

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH50M 120737-1216 - Diesel Engine

Sample No: LHMC116392

Oil Type: CHEVRON URSA SUPER PLUS EC 15W40



SAMPLE INFORMATION

Sample Number	LHMC116392	LH0173877	LHMC116375	LH0173873
Sample Date	04 Dec 2021	07 Oct 2021	02 Jul 2021	20 May 2021
Machine Hours	3856	3455	2691	2352
Oil Hours	401	359	339	308
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

STAIMAN RECYCLING

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WILLIAMSPORT, PA
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OIL CONDITION

Visc @ 100°C	cSt	13.1	13.1	13.2	13.0
Base Number (BN)	mg KOH/g	7.1	---	---	---
Oxidation (PA)	%	61	59	60	59

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.



CONTAMINATION

Soot %	%	0.1	0.1	0.1	0.1
Nitration (PA)	%	58	58	58	56
Sulfation (PA)	%	58	58	59	59
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	9	7	6	9
Sodium	ppm	1	2	2	3
Potassium	ppm	1	1	<1	<1



WEAR METALS

Iron	ppm	4	3	3	3
Copper	ppm	5	2	2	2
Lead	ppm	<1	<1	<1	<1
Tin	ppm	<1	<1	<1	<1
Aluminum	ppm	<1	2	1	0
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	83	85	77	86
Nickel	ppm	0	0	0	0
Titanium	ppm	<1	<1	<1	<1
Silver	ppm	<1	<1	1	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1370	1373	1317	1288
Magnesium	ppm	391	406	345	372
Zinc	ppm	1219	1182	1097	1117
Phosphorus	ppm	1050	1038	927	945
Barium	ppm	0	0	0	<1
Boron	ppm	400	419	456	535

Depot: STAWILLH
Unique No: 9787228
Signed: Wes Davis
Report Date: 22 Dec 2021



GRAPHS

