236719	LH0231326
Sample Date	16 Aug 2023	23 Mar 2023	11 Jan 2023	29 Sep 2022
Machine Hours	6834	5480	0	3484
Oil Hours	0	0	0	0
Oil Changed	Not Changd	Not Changd	Changed	Changed
Sample Status	ATTENTION	NORMAL	ABNORMAL	SEVERE

ALTER SCRAP

1640 BRUCE STREET
MILWAUKEE, WI
US 53227
Contact: JEFF KOENIGS



OIL CONDITION

Visc @ 40°C	cSt	55.9	48.2	45.4	48.1
Acid Number (AN)	mg KOH/g	0.37	0.40	0.51	0.69

T: 541-8700
F: (414)541-1892



CONTAMINATION

Water	%	---	---	0.296	1.09
Particles >4µm		16422	9946	1003	---
Particles >6µm		1331	707	546	---
Particles >14µm		31	27	93	---
ISO 4406:1999 (c)		21/18/12	20/17/12	17/16/14	---
Silicon	ppm	<1	2	<1	0
Sodium	ppm	<1	<1	0	2
Potassium	ppm	<1	0	1	0

Diagnosis

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. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The oil viscosity is higher than normal. The AN level is acceptable for this fluid.



WEAR METALS

Iron	ppm	4	7	13	15
Copper	ppm	<1	2	5	8
Lead	ppm	2	1	4	6
Tin	ppm	<1	0	0	0
Aluminum	ppm	<1	<1	0	<1
Chromium	ppm	<1	4	3	2
Molybdenum	ppm	3	3	2	3
Nickel	ppm	0	0	0	0
Titanium	ppm	<1	0	<1	0
Silver	ppm	0	0	0	<1
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	0	0	0



ADDITIVES

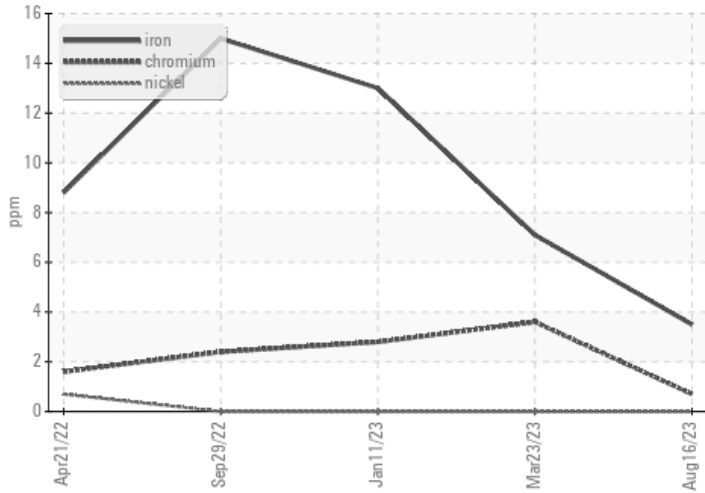
Calcium	ppm	148	164	194	314
Magnesium	ppm	24	20	14	23
Zinc	ppm	446	461	471	514
Phosphorus	ppm	360	372	359	431
Barium	ppm	0	0	0	0
Boron	ppm	3	3	<1	<1

Depot: ALTMILWI
Unique No: 10630761
Signed: Don Baldrige
Report Date: 05 Sep 2023

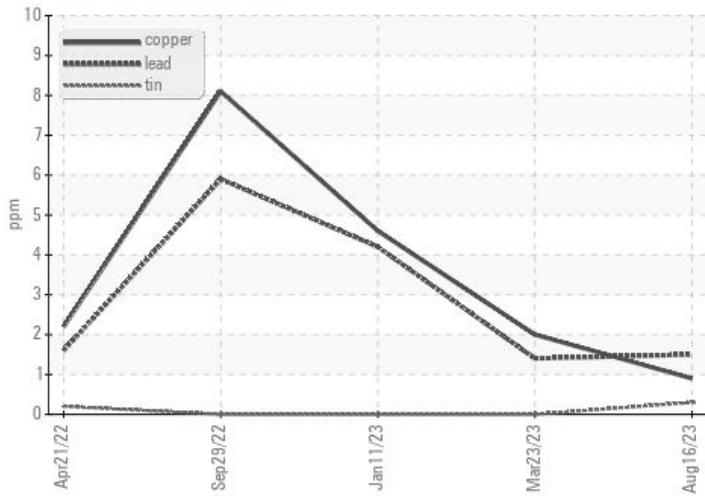


GRAPHS

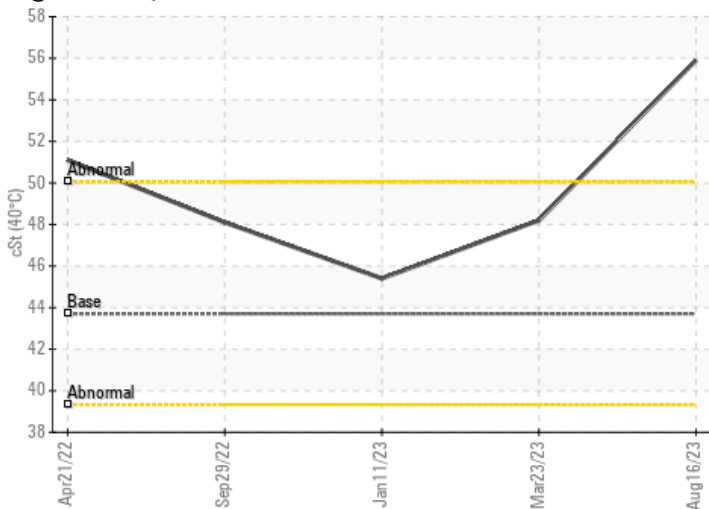
Ferrous Alloys



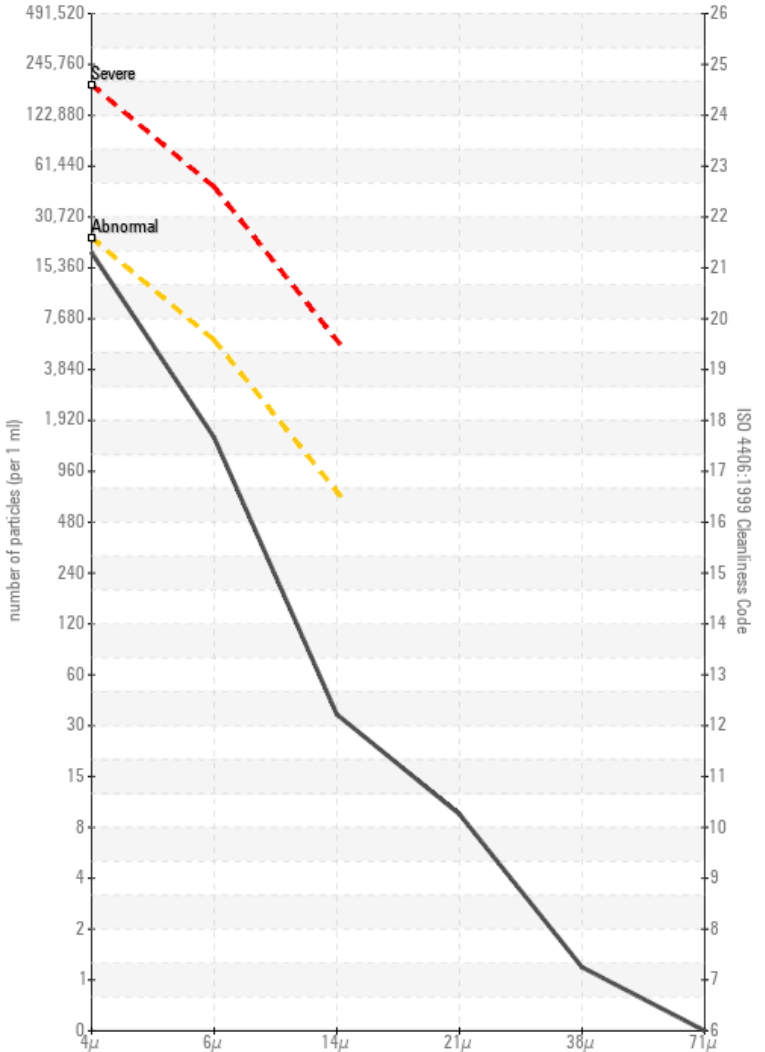
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

