

OIL ANALYSIS REPORT

Area BOF/ALLOY SYSTEM Machine Id TRIPPER CAR T2 (4th floor) Component

Gearbox Fluid GEAR OIL ISO 220 (--- GAL)

DIAGNOSIS

Recommendation

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

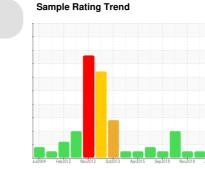
All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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

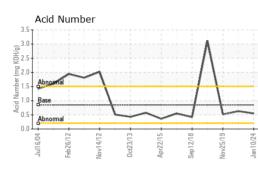


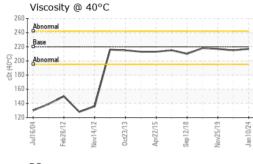
NORMAL

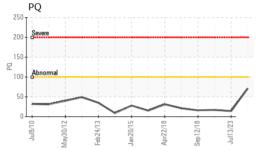
| SAMPLE INFORM | IATION | method | limit/base | current | history1 | history2 |
|------------------|----------|---------------|------------|-------------|-------------|-------------|
| Sample Number | | Client Info | | WC0898701 | WC0838943 | WC0415688 |
| Sample Date | | Client Info | | 10 Jan 2024 | 13 Jul 2023 | 25 Nov 2019 |
| 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 | | | | NORMAL | NORMAL | NORMAL |
| CONTAMINATION | ١ | method | limit/base | current | history1 | history2 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| PQ | | ASTM D8184* | >DFLT | 71 | 14 | 17 |
| Iron | ppm | ASTM D5185(m) | >200 | 61 | 19 | 12 |
| Chromium | ppm | ASTM D5185(m) | >15 | 2 | 2 | 1 |
| Nickel | ppm | ASTM D5185(m) | >15 | <1 | <1 | <1 |
| Titanium | ppm | ASTM D5185(m) | | 0 | 0 | <1 |
| Silver | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >25 | 2 | 1 | <1 |
| Lead | ppm | ASTM D5185(m) | >100 | 32 | 30 | 28 |
| Copper | ppm | ASTM D5185(m) | >200 | 16 | 20 | 19 |
| Tin | ppm | ASTM D5185(m) | >25 | <1 | <1 | <1 |
| Antimony | ppm | ASTM D5185(m) | >5 | 0 | 0 | <1 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Beryllium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185(m) | 50 | <1 | <1 | <1 |
| Barium | ppm | ASTM D5185(m) | 15 | 0 | 0 | <1 |
| Molybdenum | ppm | ASTM D5185(m) | 15 | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185(m) | | 3 | <1 | <1 |
| Magnesium | ppm | ASTM D5185(m) | 50 | 12 | 6 | 2 |
| Calcium | ppm | ASTM D5185(m) | 50 | 27 | 14 | 9 |
| Phosphorus | ppm | ASTM D5185(m) | 350 | 314 | 341 | 312 |
| Zinc | ppm | ASTM D5185(m) | 100 | 25 | 29 | 20 |
| Sulfur | ppm | ASTM D5185(m) | 12500 | 9795 | 9650 | 9870 |
| Lithium | ppm | ASTM D5185(m) | | <1 | <1 | <1 |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185(m) | >50 | 4 | 3 | 2 |
| Sodium | ppm | ASTM D5185(m) | | 2 | 2 | <1 |
| Potassium | ppm | ASTM D5185(m) | >20 | 1 | 1 | <1 |
| FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D974* | 0.85 | 0.55 | 0.63 | 0.515 |



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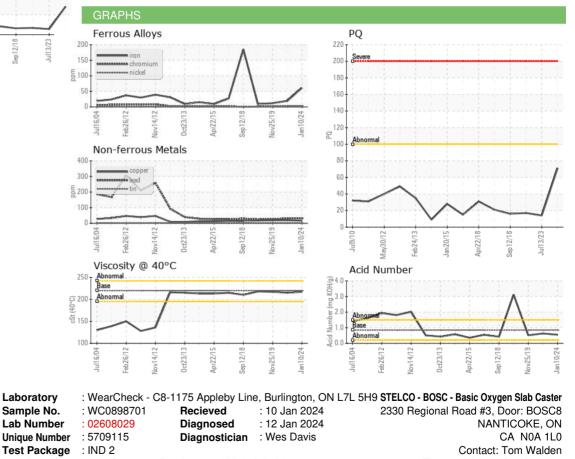






| VISUAL | | method | limit/base | current | history1 | history2 |
|------------------|--------|---------------|------------|---------|----------|----------|
| White Metal | scalar | Visual* | NONE | NONE | NONE | VLITE |
| Yellow Metal | scalar | Visual* | NONE | NONE | NONE | NONE |
| Precipitate | scalar | Visual* | NONE | NONE | NONE | NONE |
| Silt | scalar | Visual* | NONE | NONE | NONE | NONE |
| Debris | scalar | Visual* | NONE | LIGHT | VLITE | VLITE |
| 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 PROPERT | IES | method | limit/base | current | history1 | history2 |
| Visc @ 40°C | cSt | ASTM D7279(m) | 220 | 217 | 215 | 217 |
| SAMPLE IMAGES | 3 | method | limit/base | current | history1 | history2 |
| Color | | | | | | |
| Bottom | | | | | | |





To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

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CALA

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