

LIEBHERR

CONSTRUCTION EQUIPMENT



[(354194)] LIEBHERR LH40C132159-1527 - Diesel Engine

Sample No: LH0209414

Oil Type: DIESEL ENGINE OIL SAE 15W40



SAMPLE INFORMATION

Sample Number	LH0209414	LH0209411	LH0209405	LH0209404
Sample Date	19 Mar 2023	14 Mar 2023	27 Jan 2023	08 Dec 2022
Machine Hours	500	3250	500	2710
Oil Hours	0	0	0	0
Oil Changed	Changed	Not Changd	Changed	Not Changd
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

National Salvage Ltd.
206-33 Street N
Lethbridge, AB
CA T1H 3Z5
Contact: Service Manager



OIL CONDITION

Visc @ 100°C	cSt	13.5	13.8	13.6	13.8
Oxidation (PA)	%	58	57	49	59

T:
F:



CONTAMINATION

Soot %	%	0	0	0	0
Nitration (PA)	%	53	48	48	49
Sulfation (PA)	%	52	58	49	55
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	6	6	6
Sodium	ppm	1	1	1	1
Potassium	ppm	<1	0	0	0

Diagnosis

Resample at the next service interval to monitor. Metal levels are typical for a new component breaking in. 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	3	3	4	3
Copper	ppm	1	9	1	<1
Lead	ppm	0	2	0	0
Tin	ppm	0	1	0	0
Aluminum	ppm	<1	1	1	1
Chromium	ppm	<1	0	0	0
Molybdenum	ppm	56	58	58	56
Nickel	ppm	0	0	0	0
Titanium	ppm	0	0	<1	0
Silver	ppm	<1	<1	0	0
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1073	1083	1078	1045
Magnesium	ppm	942	952	942	915
Zinc	ppm	1181	1182	1192	1156
Phosphorus	ppm	1065	1092	1077	1051
Barium	ppm	0	0	0	0
Boron	ppm	2	3	3	3

Depot: NATLET
Unique No: 5616449
Signed: Wes Davis
Report Date: 21 Jul 2023



GRAPHS

