

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR R926 050225-1715 - Hydraulic System

Sample No: LH0236014

Oil Type: LIEBHERR GEAR BASIC 90 LS



SAMPLE INFORMATION

Sample Number	LH0236014	---	---	---
Sample Date	16 Jan 2024	---	---	---
Machine Hours	835	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ATTENTION	---	---	---

INTERSTATE POWER SYSTEMS
 407 ADVENTURLAND DR NE
 ALTOONA, IA
 US 50009
 Contact: DALTON JOHNSON
 dalton.johnson@istate.com
 T: (515)957-3300
 F:



OIL CONDITION

Visc @ 40°C	cSt	● 43.4	---	---	---
Acid Number (AN)	mg KOH/g	● 0.96	---	---	---



CONTAMINATION

Water	%	NEG	---	---	---
Particles >4µm		● 31393	---	---	---
Particles >6µm		● 4426	---	---	---
Particles >14µm		● 181	---	---	---
ISO 4406:1999 (c)		22/19/15	---	---	---
Silicon	ppm	● 4	---	---	---
Sodium	ppm	● <1	---	---	---
Potassium	ppm	● 2	---	---	---

Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type. The AN level is acceptable for this fluid.



WEAR METALS

Iron	ppm	● 5	---	---	---
Copper	ppm	● 2	---	---	---
Lead	ppm	● <1	---	---	---
Tin	ppm	● 0	---	---	---
Aluminum	ppm	● 1	---	---	---
Chromium	ppm	● <1	---	---	---
Molybdenum	ppm	● 3	---	---	---
Nickel	ppm	● 0	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	● 0	---	---	---
Vanadium	ppm	0	---	---	---



ADDITIVES

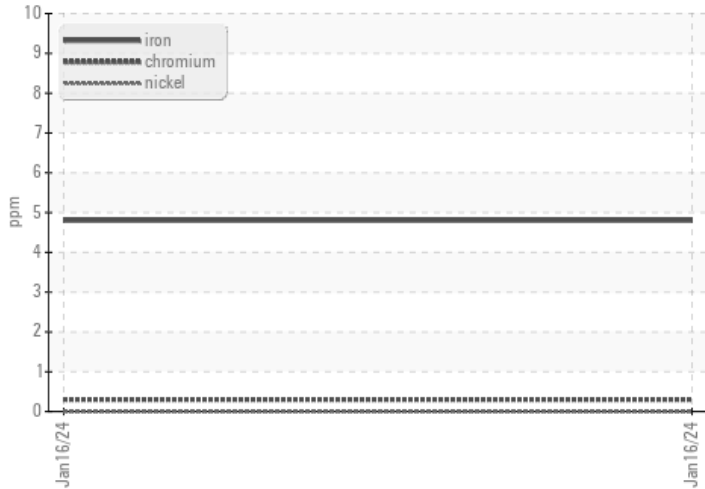
Calcium	ppm	● 2290	---	---	---
Magnesium	ppm	● 26	---	---	---
Zinc	ppm	● 978	---	---	---
Phosphorus	ppm	● 911	---	---	---
Barium	ppm	● <1	---	---	---
Boron	ppm	● 19	---	---	---

Depot: INTALT
Unique No: 10845702
Signed: Don Baldrige
Report Date: 25 Jan 2024

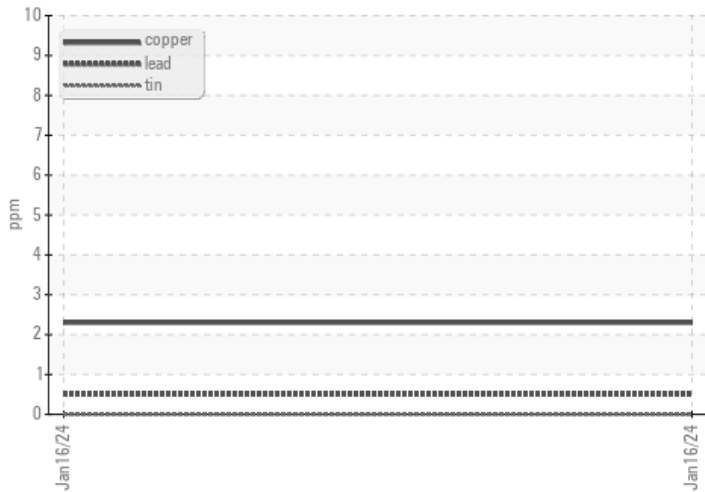


GRAPHS

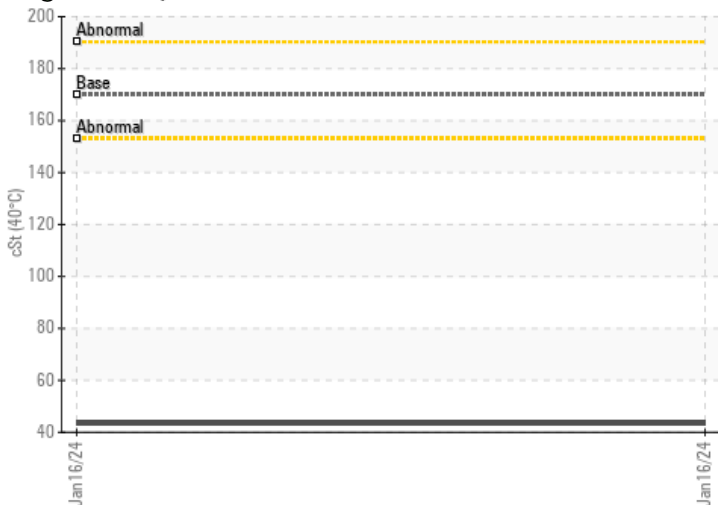
Ferrous Alloys



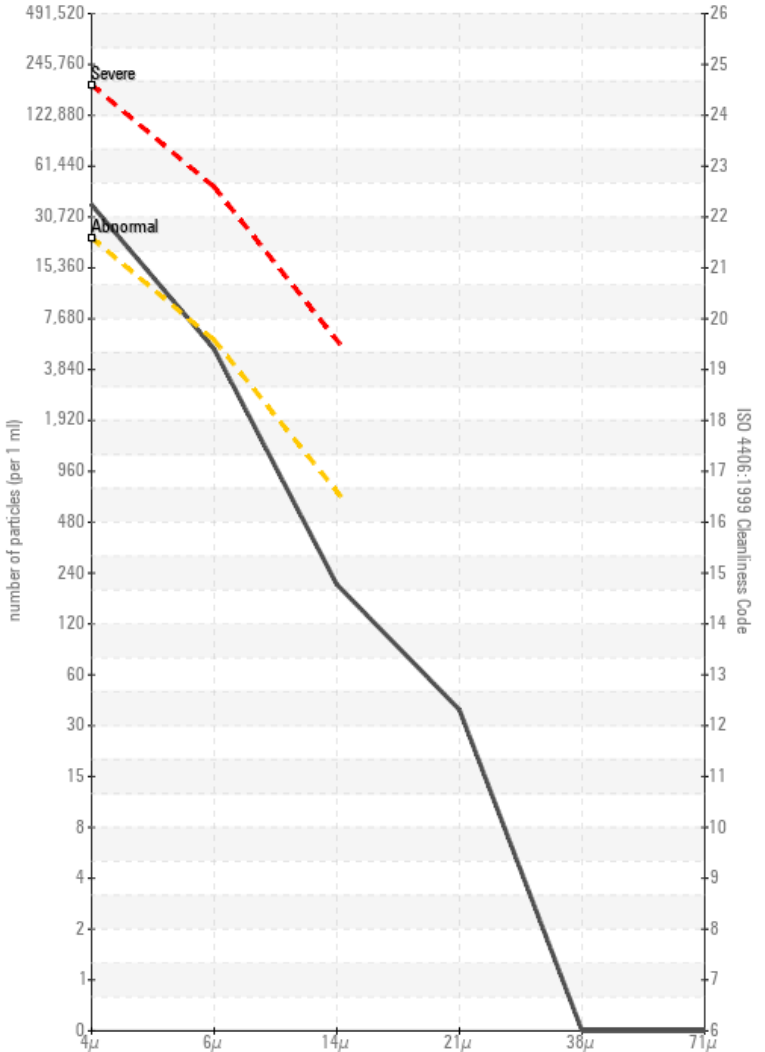
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

