

LIEBHERR

CONSTRUCTION EQUIPMENT



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

Sample No: LH0277610

Oil Type: PETRO CANADA 10W40



SAMPLE INFORMATION

Sample Number	LH0277610	LH0270383	LH0239225	LH0239534
Sample Date	21 Jan 2024	27 Jul 2023	15 Nov 2022	27 Jul 2022
Machine Hours	3500	2842	1904	1478
Oil Hours	0	0	0	0
Oil Changed	N/A	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	ABNORMAL

MOFFATT SCRAP IRON & METAL INC.
 9620 GUELPH LINE
 CAMPBELLVILLE, ON
 CA L0P 1B0
 Contact: Paul Brochu
 maintenance@moffatsscrapiron.ca
 T: (905)854-2792
 F: (905)854-1225



OIL CONDITION

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



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0	0	0	0
Nitration (PA)	%	77	78	75	85
Sulfation (PA)	%	55	57	57	62
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	1.1
Silicon	ppm	6	7	8	8
Sodium	ppm	1	2	2	5
Potassium	ppm	2	<1	1	<1

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	4	5	4	6
Copper	ppm	2	3	4	13
Lead	ppm	2	1	1	2
Tin	ppm	<1	<1	<1	<1
Aluminum	ppm	1	1	2	2
Chromium	ppm	<1	<1	0	<1
Molybdenum	ppm	53	60	58	58
Nickel	ppm	<1	0	<1	0
Titanium	ppm	0	0	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1253	1104	1127	836
Magnesium	ppm	872	1018	975	1136
Zinc	ppm	1201	1253	1218	1232
Phosphorus	ppm	1012	1093	1064	1004
Barium	ppm	0	<1	<1	<1
Boron	ppm	14	4	3	25

Depot: MOFMOF
 Unique No: 5711335
 Signed: Kevin Marson
 Report Date: 23 Jan 2024



GRAPHS

