



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
LIEBHERR 1400 CR4405 (S/N 0015-108)
 Component
Gearbox
 Fluid
GEAR OIL ISO 220 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0935931	WC0922280	WC0401851
Sample Date		Client Info		08 May 2024	22 Apr 2024	28 Oct 2019
Machine Age	hrs	Client Info		9661	9651	0
Oil Age	hrs	Client Info		252	242	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	N/A
Filter Changed		Client Info		Not Changed	Not Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	9	13	5
Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	0	0	2
Lead	ppm	ASTM D5185m	>50	0	0	2
Copper	ppm	ASTM D5185m	>200	0	<1	1
Tin	ppm	ASTM D5185m	>10	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

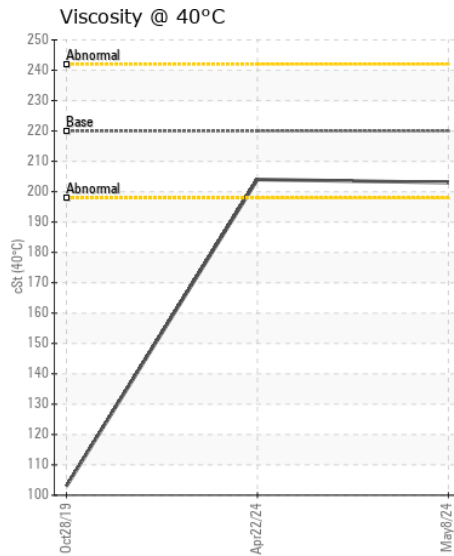
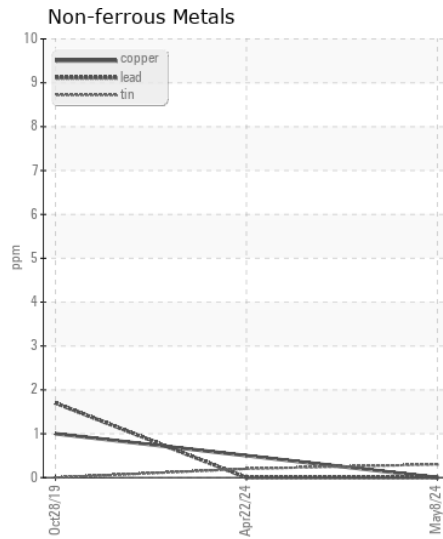
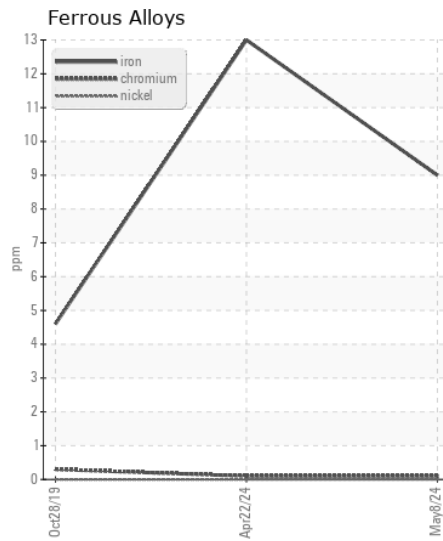
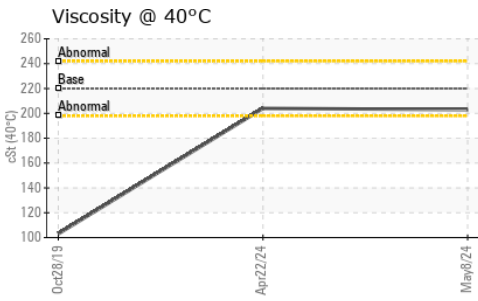
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	3	3	4
Potassium	ppm	ASTM D5185m	>20	0	0	0
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		<1	0	4
Boron	ppm	ASTM D5185m	50	22	21	35
Barium	ppm	ASTM D5185m	15	1	0	0
Molybdenum	ppm	ASTM D5185m	15	0	<1	63
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m	50	16	14	419
Calcium	ppm	ASTM D5185m	50	150	139	1601
Phosphorus	ppm	ASTM D5185m	350	374	395	884
Zinc	ppm	ASTM D5185m	100	70	67	1103
Sulfur	ppm	ASTM D5185m	12500	4677	5057	2766
Visc @ 40°C	cSt	ASTM D445	220	203	204	103



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0935931
Lab Number : 06177972
Unique Number : 11029298
Test Package : CONST

Received : 13 May 2024
Tested : 14 May 2024
Diagnosed : 15 May 2024 - Sean Felton

BUCKNER HEAVY LIFT
 4732 NC 54 EAST
 GRAHAM, NC
 US 27253-9215

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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)