

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR A904CLI 075959-1005 - Hydraulic System

Sample No: LH0107883

Oil Type: HD-46



The Corporation of the Township of Hamilton  
8285 Majestic Hills Drive  
Cobourg, ON  
CA K9A 4J7  
Contact: Craig McMurray  
cmcmurray@hamiltontownship.ca  
T: (905)342-2810  
F: (905)342-2659



#### Sample Information

Sample Number	LH0107883	LH0107894	LH0107839	---
Sample Date	08 Apr 2019	07 Aug 2018	04 Apr 2017	---
Machine Hours	1894	1451	596	---
Oil Hours	0	0	0	---
Oil Changed	Not Chngd	Not Chngd	Changed	---
Sample Status	ABNORMAL	NORMAL	NORMAL	---



#### Oil Condition

Visc @ 40°C	cSt	45.1	45.4	47.3	---
-------------	-----	------	------	------	-----



#### Contamination

Water	%	0.020	NEG	NEG	---
Particles >4µm		37330	2787	8078	---
Particles >6µm		11632	220	217	---
Particles >14µm		937	9	12	---
ISO 4406:1999 (c)		22/21/17	19/15/10	20/15/11	---
Silicon	ppm	2	1	2	---
Sodium	ppm	2	2	3	---
Potassium	ppm	1	1	1	---



#### Wear Metals

Iron	ppm	6	6	6	---
Copper	ppm	6	4	3	---
Lead	ppm	2	1	<1	---
Tin	ppm	0	0	0	---
Aluminum	ppm	<1	<1	<1	---
Chromium	ppm	<1	<1	<1	---
Molybdenum	ppm	<1	0	0	---
Nickel	ppm	0	0	0	---
Titanium	ppm	0	0	0	---
Silver	ppm	0	0	0	---
Manganese	ppm	<1	<1	<1	---
Vanadium	ppm	0	0	0	---



#### Additives

Calcium	ppm	1216	1164	1326	---
Magnesium	ppm	5	5	7	---
Zinc	ppm	657	660	719	---
Phosphorus	ppm	522	546	607	---
Barium	ppm	<1	<1	<1	---
Boron	ppm	0	<1	<1	---

#### Diagnosis

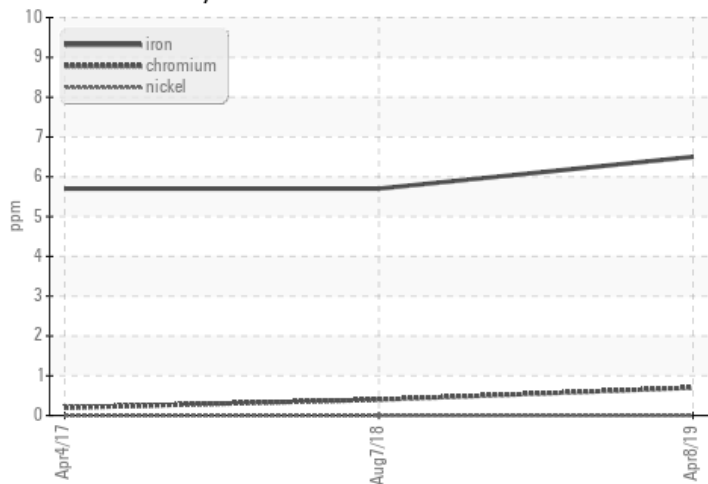
We recommend you service the filters on this component. We recommend an early resample to monitor this condition. All component wear rates are normal. Particles >6µm are abnormally high. Particles >14µm are notably high. Particles >21µm are notably high. Particles >4µm are notably high. The water content is negligible. The condition of the oil is acceptable for the time in service. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Depot: THECOB  
Unique No: 4850220  
Signed: Wes Davis  
Report Date: 15 Apr 2019

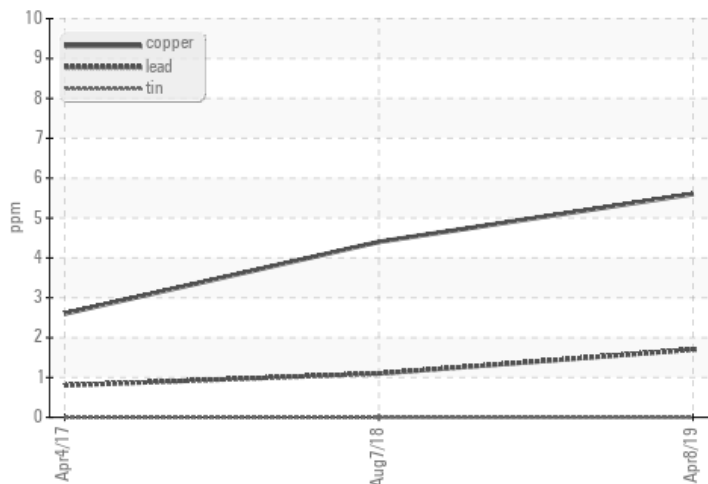


### Graphs

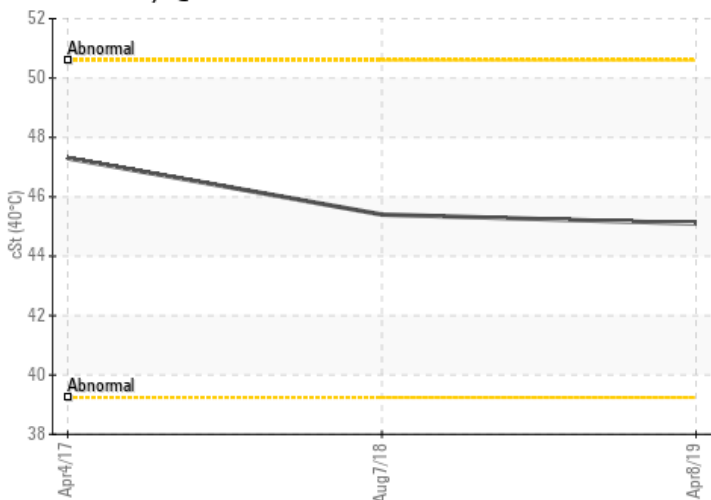
#### Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 40°C



#### Particle Count

