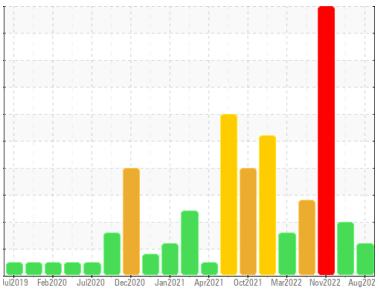
PROBLEM SUMMARY

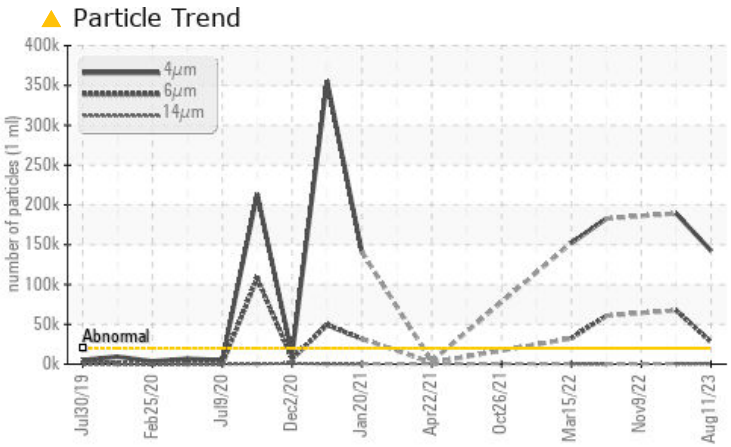
Sample Rating Trend



ISO

Area
Recovery
Machine Id
Bornemann FHG25AP01 Decanter Sludge Outlet Flow Pump
Component
Gearbox
Fluid
JAX Flow-Guard Synthetic 100 (4 QTS)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	SEVERE
Particles >4µm		ASTM D7647	>20000	▲ **142316**	▲ 189262	---
Particles >6µm		ASTM D7647	>5000	▲ **27731**	▲ 67583	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ **24/22/16**	▲ 25/23/16	---

Customer Id: NOVFRANC
Sample No.: WC0827149
Lab Number: 05923433
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldridge +1
don.b505@comcast.net

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component if applicable.

HISTORICAL DIAGNOSIS

20 Jan 2023 Diag: Jonathan Hester

WEAR

We recommend you service the filters on this component if applicable. We recommend an early resample to monitor this condition.Gear wear is indicated. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

09 Nov 2022 Diag: Angela Borella

WEAR

We advise that you check for the source of water entry. Check seals and/or filters for points of contaminant entry. We advise that you check all areas where dirt can enter the system. We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. We advise that you inspect for the source(s) of wear. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.Chromium and iron and nickel ppm levels are severe. Copper ppm levels are abnormal. Aluminum ppm levels are noted. Gear wear is indicated. Bearing and/or bushing wear is indicated. There is a high concentration of water present in the oil. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

view report

03 May 2022 Diag: Angela Borella

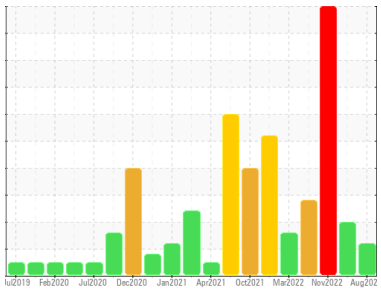
ISO

If applicable, we advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Area
Recovery
Machine Id
Bornemann FHG25AP01 Decanter Sludge Outlet Flow Pump
Component
Gearbox
Fluid
JAX Flow-Guard Synthetic 100 (4 QTS)

DIAGNOSIS

Recommendation
We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
There is a high 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		**WC0827149**	WC0765176	WC0663723
Sample Date		Client Info		**11 Aug 2023**	20 Jan 2023	09 Nov 2022
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	ABNORMAL	SEVERE

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	**61**	▲ 486	⬢ 10000
Chromium	ppm	ASTM D5185m	>15	**<1**	10	⬢ 760
Nickel	ppm	ASTM D5185m	>15	**0**	2	⬢ 209
Titanium	ppm	ASTM D5185m		**<1**	<1	2
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**<1**	2	▲ 39
Lead	ppm	ASTM D5185m	>100	**0**	<1	5
Copper	ppm	ASTM D5185m	>200	**1**	3	▲ 181
Tin	ppm	ASTM D5185m	>25	**0**	0	3
Vanadium	ppm	ASTM D5185m		**<1**	0	2
Cadmium	ppm	ASTM D5185m		**0**	0	1

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	2
Barium	ppm	ASTM D5185m		**<1**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	<1	8
Manganese	ppm	ASTM D5185m		**1**	3	▲ 128
Magnesium	ppm	ASTM D5185m		**7**	<1	8
Calcium	ppm	ASTM D5185m		**2**	1	11
Phosphorus	ppm	ASTM D5185m		**107**	141	203
Zinc	ppm	ASTM D5185m		**19**	0	14
Sulfur	ppm	ASTM D5185m		**1811**	1882	▲ 107

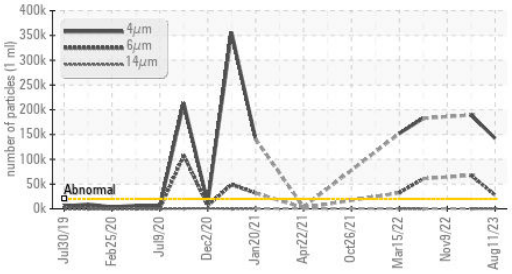
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**2**	4	▲ 63
Sodium	ppm	ASTM D5185m		**1**	<1	9
Potassium	ppm	ASTM D5185m	>20	**<1**	2	10
Water	%	ASTM D6304	>0.2	**0.008**	0.046	⬢ 2.57
ppm Water	ppm	ASTM D6304	>2000	**80.8**	463	⬢ 25700

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	▲ **142316**	▲ 189262	---
Particles >6µm		ASTM D7647	>5000	▲ **27731**	▲ 67583	---
Particles >14µm		ASTM D7647	>640	**441**	363	---
Particles >21µm		ASTM D7647	>160	**67**	80	---
Particles >38µm		ASTM D7647	>40	**2**	11	---
Particles >71µm		ASTM D7647	>10	**1**	0	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ **24/22/16**	▲ 25/23/16	---

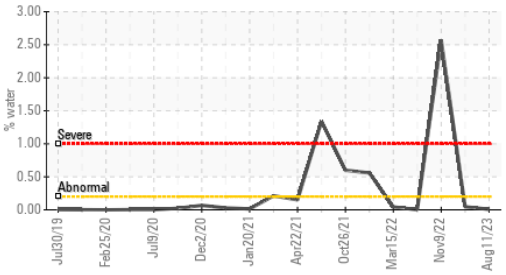
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.38**	0.13	0.65

OIL ANALYSIS REPORT

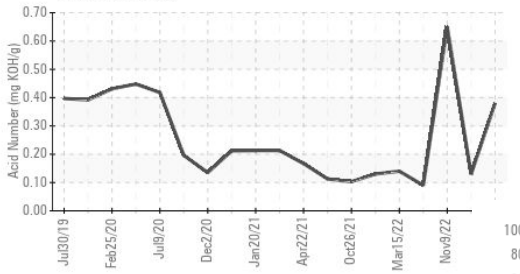
Particle Trend



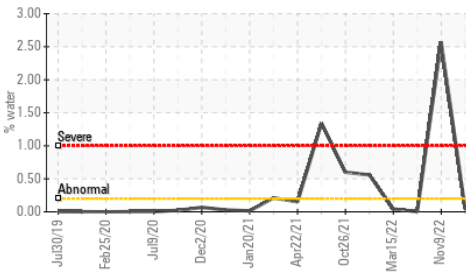
Water



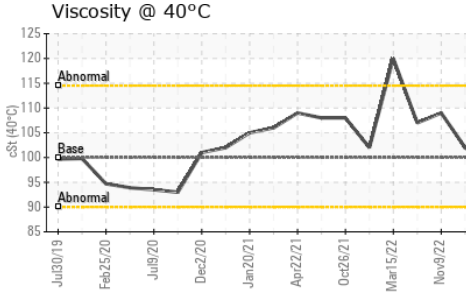
Acid Number



Water

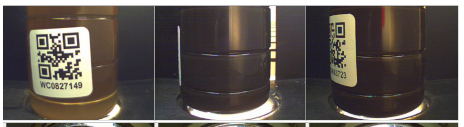
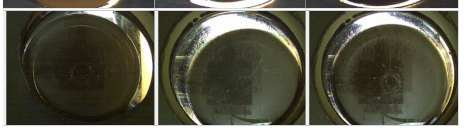


Viscosity @ 40°C



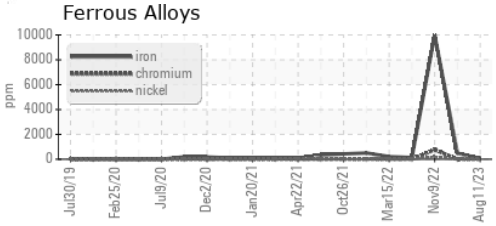
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**LIGHT**	LIGHT	VLITE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	▲ MILKY
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	**NEG**	NEG	⬢ 0.2%
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	100.0	**98.7**	102	109

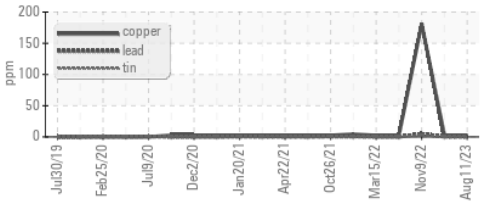
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

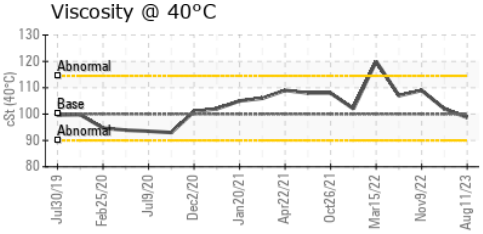
Ferrous Alloys



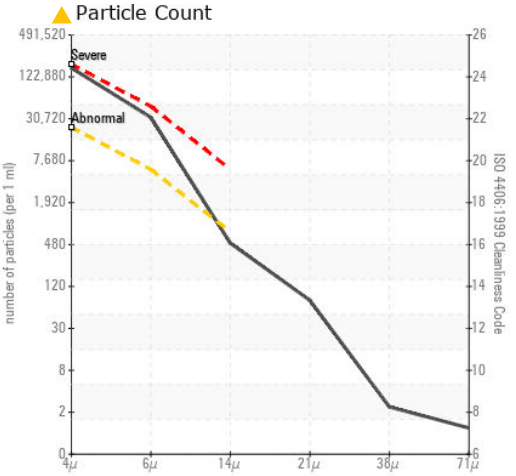
Non-ferrous Metals



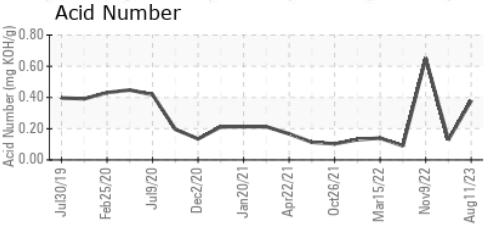
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0827149 **Received** : 14 Aug 2023
Lab Number : 05923433 **Diagnosed** : 15 Aug 2023
Unique Number : 10603380 **Diagnostician** : Don Baldridge
Test Package : IND 2 (Additional Tests: KF, PrtCount)

Certificate L2367

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)

NOVOZYMES
P.O. BOX 576, 77 PERRY CHAPEL CHURCH ROAD
FRANKLINTON, NC
US 27525
Contact: BRUCE THOMAS
brct@novozymes.com
T: (919)494-3146
F: (919)494-3456