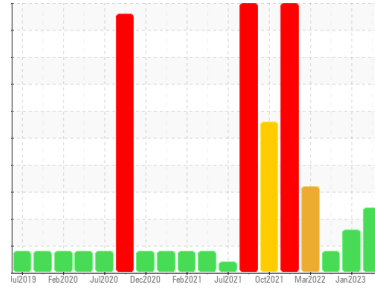




PROBLEM SUMMARY

Sample Rating Trend



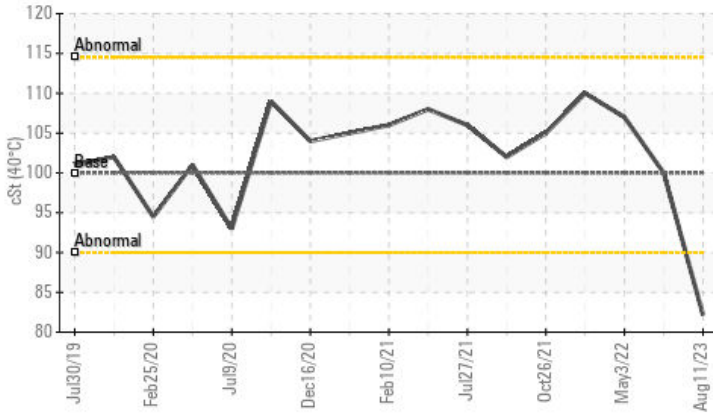
VISUAL METAL



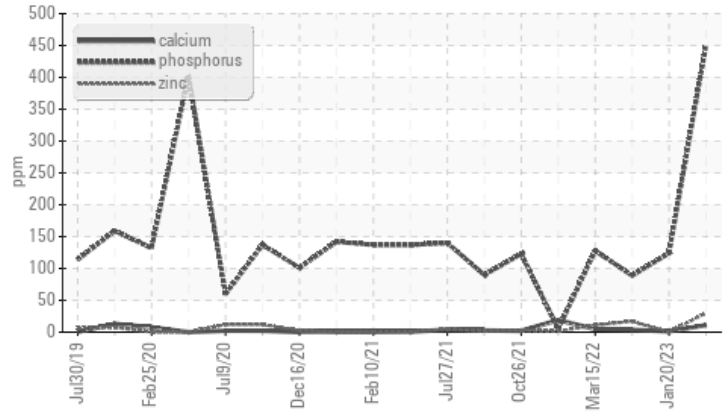
Area
Recovery
 Machine Id
Bornemann FHG25BP01 Decanter, Sludge Outlet Flow Pump
 Component
Gearbox
 Fluid
JAX Flow-Guard Synthetic 100 (4 QTS)

COMPONENT CONDITION SUMMARY

▲ Viscosity @ 40°C



▲ Additives



RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

| Sample Status | | | | ABNORMAL | ABNORMAL | ABNORMAL |
|---------------|--------|-------------|-------|----------|----------|----------|
| Phosphorus | ppm | ASTM D5185m | | ▲ 450 | 124 | 89 |
| Sulfur | ppm | ASTM D5185m | | ▲ 0 | 1720 | 1442 |
| White Metal | scalar | *Visual | NONE | ▲ MODER | LIGHT | NONE |
| Visc @ 40°C | cSt | ASTM D445 | 100.0 | ▲ 82.17 | 100 | 107 |

Customer Id: NOVFRANC
 Sample No.: WC0827150
 Lab Number: 05923434
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Doug Bogart +1 (800)237-1369 x4016
dougb@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 Jan 2023 Diag: Angela Borella

ISO



We advise that you perform a filter service, 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. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



03 May 2022 Diag: Angela Borella

WEAR



Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



15 Mar 2022 Diag: Doug Bogart

WATER



We advise that you check for the source of water entry. We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. Gear wear is indicated. There is a moderate concentration of water present in the oil. There is a high amount of visible silt present in the sample. The AN level is acceptable for this fluid.

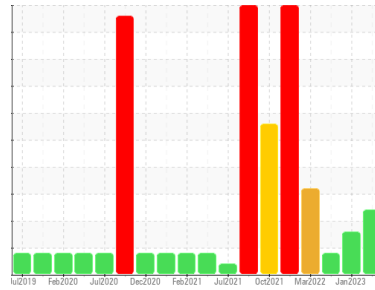
view report





OIL ANALYSIS REPORT

Sample Rating Trend



VISUAL METAL



Area
Recovery
 Machine Id
Bornemann FHG25BP01 Decanter, Sludge Outlet Flow Pump
 Component
Gearbox
 Fluid
JAX Flow-Guard Synthetic 100 (4 QTS)

DIAGNOSIS

- Recommendation**
Resample at the next service interval to monitor.
- Wear**
Moderate concentration of visible metal present. All component wear rates are normal.
- Contamination**
No other contaminants were detected in the oil.
- Fluid Condition**
The oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type.

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | WC0827150 | WC0765175 | WC0660557 |
| Sample Date | Client Info | | 11 Aug 2023 | 20 Jan 2023 | 03 May 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 | ABNORMAL |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|------------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m >200 | 49 | 6 | ▲ 502 |
| Chromium | ppm | ASTM D5185m >15 | 5 | <1 | 8 |
| Nickel | ppm | ASTM D5185m >15 | 2 | <1 | 0 |
| Titanium | ppm | ASTM D5185m | 2 | 0 | <1 |
| Silver | ppm | ASTM D5185m | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m >25 | <1 | 0 | 3 |
| Lead | ppm | ASTM D5185m >100 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m >200 | <1 | 0 | 6 |
| Tin | ppm | ASTM D5185m >25 | 6 | <1 | 0 |
| Vanadium | ppm | ASTM D5185m | <1 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | 0 | 0 | 0 |

ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|-------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m | 0 | 0 | 0 |
| Barium | ppm | ASTM D5185m | 4 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | <1 |
| Manganese | ppm | ASTM D5185m | 1 | 0 | 3 |
| Magnesium | ppm | ASTM D5185m | 6 | 1 | 0 |
| Calcium | ppm | ASTM D5185m | 11 | 1 | 4 |
| Phosphorus | ppm | ASTM D5185m | ▲ 450 | 124 | 89 |
| Zinc | ppm | ASTM D5185m | 30 | 0 | 17 |
| Sulfur | ppm | ASTM D5185m | ▲ 0 | 1720 | 1442 |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|------------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m >50 | 43 | 5 | 4 |
| Sodium | ppm | ASTM D5185m | 2 | <1 | 0 |
| Potassium | ppm | ASTM D5185m >20 | <1 | <1 | 2 |
| Water | % | ASTM D6304 >0.2 | 0.010 | 0.008 | 0.001 |
| ppm Water | ppm | ASTM D6304 >2000 | 107.4 | 85.7 | 3.6 |

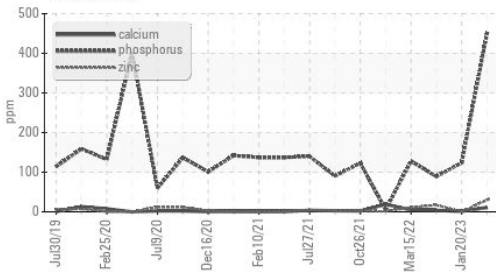
FLUID CLEANLINESS

| | method | limit/base | current | history1 | history2 |
|-----------------|--------------|------------|---------|------------|----------|
| Particles >4µm | ASTM D7647 | >20000 | --- | ▲ 110701 | --- |
| Particles >6µm | ASTM D7647 | >5000 | --- | ▲ 39200 | --- |
| Particles >14µm | ASTM D7647 | >640 | --- | ▲ 735 | --- |
| Particles >21µm | ASTM D7647 | >160 | --- | 86 | --- |
| Particles >38µm | ASTM D7647 | >40 | --- | 2 | --- |
| Particles >71µm | ASTM D7647 | >10 | --- | 0 | --- |
| Oil Cleanliness | ISO 4406 (c) | >21/19/16 | --- | ▲ 24/22/17 | --- |

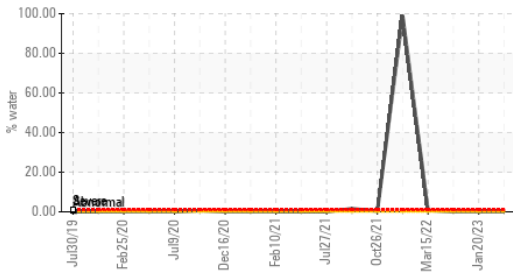
FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 1.68 | 0.32 | 0.22 |

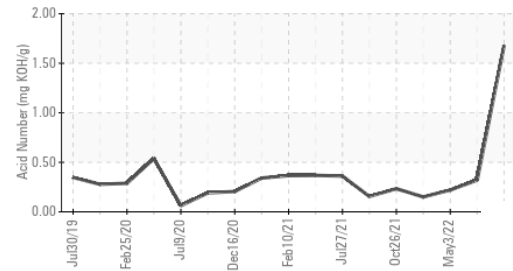
Additives



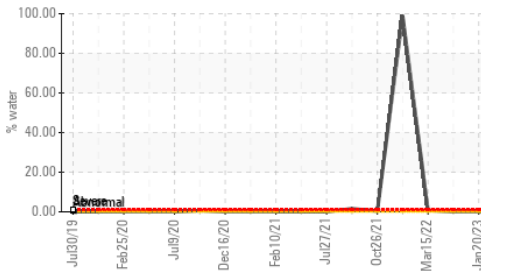
Water



Acid Number



Water



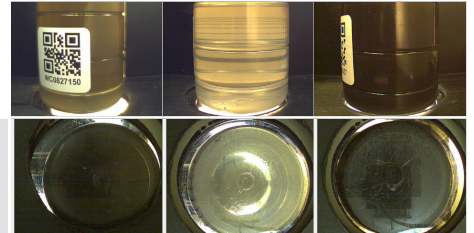
| VISUAL | method | limit/base | current | history1 | history2 | |
|------------------|--------|------------|---------|----------|----------|-------|
| White Metal | scalar | *Visual | NONE | ▲ MODER | LIGHT | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Precipitate | scalar | *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 | NEG | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 | |
|------------------|--------|------------|---------|----------|----------|-----|
| Visc @ 40°C | cSt | ASTM D445 | 100.0 | ▲ 82.17 | 100 | 107 |

| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|----------|----------|
|---------------|--------|------------|---------|----------|----------|

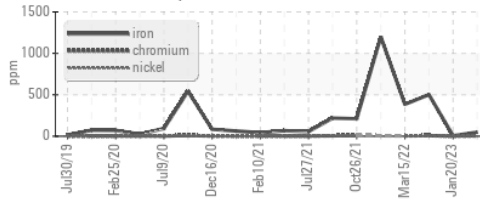
Color

Bottom

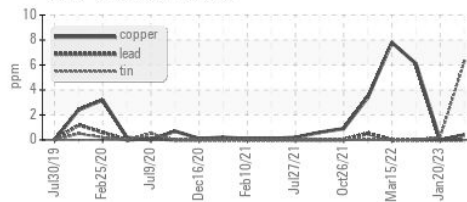


GRAPHS

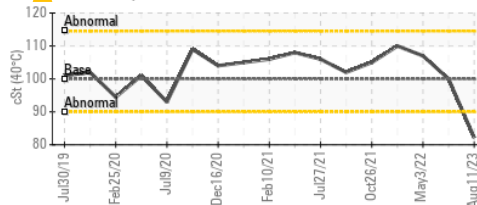
Ferrous Alloys



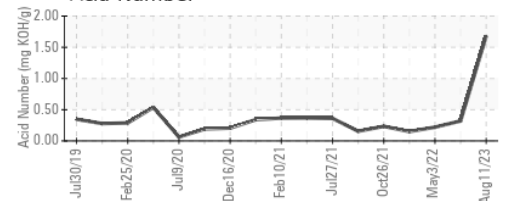
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : WC0827150
 Lab Number : 05923434
 Unique Number : 10603381
 Test Package : IND 2 (Additional Tests: KF, PrtCount)

Received : 14 Aug 2023
 Diagnosed : 22 Aug 2023
 Diagnostician : Doug Bogart

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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