

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR R936 040489-1148 - Swing Drive

Sample No: LH0229686

Oil Type: LIEBHERR HYPOID 85W-140 EP



#### Sample Information

Sample Number	LH0229686	LH0267373	LH0244010	LHMC104037
Sample Date	21 Mar 2024	30 Aug 2023	21 May 2023	27 Jul 2022
Machine Hours	9014	8524	8050	6781
Oil Hours	1000	474	0	494
Oil Changed	Changed	Changed	Not Changd	Changed
Sample Status	NORMAL	ATTENTION	ABNORMAL	NORMAL

#### ACECO

10119 RESIDENCY ROAD  
MANASSAS, VA  
US 20110  
Contact: RON BROCK



#### Oil Condition

Visc @ 40°C	cSt	218	205	353	348
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T: (703)392-0111  
F: (703)331-5604



#### Contamination

Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	1	2	<1	<1
Sodium	ppm	0	1	2	2
Potassium	ppm	0	<1	<1	0

#### 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	46	139	130	209
Copper	ppm	38	58	76	41
Lead	ppm	0	0	0	0
Tin	ppm	3	4	2	1
Aluminum	ppm	0	<1	0	<1
Chromium	ppm	<1	2	1	2
Molybdenum	ppm	<1	<1	<1	<1
Nickel	ppm	0	<1	<1	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	2	2	2
Vanadium	ppm	0	0	0	0



#### Additives

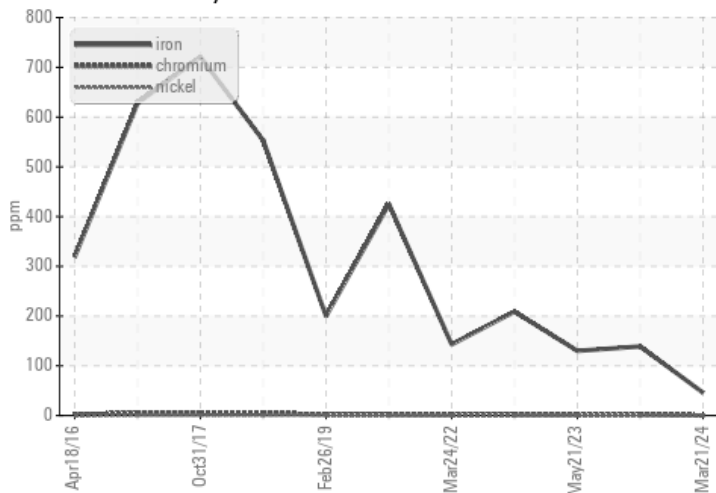
Calcium	ppm	0	12	10	23
Magnesium	ppm	0	2	1	<1
Zinc	ppm	0	18	8	16
Phosphorus	ppm	2417	2101	1300	1030
Barium	ppm	0	0	0	0
Boron	ppm	0	0	0	2

Depot: ACEMAN  
Unique No: 11002940  
Signed: Don Baldrige  
Report Date: 30 Apr 2024

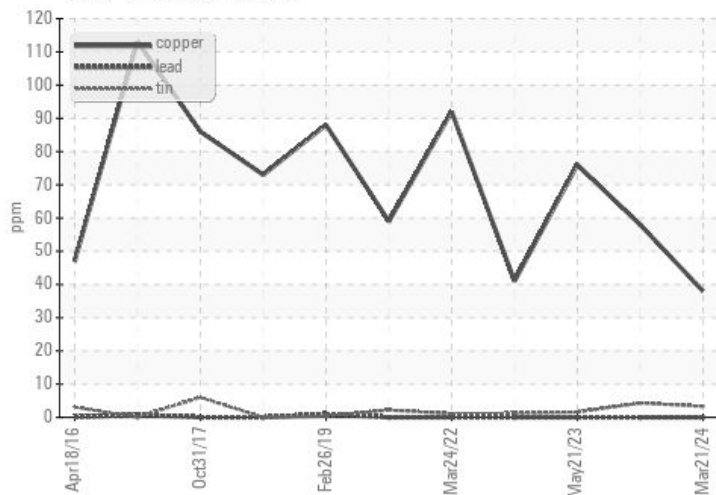


### Graphs

#### Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 40°C

