

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR A944 038730-194 - Swing Drive

Sample No: LH0263825

Oil Type: GEAR OIL LS 80W90



SAMPLE INFORMATION

Sample Number	LH0263825	LH0185263	---	---
Sample Date	28 Jun 2023	29 Jan 2021	---	---
Machine Hours	29970	27384	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	SEVERE	ABNORMAL	---	---

ALTER METAL

2080 SPINDT DR
WAUPACA, WI
US 54981
Contact: BRAD DORMADY
brad.dormady@altertrading.com
T:
F:



OIL CONDITION

Visc @ 40°C	cSt	134	121	---	---
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CONTAMINATION

Water	%	1.69	0.285	---	---
Silicon	ppm	34	4	---	---
Sodium	ppm	7	2	---	---
Potassium	ppm	7	<1	---	---



WEAR METALS

Iron	ppm	1015	671	---	---
Copper	ppm	165	441	---	---
Lead	ppm	<1	<1	---	---
Tin	ppm	10	18	---	---
Aluminum	ppm	21	2	---	---
Chromium	ppm	11	7	---	---
Molybdenum	ppm	3	2	---	---
Nickel	ppm	4	4	---	---
Titanium	ppm	1	<1	---	---
Silver	ppm	0	4	---	---
Manganese	ppm	7	4	---	---
Vanadium	ppm	<1	<1	---	---



ADDITIVES

Calcium	ppm	114	33	---	---
Magnesium	ppm	10	6	---	---
Zinc	ppm	89	55	---	---
Phosphorus	ppm	758	536	---	---
Barium	ppm	1	0	---	---
Boron	ppm	89	30	---	---

Diagnosis

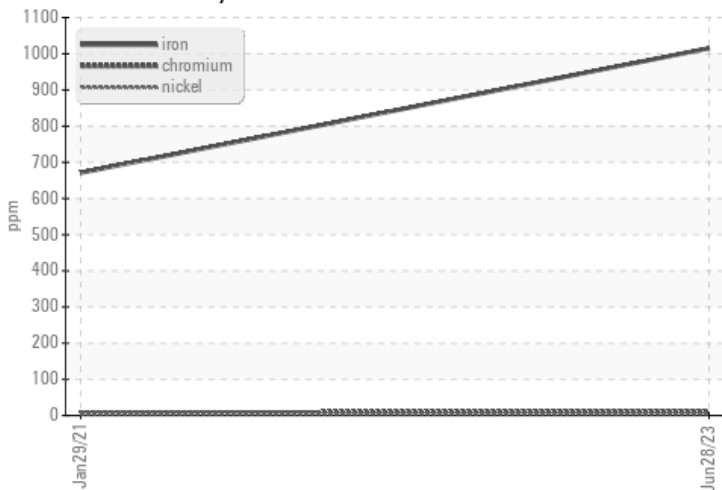
We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. There is a high concentration of water present in the oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Depot: ALTWAUWI
Unique No: 10546769
Signed: Angela Borella
Report Date: 07 Jul 2023

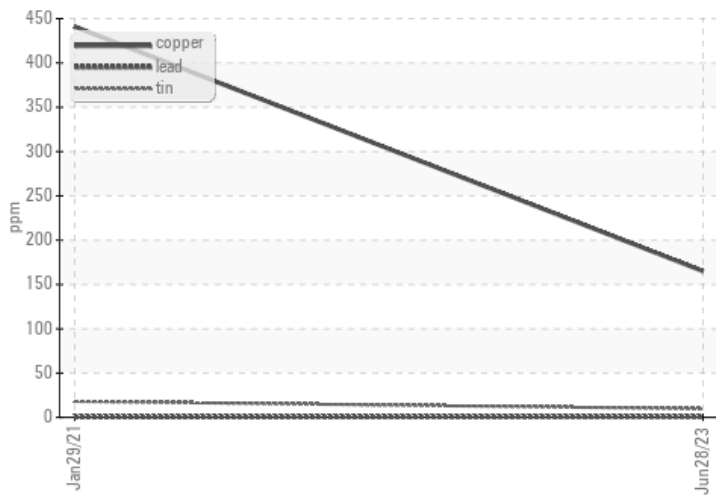


GRAPHS

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C

