

LIEBHERR

CONSTRUCTION EQUIPMENT



74710 - Diesel Engine

Sample No: LH0289691

Oil Type: DIESEL ENGINE OIL SAE 40



Sample Information

Sample Number	LH0289691	LH0270541	LH0270115	---
Sample Date	21 Apr 2024	13 Mar 2024	25 Sep 2023	---
Machine Hours	2711	2276	430	---
Oil Hours	0	0	0	---
Oil Changed	Changed	Changed	N/A	---
Sample Status	NORMAL	NORMAL	ABNORMAL	---

LIEBHERR CANADA LTD.
 1015 SUTTON DRIVE
 BURLINGTON, ON
 CA L7L 5Z8
 Contact: Joseph Rodgers
 joseph.rodgers@liebherr.com
 T:
 F: (905)319-6622



Oil Condition

Visc @ 100°C	cSt	13.7	13.4	12.1	---
Oxidation (PA)	%	59	65	206	---



Contamination

Water	%	NEG	NEG	NEG	---
Soot %	%	0	0	0	---
Nitration (PA)	%	53	63	90	---
Sulfation (PA)	%	53	53	112	---
Glycol	%	NEG	0.0	NEG	---
Fuel	%	<1.0	<1.0	1.3	---
Silicon	ppm	7	12	11	---
Sodium	ppm	<1	1	2	---
Potassium	ppm	<1	1	3	---

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	4	6	10	---
Copper	ppm	49	264	150	---
Lead	ppm	1	7	6	---
Tin	ppm	0	<1	1	---
Aluminum	ppm	1	2	3	---
Chromium	ppm	0	<1	<1	---
Molybdenum	ppm	57	58	47	---
Nickel	ppm	0	<1	0	---
Titanium	ppm	0	0	0	---
Silver	ppm	0	0	<1	---
Manganese	ppm	0	0	2	---
Vanadium	ppm	0	0	0	---



Additives

Calcium	ppm	1038	1083	1400	---
Magnesium	ppm	942	960	975	---
Zinc	ppm	1145	1187	893	---
Phosphorus	ppm	955	1006	778	---
Barium	ppm	<1	<1	27	---
Boron	ppm	4	4	91	---

Depot: LIEMIS
 Unique No: 5763598
 Signed: Kevin Marson
 Report Date: 22 Apr 2024



Graphs

