

LIEBHERR

CONSTRUCTION EQUIPMENT



113718-1216 - Hydraulic System

Sample No: LH0279233

Oil Type: PETRO CANADA HYDREX AW 46



SAMPLE INFORMATION

Sample Number	LH0279233	LH	LH0251200	LH0234878
Sample Date	16 Jan 2024	30 Oct 2023	23 Feb 2023	22 Jul 2022
Machine Hours	5998	5676	4729	4000
Oil Hours	0	0	0	0
Oil Changed	Not Changd	Not Changd	Not Changd	Not Changd
Sample Status	NORMAL	NORMAL	ABNORMAL	NORMAL

American Iron and Metal

2555 Sheffield Road
Ottawa, ON
CA K1B 3V6
Contact: Dan Dupelle
ddupelle@aim-rg.com
T: (613)228-9380
F: (613)745-0692



OIL CONDITION

Visc @ 40°C	cSt	42.7	43.6	42.6	42.2
-------------	-----	------	------	------	------



CONTAMINATION

Water	%	NEG	NEG	0.023	NEG
Particles >4µm		2182	1000	4151	7910
Particles >6µm		590	277	802	2240
Particles >14µm		39	25	49	160
ISO 4406:1999 (c)		18/16/12	17/15/12	19/17/13	20/18/14
Silicon	ppm	<1	1	2	2
Sodium	ppm	1	2	2	3
Potassium	ppm	1	0	<1	2



WEAR METALS

PQ		---	---	0	---
Iron	ppm	54	53	66	56
Copper	ppm	3	3	4	4
Lead	ppm	<1	<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	1	1
Nickel	ppm	<1	<1	<1	0
Titanium	ppm	0	0	<1	<1
Silver	ppm	0	<1	0	0
Manganese	ppm	<1	<1	1	1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	530	543	1015	1118
Magnesium	ppm	12	10	18	21
Zinc	ppm	733	767	664	680
Phosphorus	ppm	599	594	616	567
Barium	ppm	0	<1	0	0
Boron	ppm	<1	1	2	3

Diagnosis

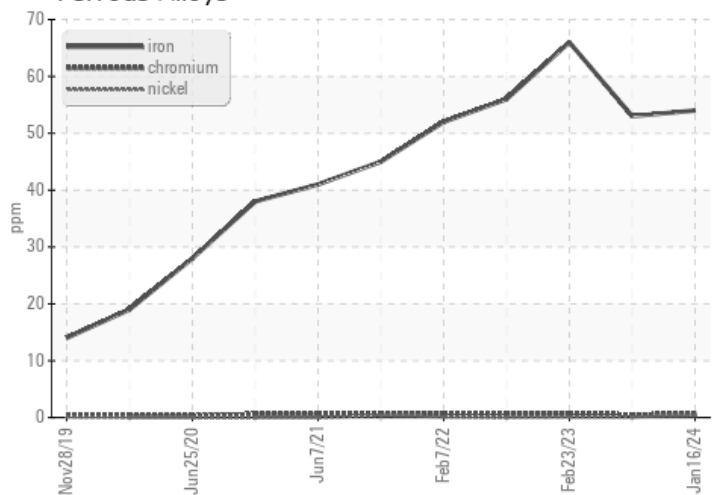
Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

Depot: BAKOTT
Unique No: 5710804
Signed: Kevin Marson
Report Date: 19 Jan 2024

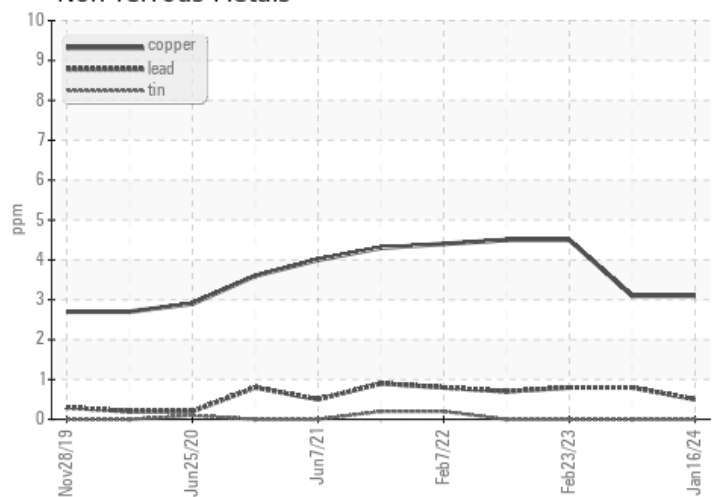


GRAPHS

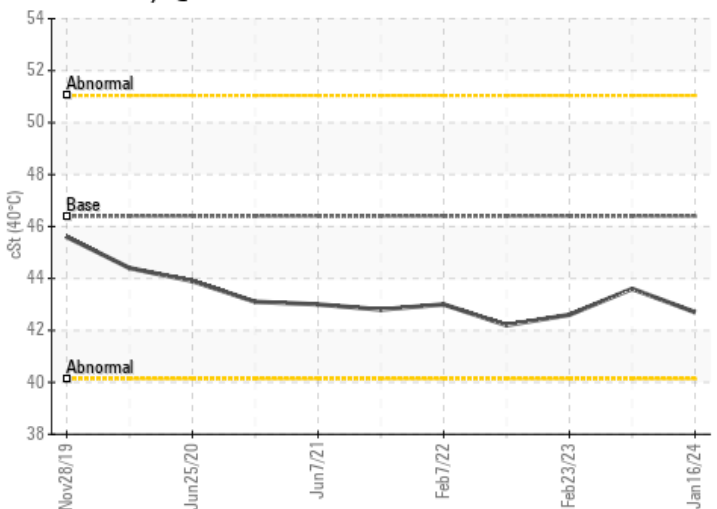
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Particle Count

