

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LH40C 103882-1527 - Hydraulic System

Sample No: LH0286877

Oil Type: KENDALL FOUR SEASONS AW ISO 46



#### Sample Information

Sample Number	LH0286877	LH0261466	LH0247336	LH0224522
Sample Date	18 Apr 2024	29 Jun 2023	08 Mar 2023	25 Oct 2022
Machine Hours	10300	9040	8400	7787
Oil Hours	5000	4553	3913	4487
Oil Changed	Changed	Not Changd	Not Changd	Not Changd
Sample Status	NORMAL	MARGINAL	NORMAL	NORMAL

**DOMINION NICKEL ALLOYS LTD.**

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#### Oil Condition

Visc @ 40°C	cSt	42.5	42.3	41.8	41.9
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#### Contamination

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		3794	1241	5783	6816
Particles >6µm		871	158	1455	1957
Particles >14µm		45	7	72	180
ISO 4406:1999 (c)		19/17/13	17/14/10	20/18/13	20/18/15
Silicon	ppm	0	1	1	1
Sodium	ppm	1	2	2	2
Potassium	ppm	<1	<1	1	<1

#### Diagnosis

Confirm the source of the lubricant being utilized for top-up/fill. 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. Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.



#### Wear Metals

Iron	ppm	14	13	13	14
Copper	ppm	7	7	7	8
Lead	ppm	0	<1	<1	<1
Tin	ppm	0	0	0	0
Aluminum	ppm	<1	<1	<1	<1
Chromium	ppm	9	8	8	8
Molybdenum	ppm	0	<1	0	0
Nickel	ppm	0	0	0	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0



#### Additives

Calcium	ppm	513	704	781	877
Magnesium	ppm	3	4	4	4
Zinc	ppm	537	582	582	599
Phosphorus	ppm	435	507	525	553
Barium	ppm	0	0	0	0
Boron	ppm	<1	1	<1	<1

Depot: DOMBUR  
Unique No: 5763748  
Signed: Kevin Marson  
Report Date: 23 Apr 2024

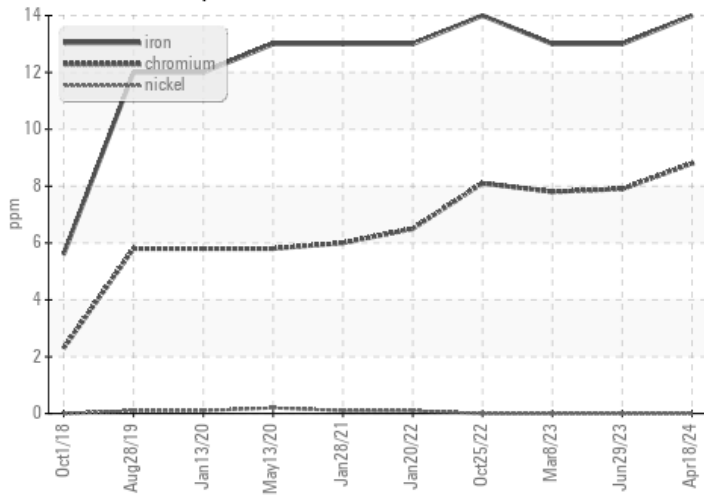
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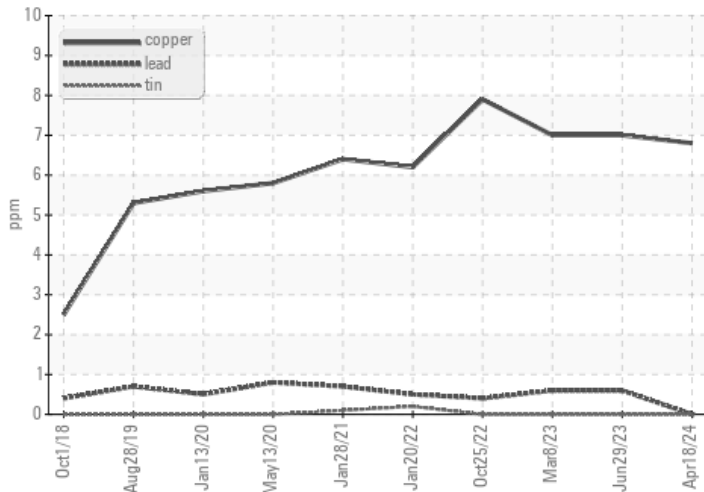


### Graphs

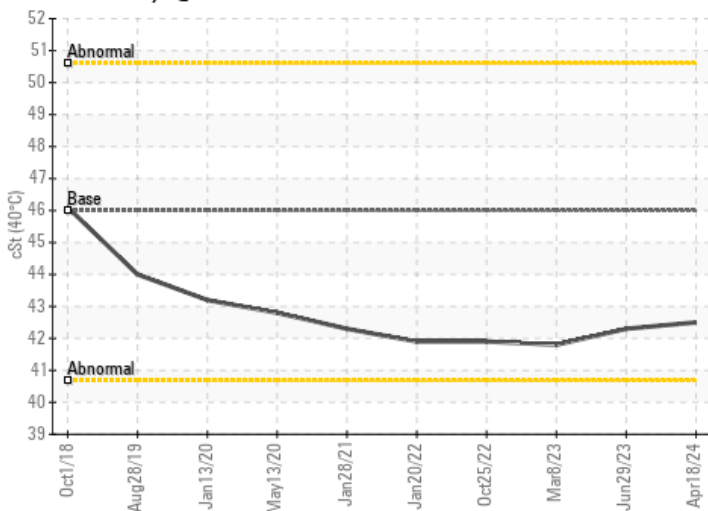
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Particle Count

