

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH50M 145461-1216 - Diesel Engine

Sample No: LH0255616

Oil Type: 49 NORTH 10W30



GENERAL RECYCLING INDUSTRIES LTD.
 4120 - 84 AVENUE
 EDMONTON, AB
 CA T6B 3H3
 Contact: Corey MacKay
 cmackay@trailco.ca
 T: (587)926-1610
 F: (780)485-4294



SAMPLE INFORMATION

Sample Number	LH0255616	LH0255613	LH0255604	LH0255601
Sample Date	25 Nov 2023	14 Sep 2023	26 Jun 2023	04 May 2023
Machine Hours	2400	1812	1086	537
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	N/A	Changed
Sample Status	MARGINAL	NORMAL	NORMAL	NORMAL



OIL CONDITION

Visc @ 100°C	cSt	10.7	10.8	11.3	11.8
Oxidation (PA)	%	72	78	92	200



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0	0	0	0
Nitration (PA)	%	69	68	68	104
Sulfation (PA)	%	54	58	67	109
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	2	<1.0	1.7	1.5
Silicon	ppm	6	7	4	8
Sodium	ppm	2	2	2	2
Potassium	ppm	0	0	<1	4



WEAR METALS

Iron	ppm	4	5	5	11
Copper	ppm	9	42	101	240
Lead	ppm	1	2	3	8
Tin	ppm	<1	<1	<1	<1
Aluminum	ppm	2	1	<1	2
Chromium	ppm	0	<1	<1	<1
Molybdenum	ppm	56	55	54	46
Nickel	ppm	<1	0	0	0
Titanium	ppm	0	0	0	<1
Silver	ppm	<1	<1	0	0
Manganese	ppm	0	0	<1	1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1002	1002	1058	1317
Magnesium	ppm	944	940	938	924
Zinc	ppm	1172	1172	1125	876
Phosphorus	ppm	1039	1005	1004	773
Barium	ppm	<1	2	6	30
Boron	ppm	2	4	16	100

Diagnosis

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time. All component wear rates are normal. Light fuel dilution occurring. No other contaminants were detected in the oil. The condition of the oil is acceptable for the time in service.

Depot: GEN156EDM
 Unique No: 5684924
 Signed: Kevin Marson
 Report Date: 01 Dec 2023



GRAPHS

