

LIEBHERR

CONSTRUCTION EQUIPMENT



MS19 - Swing Drive

Sample No: LH0244650
 Oil Type: NOT GIVEN



SAMPLE INFORMATION

Sample Number	LH0244650	LHMC122826	---	---
Sample Date	08 Dec 2023	03 Aug 2023	---	---
Machine Hours	3512	2706	---	---
Oil Hours	0	0	---	---
Oil Changed	Not Changd	N/A	---	---
Sample Status	SEVERE	SEVERE	---	---

OSCAR WINSKI CO. INC
 2407 N. 9TH STREET
 LAFAYETTE, IN
 US 47904
 Contact: JAYSON FRAZIER
 frazierj@oscarwinski.com
 T: (765)376-1230
 F: x:



OIL CONDITION

Visc @ 40°C	cSt	238	241	---	---
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CONTAMINATION

Water	%	2.09	1.64	---	---
Silicon	ppm	7	8	---	---
Sodium	ppm	11	0	---	---
Potassium	ppm	2	2	---	---



WEAR METALS

Iron	ppm	72	48	---	---
Copper	ppm	41	26	---	---
Lead	ppm	0	0	---	---
Tin	ppm	5	4	---	---
Aluminum	ppm	4	0	---	---
Chromium	ppm	<1	<1	---	---
Molybdenum	ppm	0	0	---	---
Nickel	ppm	<1	<1	---	---
Titanium	ppm	0	0	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	<1	<1	---	---
Vanadium	ppm	<1	0	---	---



ADDITIVES

Calcium	ppm	4	8	---	---
Magnesium	ppm	3	4	---	---
Zinc	ppm	0	5	---	---
Phosphorus	ppm	411	411	---	---
Barium	ppm	0	0	---	---
Boron	ppm	20	9	---	---

Diagnosis

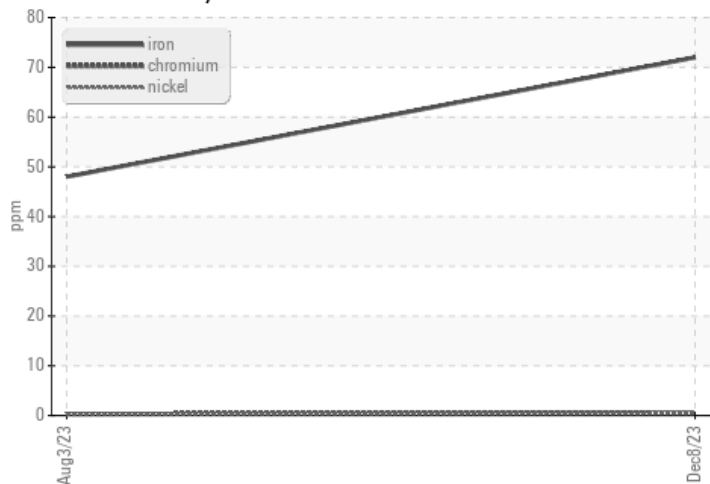
We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a high concentration of water present in the oil. The oil is no longer serviceable due to the presence of contaminants.

Depot: OSCLAF
 Unique No: 10807291
 Signed: Jonathan Hester
 Report Date: 29 Dec 2023

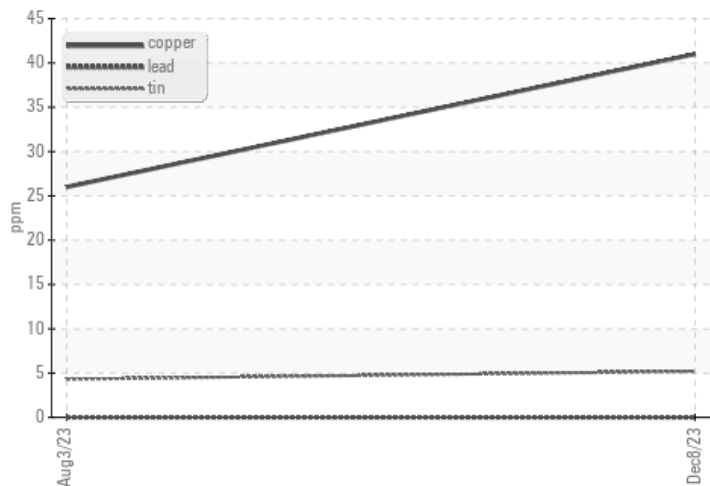


GRAPHS

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C

