



# OIL ANALYSIS REPORT

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



Machine Id  
**LIEBHERR A934C-HD-LI C-48 (S/N 045988-1007)**  
Component  
**Swing Drive**  
Fluid  
**KENDALL 80W90 SHP (2 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0920295</b>	WC0794449	WC0782666
Sample Date		Client Info		<b>24 Jun 2024</b>	23 Jun 2023	15 Mar 2023
Machine Age	hrs	Client Info		<b>26123</b>	25091	0
Oil Age	hrs	Client Info		<b>2000</b>	1124	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	N/A
Filter Changed		Client Info		<b>Not Changed</b>	Changed	N/A
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>1450	<b>451</b>	258	259
Chromium	ppm	ASTM D5185m	>11	<b>5</b>	3	2
Nickel	ppm	ASTM D5185m	>3	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	<1
Lead	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>542	<b>103</b>	36	40
Tin	ppm	ASTM D5185m	>38	<b>2</b>	1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	MODER	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

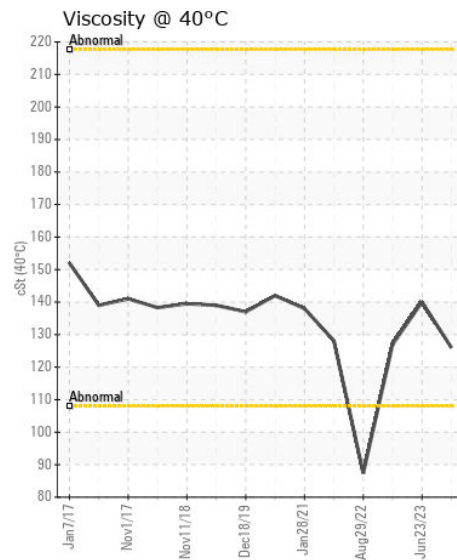
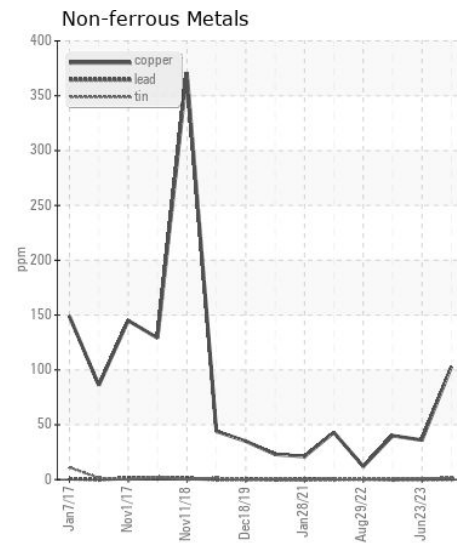
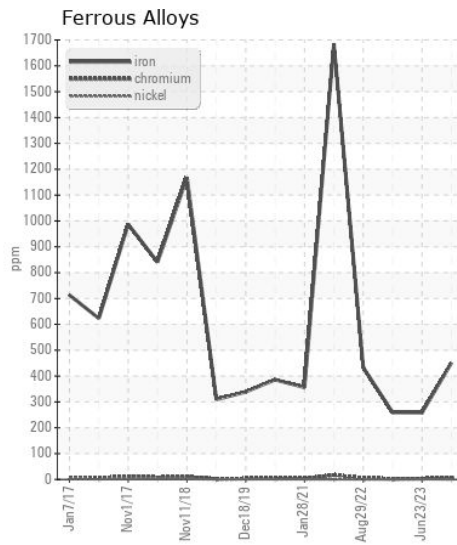
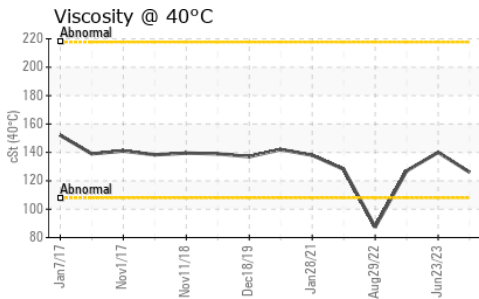
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>15	<b>6</b>	9	5
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	2	<1
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	▲ MODER	MODER
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	0.2%	NEG

## FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		<b>2</b>	0	0
Boron	ppm	ASTM D5185m		<b>17</b>	27	18
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>3</b>	3	2
Magnesium	ppm	ASTM D5185m		<b>1</b>	6	3
Calcium	ppm	ASTM D5185m		<b>59</b>	42	25
Phosphorus	ppm	ASTM D5185m		<b>468</b>	585	615
Zinc	ppm	ASTM D5185m		<b>47</b>	85	66
Sulfur	ppm	ASTM D5185m		<b>19850</b>	18865	19798
Visc @ 40°C	cSt	ASTM D445		<b>126</b>	140	127



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0920295  
**Lab Number** : 06223875  
**Unique Number** : 11102072  
**Test Package** : CONST  
**Received** : 28 Jun 2024  
**Tested** : 01 Jul 2024  
**Diagnosed** : 01 Jul 2024 - Wes Davis

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To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)