



# LIEBHERR

## OIL ANALYSIS REPORT

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

Machine Id  
**LIEBHERR 43526**

Component  
**Diesel Engine**

Fluid  
**CHEVRON DELO 400 SYNTHETIC 5W40 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LH0151146</b>	---	---
Sample Date		Client Info		<b>15 Feb 2024</b>	---	---
Machine Age	hrs	Client Info		<b>1421</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Filter Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>Not Changd</b>	---	---
Filter Changed		Client Info		<b>N/A</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>4</b>	---	---
Chromium	ppm	ASTM D5185(m)	>5	<b>0</b>	---	---
Nickel	ppm	ASTM D5185(m)	>5	<b>0</b>	---	---
Titanium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185(m)	>15	<b>2</b>	---	---
Lead	ppm	ASTM D5185(m)	>30	<b>0</b>	---	---
Copper	ppm	ASTM D5185(m)	>125	<b>11</b>	---	---
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	---	---

### CONTAMINATION

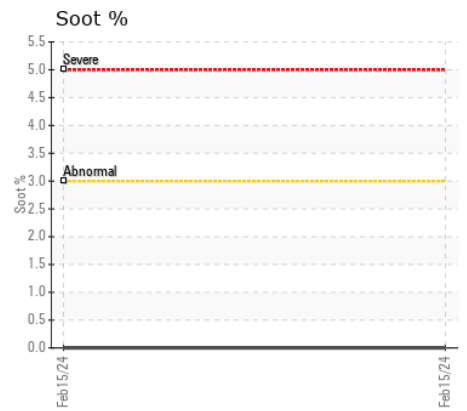
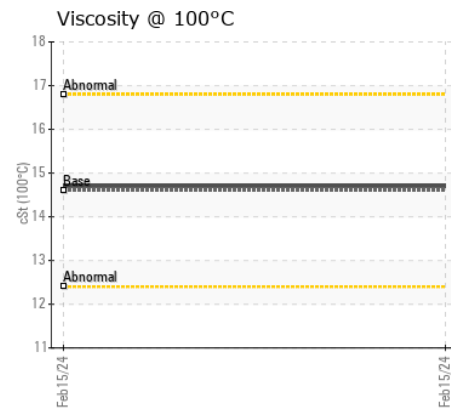
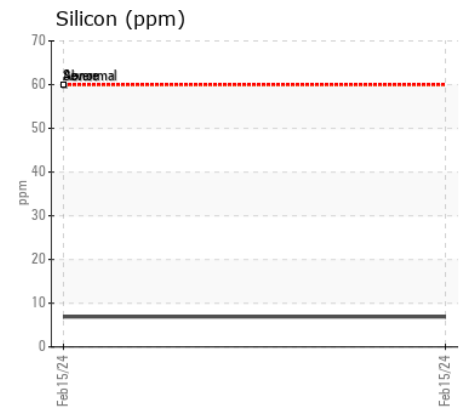
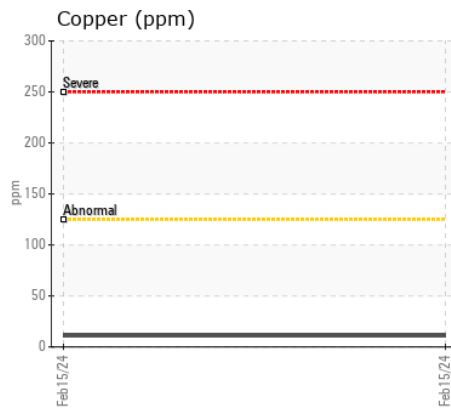
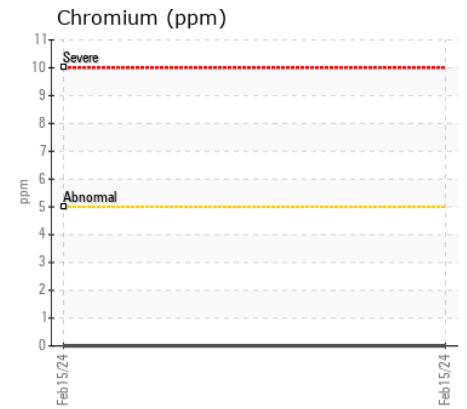
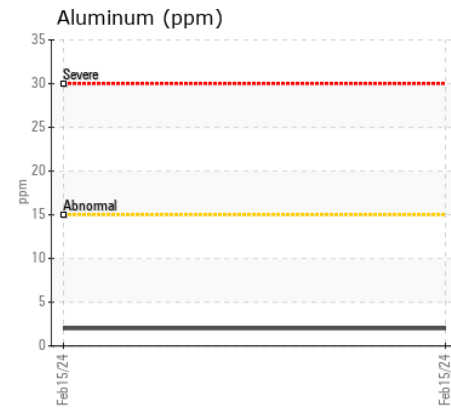
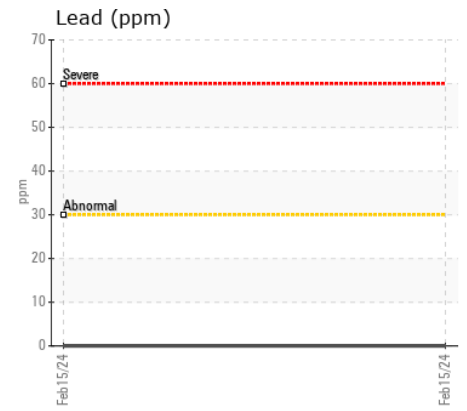
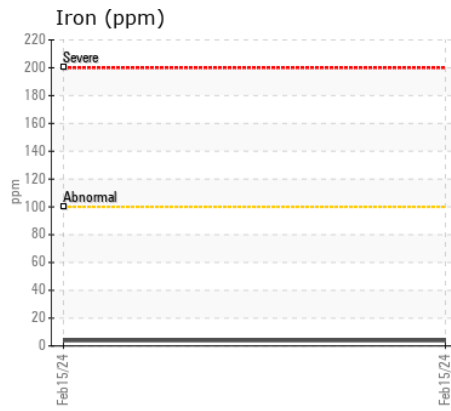
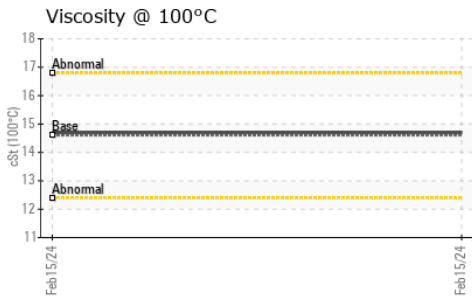
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>60	<b>7</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>3</b>	---	---
Fuel		WC Method	>5	<b>&lt;1.0</b>	---	---
Water		WC Method	>0.2	<b>NEG</b>	---	---
Glycol		WC Method		<b>NEG</b>	---	---
Soot %	%	ASTM D7844*	>3	<b>0</b>	---	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.0</b>	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>18.3</b>	---	---
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	---	---

### FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		<b>2</b>	---	---
Boron	ppm	ASTM D5185(m)		<b>83</b>	---	---
Barium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---
Manganese	ppm	ASTM D5185(m)		<b>0</b>	---	---
Magnesium	ppm	ASTM D5185(m)		<b>673</b>	---	---
Calcium	ppm	ASTM D5185(m)		<b>1259</b>	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	<b>661</b>	---	---
Zinc	ppm	ASTM D5185(m)	1270	<b>711</b>	---	---
Sulfur	ppm	ASTM D5185(m)	2900	<b>2503</b>	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>12.6</b>	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.6	<b>14.7</b>	---	---



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH0151146 **Received** : 08 Mar 2024  
**Lab Number** : 02620752 **Tested** : 08 Mar 2024  
**Unique Number** : 5737862 **Diagnosed** : 08 Mar 2024 - Kevin Marson  
**Test Package** : MOB 1

**ENERGY CRANE SERVICE**  
 19 BOULDER BLVD  
 STANEY PLAIN, AB  
 CA T7Z 1V6  
 Contact: Service Manager

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.

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F: