

LIEBHERR

CONSTRUCTION EQUIPMENT



115055 - Diesel Engine

Sample No: LH0194165

Oil Type: SAE 5W30



Sample Information

Sample Number	LH0194165	LH	LH0155729	---
Sample Date	18 Apr 2024	29 Oct 2020	16 May 2020	---
Machine Hours	4709	970	420	---
Oil Hours	0	0	0	---
Oil Changed	Changed	Changed	Changed	---
Sample Status	NORMAL	NORMAL	NORMAL	---

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Oil Condition

Visc @ 100°C	cSt	11.4	11.0	11.3	---
Oxidation (PA)	%	69	96	190	---



Contamination

Water	%	NEG	NEG	NEG	---
Soot %	%	0	0	0	---
Nitration (PA)	%	72	89	100	---
Sulfation (PA)	%	53	65	119	---
Glycol	%	NEG	NEG	NEG	---
Fuel	%	<1.0	1.2	1.4	---
Silicon	ppm	6	8	11	---
Sodium	ppm	4	5	2	---
Potassium	ppm	<1	<1	2	---

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.



Wear Metals

Iron	ppm	3	8	13	---
Copper	ppm	<1	8	25	---
Lead	ppm	0	1	3	---
Tin	ppm	0	<1	2	---
Aluminum	ppm	<1	1	2	---
Chromium	ppm	0	<1	<1	---
Molybdenum	ppm	53	58	46	---
Nickel	ppm	0	<1	<1	---
Titanium	ppm	0	<1	<1	---
Silver	ppm	0	<1	1	---
Manganese	ppm	0	<1	2	---
Vanadium	ppm	0	0	0	---



Additives

Calcium	ppm	811	903	1400	---
Magnesium	ppm	1058	1130	874	---
Zinc	ppm	1129	1258	847	---
Phosphorus	ppm	966	1002	688	---
Barium	ppm	0	6	48	---
Boron	ppm	41	28	95	---

Depot: LIEMIS
 Unique No: 5773869
 Signed: Kevin Marson
 Report Date: 02 May 2024



Graphs

