LIEBHERR
CONSTRUCTION EQUIPMENT

[(363344)] LIEBHERR LH40C 135581-1527 - Hydraulic System

Sample No: LH0296393
Oil Type: {unknown}

Sample Information

Sample Number		**LH0296393**	LH0278732	LH0277660	LH0270110
Sample Date		**07 Jul 2024**	15 Feb 2024	07 Dec 2023	25 Sep 2023
Machine Hours		**8400**	5458	4925	4405
Oil Hours		**0**	0	0	0
Oil Changed		**Not Changd**	Not Changd	Changed	N/A
Sample Status		**ABNORMAL**	NORMAL	ABNORMAL	NORMAL

Oil Condition

Visc @ 40°C	cSt	**39.8**	41.2	39.4	39.7

Contamination

Water	%	**NEG**	NEG	NEG	NEG
Particles >4µm		**7102**	2496	63278	959
Particles >6µm		**1547**	662	22230	280
Particles >14µm		**78**	44	1566	28
ISO 4406:1999 (c)		**20/18/13**	18/17/13	23/22/18	17/15/12
Silicon	ppm	**<1**	2	4	3
Sodium	ppm	**2**	1	2	2
Potassium	ppm	**<1**	<1	<1	<1

Wear Metals

PQ		**7**	---	---	---
Iron	ppm	**99**	28	42	36
Copper	ppm	**4**	3	5	4
Lead	ppm	**0**	<1	1	<1
Tin	ppm	**0**	0	0	0
Aluminum	ppm	**<1**	<1	<1	<1
Chromium	ppm	**<1**	<1	<1	<1
Molybdenum	ppm	**0**	0	0	0
Nickel	ppm	**0**	0	<1	<1
Titanium	ppm	**0**	0	0	0
Silver	ppm	**0**	<1	<1	<1
Manganese	ppm	**1**	0	<1	<1
Vanadium	ppm	**0**	0	0	0

Additives

Calcium	ppm	**618**	519	804	821
Magnesium	ppm	**2**	2	2	2
Zinc	ppm	**645**	664	589	592
Phosphorus	ppm	**513**	552	469	500
Barium	ppm	**0**	0	<1	<1
Boron	ppm	**<1**	<1	<1	2

CANADA IRON AND METAL CO. LTD.
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TORONTO, ON
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Diagnosis

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.Iron ppm levels are abnormal. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. NOTE: An increase in the particle count is noted. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Depot: CAN353TOR
Unique No: 5811853
Signed: Kevin Marson
Report Date: 09 Jul 2024

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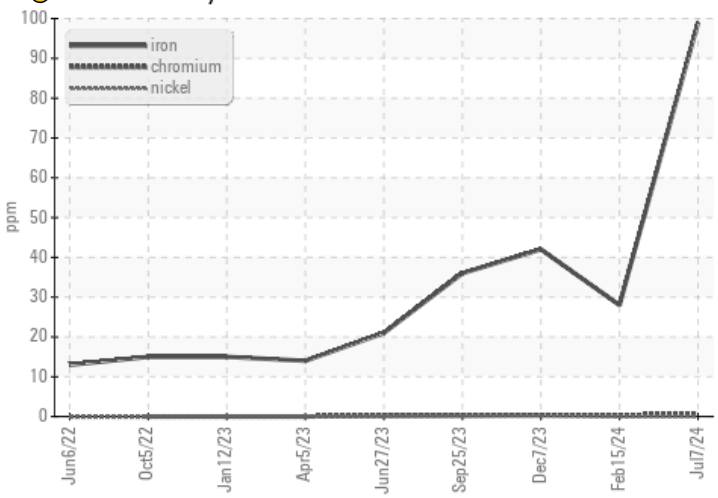
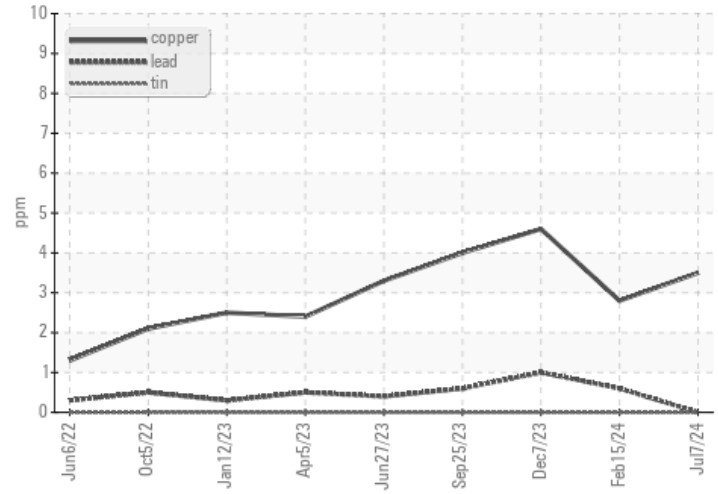
Graphs

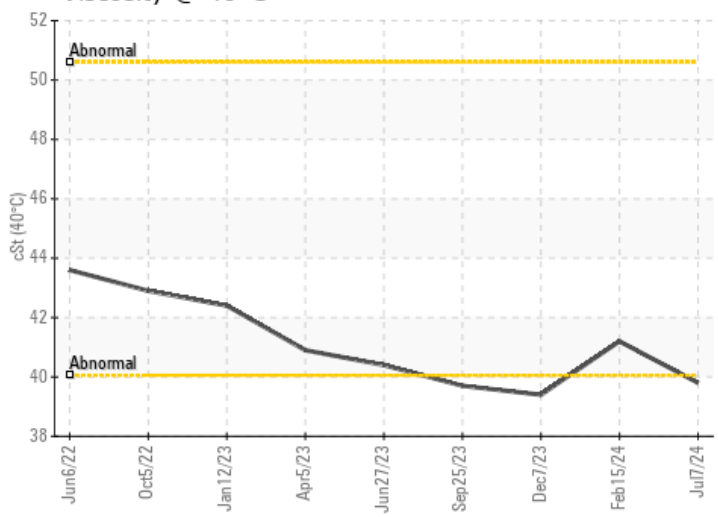
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Particle Count