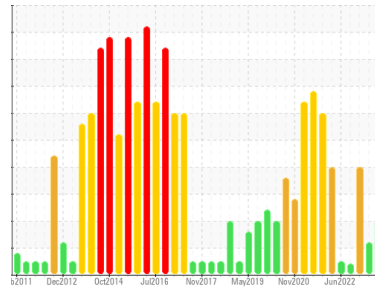




OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Area
(ZONE3) BRUCE B/0B/34340
 Machine Id
0B-34340-MV314-ActuatorHydFluid
 Component
Hydraulic System
 Fluid
SUPRESTA FYRQUEL EHC-S (8 GAL)

DIAGNOSIS

Recommendation

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. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. The fluid was specified as SUPRESTA FYRQUEL EHC-S, however, a fluid match indicates that this fluid is ISO 46 Synthetic (PE) Hydraulic Oil. Please confirm the oil type and grade on your next sample.

Wear

All component wear rates are normal.

Contamination

There is a trace of moisture present in the oil.

Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | WC0900706 | WC0845415 | WC0744558 |
| Sample Date | Client Info | | 19 Jun 2024 | 04 Jan 2024 | 20 Jul 2023 |
| Machine Age | kms | Client Info | 0 | 0 | 0 |
| Oil Age | kms | Client Info | 0 | 0 | 0 |
| Oil Changed | Client Info | | N/A | N/A | N/A |
| Sample Status | | | ATTENTION | ATTENTION | ABNORMAL |

WEAR METALS

| | method | limit/base | current | history1 | history2 | |
|-----------|--------|---------------|---------|----------|----------|----|
| Iron | ppm | ASTM D5185(m) | >5 | 0 | 0 | <1 |
| Chromium | ppm | ASTM D5185(m) | >5 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185(m) | >5 | 0 | <1 | <1 |
| Titanium | ppm | ASTM D5185(m) | >5 | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >5 | 0 | 0 | <1 |
| Lead | ppm | ASTM D5185(m) | >5 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185(m) | >5 | 0 | 0 | <1 |
| Tin | ppm | ASTM D5185(m) | >5 | 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) | | 1 | 0 | <1 |
| Barium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Magnesium | ppm | ASTM D5185(m) | | <1 | <1 | <1 |
| Calcium | ppm | ASTM D5185(m) | | 2 | 1 | 2 |
| Phosphorus | ppm | ASTM D5185(m) | | 35891 | 36741 | 28225 |
| Zinc | ppm | ASTM D5185(m) | | 9 | 7 | 9 |
| Sulfur | ppm | ASTM D5185(m) | | 2 | 0 | 34 |
| Lithium | ppm | ASTM D5185(m) | | <1 | <1 | <1 |

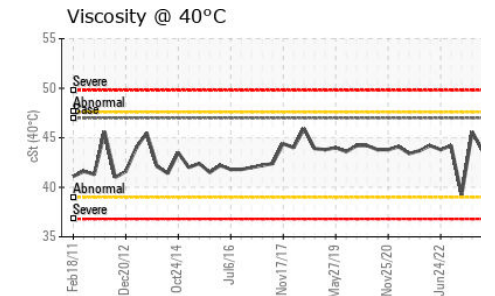
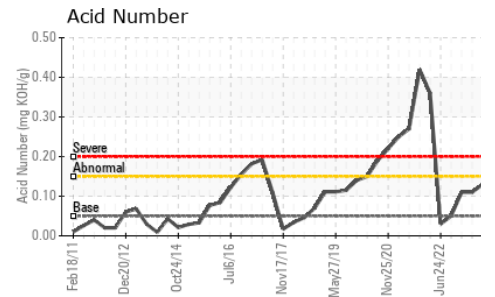
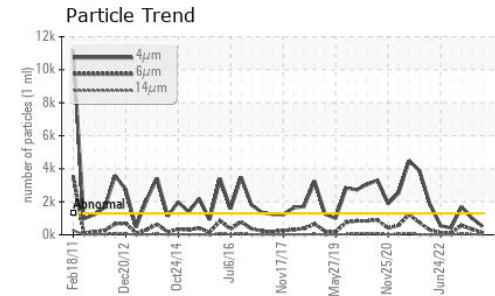
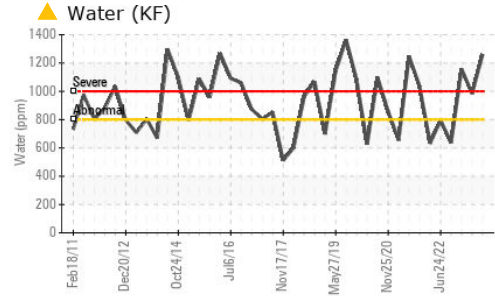
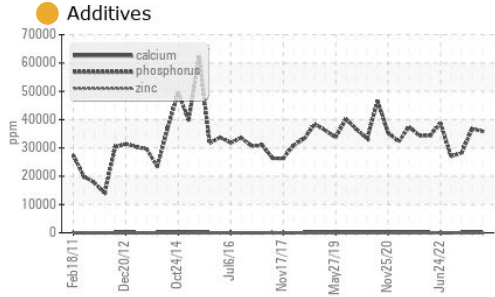
CONTAMINANTS

| | method | limit/base | current | history1 | history2 | |
|-----------|--------|---------------|---------|----------------|----------|----------|
| Silicon | ppm | ASTM D5185(m) | >5 | 0 | <1 | <1 |
| Sodium | ppm | ASTM D5185(m) | >5 | <1 | 0 | <1 |
| Potassium | ppm | ASTM D5185(m) | >20 | 0 | 2 | <1 |
| Water | % | ASTM D6304* | >0.08 | ▲ 0.125 | 0.098 | ▲ 0.115 |
| ppm Water | ppm | ASTM D6304* | >800 | ▲ 1260 | 984 | ▲ 1157.1 |

FLUID CLEANLINESS

| | method | limit/base | current | history1 | history2 |
|-----------------|--------------|------------|-----------------|------------|------------|
| Particles >4µm | ASTM D7647 | >1300 | 506 | 1003 | ● 1691 |
| Particles >6µm | ASTM D7647 | >320 | 135 | ● 333 | ● 575 |
| Particles >14µm | ASTM D7647 | >40 | 9 | 35 | ● 57 |
| Particles >21µm | ASTM D7647 | >10 | 3 | 14 | ● 15 |
| Particles >38µm | ASTM D7647 | >3 | 2 | 3 | 1 |
| Particles >71µm | ASTM D7647 | >3 | 2 | 2 | 0 |
| Oil Cleanliness | ISO 4406 (c) | >17/15/12 | 16/14/10 | ● 17/16/12 | ● 18/16/13 |

OIL ANALYSIS REPORT



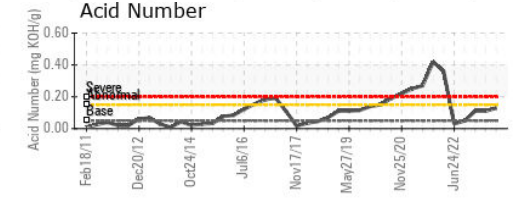
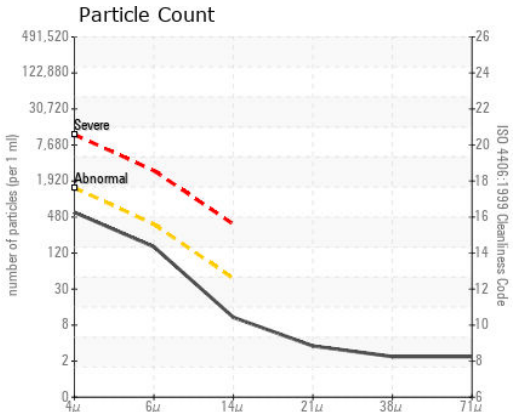
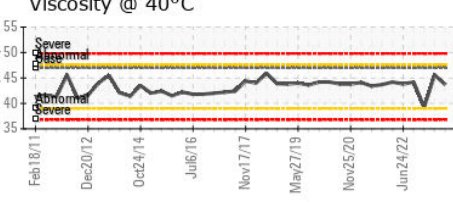
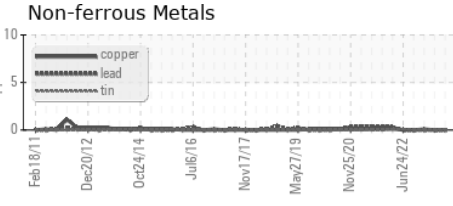
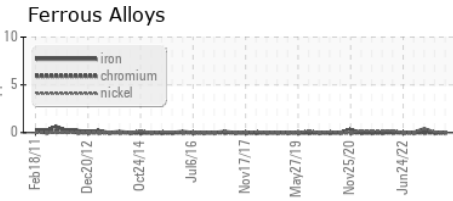
| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D974* | 0.05 | 0.13 | 0.11 | 0.11 |

| 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 | 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* | >0.08 | 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) | 47 | 43.7 | 45.6 | 39.2 |

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

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0900706 **Received** : 05 Jul 2024
Lab Number : **02646013** **Tested** : 10 Jul 2024
Unique Number : 5811565 **Diagnosed** : 10 Jul 2024 - Kevin Marson
Test Package : IND 2 (Additional Tests: TAN Man)

Bruce Power - Bruce A Pdm
 P.O.Box 1540, 177 Tie Road, RM-222 U2 Column 2N11 615'
 Tiverton, ON
 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.