

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR A934C 061188-1419 - Transmission (Manual)

Sample No: LH0272395

Oil Type: DIESEL ENGINE OIL SAE 5W40



**NORTHERN METAL RECYCLING**  
 2800 PACIFIC ST N  
 MINNEAPOLIS, MN  
 US 55411  
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 F:



#### Sample Information

Sample Number	LH0272395	LH0253880	LH0236051	LH0220531
Sample Date	30 Jan 2024	21 Sep 2023	23 Nov 2022	27 Sep 2022
Machine Hours	28174	27222	25468	0
Oil Hours	1000	0	1000	1000
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL



#### Oil Condition

Visc @ 40°C	cSt	50.1	57.7	55.9	53.8



#### Contamination

Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	11	6	5	7
Sodium	ppm	1	2	3	3
Potassium	ppm	5	3	<1	<1



#### Wear Metals

Iron	ppm	15	4	11	28
Copper	ppm	4	0	1	2
Lead	ppm	1	0	0	<1
Tin	ppm	1	<1	<1	<1
Aluminum	ppm	2	1	<1	2
Chromium	ppm	<1	0	0	<1
Molybdenum	ppm	5	2	4	3
Nickel	ppm	1	<1	0	0
Titanium	ppm	102	89	73	58
Silver	ppm	0	0	0	0
Manganese	ppm	2	<1	<1	1
Vanadium	ppm	1	1	<1	<1



#### Additives

Calcium	ppm	1370	1372	1599	2107
Magnesium	ppm	683	703	549	492
Zinc	ppm	1152	1237	1048	1073
Phosphorus	ppm	1031	1088	919	965
Barium	ppm	<1	0	0	0
Boron	ppm	185	186	164	186

#### Diagnosis

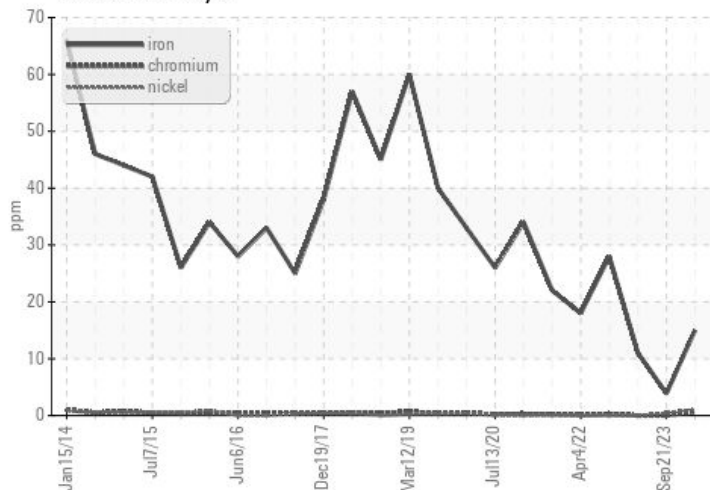
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot: NORMINLH  
 Unique No: 10995371  
 Signed: Don Baldrige  
 Report Date: 26 Apr 2024

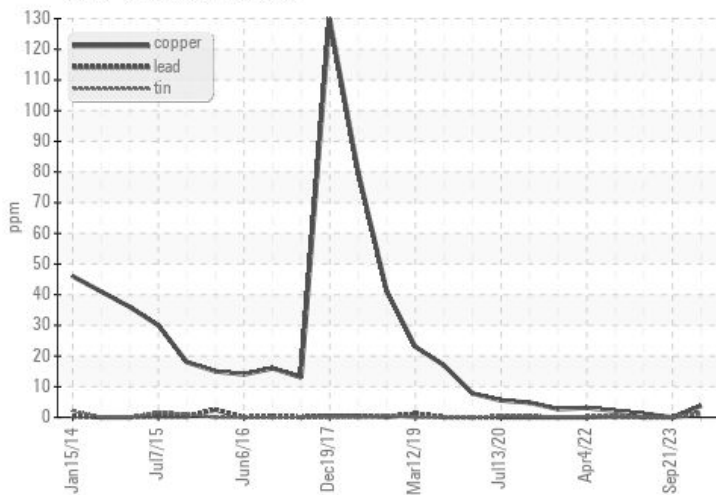


### Graphs

#### Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 40°C

