

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH60M 099250-1475 - Diesel Engine

Sample No: LH0122720

Oil Type: SAE 5W30



SAMPLE INFORMATION

Sample Number	LH0122720	LH0122815	LH0122800	LH0122779
Sample Date	19 Jun 2018	25 May 2018	12 Apr 2018	22 Feb 2018
Machine Hours	2268	1808	1136	545
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	N/A	N/A
Sample Status	NORMAL	NORMAL	NORMAL	ABNORMAL

J.D. Irving Sussex
 39C Rte 890, Sussex Garage
 Four Corners, NB
 CA E4G 2W1
 Contact: Mike Coates
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 T:
 F:



OIL CONDITION

Visc @ 40°C	cSt	---	63.5	---	67.4
Visc @ 100°C	cSt	10.8	10.6	11.2	11.6
Viscosity Index (VI)	Scale	---	157	---	168
Oxidation (PA)	%	110	124	127	185

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 condition of the oil is acceptable for the time in service.



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0	0	0	0
Nitration (PA)	%	116	121	117	103
Sulfation (PA)	%	61	65	68	100
Glycol	%	0.0	0.0	0.0	0.0
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	7	7	11
Sodium	ppm	4	5	6	4
Potassium	ppm	13	15	14	10



WEAR METALS

Iron	ppm	4	9	8	10
Copper	ppm	<1	3	9	49
Lead	ppm	<1	<1	1	5
Tin	ppm	0	<1	<1	<1
Aluminum	ppm	1	1	2	4
Chromium	ppm	<1	<1	<1	2
Molybdenum	ppm	<1	<1	5	34
Nickel	ppm	0	<1	0	<1
Titanium	ppm	<1	<1	<1	<1
Silver	ppm	0	<1	<1	<1
Manganese	ppm	<1	<1	<1	1
Vanadium	ppm	0	0	<1	0



ADDITIVES

Calcium	ppm	2240	2356	2275	1529
Magnesium	ppm	73	85	152	715
Zinc	ppm	734	785	785	826
Phosphorus	ppm	625	686	685	659
Barium	ppm	<1	1	6	48
Boron	ppm	2	3	11	80

Depot: JDISUS
Unique No: 4707491
Signed: Kevin Marson
Report Date: 26 Jun 2018



GRAPHS

