



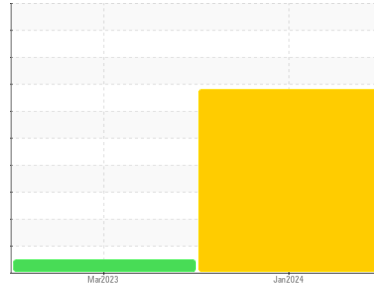
PROBLEM SUMMARY

Sample Rating Trend

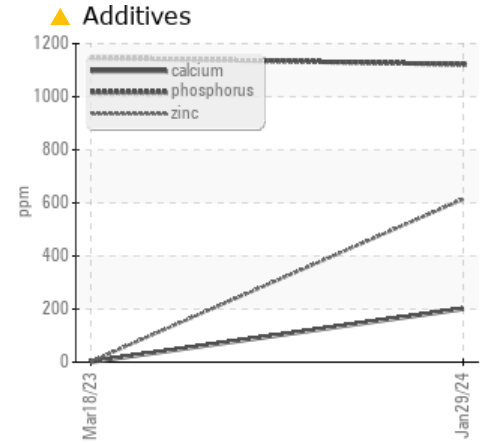
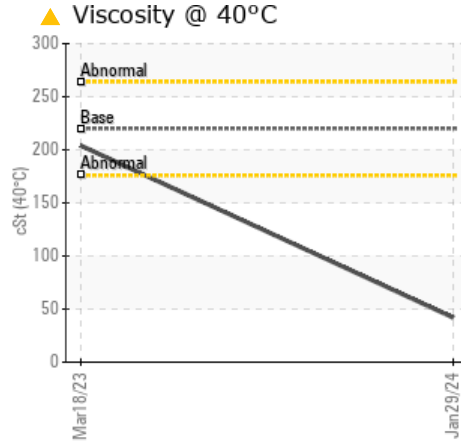
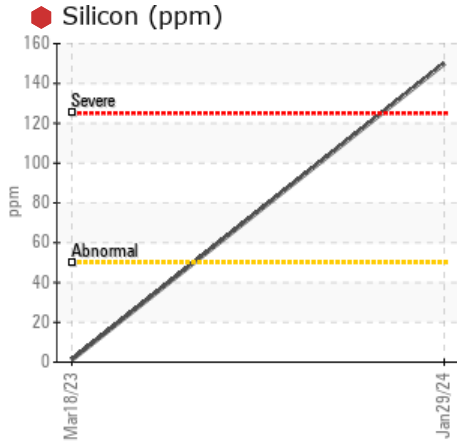
DIRT



Machine Id
LIEBHERR LR-1400 CR-4404
Component
Right Swing Drive
Fluid
GEAR OIL ISO 220 (--- GAL)



COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	NORMAL	---
Silicon	ppm	ASTM D5185m	>50	150	1	---

Customer Id: BUCWILTX
Sample No.: WC0893052
Lab Number: 06075161
Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:
Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.

HISTORICAL DIAGNOSIS

18 Mar 2023 Diag: Don Baldrige

NORMAL



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.

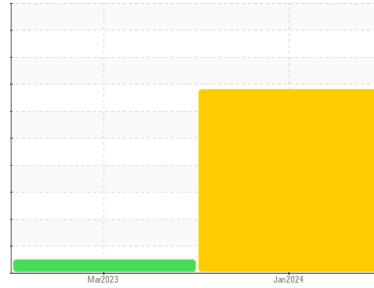
view report





OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Machine Id
LIEBHERR LR-1400 CR-4404
 Component
Right Swing Drive
 Fluid
GEAR OIL ISO 220 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check all areas where dirt can enter the system. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Elemental level of silicon (Si) above normal indicating ingress of dirt/seal material.

Fluid Condition

The oil viscosity is lower than normal. Additive levels indicate the addition of a different brand, or type of oil. Confirm oil type.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0893052	WC0720770	---
Sample Date	Client Info		29 Jan 2024	18 Mar 2023	---
Machine Age	hrs	Client Info	0	4781	---
Oil Age	hrs	Client Info	0	1000	---
Oil Changed	Client Info		N/A	Changed	---
Sample Status			SEVERE	NORMAL	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	NEG	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >400	66	4	---
Chromium	ppm	ASTM D5185m >10	1	<1	---
Nickel	ppm	ASTM D5185m >10	<1	<1	---
Titanium	ppm	ASTM D5185m	<1	0	---
Silver	ppm	ASTM D5185m	0	0	---
Aluminum	ppm	ASTM D5185m >25	4	2	---
Lead	ppm	ASTM D5185m >50	0	0	---
Copper	ppm	ASTM D5185m >200	<1	<1	---
Tin	ppm	ASTM D5185m >10	<1	<1	---
Vanadium	ppm	ASTM D5185m	0	<1	---
Cadmium	ppm	ASTM D5185m	<1	<1	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	15	15	---
Barium	ppm	ASTM D5185m 15	0	0	---
Molybdenum	ppm	ASTM D5185m 15	2	0	---
Manganese	ppm	ASTM D5185m	<1	<1	---
Magnesium	ppm	ASTM D5185m 50	91	<1	---
Calcium	ppm	ASTM D5185m 50	▲ 201	1	---
Phosphorus	ppm	ASTM D5185m 350	▲ 1122	1147	---
Zinc	ppm	ASTM D5185m 100	▲ 614	2	---
Sulfur	ppm	ASTM D5185m 12500	▲ 3090	1439	---

CONTAMINANTS

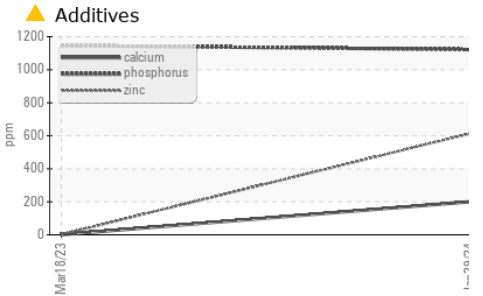
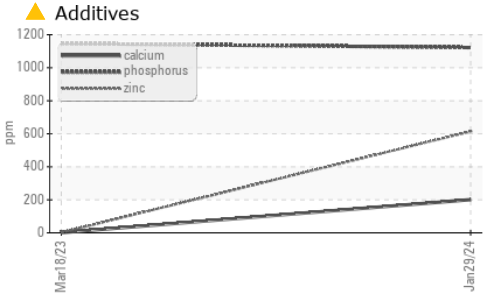
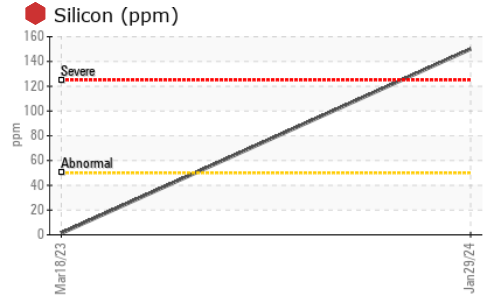
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	◆ 150	1	---
Sodium	ppm	ASTM D5185m	9	3	---
Potassium	ppm	ASTM D5185m >20	7	<1	---

VISUAL

	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual NONE	NONE	NONE	---
Precipitate	scalar	*Visual NONE	NONE	NONE	---
Silt	scalar	*Visual NONE	NONE	NONE	---
Debris	scalar	*Visual NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual NONE	NONE	NONE	---
Appearance	scalar	*Visual NORML	NORML	NORML	---
Odor	scalar	*Visual NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual >0.2	NEG	NEG	---
Free Water	scalar	*Visual	NEG	NEG	---



OIL ANALYSIS REPORT

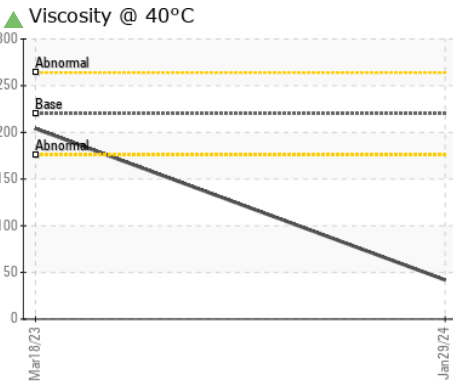
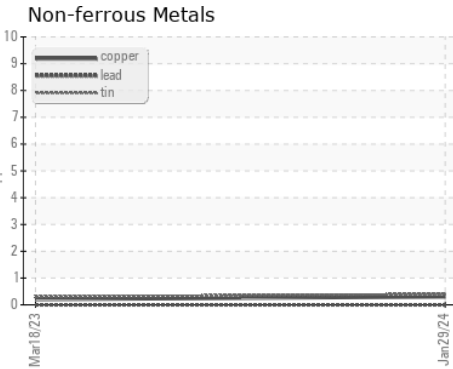
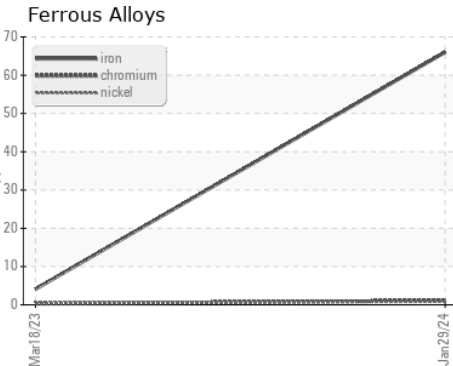


FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220 ▲ 41.94	204	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------

Color				no image	no image
Bottom				no image	no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0893052 **Received** : 30 Jan 2024
Lab Number : **06075161** **Tested** : 02 Feb 2024
Unique Number : 10857252 **Diagnosed** : 05 Feb 2024 - Jonathan Hester
Test Package : CONST

BUCKNER - WILLIS
 18123 HWY 75 NORTH
 WILLIS, TX
 US 77378
 Contact: JOHN HAWKINS
 johnh@bucknercompanies.com

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.

T:
 F:

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