

No relevant graphs to display

RECOMMENDATION

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. We were unable to perform a particle count due to a high concentration of particles present in this sample.

| PROBLEMATIC T | EST RE | SULTS | | | | |
|---------------|--------|---------|------|----------|----------|----------|
| Sample Status | | | | ABNORMAL | ABNORMAL | ABNORMAL |
| Debris | scalar | *Visual | NONE | 🔺 MODER | LIGHT | NONE |

Customer Id: HORBEL Sample No.: WC0799730 Lab Number: 05901270 Test Package: IND 2



To manage this report scan the QR code

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

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

| RECOMMENDE | D ACTIONS | | | |
|---------------|-----------|------|---------|--|
| Action | Status | Date | Done By | Description |
| Change Filter | | | ? | We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. |
| Alert | | | ? | We were unable to perform a particle count due to a high concentration of particles present in this sample. |
| Filter Fluid | | | ? | We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. |

HISTORICAL DIAGNOSIS



26 Feb 2023 Diag: Don Baldridge

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.



26 Mar 2021 Diag: Jonathan Hester



We recommend you service the filters on this component if applicable. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample. Bearing and/or bushing wear is indicated. Appearance is milky. There is a moderate amount of visible silt present in the sample. The AN level is acceptable for this fluid.





OIL ANALYSIS REPORT

[23211049] B21613 - 4 (S/N 69700019) Component

Gearbox Fluic

JAX MAGNA-PLATE 85W140-FG (--- GAL)

DIAGNOSIS

Recommendation

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. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

All component wear rates are normal.

Contamination

Moderate concentration of visible dirt/debris present in the oil.

Fluid Condition

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

| | | - | | | | |
|--------------------|------------------|----------------------------|------------|-----------------|------------------|-------------------|
| | | - | | | | |
| | | Ma | 2021 | Feb2023 Jun20. | 23 | |
| SAMPLE INFORM | IATION | method | limit/base | current | history1 | history2 |
| Sample Number | | Client Info | | WC0799730 | WC0732488 | WC0543315 |
| Sample Date | | Client Info | | 29 Jun 2023 | 26 Feb 2023 | 26 Mar 2021 |
| Machine Age | yrs | Client Info | | 0 | 0 | 0 |
| Oil Age | yrs | Client Info | | 1 | 0 | 1 |
| Oil Changed | | Client Info | | Not Changd | N/A | Not Changd |
| Sample Status | | | | ABNORMAL | ABNORMAL | ABNORMAL |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >200 | <1 | 1 | 1 |
| Chromium | ppm | ASTM D5185m | >15 | 0 | <1 | 0 |
| Nickel | ppm | ASTM D5185m | >15 | 0 | 2 | 16 |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Aluminum | ppm | ASTM D5185m | >25 | <1 | <1 | 0 |
| Lead | ppm | ASTM D5185m | >100 | 0 | 0 | 3 |
| Copper | ppm | ASTM D5185m | >200 | 31 | 79 | A 814 |
| Tin | ppm | ASTM D5185m | >25 | 2 | 6 | ▲ 94 |
| Antimony | ppm | ASTM D5185m | >5 | | | <1 |
| Vanadium | ppm | ASTM D5185m | | <1 0 | <1 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | U | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | | 0 | <1 | 2 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Magnesium | ppm | ASTM D5185m | | 1 | 0 | 0 |
| Calcium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Phosphorus Zinc | ppm | ASTM D5185m ASTM D5185m | | 467 | 341 0 | 180 0 |
| Sulfur | ppm ppm | ASTM D5185m | | 0 6274 | 3995 | 3073 |
| | | | | | | |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >50 | <1 | 1 | 0 |
| Sodium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Potassium | ppm | ASTM D5185m | >20 | <1 | <1 | <1 |
| FLUID CLEANLIN | IESS | method | limit/base | current | history1 | history2 |
| Particles >4µm | | ASTM D7647 | >20000 | | ▲ 104784 | |
| Particles >6µm | | ASTM D7647 | >5000 | | ▲ 8976 | |
| Particles >14µm | | ASTM D7647 | >640 | | 275 | |
| Particles >21µm | | ASTM D7647 | >160 | | 77 | |
| Particles >38µm | | ASTM D7647 | >40 | | 5 | |
| Particles >71µm | | ASTM D7647 | | | 0 | |
| Oil Cleanliness | | ISO 4406 (c) | >21/19/16 | | A 24/20/15 | |
| FLUID DEGRADA | | | | | | |
| I LOID DEGITION | TION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | TION mg KOH/g | method ASTM D8045 | limit/base | current 0.76 | history1 0.75 | history2 0.201 |

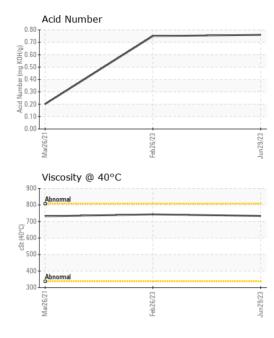
Sample Rating Trend

VIS DEBRIS

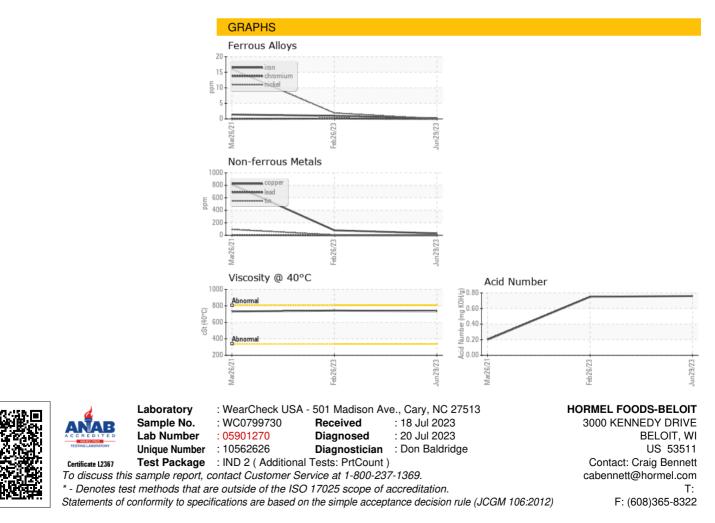
Report Id: HORBEL [WUSCAR] 05901270 (Generated: 07/20/2023 10:12:33) Rev: 1



OIL ANALYSIS REPORT



| 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 | 🔺 MODER |
| Debris | scalar | *Visual | NONE | A MODER | LIGHT | NONE |
| 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 | NEG |
| Free Water | scalar | *Visual | | NEG | NEG | NEG |
| FLUID PROPERT | IES | method | limit/base | current | history1 | history2 |
| Visc @ 40°C | cSt | ASTM D445 | | 734 | 743 | 732 |
| SAMPLE IMAGES | | | | | | |
| SAMPLE IMAGES | 6 | method | limit/base | current | history1 | history2 |
| Color | 3 | method | limit/base | current | history1 | history2 |



Contact/Location: Craig Bennett - HORBEL