

LIEBHERR

CONSTRUCTION EQUIPMENT



2003.12.0533 - Diesel Engine

Sample No: LH0266051

Oil Type: PETRO CANADA DURON SHP 15W40



SAMPLE INFORMATION

Sample Number	LH0266051	---	---	---
Sample Date	04 Aug 2023	---	---	---
Machine Hours	16317	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Not Changd	---	---	---
Sample Status	NORMAL	---	---	---

LIEBHERR CANADA LTD. - REMAN
 1015 SUTTON DRIVE
 BURLINGTON, ON
 CA L7L 5Z8
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OIL CONDITION

Visc @ 100°C	cSt	14.3	---	---	---
Oxidation (PA)	%	62	---	---	---



CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	0	---	---	---
Nitration (PA)	%	48	---	---	---
Sulfation (PA)	%	51	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	<1.0	---	---	---
Silicon	ppm	8	---	---	---
Sodium	ppm	37	---	---	---
Potassium	ppm	<1	---	---	---

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. 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	13	---	---	---
Copper	ppm	6	---	---	---
Lead	ppm	2	---	---	---
Tin	ppm	0	---	---	---
Aluminum	ppm	2	---	---	---
Chromium	ppm	<1	---	---	---
Molybdenum	ppm	56	---	---	---
Nickel	ppm	<1	---	---	---
Titanium	ppm	0	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	0	---	---	---
Vanadium	ppm	0	---	---	---



ADDITIVES

Calcium	ppm	865	---	---	---
Magnesium	ppm	1031	---	---	---
Zinc	ppm	1123	---	---	---
Phosphorus	ppm	1002	---	---	---
Barium	ppm	39	---	---	---
Boron	ppm	48	---	---	---

Depot: REMAN
 Unique No: 5697655
 Signed: Kevin Marson
 Report Date: 21 Dec 2023



GRAPHS

