

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH40M 114405-1215 - Diesel Engine

Sample No: LH0270293

Oil Type: PETRO CANADA SUPREME 5W30



ELG Canada
4375 CORPORATE DRIVE
BURLINGTON, ON
CA L7L 5P7
Contact: Service Manager

T:
F: (905)335-9687



Sample Information

Sample Number	LH0270293	LH0281441	LH0270643	LH0251679
Sample Date	25 Mar 2024	27 Nov 2023	12 Jul 2023	31 Jan 2023
Machine Hours	6625	6537	6035	5542
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL



Oil Condition

Visc @ 100°C	cSt	14.0	12.9	13.1	12.8
Oxidation (PA)	%	56	66	61	64



Contamination

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0	0	0	0
Nitration (PA)	%	48	74	68	69
Sulfation (PA)	%	50	53	52	55
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	4	6	6	6
Sodium	ppm	<1	2	2	1
Potassium	ppm	0	0	0	0



Wear Metals

Iron	ppm	3	3	3	3
Copper	ppm	1	3	1	1
Lead	ppm	0	<1	<1	1
Tin	ppm	0	0	0	<1
Aluminum	ppm	<1	1	<1	2
Chromium	ppm	0	0	0	0
Molybdenum	ppm	56	59	58	57
Nickel	ppm	0	<1	0	<1
Titanium	ppm	0	0	0	0
Silver	ppm	0	<1	<1	<1
Manganese	ppm	0	0	<1	<1
Vanadium	ppm	0	0	0	0



Additives

Calcium	ppm	1093	1046	1074	1110
Magnesium	ppm	938	965	981	959
Zinc	ppm	1155	1185	1207	1203
Phosphorus	ppm	978	1006	1058	1072
Barium	ppm	0	<1	0	0
Boron	ppm	3	3	4	2

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. Viscosity of sample indicates oil is within SAE 40 range, advise investigate. The condition of the oil is acceptable for the time in service.

Depot: STR437BUR
Unique No: 5760738
Signed: Kevin Marson
Report Date: 09 Apr 2024



Graphs

