

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LH30 097842-1253 - Diesel Engine

Sample No: LH0243226

Oil Type: PETRO CANADA DURON UHP 5W30



#### SAMPLE INFORMATION

Sample Number	LH0243226	LH0258246	LH0230036	LH0230020
Sample Date	15 Mar 2024	08 Nov 2023	04 Jan 2023	08 Dec 2022
Machine Hours	13061	12403	10714	10567
Oil Hours	0	500	147	0
Oil Changed	Changed	Changed	Not Changd	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

**MIDWEST METALS CORP**  
 40 WINDHURST WAY  
 SHELBYVILLE, KY  
 US 40065  
 Contact: JIMMY RENFROE  
 jimmyr@mwmcorp.com  
 T: (502)633-4211  
 F: (502)633-5212



#### OIL CONDITION

Visc @ 100°C	cSt	12.3	11.1	11.6	11.4
Base Number (BN)	mg KOH/g	6.0	7.6	10.4	8.1
Oxidation (PA)	%	57	85	73	86



#### CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.1	0.1	0.1
Nitration (PA)	%	73	82	65	86
Sulfation (PA)	%	57	55	49	54
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	7	6	7	6
Sodium	ppm	<1	2	<1	0
Potassium	ppm	0	2	1	0



#### WEAR METALS

Iron	ppm	3	2	2	4
Copper	ppm	1	3	<1	1
Lead	ppm	<1	<1	<1	<1
Tin	ppm	0	0	0	<1
Aluminum	ppm	1	2	<1	1
Chromium	ppm	0	0	0	<1
Molybdenum	ppm	24	41	46	45
Nickel	ppm	0	<1	<1	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	0	<1	0	<1
Vanadium	ppm	<1	0	0	0



#### ADDITIVES

Calcium	ppm	2274	1164	1334	1259
Magnesium	ppm	227	840	896	870
Zinc	ppm	1085	801	926	838
Phosphorus	ppm	891	667	752	653
Barium	ppm	0	0	0	0
Boron	ppm	16	58	129	76

#### Diagnosis

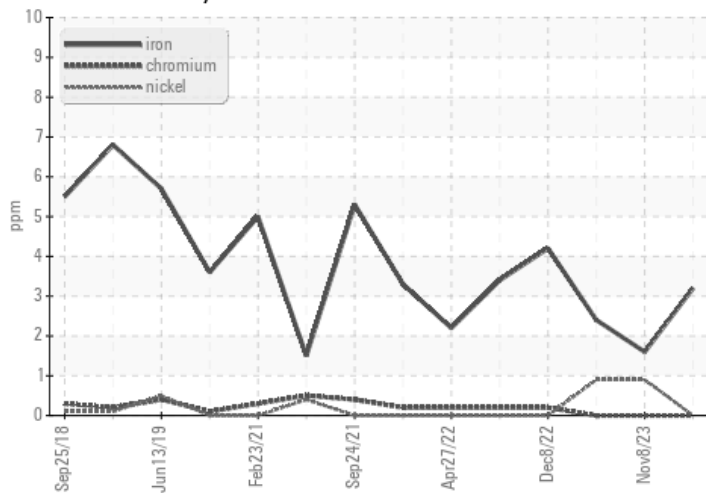
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

**Depot:** MIDSHELH  
**Unique No:** 10949262  
**Signed:** Don Baldrige  
**Report Date:** 29 Mar 2024

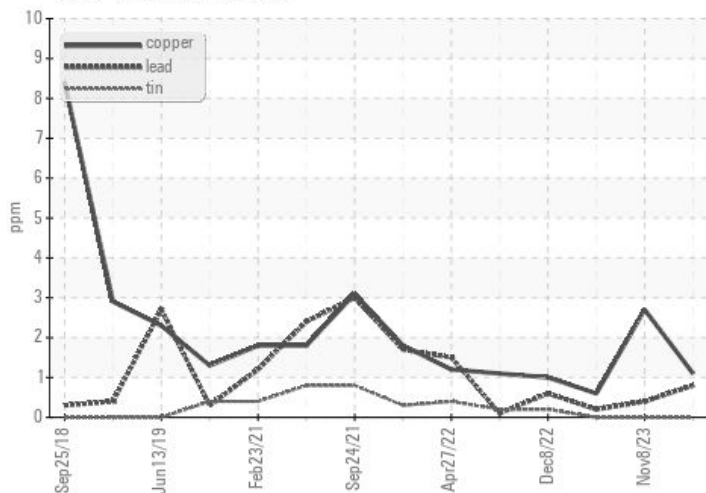


### GRAPHS

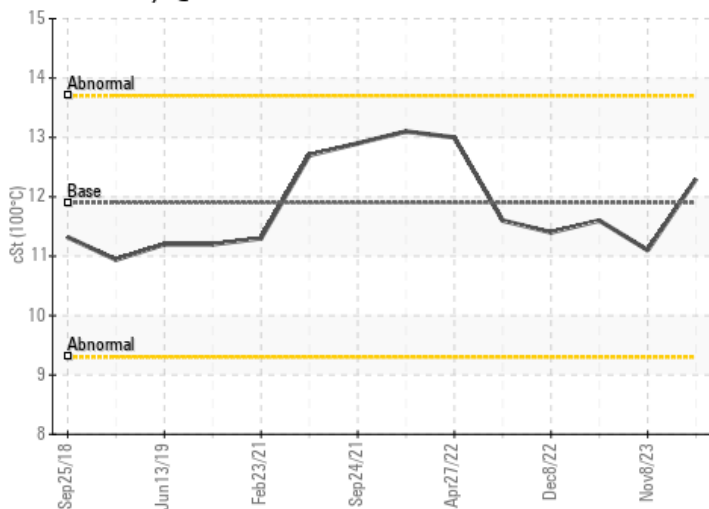
#### Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 100°C



#### Base Number

