

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### [(348643)] LIEBHERR NO UNIT WC0904887 - Diesel Engine

Sample No: LH0199303

Oil Type: SAE 0W40



#### Sample Information

Sample Number	LH0199303	LH0199302	LH0199301	LH0199295
Sample Date	29 Jan 2024	17 Jan 2024	10 Oct 2023	06 Feb 2023
Machine Hours	3004	2730	2500	1978
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

**COUNTY OF ST. PAUL NO. 19**  
 5015 - 49 AVENUE  
 ST. PAUL, AB  
 CA T0A 3A4  
 Contact: DD SKAWRONSKI-MUNRO  
 DSKAWRONSKI@COUNTY.STPAUL.AB.CA  
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#### Oil Condition

Visc @ 100°C	cSt	12.6	12.7	12.8	13.3
Oxidation (PA)	%	151	147	137	86



#### Contamination

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0	0	0	0
Nitration (PA)	%	83	80	88	84
Sulfation (PA)	%	89	88	89	68
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	7	7	8	10
Sodium	ppm	2	2	3	2
Potassium	ppm	<1	1	<1	<1

#### Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. 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	3	4	7	6
Copper	ppm	2	2	10	5
Lead	ppm	0	<1	2	<1
Tin	ppm	0	0	0	<1
Aluminum	ppm	2	3	3	4
Chromium	ppm	0	0	<1	<1
Molybdenum	ppm	102	102	101	93
Nickel	ppm	0	<1	0	0
Titanium	ppm	0	0	0	<1
Silver	ppm	0	0	<1	0
Manganese	ppm	0	0	0	<1
Vanadium	ppm	0	0	0	<1



#### Additives

Calcium	ppm	2130	2141	2196	2331
Magnesium	ppm	12	16	14	16
Zinc	ppm	1093	1092	1146	1212
Phosphorus	ppm	953	964	996	1111
Barium	ppm	<1	0	<1	0
Boron	ppm	105	108	57	62

Depot: COU501STP  
 Unique No: 5776327  
 Signed: Kevin Marson  
 Report Date: 14 May 2024



### Graphs

