

LIEBHERR

CONSTRUCTION EQUIPMENT



[[575873]] LIEBHERR HS8100 184908 - Hydraulic System

Sample No: LH0277702

Oil Type: PETRO CANADA HYDREX AW 46



Tillsonburg Ready-Mix Inc.
 10 Elm Street
 Tillsonburg, ON
 CA N4G 0A7
 Contact: Service Manager



Sample Information

Sample Number	LH0277702	LH0251527	LH0230704	---
Sample Date	12 Oct 2023	23 Jan 2023	22 Jul 2022	---
Machine Hours	12289	10946	10063	---
Oil Hours	0	0	0	---
Oil Changed	N/A	Not Changd	N/A	---
Sample Status	NORMAL	NORMAL	NORMAL	---



Oil Condition

Visc @ 40°C	cSt	38.6	38.6	38.3	---
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T:
F:



Contamination

Water	%	NEG	NEG	NEG	---
Particles >4µm		2799	9668	9719	---
Particles >6µm		647	1447	1653	---
Particles >14µm		47	31	59	---
ISO 4406:1999 (c)		19/17/13	20/18/12	20/18/13	---
Silicon	ppm	1	<1	<1	---
Sodium	ppm	1	<1	<1	---
Potassium	ppm	0	0	0	---

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. Viscosity of sample indicates oil is within ISO 32 range, advise investigate. The condition of the oil is acceptable for the time in service.



Wear Metals

Iron	ppm	13	12	6	---
Copper	ppm	3	3	2	---
Lead	ppm	<1	<1	<1	---
Tin	ppm	0	0	0	---
Aluminum	ppm	0	0	0	---
Chromium	ppm	0	0	0	---
Molybdenum	ppm	0	0	0	---
Nickel	ppm	0	<1	0	---
Titanium	ppm	0	0	0	---
Silver	ppm	<1	0	0	---
Manganese	ppm	0	<1	0	---
Vanadium	ppm	0	0	0	---



Additives

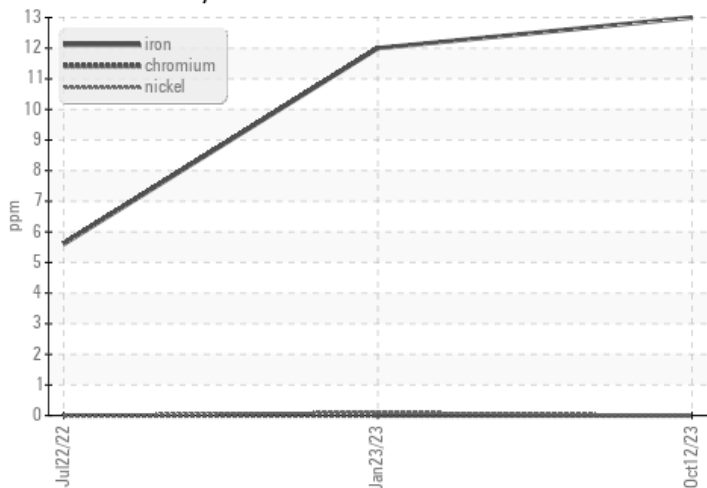
Calcium	ppm	144	152	150	---
Magnesium	ppm	<1	<1	1	---
Zinc	ppm	600	575	566	---
Phosphorus	ppm	541	575	516	---
Barium	ppm	<1	0	0	---
Boron	ppm	3	4	3	---

Depot: TIL10TIL
 Unique No: 5658732
 Signed: Kevin Marson
 Report Date: 18 Oct 2023

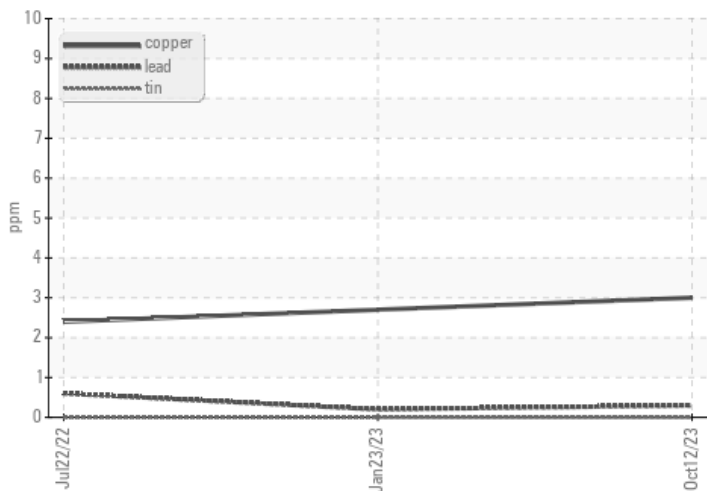


Graphs

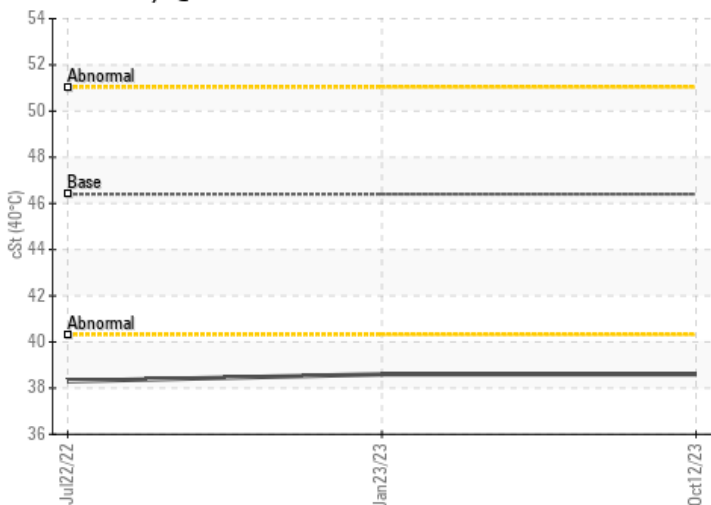
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Particle Count

