

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH30M 1253-123497 - Diesel Engine

Sample No: LH0273454

Oil Type: LIEBHERR MOTOROIL 5W30



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

T:
 F:



Sample Information

Sample Number	LH0273454	LH0285589	LH0272811	LH0272906
Sample Date	20 Jun 2024	23 Apr 2024	08 Mar 2024	11 Jan 2024
Machine Hours	5603	5225	4915	4554
Oil Hours	500	250	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL



Oil Condition

Visc @ 100°C	cSt	11.5	11.4	11.6	11.2
Base Number (BN)	mg KOH/g	15.5	15.6	15.5	7.2
Oxidation (PA)	%	41	41	46	81



Contamination

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.1	0.1	0.1
Nitration (PA)	%	96	91	97	76
Sulfation (PA)	%	41	40	42	52
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	8	8	7	5
Sodium	ppm	5	3	3	0
Potassium	ppm	2	2	0	0



Wear Metals

Iron	ppm	6	6	6	3
Copper	ppm	6	1	<1	2
Lead	ppm	<1	0	0	0
Tin	ppm	<1	<1	0	0
Aluminum	ppm	4	3	2	1
Chromium	ppm	<1	<1	0	0
Molybdenum	ppm	3	2	3	41
Nickel	ppm	<1	<1	0	0
Titanium	ppm	<1	<1	0	0
Silver	ppm	0	<1	0	0
Manganese	ppm	<1	<1	0	0
Vanadium	ppm	<1	<1	0	<1



Additives

Calcium	ppm	4500	4048	4132	1324
Magnesium	ppm	61	50	80	841
Zinc	ppm	1311	1076	1098	863
Phosphorus	ppm	1132	939	1024	695
Barium	ppm	0	1	0	0
Boron	ppm	247	269	230	98

Diagnosis

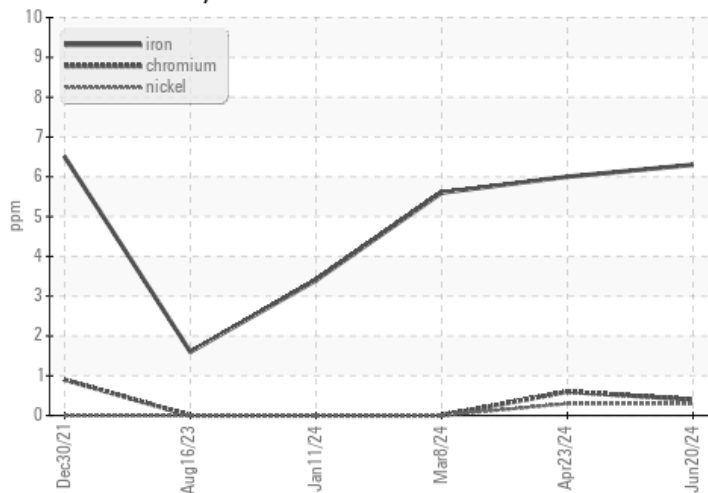
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Depot: SPASPALH
 Unique No: 11100217
 Signed: Wes Davis
 Report Date: 27 Jun 2024

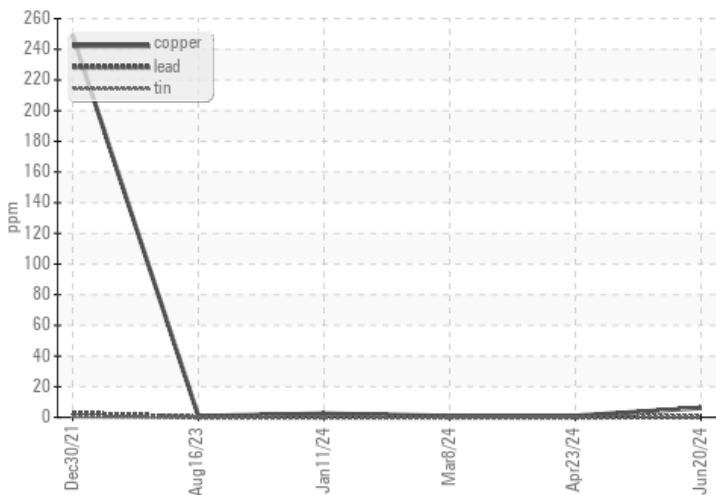


Graphs

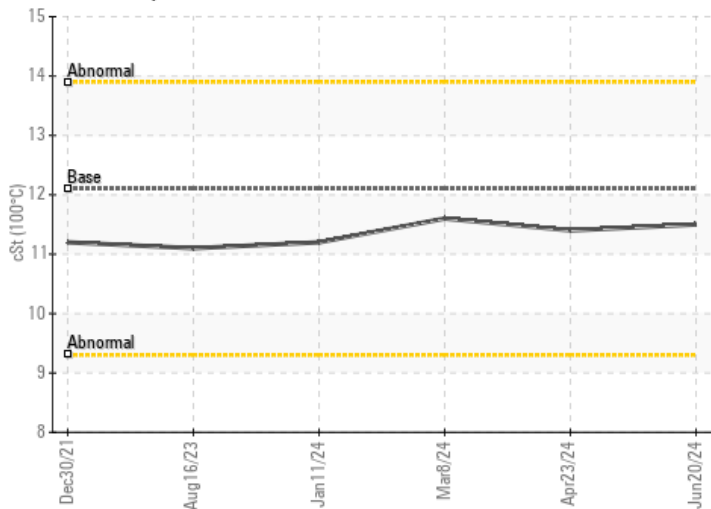
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



Base Number

