

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH50 137429 - Diesel Engine

Sample No: LH0281413

Oil Type: DIESEL ENGINE OIL SAE 40



SAMPLE INFORMATION

Sample Number	LH0281413	LH0274497	LH0251871	LH0251475
Sample Date	07 Dec 2023	20 Aug 2023	23 Feb 2023	16 Jan 2023
Machine Hours	7578	6359	4360	3821
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

CMI - COMBINED METAL INDUSTRIES
 505 GARY RAY DRIVE
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OIL CONDITION

Visc @ 100°C	cSt	12.9	12.6	13.1	13.0
Oxidation (PA)	%	75	74	70	67



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0	0	0	0
Nitration (PA)	%	73	74	75	72
Sulfation (PA)	%	56	59	59	55
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	6	9	7
Sodium	ppm	2	2	1	2
Potassium	ppm	0	<1	<1	<1

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 40. Please confirm.
 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	4	4	4	3
Copper	ppm	2	2	2	2
Lead	ppm	<1	<1	<1	<1
Tin	ppm	0	<1	<1	<1
Aluminum	ppm	1	<1	1	1
Chromium	ppm	0	<1	0	0
Molybdenum	ppm	58	60	58	59
Nickel	ppm	<1	0	0	<1
Titanium	ppm	0	0	<1	<1
Silver	ppm	<1	0	0	0
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1172	1082	1104	1143
Magnesium	ppm	933	1006	978	967
Zinc	ppm	1199	1226	1216	1219
Phosphorus	ppm	971	1098	1101	1096
Barium	ppm	<1	0	0	0
Boron	ppm	3	2	1	6

Depot: COMWES
 Unique No: 5694882
 Signed: Wes Davis
 Report Date: 08 Dec 2023



GRAPHS

