

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH80M 1205-65873 - Diesel Engine

Sample No: LH0202889

Oil Type: PETRO CANADA 10W40



GERDAU AMERISTEEL

1 GERDAU COURT

WHITBY, ON

CA L1N 5T1

Contact: Tyson Young

tyoung@gerdauameristeel.com

T: (905)668-8811

F: (905)668-6469



SAMPLE INFORMATION

Sample Number	LH0202889	LH0251859	LH	LH
Sample Date	03 Aug 2023	22 Mar 2023	06 Jun 2022	11 Nov 2021
Machine Hours	29500	29054	27942	27541
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ATTENTION	ABNORMAL	ABNORMAL	ABNORMAL



OIL CONDITION

Visc @ 100°C	cSt	14.5	14.3	14.3	14.6
Oxidation (PA)	%	59	74	65	43



CONTAMINATION

Soot %	%	0.4	0.8	0.8	0.7
Nitration (PA)	%	74	106	93	58
Sulfation (PA)	%	57	71	65	52
Glycol	%	0.0	0.0	0.0	0.0
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	8	9	7
Sodium	ppm	207	630	748	182
Potassium	ppm	2	3	0	2



WEAR METALS

Iron	ppm	8	18	21	19
Copper	ppm	1	3	3	2
Lead	ppm	0	<1	<1	<1
Tin	ppm	0	<1	<1	<1
Aluminum	ppm	5	15	25	10
Chromium	ppm	<1	<1	1	<1
Molybdenum	ppm	41	55	55	47
Nickel	ppm	<1	1	2	<1
Titanium	ppm	<1	<1	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1233	1208	1124	1161
Magnesium	ppm	793	943	932	922
Zinc	ppm	1063	1144	1194	1165
Phosphorus	ppm	952	995	1054	1007
Barium	ppm	0	0	0	0
Boron	ppm	22	5	9	9

Diagnosis

Check for low coolant level. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. Water treatment chemicals present, indicating slow coolant leak. Test for glycol is negative. The water content is negligible. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service (see recommendation).

Depot: LAKWHI

Unique No: 5619507

Signed: Kevin Marson

Report Date: 08 Aug 2023

LIEBHERR

CONSTRUCTION EQUIPMENT



GRAPHS

