

LIEBHERR

CONSTRUCTION EQUIPMENT



MS18 - Swing Drive

Sample No: LH0244832

Oil Type: {unknown}



SAMPLE INFORMATION

Sample Number	LH0244832	LHMC103768	LHMC119670	LHMC119706
Sample Date	21 Mar 2024	01 Dec 2023	03 Aug 2023	13 May 2023
Machine Hours	6118	5393	4388	3734
Oil Hours	0	0	0	0
Oil Changed	Changed	Not Changd	Not Changd	Not Changd
Sample Status	ABNORMAL	ABNORMAL	NORMAL	NORMAL

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	204	229	227	231
-------------	-----	-----	-----	-----	-----



CONTAMINATION

Water	%	0.137	0.134	NEG	NEG
Silicon	ppm	23	4	2	3
Sodium	ppm	1	<1	0	0
Potassium	ppm	<1	1	0	2



WEAR METALS

Iron	ppm	567	426	306	225
Copper	ppm	74	20	2	12
Lead	ppm	0	0	0	0
Tin	ppm	15	9	3	3
Aluminum	ppm	3	<1	0	0
Chromium	ppm	5	5	3	1
Molybdenum	ppm	0	0	0	0
Nickel	ppm	<1	<1	0	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	4	4	3	2
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	9	6	3	2
Magnesium	ppm	0	2	2	<1
Zinc	ppm	44	52	36	28
Phosphorus	ppm	360	327	245	372
Barium	ppm	0	0	0	0
Boron	ppm	14	6	4	2

Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. Gear wear is indicated. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot: OSCLAF

Unique No: 10940057

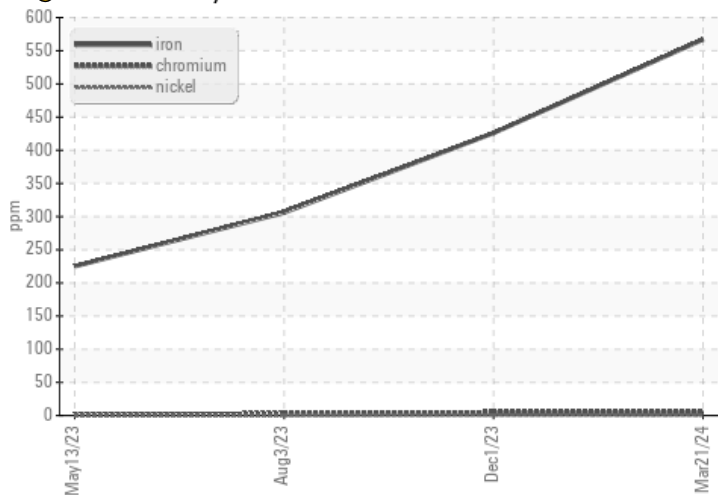
Signed: Angela Borella

Report Date: 25 Mar 2024

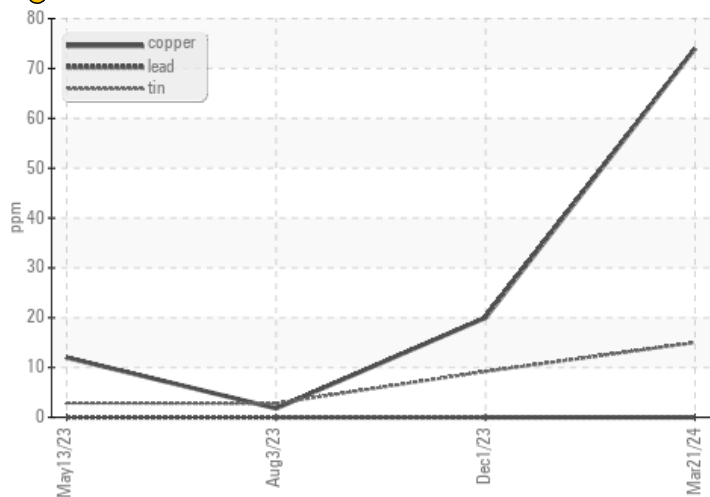


GRAPHS

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C

