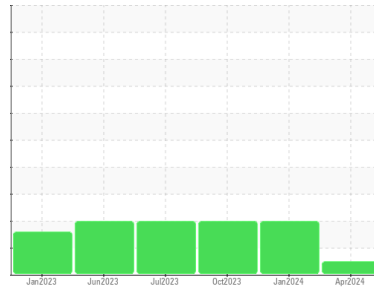




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
KILN WET END INNER
 Component
Hydraulic System
 Fluid
PACEMAKER 68 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.
 NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. 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 | | method | limit/base | current | history1 | history2 |
|--------------------|-------------|-------------|------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | | WC0904909 | WC0819732 | WC0845563 |
| Sample Date | Client Info | | | 04 Apr 2024 | 24 Jan 2024 | 16 Oct 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 | | | | NORMAL | ATTENTION | ABNORMAL |

| CONTAMINATION | | method | limit/base | current | history1 | history2 |
|---------------|-----------|--------|------------|------------|----------|----------|
| Water | WC Method | | >0.05 | NEG | NEG | NEG |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m | >20 | 2 | 1 | <1 |
| Chromium | ppm | ASTM D5185m | >20 | <1 | <1 | 0 |
| Nickel | ppm | ASTM D5185m | >20 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >20 | 4 | 3 | 0 |
| Lead | ppm | ASTM D5185m | >20 | 0 | 0 | <1 |
| Copper | ppm | ASTM D5185m | >20 | <1 | <1 | <1 |
| Tin | ppm | ASTM D5185m | >20 | <1 | 0 | <1 |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 |

| ADDITIVES | | method | limit/base | current | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Magnesium | ppm | ASTM D5185m | | 2 | <1 | 0 |
| Calcium | ppm | ASTM D5185m | | 10 | <1 | 0 |
| Phosphorus | ppm | ASTM D5185m | | 35 | 0 | 21 |
| Zinc | ppm | ASTM D5185m | | 8 | 0 | 0 |
| Sulfur | ppm | ASTM D5185m | | 1334 | 393 | 141 |

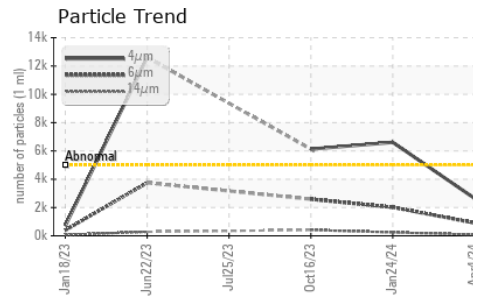
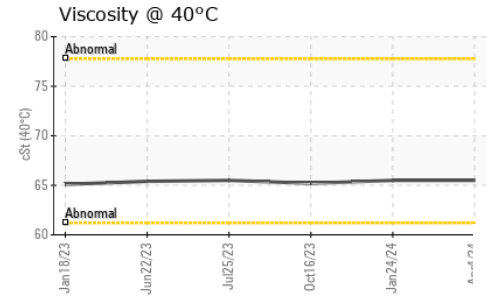
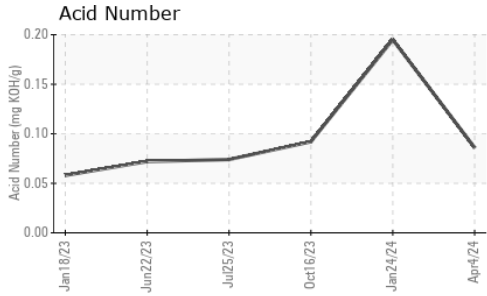
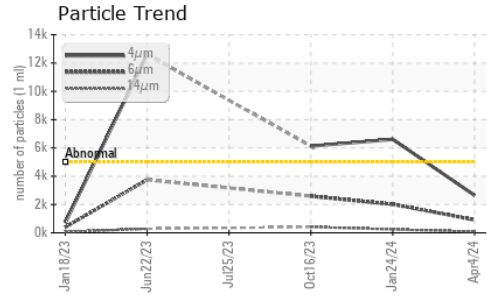
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|--------------|-----|-------------|------------|----------|----------|----------|
| Silicon | ppm | ASTM D5185m | >15 | 2 | 4 | <1 |
| Sodium | ppm | ASTM D5185m | | 2 | 0 | <1 |
| Potassium | ppm | ASTM D5185m | >20 | 3 | <1 | <1 |

| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|-------------------|--|--------------|------------|-----------------|----------|----------|
| Particles >4µm | | ASTM D7647 | >5000 | 2642 | 6609 | 6129 |
| Particles >6µm | | ASTM D7647 | >1300 | 907 | 2013 | 2589 |
| Particles >14µm | | ASTM D7647 | >160 | 82 | 241 | 410 |
| Particles >21µm | | ASTM D7647 | >40 | 23 | 78 | 150 |
| Particles >38µm | | ASTM D7647 | >10 | 1 | 4 | 11 |
| Particles >71µm | | ASTM D7647 | >3 | 0 | 0 | 2 |
| Oil Cleanliness | | ISO 4406 (c) | >19/17/14 | 19/17/14 | 20/18/15 | 20/19/16 |

| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|-------------------|----------|------------|------------|--------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.086 | 0.195 | 0.092 |



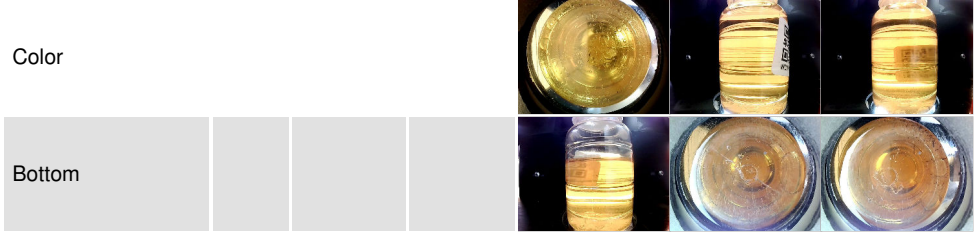
OIL ANALYSIS REPORT



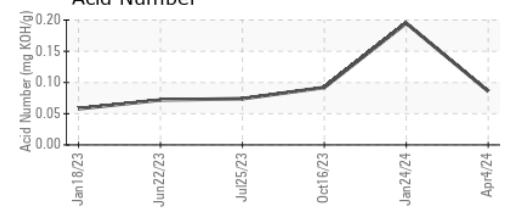
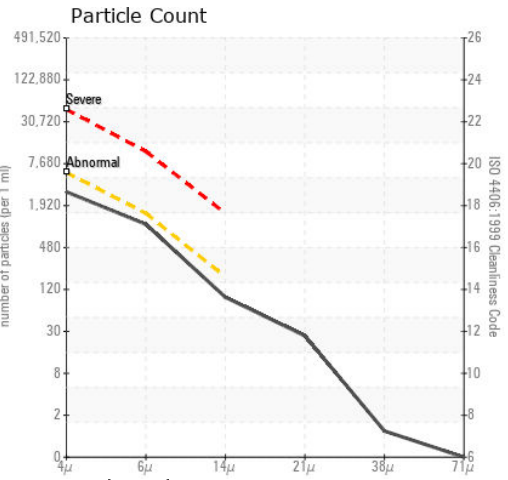
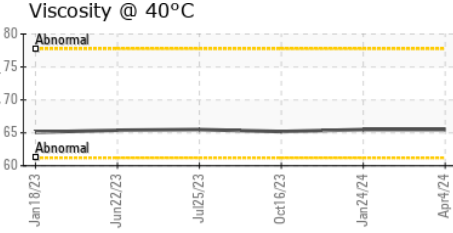
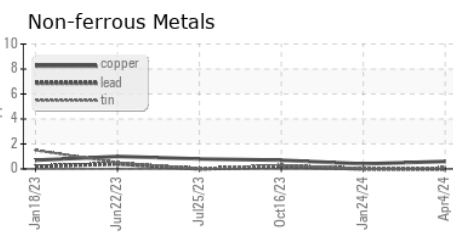
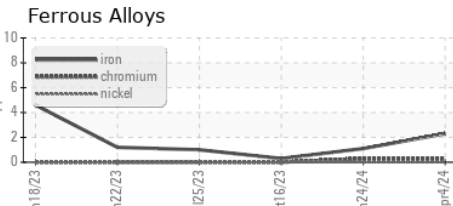
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | LIGHT |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.05 | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 65.5 | 65.5 | 65.2 |

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



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0904909
Lab Number : 06141267
Unique Number : 10966075
Test Package : IND 2
Received : 08 Apr 2024
Tested : 09 Apr 2024
Diagnosed : 09 Apr 2024 - Wes Davis

BLUE RIDGE FIBERBOARD
 250 KNIGHT CELOTEX DR
 DANVILLE, VA
 US 24541
 Contact: Jerald Caldwell
 JCaldwell@blueridgefiberboard.com

To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)