

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR L550 040969-1287 - Diesel Engine

Sample No: LH0257439

Oil Type: PETRO CANADA 10W40



SAMPLE INFORMATION

Sample Number	LH0257439	LH0247293	LH0239418	LH
Sample Date	29 Aug 2023	27 Jun 2023	14 Mar 2023	12 Jan 2023
Machine Hours	20270	19847	19072	18588
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

CMI - COMBINED METAL INDUSTRIES
 505 GARY RAY DRIVE
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 CA M9L 1P9
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 F:



OIL CONDITION

Visc @ 100°C	cSt	14.3	13.8	14.3	14.2
Oxidation (PA)	%	57	64	60	61



CONTAMINATION

Soot %	%	0.1	0.2	0.1	0.1
Nitration (PA)	%	54	68	61	62
Sulfation (PA)	%	54	53	58	55
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	5	6	5	5
Sodium	ppm	1	2	1	2
Potassium	ppm	0	0	0	0

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	3	5	4	5
Copper	ppm	1	2	<1	1
Lead	ppm	<1	<1	<1	<1
Tin	ppm	0	0	<1	0
Aluminum	ppm	2	3	3	3
Chromium	ppm	0	0	0	0
Molybdenum	ppm	58	59	58	58
Nickel	ppm	0	0	<1	<1
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1045	1059	1113	1145
Magnesium	ppm	968	988	962	969
Zinc	ppm	1192	1194	1217	1216
Phosphorus	ppm	1056	1072	1111	1102
Barium	ppm	0	0	0	0
Boron	ppm	3	1	<1	2

Depot: COMWES
 Unique No: 5632375
 Signed: Wes Davis
 Report Date: 30 Aug 2023



GRAPHS

