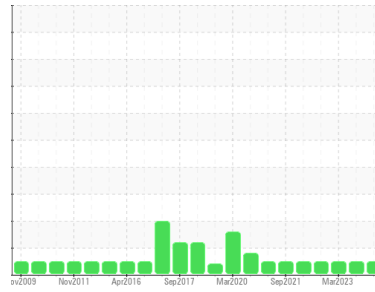




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
FES COMPRESSOR 3 (S/N MKSD-1066)
 Component
Refrigeration Compressor
 Fluid
CAMCO 717 HT (80 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are 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 | | USP248604 | USP248602 | USP229612 |
| Sample Date | Client Info | | 26 Mar 2024 | 18 Sep 2023 | 29 Mar 2023 |
| Machine Age | hrs | Client Info | 100510 | 97825 | 97439 |
| Oil Age | hrs | Client Info | 0 | 0 | 0 |
| Oil Changed | Client Info | | N/A | N/A | Not Chngd |
| Sample Status | | | NORMAL | NORMAL | NORMAL |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|----------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m >8 | 3 | <1 | 3 |
| Chromium | ppm | ASTM D5185m >2 | <1 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | <1 | <1 | 0 |
| Titanium | ppm | ASTM D5185m | <1 | 0 | 0 |
| Silver | ppm | ASTM D5185m >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m >3 | 0 | 0 | <1 |
| Lead | ppm | ASTM D5185m >2 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m >8 | <1 | 0 | 0 |
| Tin | ppm | ASTM D5185m >4 | <1 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | <1 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | <1 | 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 | <1 | 0 | <1 |
| Magnesium | ppm | ASTM D5185m | <1 | 0 | 0 |
| Calcium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Phosphorus | ppm | ASTM D5185m | 0 | 0 | <1 |
| Zinc | ppm | ASTM D5185m | 0 | 0 | 0 |
| Sulfur | ppm | ASTM D5185m | 0 | 4 | 0 |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|------------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m >15 | 1 | 1 | 0 |
| Sodium | ppm | ASTM D5185m | <1 | 0 | 0 |
| Potassium | ppm | ASTM D5185m >20 | <1 | <1 | 0 |
| Water | % | ASTM D6304 >0.01 | 0.001 | 0.001 | 0.003 |
| ppm Water | ppm | ASTM D6304 >100 | 14 | 11.0 | 27.5 |

FLUID CLEANLINESS

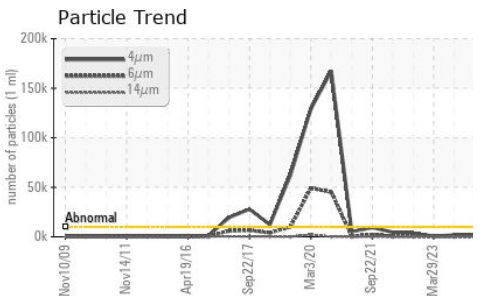
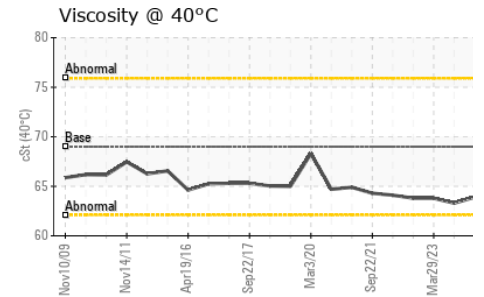
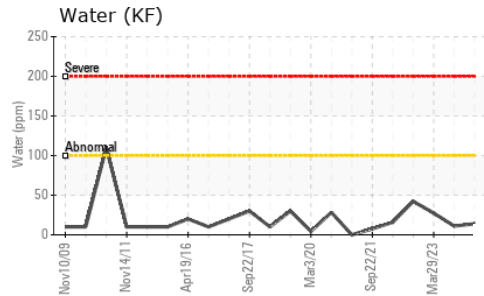
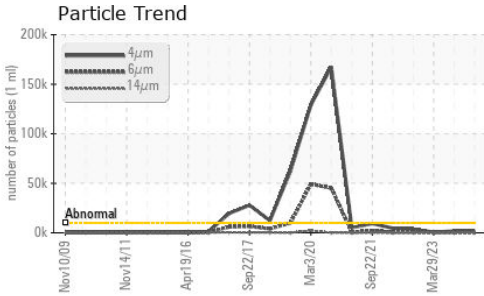
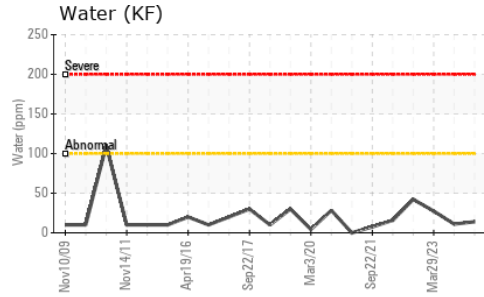
| | method | limit/base | current | history1 | history2 |
|-----------------|--------------|------------|-----------------|----------|----------|
| Particles >4µm | ASTM D7647 | >10000 | 1620 | 1785 | 745 |
| Particles >6µm | ASTM D7647 | >2500 | 353 | 383 | 147 |
| Particles >14µm | ASTM D7647 | >320 | 11 | 21 | 12 |
| Particles >21µm | ASTM D7647 | >80 | 2 | 8 | 4 |
| Particles >38µm | ASTM D7647 | >20 | 0 | 1 | 1 |
| Particles >71µm | ASTM D7647 | >4 | 0 | 0 | 0 |
| Oil Cleanliness | ISO 4406 (c) | >20/18/15 | 18/16/11 | 18/16/12 | 17/14/11 |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|-----------------|--------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D974 0.007 | 0.014 | 0.013 | 0.014 |



OIL ANALYSIS REPORT



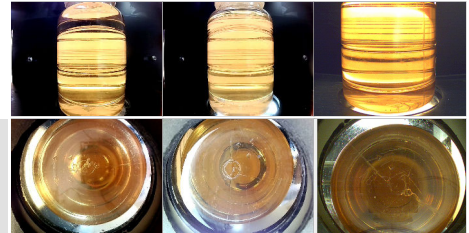
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | NONE |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.01 | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 69 | 63.9 | 63.3 |

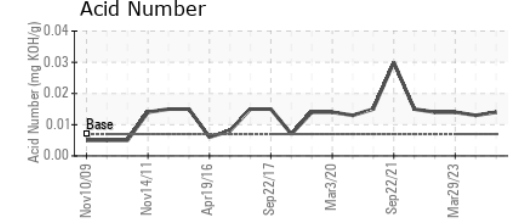
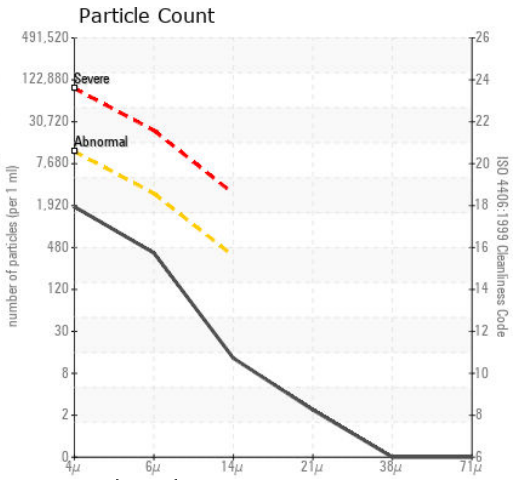
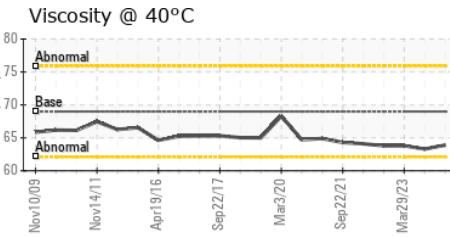
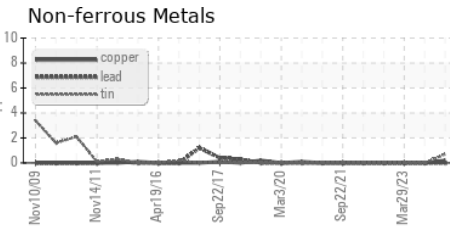
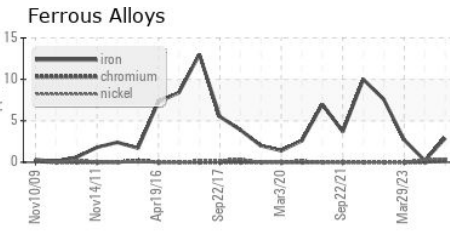
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|----------|----------|
|---------------|--------|------------|---------|----------|----------|

Color

Bottom



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : USP248604

Lab Number : 06138102

Unique Number : 10962910

Test Package : IND 2

Received : 03 Apr 2024

Tested : 04 Apr 2024

Diagnosed : 05 Apr 2024 - Doug Bogart

AMERICOLD - AMEJEF

230 COLLINS RD.

JEFFERSON, WI

US 53549

Contact: DAVID LAUER

david.lauer@americold.com

T:

F: (920)674-2092

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)