

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH110 155976-1227 - Diesel Engine

Sample No: LH0280558

Oil Type: HDMO SYN BLEND 15W40 CK4



KINDER MORGAN
4301 IVERSON
TRINITY, AL
US 35601
Contact: CHIP OAKES

T: (256)350-0006
F: (256)355-5250



SAMPLE INFORMATION

Sample Number	LH0280558	---	---	---
Sample Date	09 Jan 2024	---	---	---
Machine Hours	166	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Not Changd	---	---	---
Sample Status	ATTENTION	---	---	---



OIL CONDITION

Visc @ 100°C	cSt	12.0	---	---	---
Base Number (BN)	mg KOH/g	7.1	---	---	---
Oxidation (PA)	%	193	---	---	---



CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	0.1	---	---	---
Nitration (PA)	%	73	---	---	---
Sulfation (PA)	%	108	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	1.0	---	---	---
Silicon	ppm	8	---	---	---
Sodium	ppm	3	---	---	---
Potassium	ppm	2	---	---	---



WEAR METALS

Iron	ppm	4	---	---	---
Copper	ppm	16	---	---	---
Lead	ppm	<1	---	---	---
Tin	ppm	<1	---	---	---
Aluminum	ppm	2	---	---	---
Chromium	ppm	<1	---	---	---
Molybdenum	ppm	42	---	---	---
Nickel	ppm	<1	---	---	---
Titanium	ppm	0	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	<1	---	---	---
Vanadium	ppm	0	---	---	---



ADDITIVES

Calcium	ppm	1202	---	---	---
Magnesium	ppm	808	---	---	---
Zinc	ppm	794	---	---	---
Phosphorus	ppm	693	---	---	---
Barium	ppm	15	---	---	---
Boron	ppm	140	---	---	---

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. Fuel content negligible. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Depot: KINTRI
Unique No: 10847994
Signed: Don Baldrige
Report Date: 29 Jan 2024



GRAPHS

