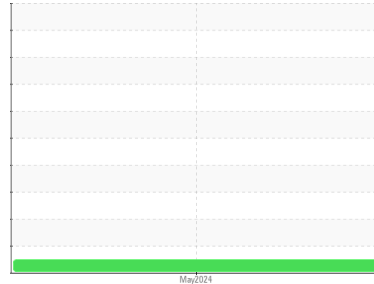




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area

BRUCE A/3/75120

Machine Id

3-75120-CP3002

Component

Reciprocating Compressor

Fluid

ATLAS COPCO ROTO Z FLUID (35 LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable.

Fluid Condition

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

SAMPLE INFORMATION

| Sample Number | Client Info | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|------------|--------------------|----------|----------|
| Sample Number | Client Info | | | WC | --- | --- |
| Sample Date | Client Info | | | 31 May 2024 | --- | --- |
| Machine Age | hrs | Client Info | | 0 | --- | --- |
| Oil Age | hrs | Client Info | | 0 | --- | --- |
| Oil Changed | Client Info | | | N/A | --- | --- |
| Sample Status | | | | NORMAL | --- | --- |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|---------------|---------|--------------|----------|
| Iron | ppm | ASTM D5185(m) | >90 | <1 | --- |
| Chromium | ppm | ASTM D5185(m) | >5 | 0 | --- |
| Nickel | ppm | ASTM D5185(m) | | <1 | --- |
| Titanium | ppm | ASTM D5185(m) | | 0 | --- |
| Silver | ppm | ASTM D5185(m) | | 0 | --- |
| Aluminum | ppm | ASTM D5185(m) | >40 | <1 | --- |
| Lead | ppm | ASTM D5185(m) | >7 | 0 | --- |
| Copper | ppm | ASTM D5185(m) | >35 | <1 | --- |
| Tin | ppm | ASTM D5185(m) | >7 | 0 | --- |
| Antimony | ppm | ASTM D5185(m) | | 0 | --- |
| Vanadium | ppm | ASTM D5185(m) | | 0 | --- |
| Beryllium | ppm | ASTM D5185(m) | | 0 | --- |
| Cadmium | ppm | ASTM D5185(m) | | 0 | --- |

ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|---------------|---------|--------------|----------|
| Boron | ppm | ASTM D5185(m) | 0 | <1 | --- |
| Barium | ppm | ASTM D5185(m) | 0 | 0 | --- |
| Molybdenum | ppm | ASTM D5185(m) | 0 | 0 | --- |
| Manganese | ppm | ASTM D5185(m) | | 0 | --- |
| Magnesium | ppm | ASTM D5185(m) | 0 | <1 | --- |
| Calcium | ppm | ASTM D5185(m) | 10 | 16 | --- |
| Phosphorus | ppm | ASTM D5185(m) | 450 | 367 | --- |
| Zinc | ppm | ASTM D5185(m) | 0 | 6 | --- |
| Sulfur | ppm | ASTM D5185(m) | 650 | 611 | --- |
| Lithium | ppm | ASTM D5185(m) | | <1 | --- |

CONTAMINANTS

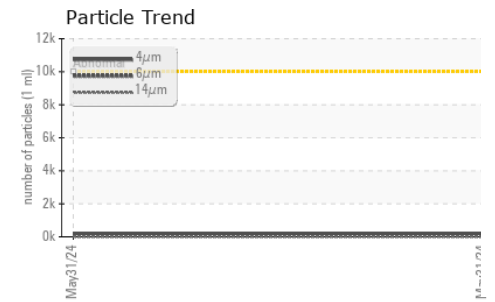
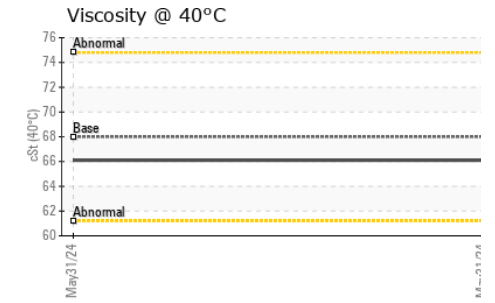
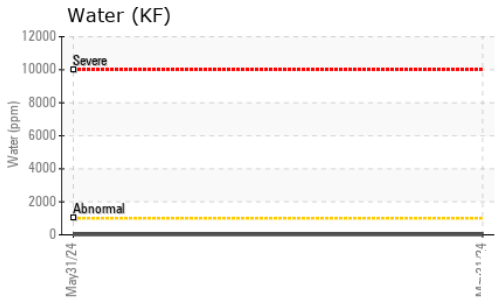
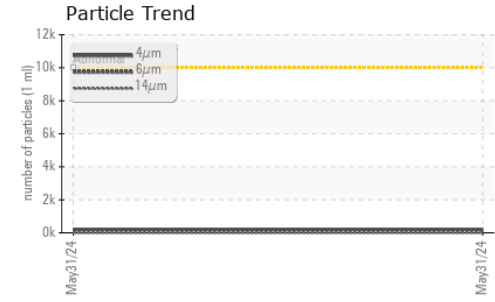
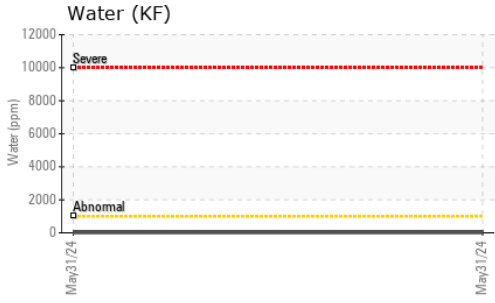
| | method | limit/base | current | history1 | history2 |
|-----------|--------|---------------|---------|--------------|----------|
| Silicon | ppm | ASTM D5185(m) | >15 | 0 | --- |
| Sodium | ppm | ASTM D5185(m) | | <1 | --- |
| Potassium | ppm | ASTM D5185(m) | >20 | <1 | --- |
| Water | % | ASTM D6304* | >0.1 | 0.002 | --- |
| ppm Water | ppm | ASTM D6304* | >1000 | 16 | --- |

FLUID CLEANLINESS

| | method | limit/base | current | history1 | history2 |
|-----------------|--------------|------------|-----------------|----------|----------|
| Particles >4µm | ASTM D7647 | >10000 | 206 | --- | --- |
| Particles >6µm | ASTM D7647 | >2500 | 62 | --- | --- |
| Particles >14µm | ASTM D7647 | >320 | 8 | --- | --- |
| Particles >21µm | ASTM D7647 | >80 | 3 | --- | --- |
| Particles >38µm | ASTM D7647 | >20 | 0 | --- | --- |
| Particles >71µm | ASTM D7647 | >4 | 0 | --- | --- |
| Oil Cleanliness | ISO 4406 (c) | >20/18/15 | 15/13/10 | --- | --- |



OIL ANALYSIS REPORT



| FLUID DEGRADATION | method | limit/base | current | history1 | history2 | |
|-------------------|----------|------------|---------|-------------|----------|-----|
| Acid Number (AN) | mg KOH/g | ASTM D974* | 0.18 | 0.18 | --- | --- |

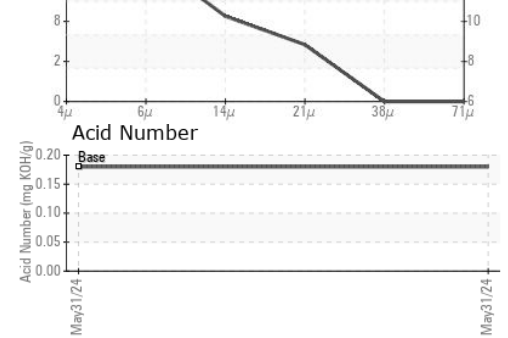
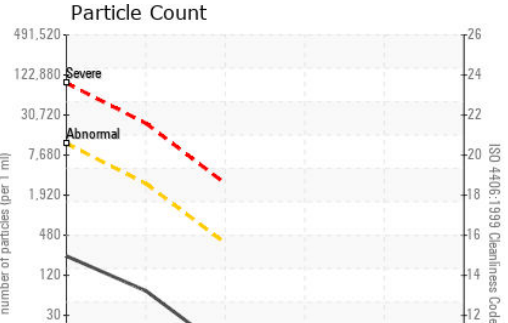
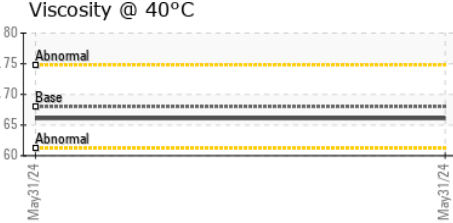
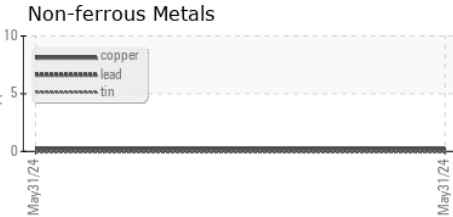
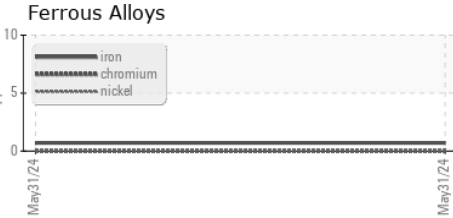
| VISUAL | method | limit/base | current | history1 | history2 | |
|------------------|--------|------------|---------|--------------|----------|-----|
| White Metal | scalar | Visual* | NONE | NONE | --- | --- |
| Yellow Metal | scalar | Visual* | NONE | NONE | --- | --- |
| Precipitate | scalar | Visual* | NONE | NONE | --- | --- |
| Silt | scalar | Visual* | NONE | NONE | --- | --- |
| Debris | scalar | Visual* | NONE | NONE | --- | --- |
| Sand/Dirt | scalar | Visual* | NONE | NONE | --- | --- |
| Appearance | scalar | Visual* | NORML | NORML | --- | --- |
| Odor | scalar | Visual* | NORML | NORML | --- | --- |
| Emulsified Water | scalar | Visual* | >0.1 | NEG | --- | --- |
| Free Water | scalar | Visual* | | NEG | --- | --- |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 | |
|------------------|--------|---------------|---------|-------------|----------|-----|
| Visc @ 40°C | cSt | ASTM D7279(m) | 68.0 | 66.1 | --- | --- |

SAMPLE IMAGES

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

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC
Lab Number : 02645902
Unique Number : 5811454
Test Package : IND 2

Bruce Power - Bruce A PdM
 P.O.Box 1540, 177 Tie Road, RM-222 U2 Column 2N11 615'
 Tiverton, ON
 CA N0G 2T0

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.

Contact: Pierre Adouki
 pierre.adouki@brucepower.com
 T: (519)361-2673
 F: