

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR HS895 188244 - Hydraulic System

Sample No: LH0289538

Oil Type: AW HYDRAULIC OIL ISO 46



Sample Information

Sample Number	LH0289538	LH0256988	LH0230813	LH0215782
Sample Date	10 May 2024	05 Sep 2023	06 Jun 2022	14 Dec 2021
Machine Hours	21278	19868	16794	16262
Oil Hours	0	0	0	0
Oil Changed	Not Changd	N/A	N/A	N/A
Sample Status	NORMAL	ATTENTION	ABNORMAL	NORMAL

HIGGS & HIGGS

RR # 4

ST THOMAS, ON

CA N5P 3S8

Contact: Bernie Higgs



Oil Condition

Visc @ 40°C	cSt	40.6	41.0	39.6	39.5

T: (519)631-4095

F: (519)631-2745



Contamination

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		2251	22465	63452	4694
Particles >6µm		559	3354	14304	1072
Particles >14µm		26	19	267	50
ISO 4406:1999 (c)		18/16/12	22/19/11	23/21/15	19/17/13
Silicon	ppm	<1	1	1	<1
Sodium	ppm	2	2	1	<1
Potassium	ppm	1	<1	2	<1

Diagnosis

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. The condition of the oil is acceptable for the time in service.



Wear Metals

Iron	ppm	4	4	4	4
Copper	ppm	4	3	3	3
Lead	ppm	0	2	<1	<1
Tin	ppm	0	0	<1	<1
Aluminum	ppm	<1	<1	<1	<1
Chromium	ppm	0	0	0	1
Molybdenum	ppm	7	8	<1	<1
Nickel	ppm	<1	0	0	<1
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	0	0	0	0
Vanadium	ppm	0	0	0	0



Additives

Calcium	ppm	302	346	256	285
Magnesium	ppm	100	121	4	4
Zinc	ppm	522	577	493	512
Phosphorus	ppm	437	512	414	428
Barium	ppm	0	0	0	0
Boron	ppm	10	11	2	3

Depot: HIGSTT

Unique No: 5801728

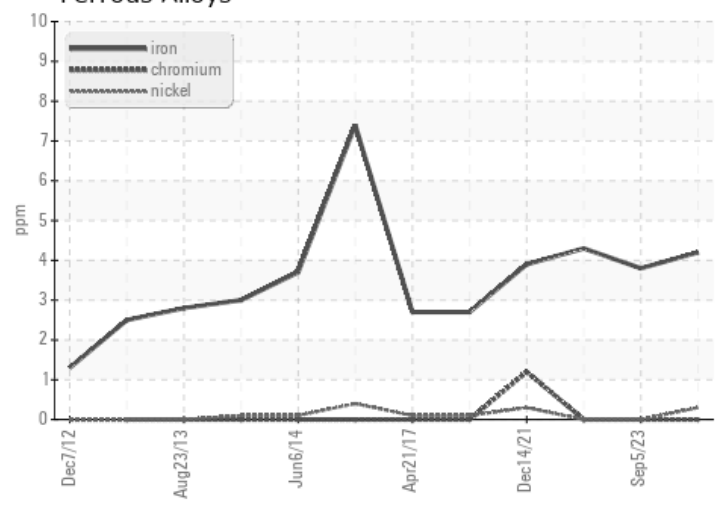
Signed: Kevin Marson

Report Date: 27 Jun 2024

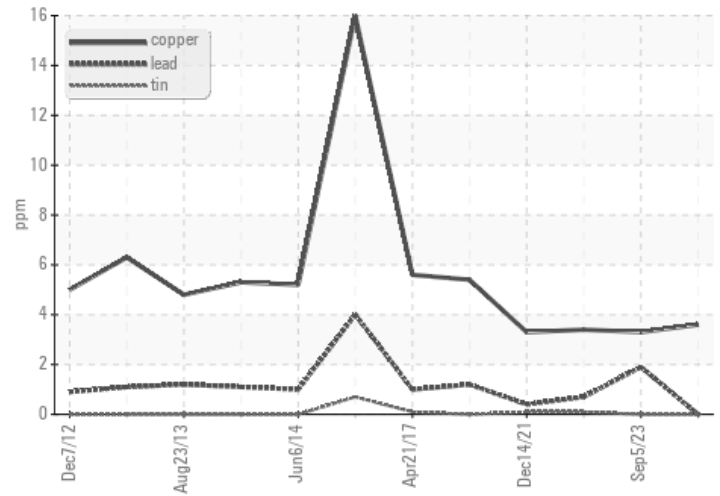


Graphs

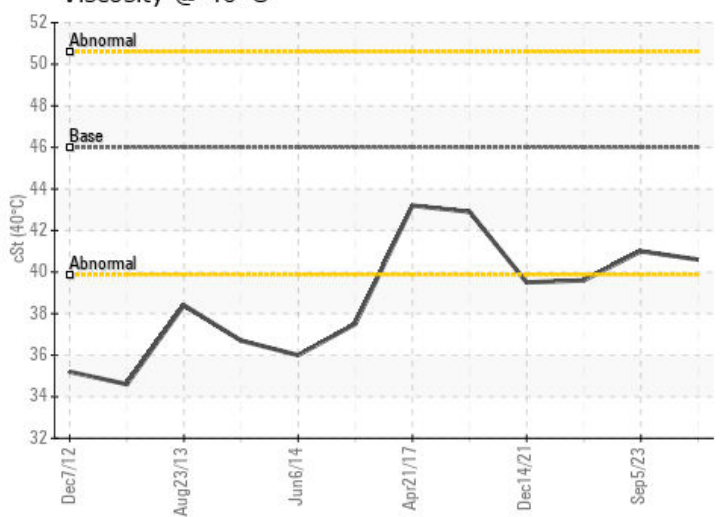
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Particle Count

