

LIEBHERR

CONSTRUCTION EQUIPMENT



[REMAN] 2007 14 0453 - Diesel Engine

Sample No: LH0141003

Oil Type: CHEVRON Delo 600 ADF 15W40



SAMPLE INFORMATION

Sample Number	LH0141003	LH0140963	---	---
Sample Date	07 Jul 2023	01 Jun 2023	---	---
Machine Hours	25560	25360	---	---
Oil Hours	0	0	---	---
Oil Changed	Not Changd	Not Changd	---	---
Sample Status	NORMAL	NORMAL	---	---

LIEBHERR CANADA LTD. - REMAN
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OIL CONDITION

Visc @ 100°C	cSt	13.5	13.5	---	---
Oxidation (PA)	%	72	69	---	---



CONTAMINATION

Soot %	%	0	0	---	---
Nitration (PA)	%	55	48	---	---
Sulfation (PA)	%	60	58	---	---
Glycol	%	0.0	0.0	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	15	14	---	---
Sodium	ppm	20	17	---	---
Potassium	ppm	259	273	---	---

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. The water content is negligible. 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	7	5	---	---
Copper	ppm	5	5	---	---
Lead	ppm	0	0	---	---
Tin	ppm	0	0	---	---
Aluminum	ppm	4	6	---	---
Chromium	ppm	<1	<1	---	---
Molybdenum	ppm	683	710	---	---
Nickel	ppm	0	0	---	---
Titanium	ppm	<1	<1	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	<1	<1	---	---
Vanadium	ppm	0	0	---	---



ADDITIVES

Calcium	ppm	1492	1442	---	---
Magnesium	ppm	152	154	---	---
Zinc	ppm	397	379	---	---
Phosphorus	ppm	372	359	---	---
Barium	ppm	8	7	---	---
Boron	ppm	505	529	---	---

Depot: REMAN
 Unique No: 5619779
 Signed: Kevin Marson
 Report Date: 10 Aug 2023



GRAPHS

