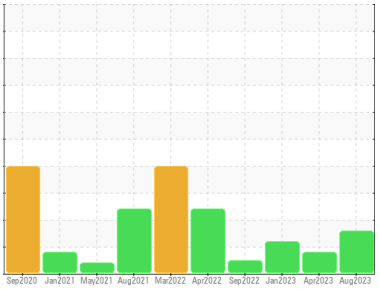
PROBLEM SUMMARY

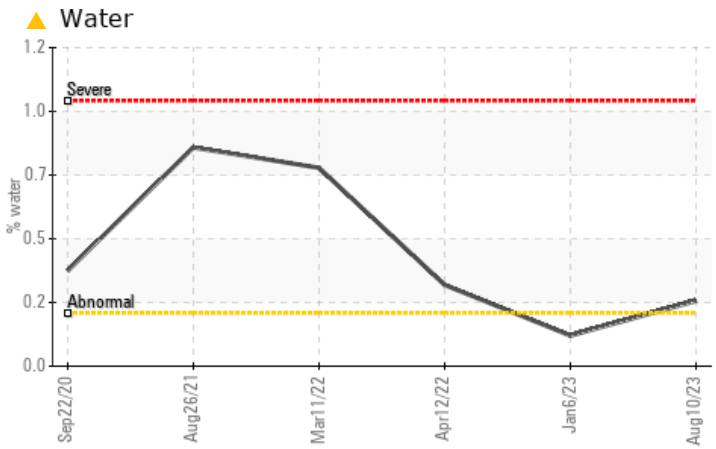
Sample Rating Trend



WATER

Area
AMR-Cheyenne
Machine Id
LIEBHERR 511144 (S/N 118832)
Component
Swing Drive
Fluid
LIEBHERR GEAR BASIC 90 LS (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

No corrective action is recommended at this time.
Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL
Water	%	ASTM D6304	>0.2	▲ **0.246**	---	0.115
ppm Water	ppm	ASTM D6304	>2000	▲ **2460**	---	1150

Customer Id: ADVKANKS
Sample No.: DJJ0018393
Lab Number: 05924578
Test Package: CONST

To manage this report scan the QR code

To discuss the diagnosis or test data:
Sean Felton +1 919-379-4092
sfelton@wearcheckusa.com

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

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

20 Apr 2023 Diag: Jonathan Hester

WEAR

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.Gear wear is indicated. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

view report

06 Jan 2023 Diag: Don Baldridge

WEAR

No corrective action is recommended at this time. Resample at the next service interval to monitor.Gear wear is indicated. All other component wear rates are normal. There is no indication of any contamination in the oil. The oil viscosity is higher than normal. Confirm oil type.

view report

27 Sep 2022 Diag: Don Baldridge

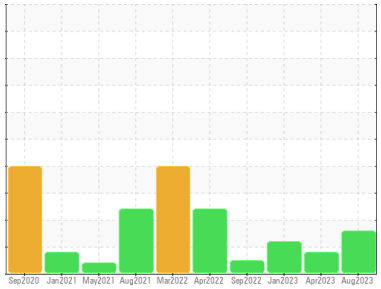
NORMAL

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



WATER

Area
AMR-Cheyenne
Machine Id
LIEBHERR 511144 (S/N 118832)
Component
Swing Drive
Fluid
LIEBHERR GEAR BASIC 90 LS (--- GAL)

DIAGNOSIS

Recommendation
No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
There is a light concentration of water present 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		**DJJ0018393**	DJJ0018666	DJJ0018406
Sample Date		Client Info		**10 Aug 2023**	20 Apr 2023	06 Jan 2023
Machine Age	hrs	Client Info		**5791**	5114	4542
Oil Age	hrs	Client Info		**500**	1000	500
Oil Changed		Client Info		**Not Changd**	Changed	Not Changd
Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>400	**386**	▲ 608	▲ 544
Chromium	ppm	ASTM D5185m	>10	**4**	7	6
Nickel	ppm	ASTM D5185m	>10	**<1**	<1	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**<1**	<1	0
Lead	ppm	ASTM D5185m	>50	**<1**	0	0
Copper	ppm	ASTM D5185m	>200	**19**	57	46
Tin	ppm	ASTM D5185m	>10	**<1**	2	2
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

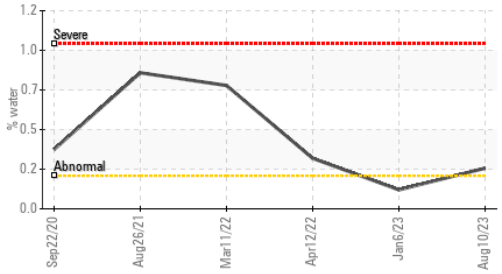
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	**<1**	0	<1
Barium	ppm	ASTM D5185m	0	**0**	0	1
Molybdenum	ppm	ASTM D5185m	0	**<1**	<1	0
Manganese	ppm	ASTM D5185m	0	**3**	5	4
Magnesium	ppm	ASTM D5185m	<1	**2**	4	1
Calcium	ppm	ASTM D5185m	<1	**15**	27	26
Phosphorus	ppm	ASTM D5185m	2143	**2185**	2152	2218
Zinc	ppm	ASTM D5185m	<1	**13**	17	18
Sulfur	ppm	ASTM D5185m	23468	**32467**	34374	30955

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**2**	1	0
Sodium	ppm	ASTM D5185m		**0**	<1	0
Potassium	ppm	ASTM D5185m	>20	**<1**	0	<1
Water	%	ASTM D6304	>0.2	▲ **0.246**	---	0.115
ppm Water	ppm	ASTM D6304	>2000	▲ **2460**	---	1150

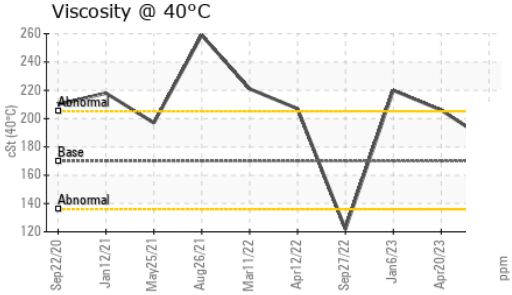
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	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	**0.2%**	NEG	0.2%
Free Water	scalar	*Visual		**NEG**	NEG	NEG

OIL ANALYSIS REPORT

Water



Viscosity @ 40°C

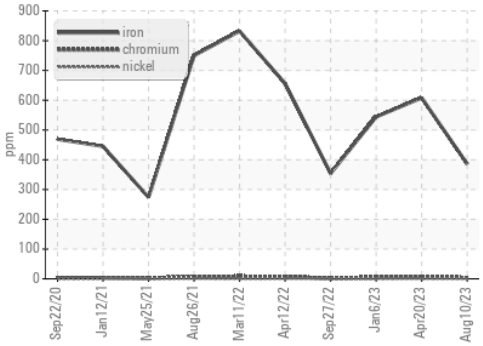


FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	170	**184**	206	▲ 220

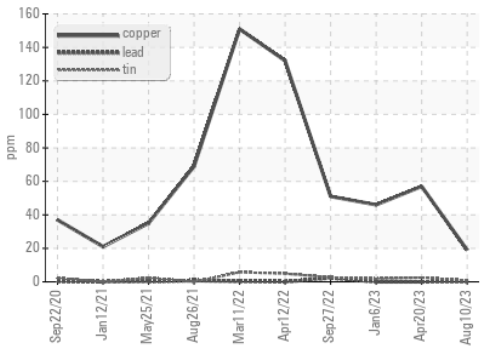
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			*no image*	*no image*	*no image*
Bottom			*no image*	*no image*	*no image*

GRAPHS

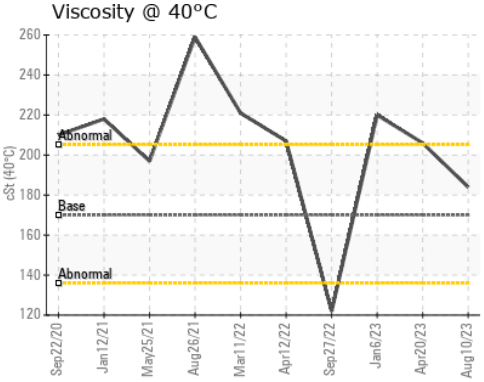
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0018393
Lab Number : 05924578
Unique Number : 10604525
Test Package : CONST (Additional Tests: KF)

Received : 14 Aug 2023
Diagnosed : 16 Aug 2023
Diagnostician : Sean Felton

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)

ADVANTAGE METALS RECYCLING - CHEYENNE
1015 S. PACKARD ST
KANSAS CITY, KS
US 66105
Contact: BRIAN JACOBS
BRIAN.JACOBS@ADVANTAGERECYCLING.COM
T: (816)808-4711
F: