

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH30M 1253-121539 - Diesel Engine

Sample No: LH0213358

Oil Type: DIESEL ENGINE OIL SAE 30



KEYSTONE RAIL RECOVERY
70 MARYLAND AVE
JERSEY SHORE, NJ
US 17740
Contact: Service Manager



SAMPLE INFORMATION

Sample Number	LH0213358	LH0213330	LH0213327	LH0213326
Sample Date	07 Sep 2024	16 Oct 2022	16 Oct 2022	17 Nov 2021
Machine Hours	3000	1000	750	491
Oil Hours	0	0	0	0
Oil Changed	N/A	N/A	N/A	Not Changd
Sample Status	NORMAL	NORMAL	NORMAL	ATTENTION



OIL CONDITION

Visc @ 100°C	cSt	12.5	11.3	11.2	11.6
Base Number (BN)	mg KOH/g	5.1	4.4	4.4	4.7
Oxidation (PA)	%	88	200	201	188

T:
F:



CONTAMINATION

Soot %	%	0.1	0.1	0.1	0.1
Nitration (PA)	%	82	117	118	88
Sulfation (PA)	%	65	114	114	106
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	1.4
Silicon	ppm	8	7	8	9
Sodium	ppm	<1	3	3	3
Potassium	ppm	2	4	5	3

Diagnosis

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 30. Please confirm.
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.



WEAR METALS

Iron	ppm	8	18	18	12
Copper	ppm	27	151	155	161
Lead	ppm	3	13	13	5
Tin	ppm	1	2	2	2
Aluminum	ppm	<1	<1	<1	1
Chromium	ppm	<1	1	1	<1
Molybdenum	ppm	61	42	43	44
Nickel	ppm	0	0	0	0
Titanium	ppm	<1	2	2	<1
Silver	ppm	0	0	0	1
Manganese	ppm	<1	2	2	2
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1775	1297	1381	1420
Magnesium	ppm	452	780	815	933
Zinc	ppm	1215	805	842	859
Phosphorus	ppm	975	588	603	708
Barium	ppm	0	35	36	21
Boron	ppm	24	48	53	101

Depot: KEYJER
Unique No: 10615982
Signed: Wes Davis
Report Date: 22 Aug 2023



GRAPHS

