

LIEBHERR

CONSTRUCTION EQUIPMENT



[(347307)] LIEBHERR R934 052025-1550 - Diesel Engine

Sample No: LH0270383

Oil Type: PETRO CANADA 10W40



SAMPLE INFORMATION

Sample Number	LH0270383	LH0239225	LH0239534	LH0227471
Sample Date	27 Jul 2023	15 Nov 2022	27 Jul 2022	09 Mar 2022
Machine Hours	2842	1904	1478	979
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	ABNORMAL	NORMAL

MOFFATT SCRAP IRON & METAL INC.
 9620 GUELPH LINE
 CAMPBELLVILLE, ON
 CA L0P 1B0
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OIL CONDITION

Visc @ 100°C	cSt	13.2	13.1	11.7	11.9
Oxidation (PA)	%	71	73	89	102



CONTAMINATION

Soot %	%	0	0	0	0
Nitration (PA)	%	78	75	85	92
Sulfation (PA)	%	57	57	62	69
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	1.1	1.7
Silicon	ppm	7	8	8	8
Sodium	ppm	2	2	5	4
Potassium	ppm	<1	1	<1	2

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.



WEAR METALS

Iron	ppm	5	4	6	9
Copper	ppm	3	4	13	73
Lead	ppm	1	1	2	3
Tin	ppm	<1	<1	<1	1
Aluminum	ppm	1	2	2	2
Chromium	ppm	<1	0	<1	<1
Molybdenum	ppm	60	58	58	58
Nickel	ppm	0	<1	0	<1
Titanium	ppm	0	<1	<1	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1104	1127	836	870
Magnesium	ppm	1018	975	1136	1171
Zinc	ppm	1253	1218	1232	1191
Phosphorus	ppm	1093	1064	1004	1001
Barium	ppm	<1	<1	<1	3
Boron	ppm	4	3	25	31

Depot: MOFMOF
 Unique No: 5618194
 Signed: Wes Davis
 Report Date: 31 Jul 2023



GRAPHS

