



### 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

**OIL CONDITION** Visc @ 100°C

cSt

%

0 14.3

62

Oxidation (PA)

	IAMIN	AIION		
Water	%	NEG	 	
Soot %	%	0	 	
Nitration (PA)	%	48	 	
Sulfation (PA)	%	51	 	
Glycol	%	NEG	 	
Fuel	%	<1.0	 	
Silicon	ppm	08	 	
Sodium	ppm	0 37	 	
Potassium	maa	<1	 	

## WEAR METALS

Iron	ppm	<b>0</b> 13	 	
Copper	ppm	06	 	
Lead	ppm	02	 	
Tin	ppm	0	 	
Aluminum	ppm	02	 	
Chromium	ppm	<b>○</b> <1	 	
Molybdenum	ppm	<b>5</b> 6	 	
Nickel	ppm	<b>○</b> <1	 	
Titanium	ppm	0	 	
Silver	ppm	0	 	
Manganese	ppm	0	 	
Vanadium	ppm	0	 	

A				
	TIVES			
Calcium	ppm	<b>865</b>	 	
Magnesium	ppm	<b>0</b> 1031	 	
Zinc	ppm	1123	 	
Phosphorus	ppm	0 1002	 	
Barium	ppm	39	 	
Boron	ppm	48	 	

#### LIEBHERR CANADA LTD. - REMAN

1015 SUTTON DRIVE BURLINGTON, ON CA L7L 5Z8 Contact: Morteza Mahmoudi morteza.mahmoudi@liebherr.com T: (905)319-9222 F: (905)319-6622

#### 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.

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

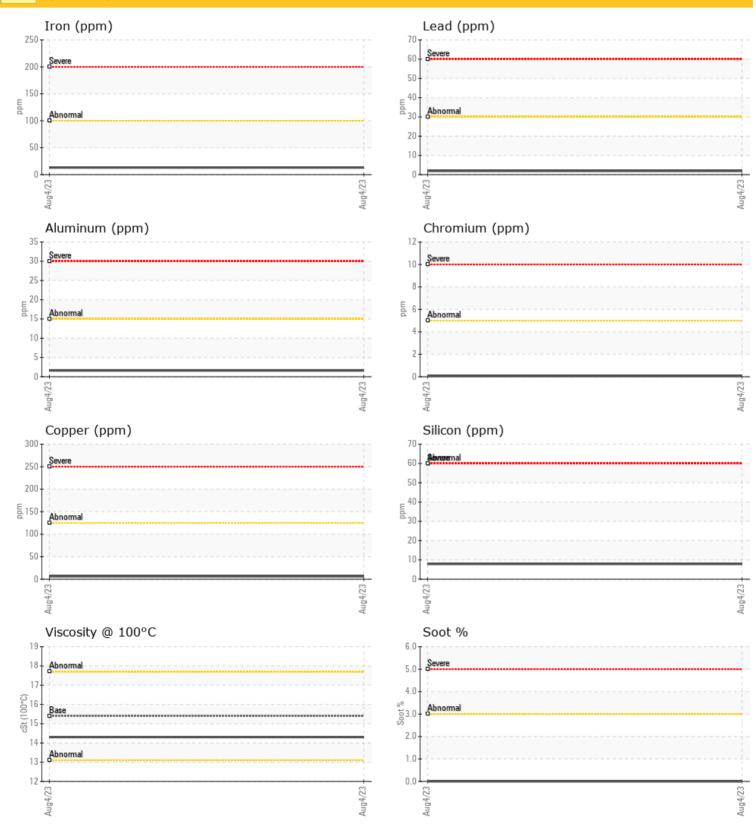
Contact/Location: Morteza Mahmoudi - REMAN

# CONSTRUCTION EQUIPMENT



GRAPHS

 $\odot$ 



Report Id: REMAN [WCAMIS] 02604570 (Generated: 12/21/2023 16:19:57) Rev: 1

Contact/Location: Morteza Mahmoudi - REMAN