



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**LIEBHERR 42**  
Component  
**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		<b>WC</b>	WC0685974	---
Sample Date		Client Info		<b>25 Feb 2024</b>	09 Oct 2023	---
Machine Age	hrs	Client Info		<b>0</b>	9021	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>N/A</b>	Changed	---
Filter Changed		Client Info		<b>N/A</b>	Changed	---
Sample Status				<b>NORMAL</b>	NORMAL	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>6</b>	8	---
Chromium	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Silver	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	<1	---
Aluminum	ppm	ASTM D5185(m)	>15	<b>2</b>	2	---
Lead	ppm	ASTM D5185(m)	>30	<b>0</b>	<1	---
Copper	ppm	ASTM D5185(m)	>125	<b>2</b>	4	---
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	---

## CONTAMINATION

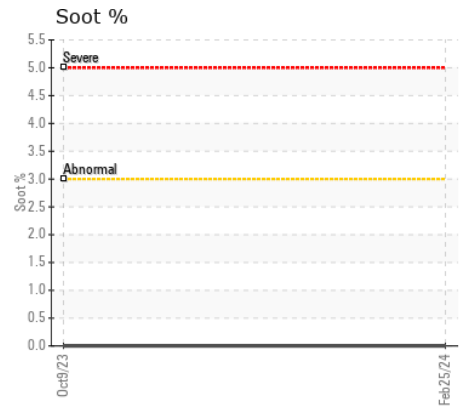
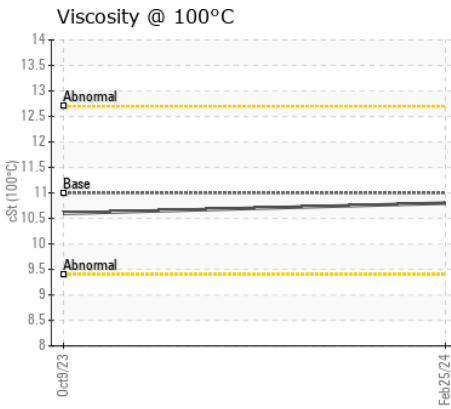
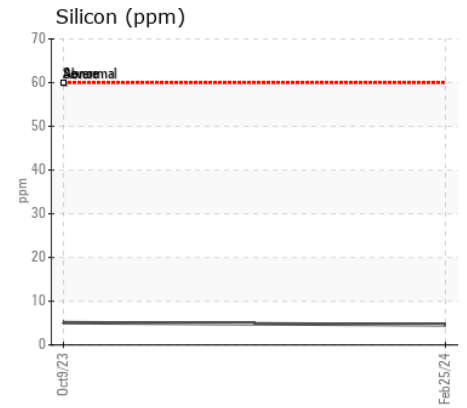
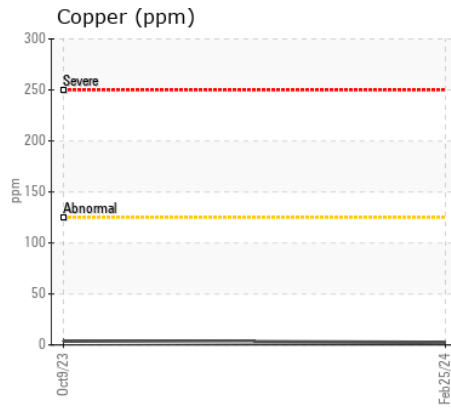
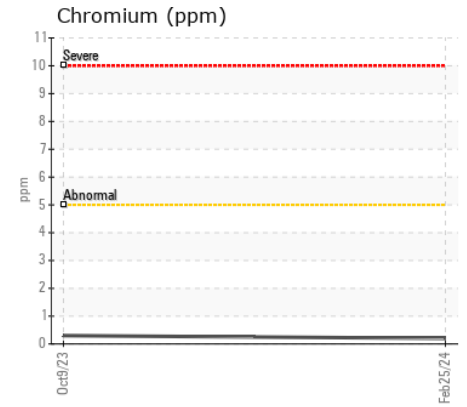
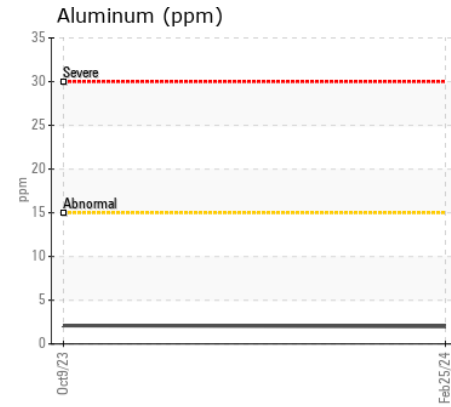
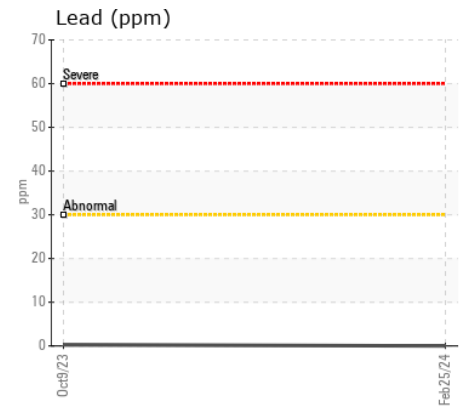
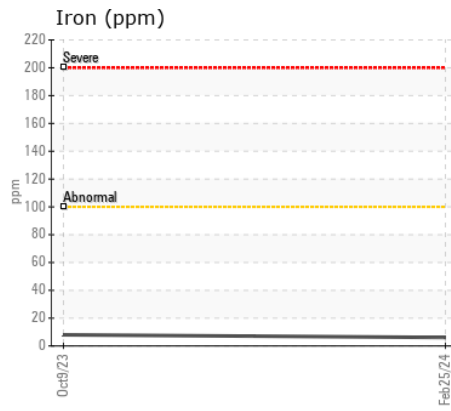
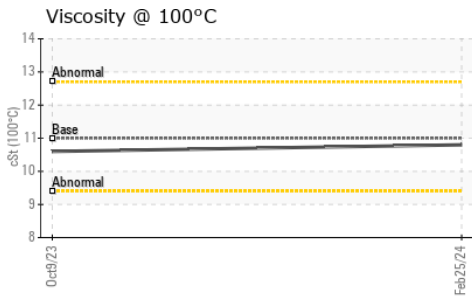
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>60	<b>5</b>	5	---
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	---
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	ASTM D7844*	>3	<b>0</b>	0	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>10.2</b>	11.1	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.5</b>	21.3	---
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	---

## FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		<b>4</b>	4	---
Boron	ppm	ASTM D5185(m)		<b>29</b>	26	---
Barium	ppm	ASTM D5185(m)		<b>0</b>	<1	---
Molybdenum	ppm	ASTM D5185(m)		<b>59</b>	61	---
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	---
Magnesium	ppm	ASTM D5185(m)		<b>1080</b>	1093	---
Calcium	ppm	ASTM D5185(m)		<b>853</b>	863	---
Phosphorus	ppm	ASTM D5185(m)		<b>1026</b>	1010	---
Zinc	ppm	ASTM D5185(m)		<b>1181</b>	1214	---
Sulfur	ppm	ASTM D5185(m)		<b>2984</b>	2828	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>19.4</b>	20.1	---
Visc @ 100°C	cSt	ASTM D7279(m)	11.0	<b>10.8</b>	10.6	---



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC  
**Lab Number** : 02617987  
**Unique Number** : 5735097  
**Test Package** : MOB 1  
**Received** : 26 Feb 2024  
**Tested** : 26 Feb 2024  
**Diagnosed** : 26 Feb 2024 - Kevin Marson

**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.