



OIL ANALYSIS REPORT

Sample Rating Trend

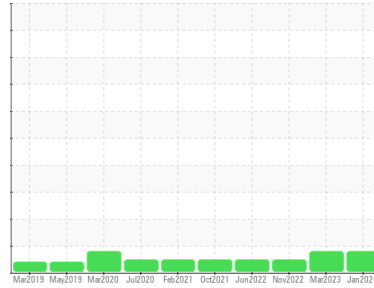
ISO



Machine Id
LIEBHERR LR-1400 CR-4404

Component
Hydraulic System

Fluid
DEXRON III (--- GAL)



DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DEXRON III. Please confirm.

Wear

All component wear rates are normal.

Contamination

There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	WC0893060	WC0785178	WC0720572
Sample Date	Client Info	29 Jan 2024	27 Mar 2023	05 Nov 2022
Machine Age	hrs	0	4781	4131
Oil Age	hrs	0	1000	500
Oil Changed	Client Info	N/A	Not Changd	Not Changd
Sample Status		ATTENTION	ATTENTION	NORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.1	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >20	4	3	3
Chromium	ppm ASTM D5185m >10	<1	0	0
Nickel	ppm ASTM D5185m >10	<1	0	0
Titanium	ppm ASTM D5185m	<1	0	0
Silver	ppm ASTM D5185m	0	0	0
Aluminum	ppm ASTM D5185m >10	2	<1	0
Lead	ppm ASTM D5185m >10	<1	0	<1
Copper	ppm ASTM D5185m >75	13	8	8
Tin	ppm ASTM D5185m >10	<1	0	0
Vanadium	ppm ASTM D5185m	0	0	0
Cadmium	ppm ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	87	86	79
Barium	ppm ASTM D5185m	0	0	0
Molybdenum	ppm ASTM D5185m	<1	<1	<1
Manganese	ppm ASTM D5185m	0	<1	0
Magnesium	ppm ASTM D5185m	3	2	2
Calcium	ppm ASTM D5185m	117	123	124
Phosphorus	ppm ASTM D5185m	200	248	241
Zinc	ppm ASTM D5185m	75	66	78
Sulfur	ppm ASTM D5185m	1216	1019	1559

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	2	4	<1
Sodium	ppm ASTM D5185m	0	2	<1
Potassium	ppm ASTM D5185m >20	2	0	2

FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >20000	▲ 21738	▲ 32412	12926
Particles >6µm	ASTM D7647 >5000	1198	4476	829
Particles >14µm	ASTM D7647 >640	39	82	49
Particles >21µm	ASTM D7647 >160	8	14	12
Particles >38µm	ASTM D7647 >40	1	1	1
Particles >71µm	ASTM D7647 >10	0	0	0
Oil Cleanliness	ISO 4406 (c) >21/19/16	▲ 22/17/12	▲ 22/19/14	21/17/13

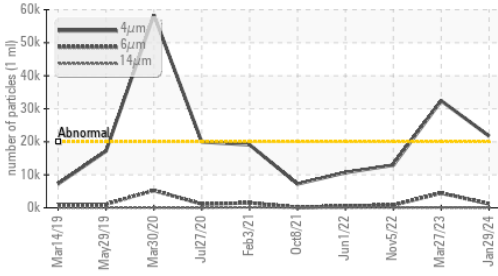
FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045	0.63	0.58	0.62

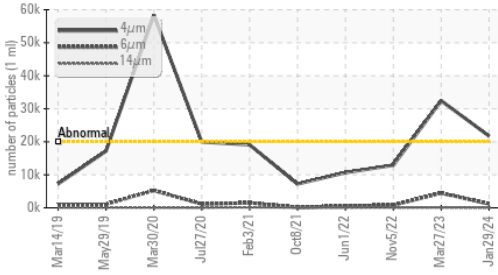


OIL ANALYSIS REPORT

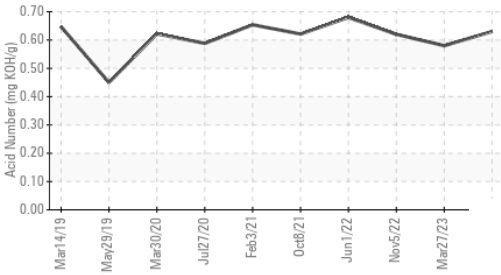
▲ Particle Trend



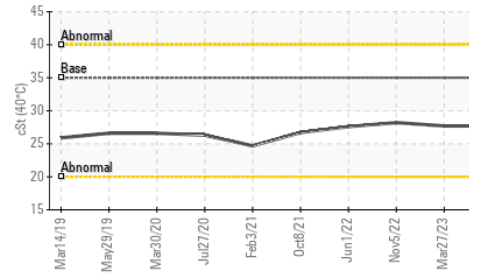
▲ Particle Trend



Acid Number



Viscosity @ 40°C

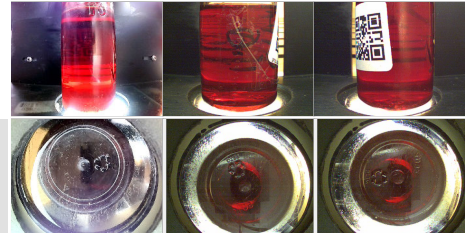


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	35.0	27.7	27.7	28.2

SAMPLE IMAGES	method	limit/base	current	history1	history2
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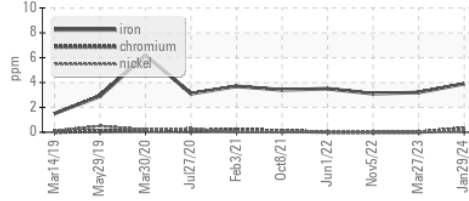
Color



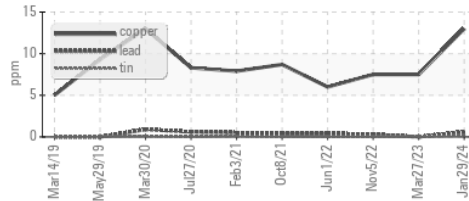
Bottom

GRAPHS

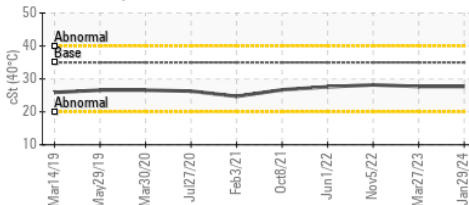
Ferrous Alloys



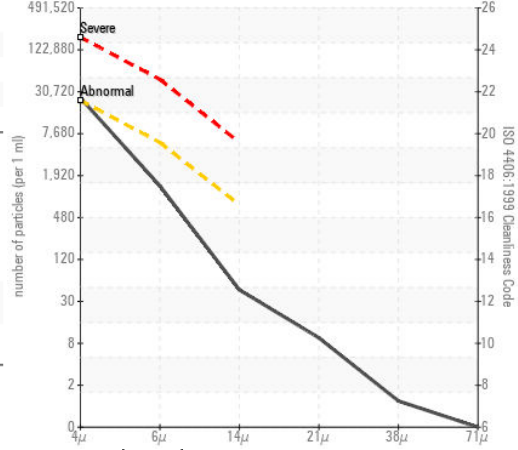
Non-ferrous Metals



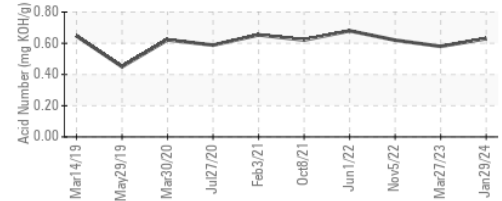
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0893060 **Received** : 30 Jan 2024
Lab Number : 06074640 **Diagnosed** : 31 Jan 2024
Unique Number : 10856731 **Diagnostician** : Wes Davis
Test Package : CONST

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)

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