

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### [[600286]] LIEBHERR HS895HD 188227 - Hydraulic System

Sample No: LH0286569

Oil Type: PETRO CANADA HYDREX AW 46



#### SAMPLE INFORMATION

Sample Number	LH0286569	LH0274764	LH0261270	LH0251596
Sample Date	01 Mar 2024	13 Oct 2023	04 May 2023	08 Mar 2023
Machine Hours	26121	25204	24070	23749
Oil Hours	0	0	0	0
Oil Changed	N/A	N/A	Not Changd	Not Changd
Sample Status	ABNORMAL	NORMAL	ABNORMAL	ABNORMAL

HIGGS & HIGGS

RR # 4

ST THOMAS, ON

CA N5P 3S8

Contact: Bernie Higgs



#### OIL CONDITION

Visc @ 40°C	cSt	41.2	41.4	41.6	45.4
-------------	-----	------	------	------	------

T: (519)631-4095

F: (519)631-2745



#### CONTAMINATION

Water	%	NEG	NEG	NEG	0.027
Particles >4µm		53711	791	19217	71992
Particles >6µm		8687	122	4076	13311
Particles >14µm		79	5	129	208
ISO 4406:1999 (c)		23/20/13	17/14/10	21/19/14	23/21/15
Silicon	ppm	1	2	1	4
Sodium	ppm	2	3	2	5
Potassium	ppm	1	<1	<1	<1

#### Diagnosis

We recommend you service the filters on this component. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. Additive levels indicate the addition of a different brand, or type of oil. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.



#### WEAR METALS

Iron	ppm	6	6	4	3
Copper	ppm	4	4	3	<1
Lead	ppm	<1	<1	<1	0
Tin	ppm	0	0	0	0
Aluminum	ppm	<1	<1	<1	<1
Chromium	ppm	0	0	0	0
Molybdenum	ppm	12	16	8	17
Nickel	ppm	<1	<1	<1	0
Titanium	ppm	0	0	0	0
Silver	ppm	1	<1	0	0
Manganese	ppm	0	0	<1	<1
Vanadium	ppm	0	0	0	0



#### ADDITIVES

Calcium	ppm	322	391	263	566
Magnesium	ppm	166	207	99	187
Zinc	ppm	553	608	494	478
Phosphorus	ppm	488	530	477	474
Barium	ppm	0	<1	0	0
Boron	ppm	14	18	12	25

Depot: HIGSTT

Unique No: 5737065

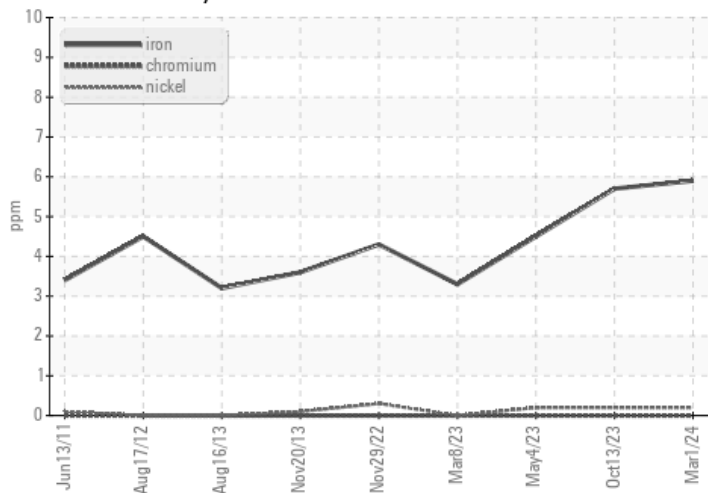
Signed: Kevin Marson

Report Date: 06 Mar 2024

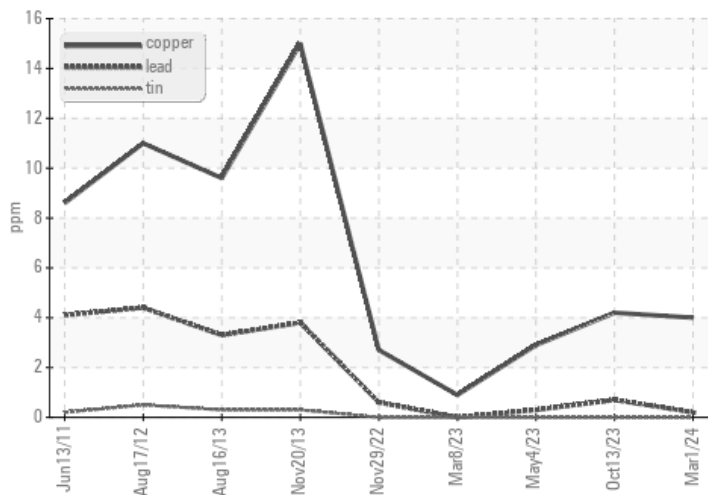


### GRAPHS

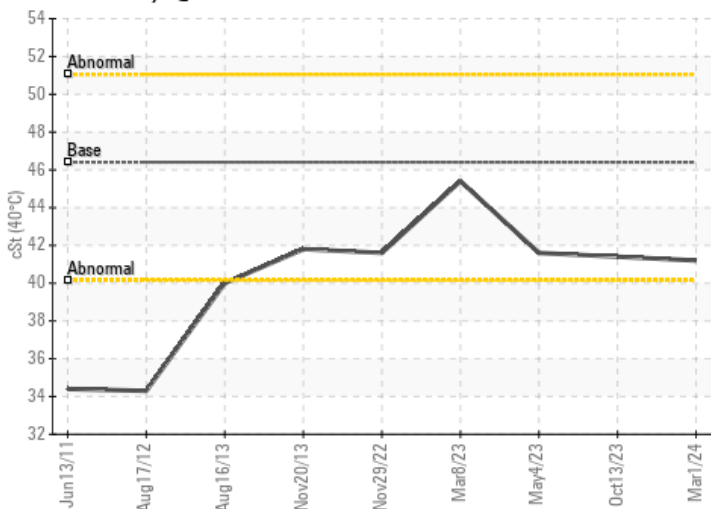
#### Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 40°C



#### Particle Count

