



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**LIEBHERR 34**  
Component  
**Upper Diesel Engine**  
Fluid  
**SAE 5W30 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0685985	---	---
Sample Date		Client Info		21 Nov 2023	---	---
Machine Age	hrs	Client Info		17506	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				NORMAL	---	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	9	---	---
Chromium	ppm	ASTM D5185(m)	>5	<1	---	---
Nickel	ppm	ASTM D5185(m)	>5	<1	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)	>3	0	---	---
Aluminum	ppm	ASTM D5185(m)	>15	2	---	---
Lead	ppm	ASTM D5185(m)	>30	1	---	---
Copper	ppm	ASTM D5185(m)	>125	5	---	---
Tin	ppm	ASTM D5185(m)	>5	<1	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---

## CONTAMINATION

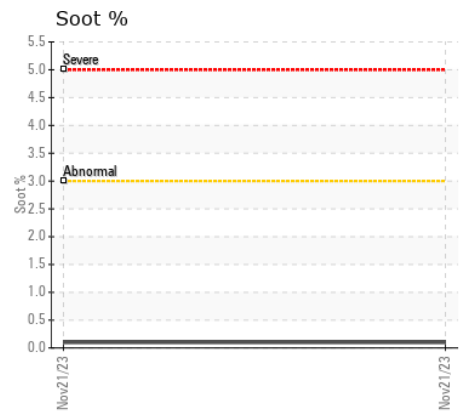
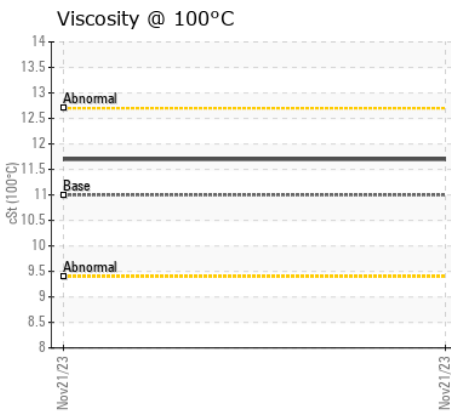
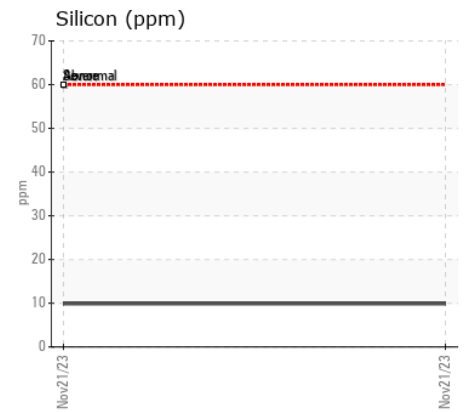
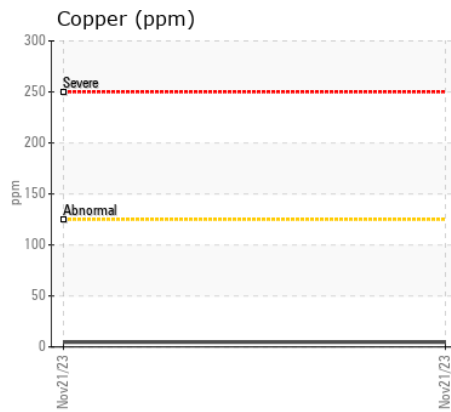
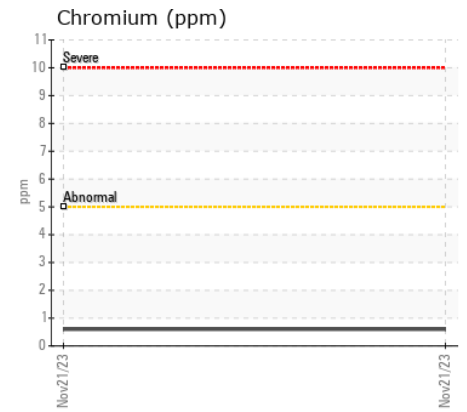
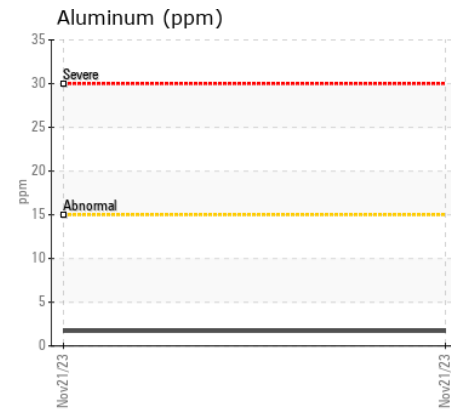
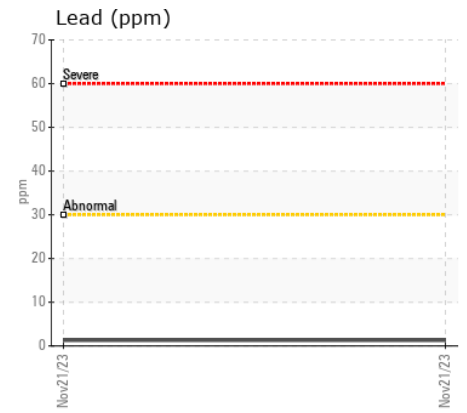
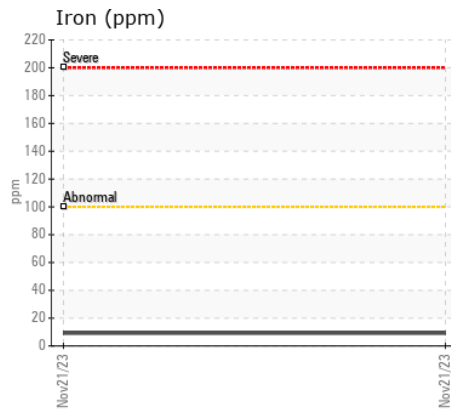
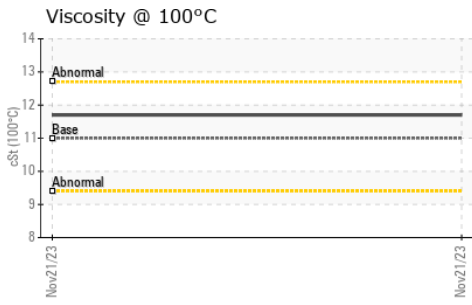
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>60	10	---	---
Potassium	ppm	ASTM D5185(m)	>20	<1	---	---
Fuel		WC Method	>5	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	ASTM D7844*	>3	0.1	---	---
Nitration	Abs/cm	ASTM D7624*	>20	8.6	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.9	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---

## FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		4	---	---
Boron	ppm	ASTM D5185(m)		34	---	---
Barium	ppm	ASTM D5185(m)		0	---	---
Molybdenum	ppm	ASTM D5185(m)		60	---	---
Manganese	ppm	ASTM D5185(m)		0	---	---
Magnesium	ppm	ASTM D5185(m)		1039	---	---
Calcium	ppm	ASTM D5185(m)		907	---	---
Phosphorus	ppm	ASTM D5185(m)		1039	---	---
Zinc	ppm	ASTM D5185(m)		1178	---	---
Sulfur	ppm	ASTM D5185(m)		2936	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.2	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	11.0	11.7	---	---



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0685985 **Received** : 26 Feb 2024  
**Lab Number** : 02617981 **Tested** : 26 Feb 2024  
**Unique Number** : 5735091 **Diagnosed** : 26 Feb 2024 - Kevin Marson  
**Test Package** : MOB 1

**DeSantis Crane**  
 294 Fifty Rd  
 Stoney Creek, ON  
 CA L8E 5L1  
 Contact: Adam  
 adam@desantiscrane.com

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.