

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR A934C 045866-1007 - Swing Drive

Sample No: LH0258242

Oil Type: LIEBHERR GEAR BASIC 90 LS



#### SAMPLE INFORMATION

Sample Number	LH0258242	LH0244876	LH0229943	LH0217024
Sample Date	11 Oct 2023	04 Apr 2023	09 Aug 2022	07 Feb 2022
Machine Hours	28406	27390	26180	25181
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	ABNORMAL	SEVERE

#### INTEGRITY METALS

835 EAST INDUSTRIAL  
MORRISTOWN, IN  
US 46161  
Contact: HEIDI KERSTIENS  
heidi@integrity-metals.com  
T: (765)763-8000  
F: (765)763-8001



#### OIL CONDITION

Visc @ 40°C	cSt	187	218	234	288
-------------	-----	-----	-----	-----	-----



#### CONTAMINATION

Water	%	---	---	0.455	3.11
Silicon	ppm	2	2	3	6
Sodium	ppm	3	2	3	4
Potassium	ppm	2	0	0	2

#### 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.



#### WEAR METALS

Iron	ppm	205	642	705	1118
Copper	ppm	84	68	97	200
Lead	ppm	<1	0	0	1
Tin	ppm	5	2	5	11
Aluminum	ppm	<1	1	2	3
Chromium	ppm	2	5	8	12
Molybdenum	ppm	0	<1	<1	1
Nickel	ppm	<1	0	0	2
Titanium	ppm	<1	0	<1	<1
Silver	ppm	0	0	<1	0
Manganese	ppm	2	5	6	9
Vanadium	ppm	0	0	0	<1



#### ADDITIVES

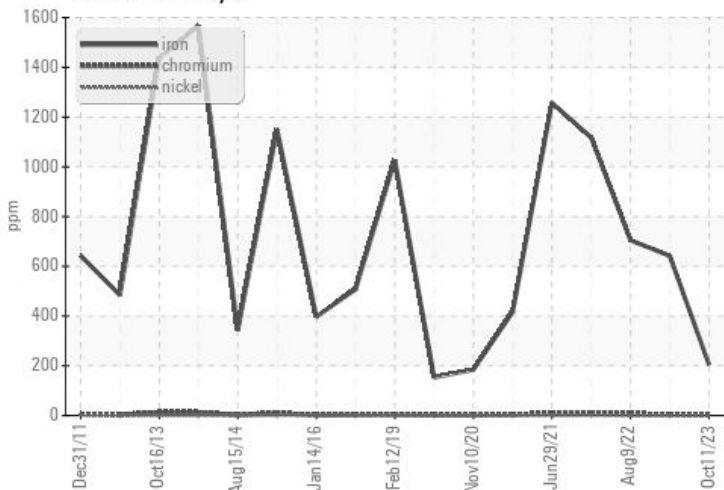
Calcium	ppm	36	19	29	18
Magnesium	ppm	0	7	<1	4
Zinc	ppm	16	11	17	22
Phosphorus	ppm	2320	1997	2121	2331
Barium	ppm	0	0	1	0
Boron	ppm	0	0	0	5

Depot: INTMORLH  
Unique No: 10708585  
Signed: Angela Borella  
Report Date: 24 Oct 2023

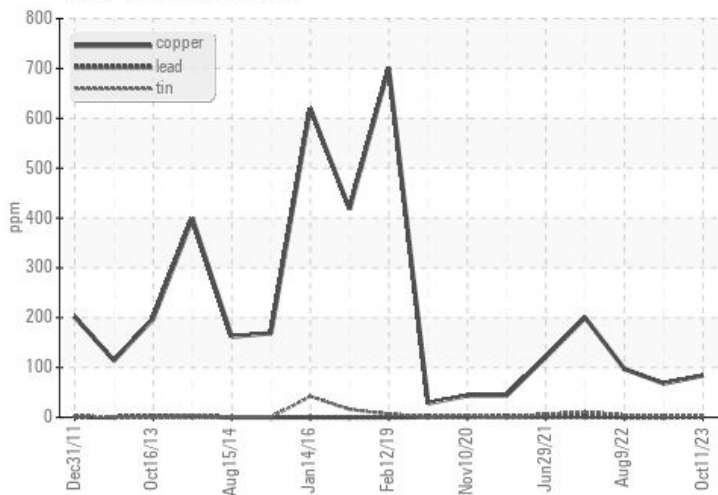


### GRAPHS

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C

