

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### [ENERGY CRANE [597641]] 086178 - Diesel Engine

Sample No: LH0151137

Oil Type: CHEVRON DELO 400 SYNTHETIC 5W40



#### SAMPLE INFORMATION

Sample Number	LH0151137	---	---	---
Sample Date	13 Feb 2024	---	---	---
Machine Hours	1175	---	---	---
Oil Hours	0	---	---	---
Oil Changed	N/A	---	---	---
Sample Status	NORMAL	---	---	---

**LIEBHERR CANADA LTD.**  
 10374 267 ST.  
 ACHESON, AB  
 CA T7X 6A2  
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#### OIL CONDITION

Visc @ 100°C	cSt	13.1	---	---	---
Oxidation (PA)	%	59	---	---	---



#### CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	0	---	---	---
Nitration (PA)	%	72	---	---	---
Sulfation (PA)	%	54	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	<1.0	---	---	---
Silicon	ppm	7	---	---	---
Sodium	ppm	2	---	---	---
Potassium	ppm	3	---	---	---

#### Diagnosis

Resample at the next service interval to monitor. Metal levels are typical for a new component breaking in. 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	---	---	---
Copper	ppm	42	---	---	---
Lead	ppm	1	---	---	---
Tin	ppm	<1	---	---	---
Aluminum	ppm	2	---	---	---
Chromium	ppm	<1	---	---	---
Molybdenum	ppm	4	---	---	---
Nickel	ppm	<1	---	---	---
Titanium	ppm	0	---	---	---
Silver	ppm	<1	---	---	---
Manganese	ppm	0	---	---	---
Vanadium	ppm	0	---	---	---



#### ADDITIVES

Calcium	ppm	1297	---	---	---
Magnesium	ppm	695	---	---	---
Zinc	ppm	752	---	---	---
Phosphorus	ppm	687	---	---	---
Barium	ppm	<1	---	---	---
Boron	ppm	74	---	---	---

Depot: LIESPR  
 Unique No: 5733725  
 Signed: Kevin Marson  
 Report Date: 21 Feb 2024



### GRAPHS

