

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR L580 1414-56018 - Diesel Engine

Sample No: LH0158328

Oil Type: LIEBHERR MOTOROIL 5W30



SAMPLE INFORMATION

Sample Number	LH0158328	LH06027016	LH05999672	LH0158324
Sample Date	13 Jan 2024	05 Dec 2023	05 Nov 2023	29 Sep 2023
Machine Hours	1000	0	0	1426
Oil Hours	0	15017	14495	0
Oil Changed	N/A	Changed	Not Changd	N/A
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:
F:



OIL CONDITION

Visc @ 100°C	cSt	12.0	12.6	12.3	11.8
Base Number (BN)	mg KOH/g	15.0	12.1	12.8	14.0
Oxidation (PA)	%	50	89	77	53



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.2	0.2	0.1
Nitration (PA)	%	108	157	144	114
Sulfation (PA)	%	46	67	61	47
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	8	9	8	9
Sodium	ppm	4	3	2	2
Potassium	ppm	0	0	0	1



WEAR METALS

Iron	ppm	7	12	9	9
Copper	ppm	<1	2	<1	<1
Lead	ppm	<1	2	0	<1
Tin	ppm	<1	2	<1	<1
Aluminum	ppm	2	3	3	2
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	2	1	0	1
Nickel	ppm	0	1	0	0
Titanium	ppm	<1	0	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	<1	0	<1	<1
Vanadium	ppm	<1	<1	<1	0



ADDITIVES

Calcium	ppm	4350	5013	5033	4672
Magnesium	ppm	50	52	50	40
Zinc	ppm	1245	1366	1411	1330
Phosphorus	ppm	1140	1101	1194	1120
Barium	ppm	0	0	0	0
Boron	ppm	267	239	237	320

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: VERQUI
Unique No: 10831473
Signed: Wes Davis
Report Date: 16 Jan 2024



GRAPHS

