LIEBHERR
CONSTRUCTION EQUIPMENT

[(344091)] LIEBHERR LH40M 120553-1215 - Hydraulic System

Sample No: LH0281070

Oil Type: PETRO CANADA HYDREX XV ALL SEASON HYDRAULIC OIL

Goodies Trading Ltd.
8150 Aitken Road
Chilliwack, BC
CA V2R 4H5
Contact: Service Manager

T:
F:

Sample Information

Sample Number		**LH0281070**	LH0193888	LH0260395	LH0193861
Sample Date		**06 Jun 2024**	13 Feb 2024	16 Aug 2023	21 Feb 2023
Machine Hours		**4500**	4086	3448	2835
Oil Hours		**0**	0	0	0
Oil Changed		**Not Changd**	Not Changd	Not Changd	Not Changd
Sample Status		**NORMAL**	NORMAL	NORMAL	NORMAL

Oil Condition

Visc @ 40°C	cSt	**41.7**	41.8	41.7	41.5
Acid Number (AN)	mg KOH/g	**---**	---	---	0.78

Contamination

Water	%	**NEG**	NEG	NEG	NEG
Particles >4µm		**1076**	689	2963	580
Particles >6µm		**214**	108	700	100
Particles >14µm		**10**	11	37	11
ISO 4406:1999 (c)		**17/15/10**	17/14/11	19/17/12	16/14/11
Silicon	ppm	**0**	<1	1	1
Sodium	ppm	**<1**	<1	1	<1
Potassium	ppm	**<1**	<1	<1	<1

Wear Metals

Iron	ppm	**24**	19	15	12
Copper	ppm	**4**	4	3	2
Lead	ppm	**0**	<1	<1	<1
Tin	ppm	**0**	0	0	0
Aluminum	ppm	**0**	<1	<1	<1
Chromium	ppm	**1**	1	1	<1
Molybdenum	ppm	**0**	0	0	0
Nickel	ppm	**0**	0	0	0
Titanium	ppm	**0**	0	0	0
Silver	ppm	**0**	0	0	0
Manganese	ppm	**<1**	0	<1	<1
Vanadium	ppm	**0**	0	0	0

Additives

Calcium	ppm	**460**	493	600	745
Magnesium	ppm	**3**	3	4	4
Zinc	ppm	**513**	517	556	559
Phosphorus	ppm	**416**	431	483	514
Barium	ppm	**0**	0	0	0
Boron	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.

Depot: GOOCHI
Unique No: 5798978
Signed: Kevin Marson
Report Date: 13 Jun 2024

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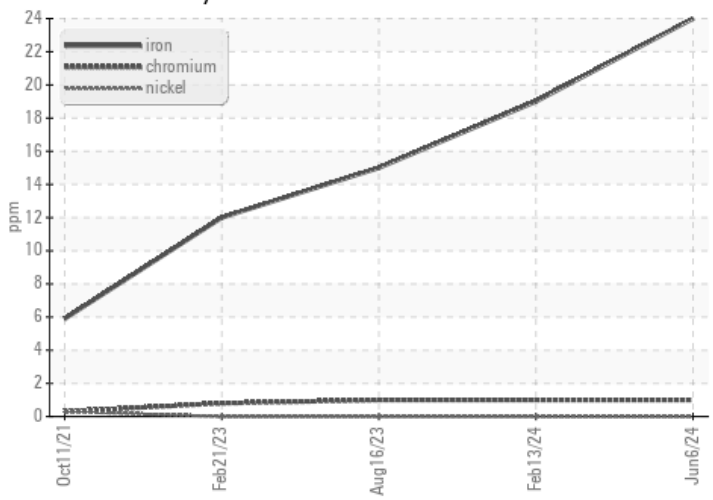
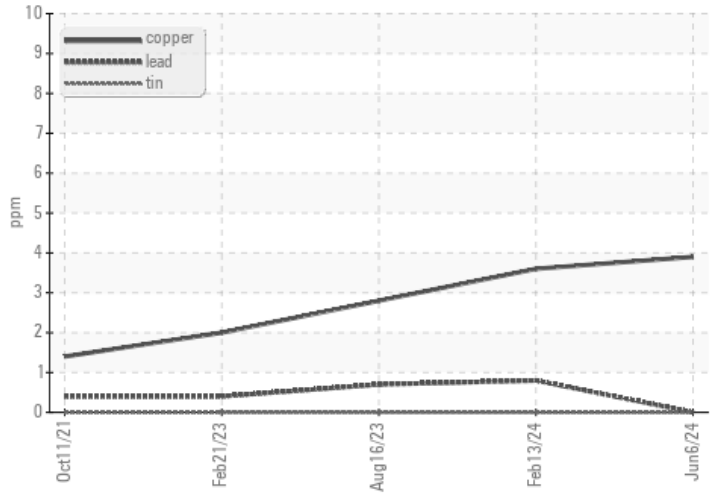
Graphs

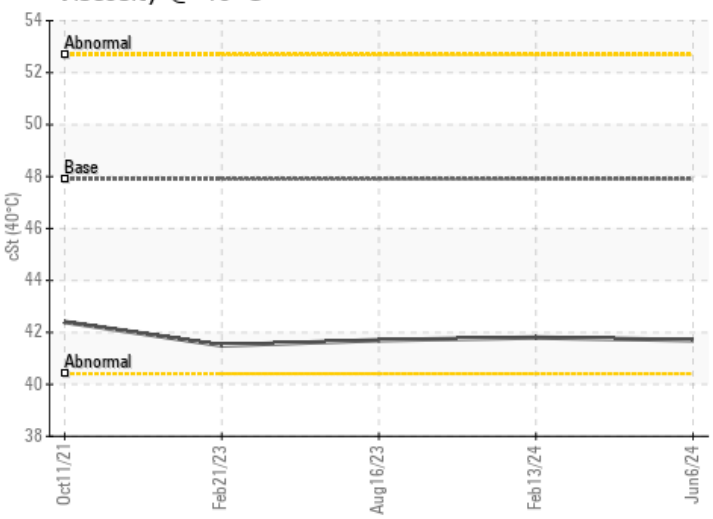
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Particle Count