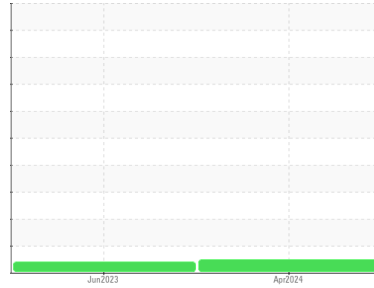




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
LIEBHERR 1300 CR-3317 (S/N 138-408)
 Component
2 Winch
 Fluid
GEAR OIL ISO 220 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.
 Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0922185	WC0810560	---
Sample Date	Client Info			08 Apr 2024	13 Jun 2023	---
Machine Age	hrs	Client Info		10234	9021	---
Oil Age	hrs	Client Info		1213	0	---
Oil Changed	Client Info			Changed	Changed	---
Sample Status				NORMAL	ATTENTION	---

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	>150	9	27	---
Chromium	ppm	ASTM D5185m	>10	0	<1	---
Nickel	ppm	ASTM D5185m	>10	0	<1	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>5	0	<1	---
Lead	ppm	ASTM D5185m	>15	0	0	---
Copper	ppm	ASTM D5185m	>80	0	<1	---
Tin	ppm	ASTM D5185m		0	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
Cadmium	ppm	ASTM D5185m		0	0	---

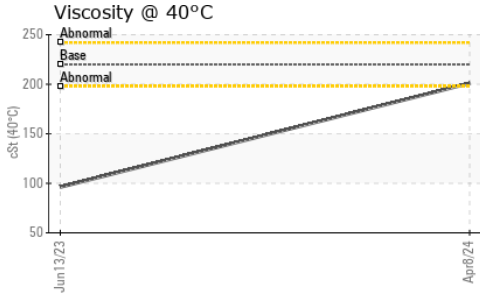
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	50	6	172	---
Barium	ppm	ASTM D5185m	15	0	2	---
Molybdenum	ppm	ASTM D5185m	15	0	2	---
Manganese	ppm	ASTM D5185m		0	<1	---
Magnesium	ppm	ASTM D5185m	50	0	12	---
Calcium	ppm	ASTM D5185m	50	7	89	---
Phosphorus	ppm	ASTM D5185m	350	545	1410	---
Zinc	ppm	ASTM D5185m	100	8	61	---
Sulfur	ppm	ASTM D5185m	12500	9884	23946	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	0	2	---
Sodium	ppm	ASTM D5185m		0	0	---
Potassium	ppm	ASTM D5185m	>20	0	2	---

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

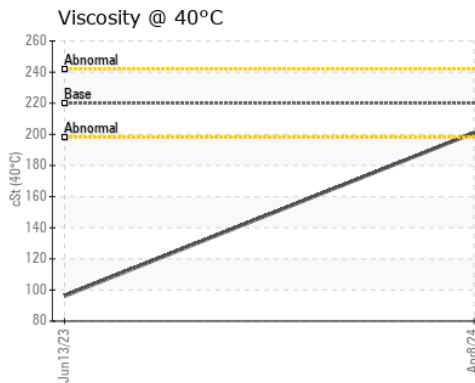
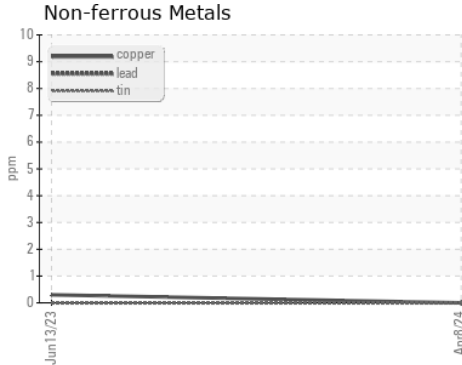
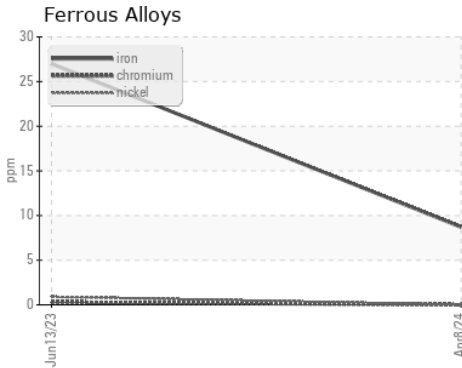


FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 220	201	96.1	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color		no image	no image	no image
Bottom		no image	no image	no image

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0922185 **Received** : 11 Apr 2024
Lab Number : 06146799 **Tested** : 12 Apr 2024
Unique Number : 10976877 **Diagnosed** : 12 Apr 2024 - Wes Davis
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.

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

T:
F: