

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LH30M 1253-123497 - Diesel Engine

Sample No: LH0272811

Oil Type: PETRO CANADA DURON UHP 5W30



**SPARTAN RECYCLING**  
3071 HOWARD ST  
SPARTANBURG, SC  
US 29303  
Contact: SERVICE MANAGER

T:  
F:



#### SAMPLE INFORMATION

Sample Number	LH0272811	LH0272906	LH0258294	LH0212306
Sample Date	08 Mar 2024	11 Jan 2024	16 Aug 2023	30 Dec 2021
Machine Hours	4915	4554	3960	981
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	ABNORMAL



#### OIL CONDITION

Visc @ 100°C	cSt	11.6	11.2	11.1	11.2
Base Number (BN)	mg KOH/g	15.5	7.2	9.9	8.0
Oxidation (PA)	%	46	81	69	99



#### CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.1	0.1	0.1
Nitration (PA)	%	97	76	58	87
Sulfation (PA)	%	42	52	47	66
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	7	5	7	7
Sodium	ppm	3	0	<1	4
Potassium	ppm	0	0	<1	0



#### WEAR METALS

Iron	ppm	6	3	2	6
Copper	ppm	<1	2	<1	249
Lead	ppm	0	0	0	3
Tin	ppm	0	0	0	<1
Aluminum	ppm	2	1	<1	1
Chromium	ppm	0	0	0	<1
Molybdenum	ppm	3	41	45	58
Nickel	ppm	0	0	0	0
Titanium	ppm	0	0	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	0	0	0	<1
Vanadium	ppm	0	<1	<1	0



#### ADDITIVES

Calcium	ppm	4132	1324	1348	911
Magnesium	ppm	80	841	898	1066
Zinc	ppm	1098	863	861	1235
Phosphorus	ppm	1024	695	715	983
Barium	ppm	0	0	0	<1
Boron	ppm	230	98	137	37

#### Diagnosis

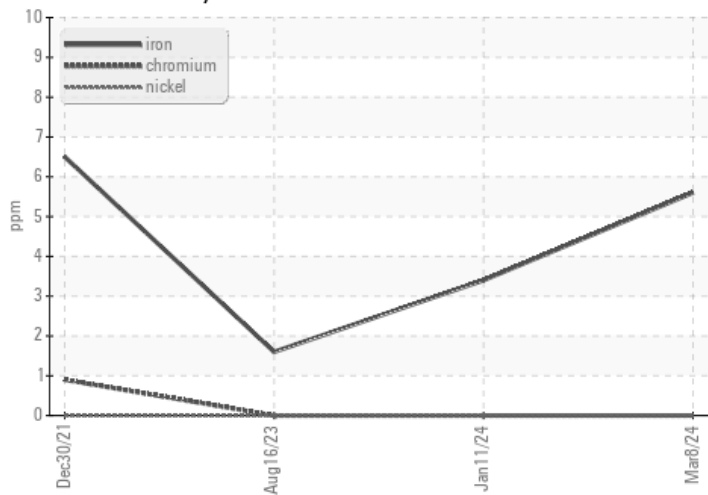
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Depot: SPASPALH  
Unique No: 10924465  
Signed: Don Baldrige  
Report Date: 13 Mar 2024

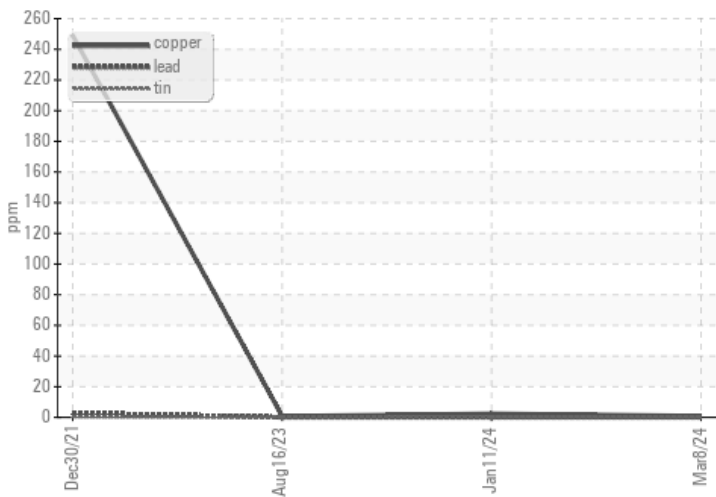


### GRAPHS

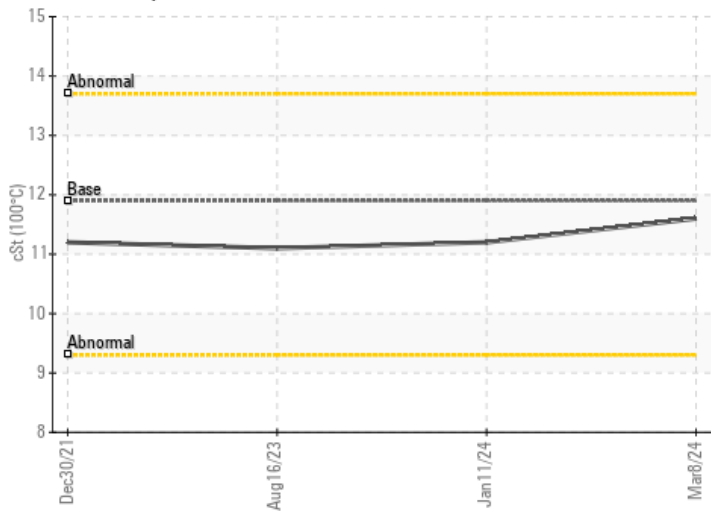
#### Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 100°C



#### Base Number

