

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR L580 1414-56018 - Diesel Engine

Sample No: LH06225959

Oil Type: LIEBHERR MOTOROIL 5W30



Sample Information

Sample Number	LH06225959	LH0158440	LH06111813	LH06077364
Sample Date	01 Jul 2024	18 Mar 2024	06 Mar 2024	31 Jan 2024
Machine Hours	17000	16260	15997	15515
Oil Hours	0	0	0	0
Oil Changed	Changed	N/A	Changed	Not Changd
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

VERSO CORP - QUINNESEC MILL
W6791 US HWY 2
QUINNESEC, MI
US 49876
Contact: ERIC LARSON
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T:
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Oil Condition

Visc @ 100°C	cSt	13.9	12.2	12.4	12.1
Base Number (BN)	mg KOH/g	10.8	14.6	11.7	13.7
Oxidation (PA)	%	124	64	84	66



Contamination

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.2	0.1	0.2	0.1
Nitration (PA)	%	193	129	151	133
Sulfation (PA)	%	88	52	63	53
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	11	9	8	7
Sodium	ppm	5	2	4	3
Potassium	ppm	0	1	0	0



Wear Metals

Iron	ppm	23	6	12	6
Copper	ppm	3	0	1	<1
Lead	ppm	7	0	<1	2
Tin	ppm	<1	<1	<1	1
Aluminum	ppm	4	3	2	2
Chromium	ppm	1	0	<1	<1
Molybdenum	ppm	4	0	1	<1
Nickel	ppm	0	0	0	0
Titanium	ppm	<1	<1	0	<1
Silver	ppm	<1	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	0	<1	0



Additives

Calcium	ppm	6580	4936	4830	4475
Magnesium	ppm	48	36	33	34
Zinc	ppm	1683	1384	1279	1229
Phosphorus	ppm	1446	1172	1067	1090
Barium	ppm	0	0	0	0
Boron	ppm	290	277	268	269

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: VERQUI
Unique No: 11109452
Signed: Jonathan Hester
Report Date: 09 Jul 2024



Graphs

