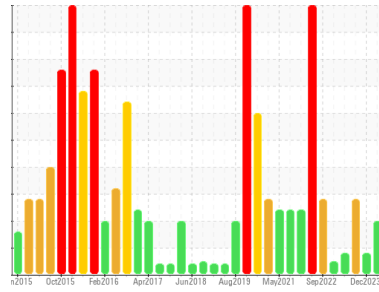




OIL ANALYSIS REPORT

Sample Rating Trend



VISUAL METAL



Area
BRUCE B/0B/54600
 Machine Id
0B-54600-SG6-Avon Level Gauge
 Component
Jet Turbine
 Fluid
SHELL AEROSHELL 500 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check for visible metal particles in the oil. We recommend that you drain the oil from the component if this has not already been done. We recommend you service the filters on this component. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

Light concentration of visible metal present.

Contamination

There is a light amount of silt (particulates < 14 microns in size) present in the oil. The water content is negligible.

Fluid Condition

The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Particle Filter (Magn: 200 x)



SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | WC0566924 | WC0628148 | WC0642788 |
| Sample Date | Client Info | | 26 Mar 2024 | 05 Dec 2023 | 07 Aug 2023 |
| 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 | ATTENTION | ABNORMAL |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|------------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185(m) >2 | <1 | <1 | <1 |
| Chromium | ppm | ASTM D5185(m) >1 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185(m) >1 | 0 | <1 | <1 |
| Titanium | ppm | ASTM D5185(m) >5 | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) >2 | 0 | <1 | 0 |
| Aluminum | ppm | ASTM D5185(m) >1 | 0 | <1 | 0 |
| Lead | ppm | ASTM D5185(m) >2 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185(m) >1 | 0 | <1 | <1 |
| Tin | ppm | ASTM D5185(m) >1 | 0 | 0 | 0 |
| Antimony | ppm | ASTM D5185(m) | 0 | 0 | 0 |
| 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) 0 | 0 | <1 | <1 |
| Barium | ppm | ASTM D5185(m) 0 | 0 | <1 | 0 |
| Molybdenum | ppm | ASTM D5185(m) 0 | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185(m) 0 | 0 | 0 | 0 |
| Magnesium | ppm | ASTM D5185(m) 0 | 0 | 0 | 0 |
| Calcium | ppm | ASTM D5185(m) 0 | 0 | 0 | <1 |
| Phosphorus | ppm | ASTM D5185(m) 1000 | 957 | 972 | 1068 |
| Zinc | ppm | ASTM D5185(m) 5 | <1 | <1 | 1 |
| Sulfur | ppm | ASTM D5185(m) 0 | 2 | 79 | 3 |
| Lithium | ppm | ASTM D5185(m) | <1 | <1 | <1 |

CONTAMINANTS

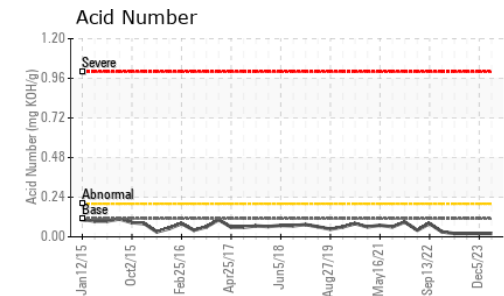
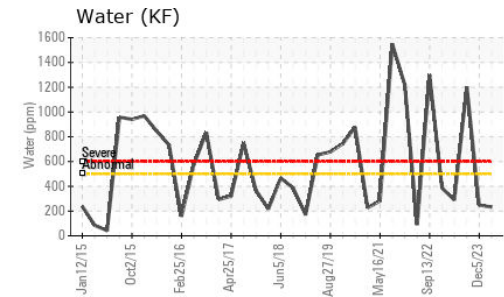
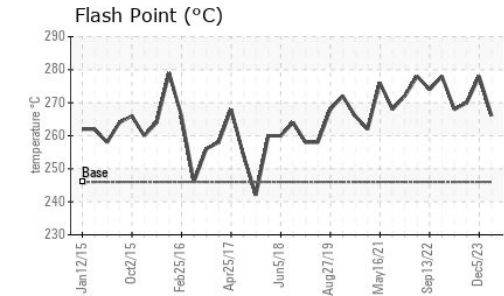
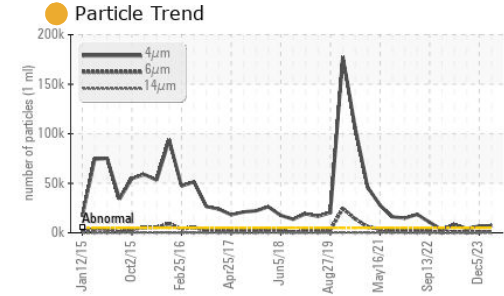
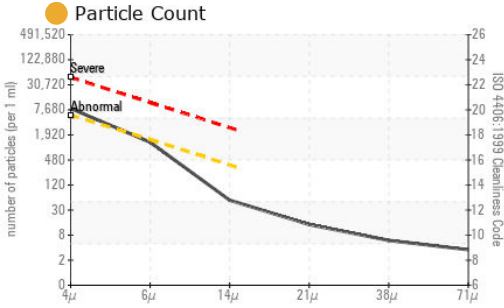
| | method | limit/base | current | history1 | history2 |
|-----------|--------|-------------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185(m) >5 | 0 | <1 | <1 |
| Sodium | ppm | ASTM D5185(m) >5 | 0 | <1 | <1 |
| Potassium | ppm | ASTM D5185(m) >20 | <1 | 0 | 0 |
| Water | % | ASTM D6304* >0.05 | 0.023 | 0.024 | ▲ 0.120 |
| ppm Water | ppm | ASTM D6304* >500 | 232 | 248 | ▲ 1202.6 |

FLUID CLEANLINESS

| | method | limit/base | current | history1 | history2 |
|-----------------|--------------|------------|-------------------|------------|----------|
| Particles >4µm | ASTM D7647 | >5000 | ● 7227 | ● 6682 | 4243 |
| Particles >6µm | ASTM D7647 | >1300 | ● 1125 | ● 844 | 423 |
| Particles >14µm | ASTM D7647 | >320 | ● 46 | ● 19 | 15 |
| Particles >21µm | ASTM D7647 | >80 | ● 12 | ● 6 | 6 |
| Particles >38µm | ASTM D7647 | >20 | ● 5 | ● 2 | 1 |
| Particles >71µm | ASTM D7647 | >4 | ● 3 | ● 2 | 0 |
| Oil Cleanliness | ISO 4406 (c) | >19/17/15 | ● 20/17/13 | ● 20/17/11 | 19/16/11 |



OIL ANALYSIS REPORT

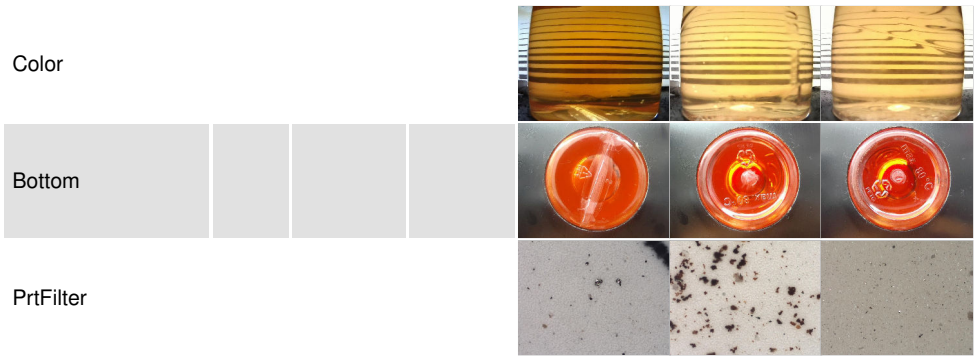


| FLUID DEGRADATION | method | limit/base | current | history1 | history2 | |
|-------------------|----------|------------|---------|-------------|----------|------|
| Acid Number (AN) | mg KOH/g | ASTM D974* | 0.11 | 0.02 | 0.02 | 0.02 |

| VISUAL | method | limit/base | current | history1 | history2 | |
|------------------|--------|------------|---------|----------------|----------|---------|
| White Metal | scalar | Visual* | NONE | ▲ LIGHT | 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 | 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* | >0.05 | NEG | NEG | NEG |
| Free Water | scalar | Visual* | | NEG | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 | |
|----------------------|--------|---------------|---------|-------------|----------|------|
| Visc @ 40°C | cSt | ASTM D7279(m) | 25.3 | 25.6 | 25.6 | 25.3 |
| Visc @ 100°C | cSt | ASTM D7279(m) | 5.2 | 5.1 | 5.1 | --- |
| Viscosity Index (VI) | Scale | ASTM D2270* | 141 | 130 | 130 | --- |
| COC Flash Point | °C | ASTM D92* | 246 | 266 | 278 | 270 |

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



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0566924
Lab Number : **02626057**
Unique Number : 5759189
Test Package : IND2+ (Additional Tests: BottomAnalysis, PrtFilter, Spat, VI, Visual)

Bruce Power - Bruce A PdM
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 CA N0G 2T0
 Contact: Pierre Adouki
 pierre.adouki@brucepower.com
 T: (519)361-2673
 F:

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.