

LIEBHERR

CONSTRUCTION EQUIPMENT



056255-1007 - Diesel Engine

Sample No: LH0270056

Oil Type: PETRO CANADA 10W40



SAMPLE INFORMATION

Sample Number	LH0270056	LH0235491	LH0133029	LH0112188
Sample Date	14 Jul 2023	27 Jun 2022	24 Oct 2018	15 Jun 2017
Machine Hours	16930	0	142295	12396
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Not Changd
Sample Status	NORMAL	NORMAL	ABNORMAL	NORMAL

American Iron and Metal
 9100 BOUL HENRI-BOURASSA EST
 MONTREAL, QC
 CA H1E 2S4
 Contact: Sebastien Liautaud
 sliautaud@aimrecyclinggroup.com
 T: (514)494-2000
 F: (450)661-5033



OIL CONDITION

Visc @ 100°C	cSt	12.9	13.0	11.8	14.2
Oxidation (PA)	%	58	59	59	53



CONTAMINATION

Soot %	%	1	0.5	4.1	0.1
Nitration (PA)	%	72	66	91	55
Sulfation (PA)	%	57	59	83	59
Glycol	%	NEG	NEG	0.0	NEG
Fuel	%	<1.0	<1.0	0.5	<1.0
Silicon	ppm	6	7	9	8
Sodium	ppm	2	2	9	21
Potassium	ppm	2	1	2	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	12	9	57	4
Copper	ppm	6	6	339	5
Lead	ppm	<1	<1	9	1
Tin	ppm	1	<1	3	<1
Aluminum	ppm	2	1	4	1
Chromium	ppm	<1	<1	1	<1
Molybdenum	ppm	59	58	21	50
Nickel	ppm	0	0	0	0
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	1136	1072	2250	1534
Magnesium	ppm	982	974	380	842
Zinc	ppm	1193	1186	1186	1220
Phosphorus	ppm	1071	1005	962	1059
Barium	ppm	0	0	<1	13
Boron	ppm	3	4	8	27

Depot: AMEMON
 Unique No: 5616413
 Signed: Wes Davis
 Report Date: 21 Jul 2023



GRAPHS

