

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR A934 055585-1007 - Diesel Engine

Sample No: LH0264441
 Oil Type: DIESEL ENGINE OIL SAE 10W30



BEHR IRON
 2815 LIBERTY AVE.
 CLINTON, IA
 US 53732
 Contact: SERVICE MANAGER

T:
 F:



Sample Information

Sample Number	LH0264441	LHMC73555	LHMC63547	LHMC64339
Sample Date	16 May 2024	29 Nov 2018	07 May 2013	24 Apr 2013
Machine Hours	14242	10955	2186	2086
Oil Hours	0	0	100	190
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL



Oil Condition

Visc @ 100°C	cSt	11.4	15.18	15.13	15.05
Base Number (BN)	mg KOH/g	9.8	---	---	---
Oxidation (PA)	%	73	55	36	40



Contamination

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.7	2.3	0.5	1.1
Nitration (PA)	%	48	73	42	50
Sulfation (PA)	%	60	63	42	47
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	9	17	4	4
Sodium	ppm	3	4	4	4
Potassium	ppm	2	2	3	2



Wear Metals

Iron	ppm	5	15	8	14
Copper	ppm	0	2	<1	1
Lead	ppm	<1	2	<1	<1
Tin	ppm	<1	0	0	0
Aluminum	ppm	1	2	1	1
Chromium	ppm	0	<1	<1	<1
Molybdenum	ppm	42	7	42	42
Nickel	ppm	0	<1	<1	<1
Titanium	ppm	<1	6	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0



Additives

Calcium	ppm	1696	1816	1227	1243
Magnesium	ppm	524	390	909	922
Zinc	ppm	905	1119	1302	1315
Phosphorus	ppm	788	998	1112	1155
Barium	ppm	0	0	0	0
Boron	ppm	71	24	<1	<1

Diagnosis

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. 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: BEHCLI
 Unique No: 11050135
 Signed: Wes Davis
 Report Date: 30 May 2024

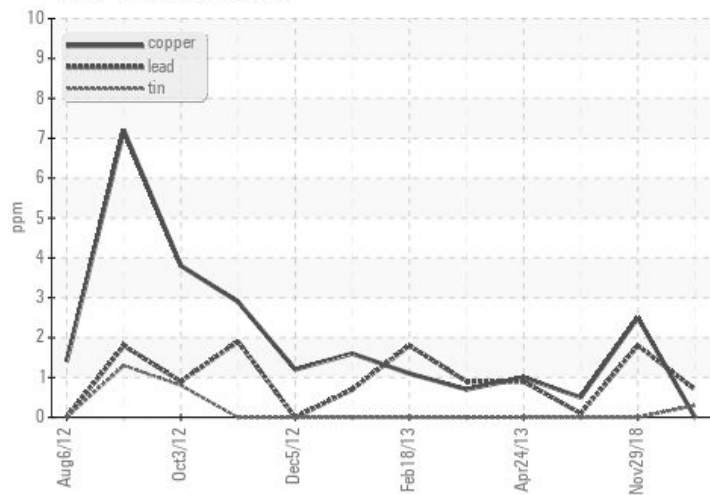


Graphs

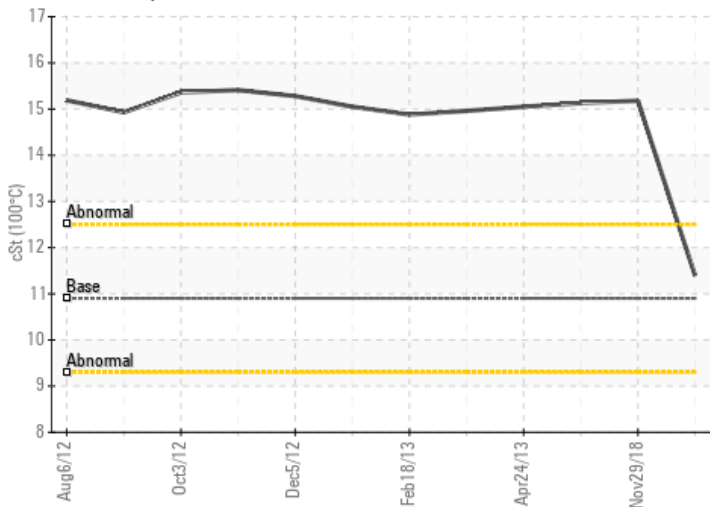
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



Base Number

