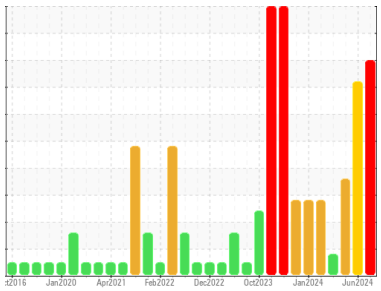
# PROBLEM SUMMARY

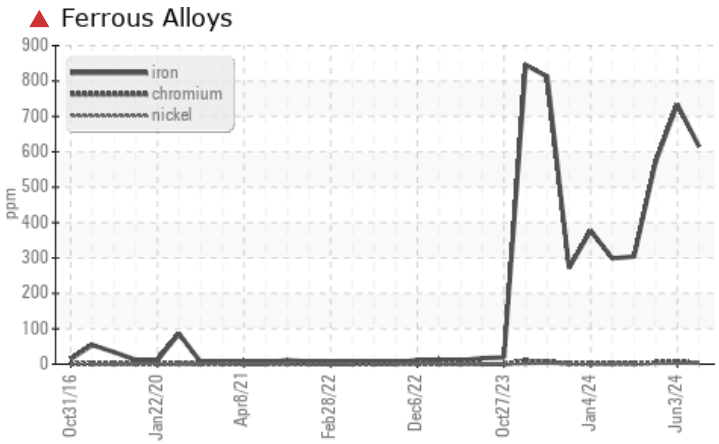
Sample Rating Trend

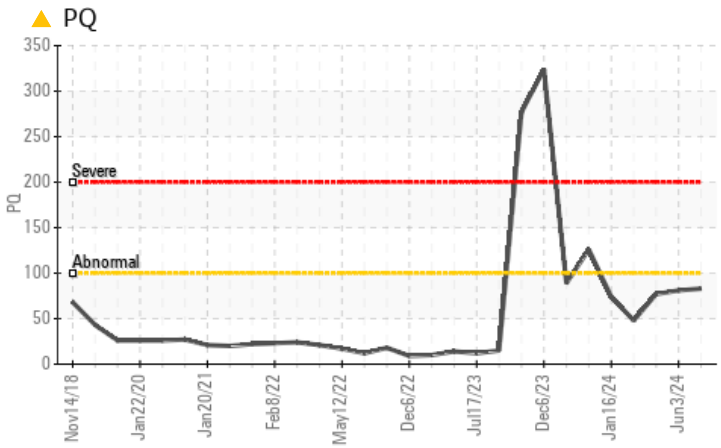


**WEAR**

Area
## MELT SHOP - BAGHOUSE FANS
Machine Id
## M/S BAGHOUSE FAN 151B M/S (S/N 15-6400-2000-1010)
Component
**Inboard Journal Bearing**
Fluid
**AW HYDRAULIC OIL ISO 100 (3 LTR)**

## COMPONENT CONDITION SUMMARY




## RECOMMENDATION

We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

## PROBLEMATIC TEST RESULTS

| Sample Status | | | | SEVERE | SEVERE | ABNORMAL |
|---|---|---|---|---|---|---|
| PQ | | ASTM D8184 | | ▲ **83** | 81 | ▲ 77 |
| Iron | ppm | ASTM D5185m | >60 | ▲ **615** | ▲ 734 | ▲ 572 |

**Customer Id:** OUTCALAL
**Sample No.:** RP0044091
**Lab Number:** 06212514
**Test Package:** IND 2

*To manage this report scan the QR code*

*To discuss the diagnosis or test data:*
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angela.borella@wearcheckusa.com

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

## RECOMMENDED ACTIONS

| Action | Status | Date | Done By | Description |
|---|---|---|---|---|
| Inspect Wear Source | MISSED | Jun 19 2024 | ? | We advise that you inspect for the source(s) of wear. |
| Resample | MISSED | Jun 19 2024 | ? | We recommend an early resample to monitor this condition. |

## HISTORICAL DIAGNOSIS

WEAR

**03 Jun 2024 Diag: Doug Bogart**

We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.Moderate concentration of visible metal present. Gear wear is indicated. The water content is negligible. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid.

view report

WEAR

**23 May 2024 Diag: Angela Borella**

We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. Resample at the next service interval to monitor.Bearing wear is indicated. There is a moderate amount of visible silt present in the sample. 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

WEAR

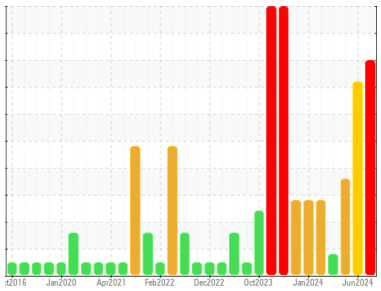
**08 Apr 2024 Diag: Angela Borella**

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.The iron level is abnormal. There is no indication of any contamination 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



**WEAR**

Area
## MELT SHOP - BAGHOUSE FANS
Machine Id
## M/S BAGHOUSE FAN 151B M/S (S/N 15-6400-2000-1010)
Component
**Inboard Journal Bearing**
Fluid
**AW HYDRAULIC OIL ISO 100 (3 LTR)**

## DIAGNOSIS

**▲ Recommendation**
We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

**▲ Wear**
Gear wear is indicated.

**Contamination**
The water content is negligible. There is no indication of any contamination in the oil.

**Fluid Condition**
The AN level is acceptable for this fluid.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **RP0044091** | RP0044250 | RP0044013 |
| Sample Date | | Client Info | | **10 Jun 2024** | 03 Jun 2024 | 23 May 2024 |
| 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 | | | | **SEVERE** | SEVERE | ABNORMAL |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| PQ | | ASTM D8184 | | ▲ **83** | 81 | ▲ 77 |
| Iron | ppm | ASTM D5185m | >60 | ▲ **615** | ▲ 734 | ▲ 572 |
| Chromium | ppm | ASTM D5185m | >20 | **4** | 5 | 4 |
| Nickel | ppm | ASTM D5185m | >20 | **2** | 2 | 2 |
| Titanium | ppm | ASTM D5185m | | **0** | 0 | <1 |
| Silver | ppm | ASTM D5185m | | **0** | 0 | 1 |
| Aluminum | ppm | ASTM D5185m | >4 | **2** | 3 | 3 |
| Lead | ppm | ASTM D5185m | >250 | **0** | 0 | <1 |
| Copper | ppm | ASTM D5185m | >125 | **5** | 6 | 6 |
| Tin | ppm | ASTM D5185m | >80 | **<1** | <1 | <1 |
| Vanadium | ppm | ASTM D5185m | | **0** | 0 | <1 |
| Cadmium | ppm | ASTM D5185m | | **0** | 0 | <1 |

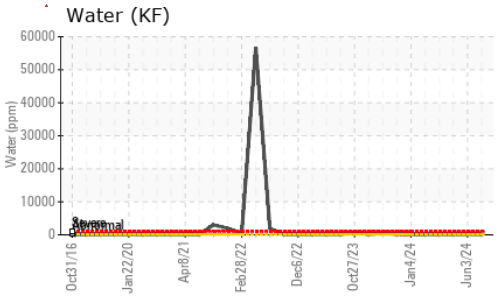
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | 5 | **5** | 7 | 0 |
| Barium | ppm | ASTM D5185m | 5 | **0** | 0 | 2 |
| Molybdenum | ppm | ASTM D5185m | 5 | **150** | 264 | 292 |
| Manganese | ppm | ASTM D5185m | | **7** | 10 | 7 |
| Magnesium | ppm | ASTM D5185m | 25 | **3** | <1 | 2 |
| Calcium | ppm | ASTM D5185m | 200 | **3** | 4 | 5 |
| Phosphorus | ppm | ASTM D5185m | 300 | **494** | 439 | 486 |
| Zinc | ppm | ASTM D5185m | 370 | **3** | 0 | 14 |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >50 | **5** | 6 | 7 |
| Sodium | ppm | ASTM D5185m | | **2** | 2 | <1 |
| Potassium | ppm | ASTM D5185m | >20 | **3** | 1 | 2 |
| Water | % | ASTM D6304 | >2 | **0.004** | 0.006 | 0.003 |
| ppm Water | ppm | ASTM D6304 | | **47** | 64 | 28 |

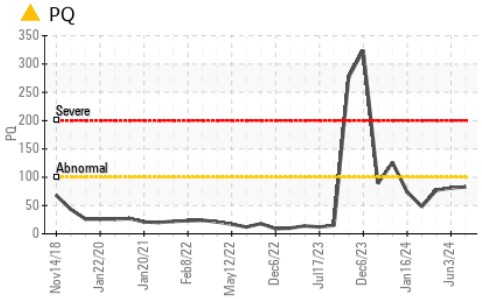
| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.57 | **0.53** | 0.53 | 0.67 |

# OIL ANALYSIS REPORT

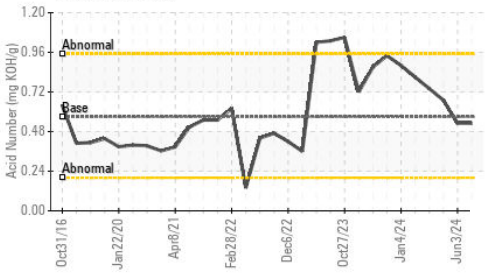
Water (KF)



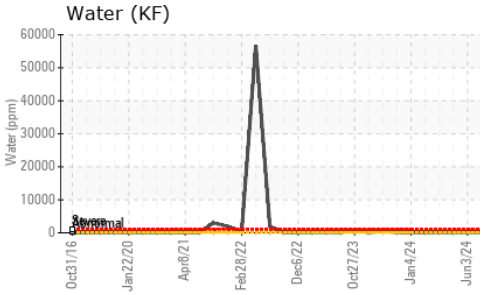

PQ



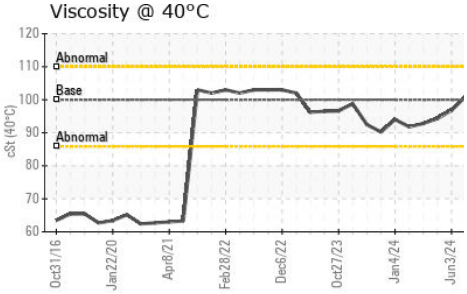

Acid Number




Water (KF)




Viscosity @ 40°C



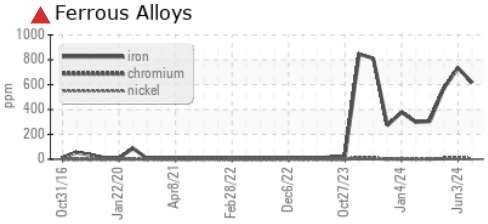

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | ▲ MODER | NONE |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Silt | scalar | *Visual | NONE | **NONE** | NONE | ▲ MODER |
| 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 | >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 | **101** | 96.76 | 94.3 |

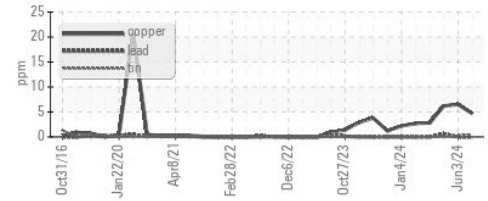
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | |  | | |
| Bottom | | |  | | |

## GRAPHS

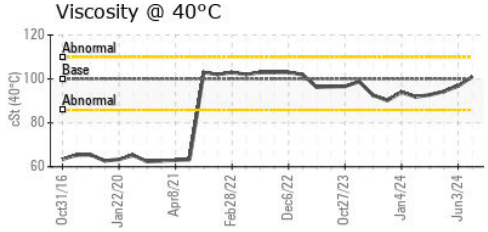
▲ Ferrous Alloys



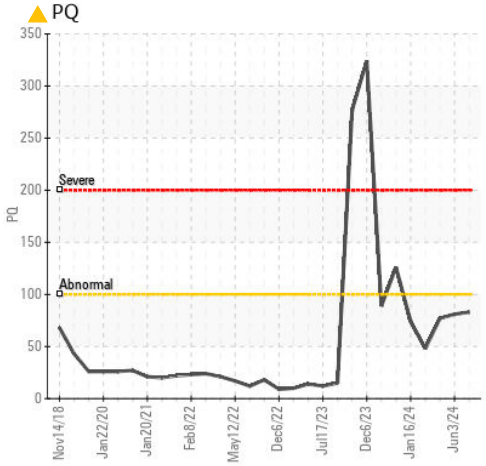

Non-ferrous Metals



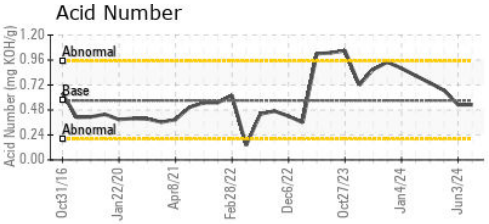

Viscosity @ 40°C




▲ PQ




Acid Number




Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : RP0044091
**Lab Number** : 06212514
**Unique Number** : 11085378
**Test Package** : IND 2 ( Additional Tests: PQ )

**Received** : 17 Jun 2024
**Tested** : 19 Jun 2024
**Diagnosed** : 19 Jun 2024 - Angela Borella

*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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