

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR L538 053298-1559 - Hydraulic System

Sample No: LH0276127

Oil Type: AW HYDRAULIC OIL ISO 46



#### SAMPLE INFORMATION

Sample Number	LH0276127	LH0257045	LH0230957	LH
Sample Date	14 Sep 2023	20 Mar 2023	17 Jun 2022	28 Sep 2021
Machine Hours	2567	2155	1651	975
Oil Hours	0	0	0	0
Oil Changed	Not Changd	Not Changd	Not Changd	Not Changd
Sample Status	ATTENTION	ABNORMAL	ABNORMAL	ABNORMAL

**Dirt Cheap**  
43 Manitou Drive  
Kitchener, ON  
CA N2C 1K9  
Contact: Service Manager



#### OIL CONDITION

Visc @ 40°C	cSt	47.4	40.6	49.9	44.5
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T:  
F:



#### CONTAMINATION

Particles >4µm	24462	79123	103339	45432
Particles >6µm	6689	8933	24600	6236
Particles >14µm	557	31	2102	32
ISO 4406:1999 (c)	22/20/16	23/20/12	24/22/18	23/20/12
Silicon ppm	<1	3	3	2
Sodium ppm	<1	3	3	2
Potassium ppm	<1	2	2	2

#### Diagnosis

We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a light amount of silt (particulates < 14 microns in size) present in the oil. The condition of the oil is acceptable for the time in service.



#### WEAR METALS

Iron ppm	<1	18	11	8
Copper ppm	0	4	5	3
Lead ppm	0	5	5	4
Tin ppm	0	0	0	<1
Aluminum ppm	0	<1	<1	1
Chromium ppm	0	2	2	<1
Molybdenum ppm	0	<1	<1	<1
Nickel ppm	0	0	<1	<1
Titanium ppm	0	<1	0	0
Silver ppm	0	0	0	<1
Manganese ppm	0	<1	<1	<1
Vanadium ppm	0	0	0	0



#### ADDITIVES

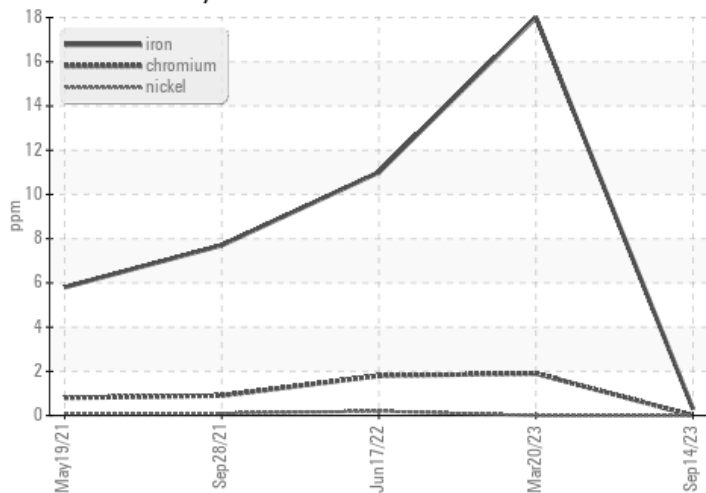
Calcium ppm	100	1105	1254	1314
Magnesium ppm	<1	10	10	10
Zinc ppm	839	616	678	691
Phosphorus ppm	691	564	590	625
Barium ppm	0	0	0	0
Boron ppm	0	2	1	2

**Depot:** DIRKIT  
**Unique No:** 5643925  
**Signed:** Bill Quesnel  
**Report Date:** 18 Sep 2023

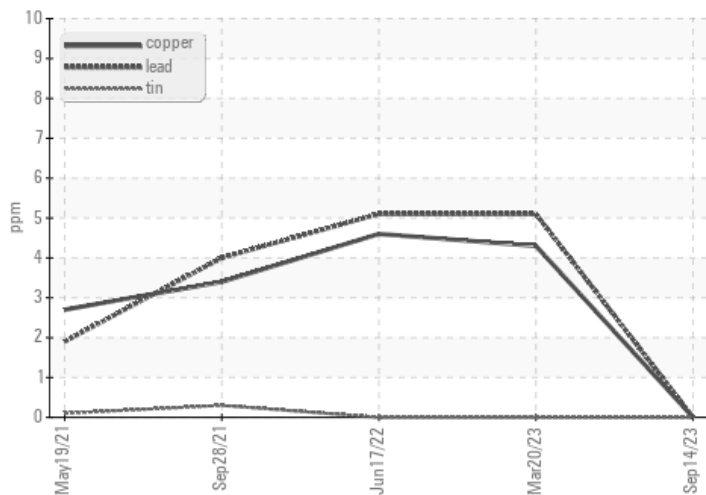


### GRAPHS

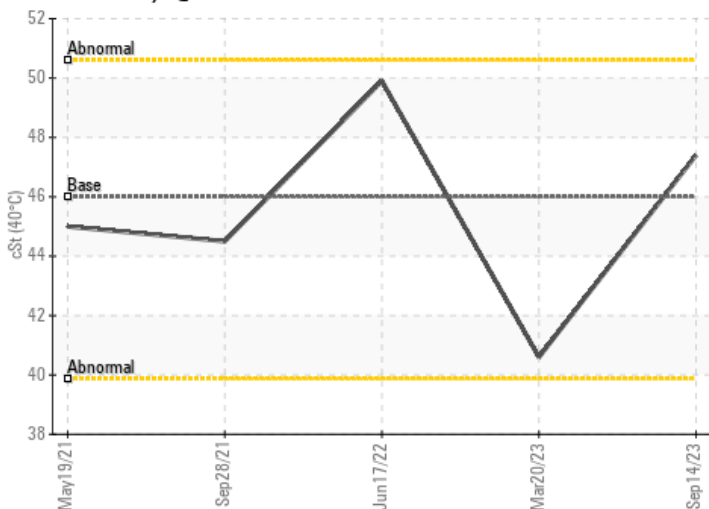
#### Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 40°C



#### Particle Count

