

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LV20F110983 - Gearbox

Sample No: LH0273165

Oil Type: LIEBHERR GEAR PG 220



Sample Information

Sample Number	LH0273165	LH0247832	---	---
Sample Date	14 May 2024	12 Aug 2023	---	---
Machine Hours	300	192	---	---
Oil Hours	300	192	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	ABNORMAL	NORMAL	---	---

PETERSON CONTRACTORS INC
 PO BOX A
 REINBECK, IA
 US 50669
 Contact: WADE VANHAVEN
 MBERWALD@PCIUS.COM
 T:
 F:



Oil Condition

Visc @ 40°C	cSt	● 235	● 224	---	---
-------------	-----	-------	-------	-----	-----



Contamination

Water	%	NEG	NEG	---	---
Silicon	ppm	● 21	● 3	---	---
Sodium	ppm	● <1	● <1	---	---
Potassium	ppm	● 3	● 0	---	---



Wear Metals

Iron	ppm	● 466	● 185	---	---
Copper	ppm	● 15	● 6	---	---
Lead	ppm	● <1	● 0	---	---
Tin	ppm	● <1	● <1	---	---
Aluminum	ppm	● 4	● 4	---	---
Chromium	ppm	● 5	● 2	---	---
Molybdenum	ppm	● 2	0	---	---
Nickel	ppm	● 2	● <1	---	---
Titanium	ppm	<1	0	---	---
Silver	ppm	<1	0	---	---
Manganese	ppm	● 6	5	---	---
Vanadium	ppm	<1	0	---	---



Additives

Calcium	ppm	● 88	3	---	---
Magnesium	ppm	● 3	0	---	---
Zinc	ppm	● 49	34	---	---
Phosphorus	ppm	● 434	473	---	---
Barium	ppm	● 0	0	---	---
Boron	ppm	● 19	21	---	---

Diagnosis

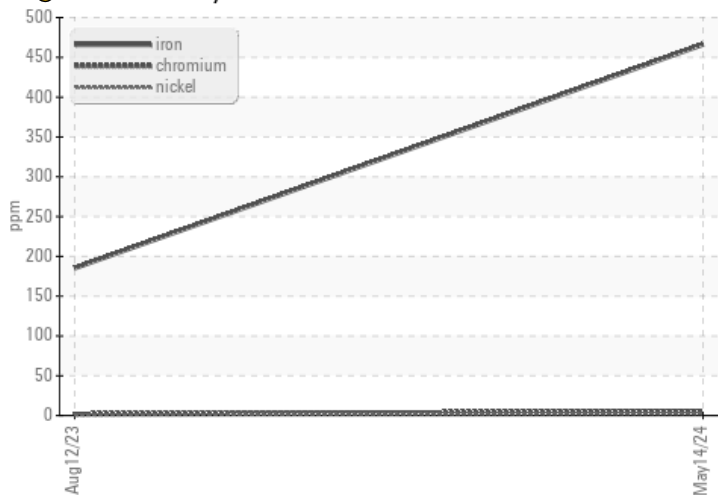
The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. The iron level is abnormal. All other metal levels are typical for a new component breaking in. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot: PETREILH
 Unique No: 11036661
 Signed: Don Baldrige
 Report Date: 22 May 2024

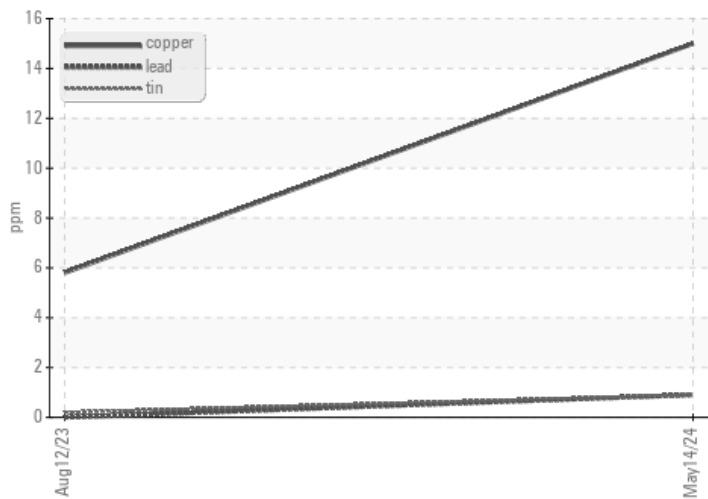


Graphs

● Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C

