

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR R945 053481-1866 - Swing Drive

Sample No: LH0273813

Oil Type: GEAR OIL SAE 80W90



AMERICAN STATE EQUIPMENT CO.
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SAMPLE INFORMATION

Sample Number	LH0273813	LH0220713	---	---
Sample Date	02 Feb 2024	29 Sep 2022	---	---
Machine Hours	574	425	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	N/A	---	---
Sample Status	NORMAL	NORMAL	---	---



OIL CONDITION

Visc @ 40°C	cSt	145	198	---	---
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CONTAMINATION

Water	%	NEG	NEG	---	---
Silicon	ppm	<1	<1	---	---
Sodium	ppm	0	4	---	---
Potassium	ppm	<1	<1	---	---



WEAR METALS

Iron	ppm	59	164	---	---
Copper	ppm	<1	<1	---	---
Lead	ppm	<1	0	---	---
Tin	ppm	<1	<1	---	---
Aluminum	ppm	1	<1	---	---
Chromium	ppm	1	2	---	---
Molybdenum	ppm	<1	0	---	---
Nickel	ppm	<1	0	---	---
Titanium	ppm	<1	0	---	---
Silver	ppm	<1	0	---	---
Manganese	ppm	1	3	---	---
Vanadium	ppm	<1	0	---	---



ADDITIVES

Calcium	ppm	10	6	---	---
Magnesium	ppm	1	0	---	---
Zinc	ppm	10	8	---	---
Phosphorus	ppm	859	1488	---	---
Barium	ppm	<1	12	---	---
Boron	ppm	2	<1	---	---

Diagnosis

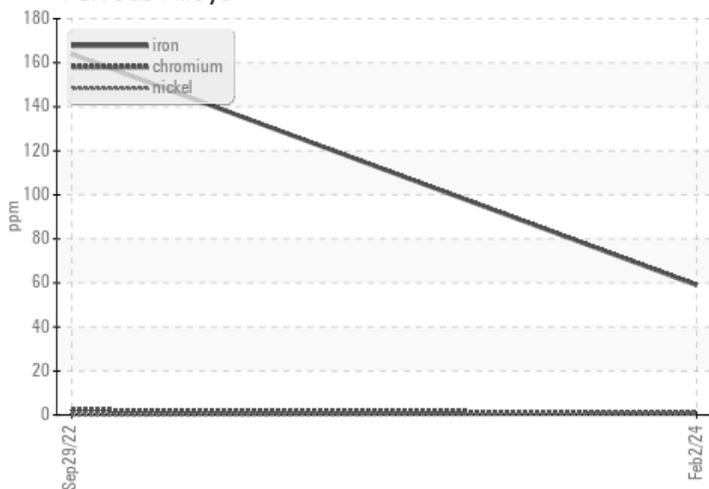
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot: LEC0008
 Unique No: 10884191
 Signed: Don Baldrige
 Report Date: 19 Feb 2024

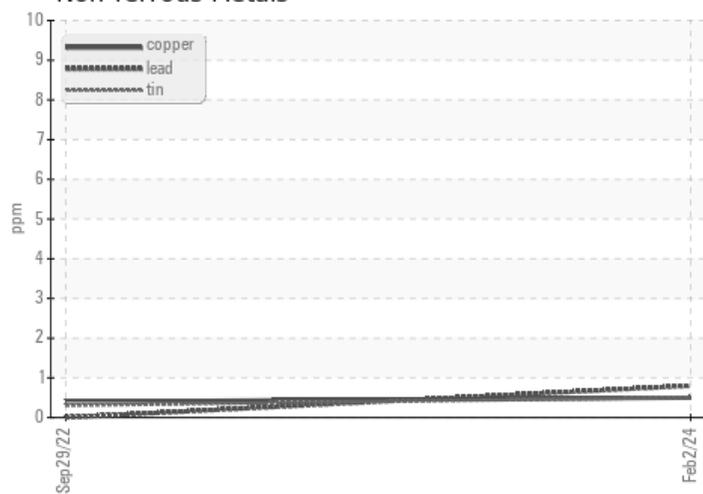


GRAPHS

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C

