

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR L580 069442-1762 - Diesel Engine

Sample No: LH0247595

Oil Type: SHELL ROTELLA T4 15W40



SAMPLE INFORMATION

Sample Number	LH0247595	---	---	---
Sample Date	04 Sep 2023	---	---	---
Machine Hours	2545	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	NORMAL	---	---	---

HUBERT ET FILS INC
 1012 CHEMIN DE PARC INDUSTRIEL
 BOIS-FRANC, QC
 CA J9E 3A9
 Contact: Service Manager



OIL CONDITION

Visc @ 100°C	cSt	14.0	---	---	---
Oxidation (PA)	%	82	---	---	---

T:
F:



CONTAMINATION

Soot %	%	0.1	---	---	---
Nitration (PA)	%	79	---	---	---
Sulfation (PA)	%	65	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	<1.0	---	---	---
Silicon	ppm	8	---	---	---
Sodium	ppm	4	---	---	---
Potassium	ppm	6	---	---	---

Diagnosis

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. All component wear rates are normal. Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil. Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.



WEAR METALS

Iron	ppm	9	---	---	---
Copper	ppm	63	---	---	---
Lead	ppm	6	---	---	---
Tin	ppm	<1	---	---	---
Aluminum	ppm	2	---	---	---
Chromium	ppm	<1	---	---	---
Molybdenum	ppm	<1	---	---	---
Nickel	ppm	<1	---	---	---
Titanium	ppm	0	---	---	---
Silver	ppm	<1	---	---	---
Manganese	ppm	0	---	---	---
Vanadium	ppm	0	---	---	---



ADDITIVES

Calcium	ppm	2234	---	---	---
Magnesium	ppm	34	---	---	---
Zinc	ppm	1147	---	---	---
Phosphorus	ppm	897	---	---	---
Barium	ppm	2	---	---	---
Boron	ppm	55	---	---	---

Depot: HUB101BOI
Unique No: 5659294
Signed: Wes Davis
Report Date: 19 Oct 2023



GRAPHS

