



OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
COMPRESSOR 1/OIL SUMP [1A]
 Machine Id
YORK York chiller 1A (S/N SMTM-140940)
 Component
Centrifugal Compressor
 Fluid
YORK TYPE K (20 GAL)



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: Routine maintenance)

Wear

All component wear rates are normal.

Contamination

The water content is negligible. There is no indication of any contamination in the oil.

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 | | WC0758329 | --- | --- |
| Sample Date | Client Info | | 23 Jan 2024 | --- | --- |
| Machine Age | hrs | Client Info | 61792 | --- | --- |
| Oil Age | hrs | Client Info | 0 | --- | --- |
| Oil Changed | Client Info | | Not Chngd | --- | --- |
| Sample Status | | | NORMAL | --- | --- |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|-----------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m >50 | 0 | --- | --- |
| Chromium | ppm | ASTM D5185m >10 | 0 | --- | --- |
| Nickel | ppm | ASTM D5185m | <1 | --- | --- |
| Titanium | ppm | ASTM D5185m | 0 | --- | --- |
| Silver | ppm | ASTM D5185m | 0 | --- | --- |
| Aluminum | ppm | ASTM D5185m >25 | <1 | --- | --- |
| Lead | ppm | ASTM D5185m >25 | 2 | --- | --- |
| Copper | ppm | ASTM D5185m >50 | 2 | --- | --- |
| Tin | ppm | ASTM D5185m >15 | 1 | --- | --- |
| Vanadium | ppm | ASTM D5185m | 0 | --- | --- |
| Cadmium | ppm | ASTM D5185m | 0 | --- | --- |

ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|----------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m 0 | 0 | --- | --- |
| Barium | ppm | ASTM D5185m 0 | 0 | --- | --- |
| Molybdenum | ppm | ASTM D5185m 0 | <1 | --- | --- |
| Manganese | ppm | ASTM D5185m 0 | 2 | --- | --- |
| Magnesium | ppm | ASTM D5185m 0 | <1 | --- | --- |
| Calcium | ppm | ASTM D5185m 0 | <1 | --- | --- |
| Phosphorus | ppm | ASTM D5185m 5 | 3 | --- | --- |
| Zinc | ppm | ASTM D5185m 0 | 0 | --- | --- |
| Sulfur | ppm | ASTM D5185m 10 | 0 | --- | --- |

CONTAMINANTS

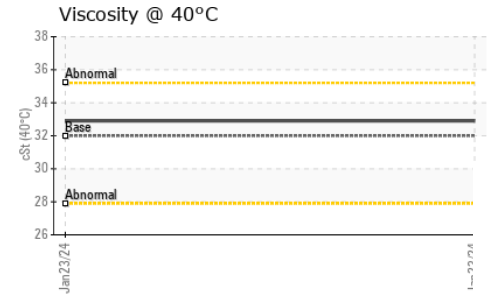
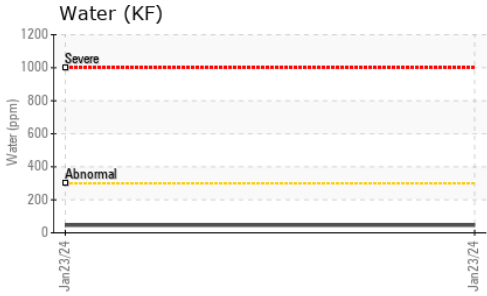
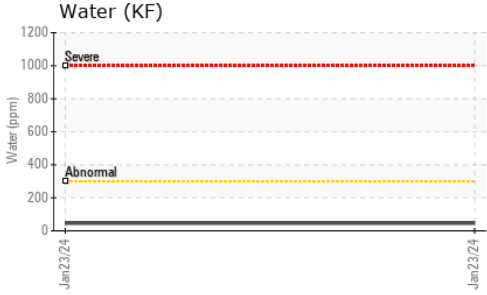
| | method | limit/base | current | history1 | history2 |
|-----------|--------|------------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m >25 | 1 | --- | --- |
| Sodium | ppm | ASTM D5185m | 2 | --- | --- |
| Potassium | ppm | ASTM D5185m >20 | 4 | --- | --- |
| Water | % | ASTM D6304 >0.03 | 0.004 | --- | --- |
| ppm Water | ppm | ASTM D6304 >300 | 46 | --- | --- |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|-----------------|--------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 0.03 | 0.014 | --- | --- |





OIL ANALYSIS REPORT



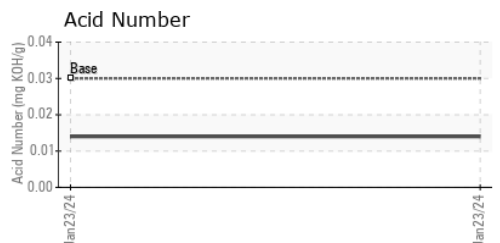
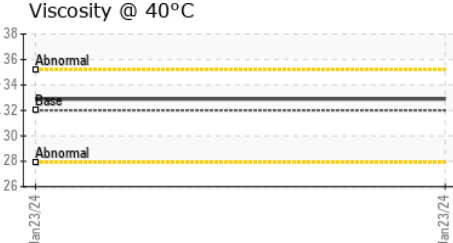
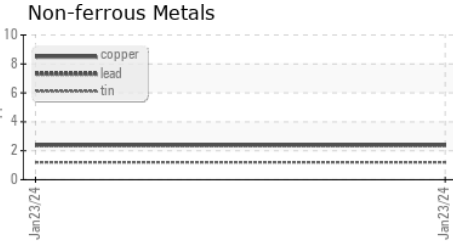
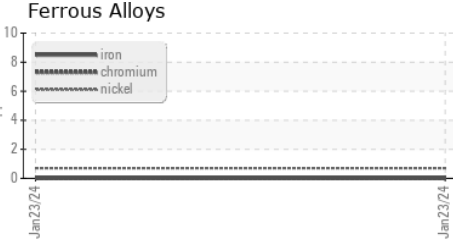
| VISUAL | method | limit/base | current | history1 | history2 | |
|------------------|--------|------------|---------|----------|----------|-----|
| White Metal | scalar | *Visual | NONE | NONE | --- | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- | --- |
| Precipitate | scalar | *Visual | 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 | >0.03 | NEG | --- | --- |
| Free Water | scalar | *Visual | | NEG | --- | --- |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 | |
|------------------|--------|------------|---------|-------------|----------|-----|
| Visc @ 40°C | cSt | ASTM D445 | 32.0 | 32.9 | --- | --- |

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

| | | | | | |
|--------|--|--|---|----------|----------|
| Color | | |  | no image | no image |
| Bottom | | |  | no image | no image |

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0758329 **Received** : 01 Feb 2024
Lab Number : 06077740 **Tested** : 08 Feb 2024
Unique Number : 10859831 **Diagnosed** : 08 Feb 2024 - Jonathan Hester
Test Package : PLANT

THERMALNETICS, INC
 3955 PINNACLE COURT SUITE 200
 AUBURN HILLS, MI
 US 48326
 Contact: SHELLY MANN
 ShellyM@thermalnetics.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)

T:
F: