



# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area

**{UNASSIGNED}**

Machine Id

**MCQUAY OU-Sports & Rec PFH087-ABBB CIRCUIT 1 (S/N 57G81019-01)**

Component

**Centrifugal Compressor**

Fluid

**POE 46 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. ( Customer Sample Comment: Circuit # 1 )

### Wear

All component wear rates are normal.

### Contamination

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 |             | <b>WC0618835</b>   | ---      | ---      |
| Sample Date   | Client Info |             | <b>13 Oct 2023</b> | ---      | ---      |
| Machine Age   | hrs         | Client Info | <b>47166</b>       | ---      | ---      |
| Oil Age       | hrs         | Client Info | <b>0</b>           | ---      | ---      |
| Oil Changed   |             | Client Info | <b>N/A</b>         | ---      | ---      |
| Sample Status |             |             | <b>NORMAL</b>      | ---      | ---      |

## WEAR METALS

|          | method | limit/base       | current      | history1 | history2 |
|----------|--------|------------------|--------------|----------|----------|
| Iron     | ppm    | ASTM D5185m >100 | <b>3</b>     | ---      | ---      |
| Chromium | ppm    | ASTM D5185m >10  | <b>0</b>     | ---      | ---      |
| Nickel   | ppm    | ASTM D5185m      | <b>&lt;1</b> | ---      | ---      |
| Titanium | ppm    | ASTM D5185m      | <b>0</b>     | ---      | ---      |
| Silver   | ppm    | ASTM D5185m      | <b>0</b>     | ---      | ---      |
| Aluminum | ppm    | ASTM D5185m >50  | <b>&lt;1</b> | ---      | ---      |
| Lead     | ppm    | ASTM D5185m >25  | <b>0</b>     | ---      | ---      |
| Copper   | ppm    | ASTM D5185m >100 | <b>1</b>     | ---      | ---      |
| Tin      | ppm    | ASTM D5185m >15  | <b>&lt;1</b> | ---      | ---      |
| Vanadium | ppm    | ASTM D5185m      | <b>0</b>     | ---      | ---      |
| Cadmium  | ppm    | ASTM D5185m      | <b>0</b>     | ---      | ---      |

## ADDITIVES

|            | method | limit/base  | current      | history1 | history2 |
|------------|--------|-------------|--------------|----------|----------|
| Boron      | ppm    | ASTM D5185m | <b>0</b>     | ---      | ---      |
| Barium     | ppm    | ASTM D5185m | <b>0</b>     | ---      | ---      |
| Molybdenum | ppm    | ASTM D5185m | <b>0</b>     | ---      | ---      |
| Manganese  | ppm    | ASTM D5185m | <b>&lt;1</b> | ---      | ---      |
| Magnesium  | ppm    | ASTM D5185m | <b>0</b>     | ---      | ---      |
| Calcium    | ppm    | ASTM D5185m | <b>0</b>     | ---      | ---      |
| Phosphorus | ppm    | ASTM D5185m | <b>0</b>     | ---      | ---      |
| Zinc       | ppm    | ASTM D5185m | <b>0</b>     | ---      | ---      |
| Sulfur     | ppm    | ASTM D5185m | <b>0</b>     | ---      | ---      |

## CONTAMINANTS

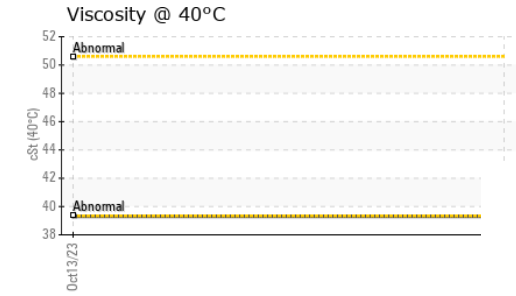
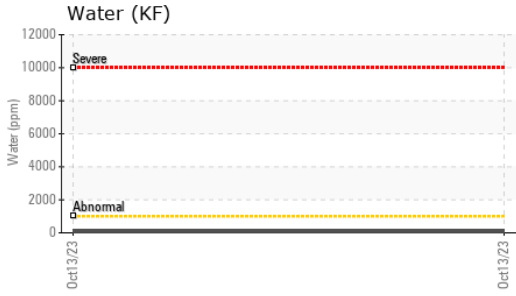
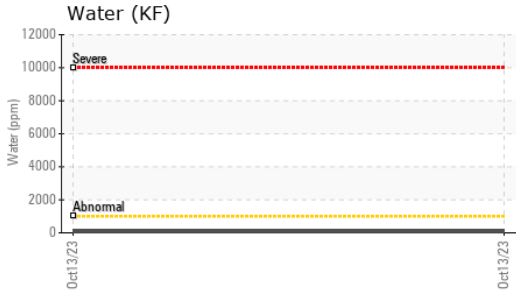
|           | method | limit/base       | current      | history1 | history2 |
|-----------|--------|------------------|--------------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >50  | <b>29</b>    | ---      | ---      |
| Sodium    | ppm    | ASTM D5185m      | <b>0</b>     | ---      | ---      |
| Potassium | ppm    | ASTM D5185m >20  | <b>&lt;1</b> | ---      | ---      |
| Water     | %      | ASTM D6304 >0.1  | <b>0.007</b> | ---      | ---      |
| ppm Water | ppm    | ASTM D6304 >1000 | <b>77.9</b>  | ---      | ---      |

## FLUID DEGRADATION

|                  | method   | limit/base | current      | history1 | history2 |
|------------------|----------|------------|--------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | <b>0.025</b> | ---      | ---      |



# OIL ANALYSIS REPORT



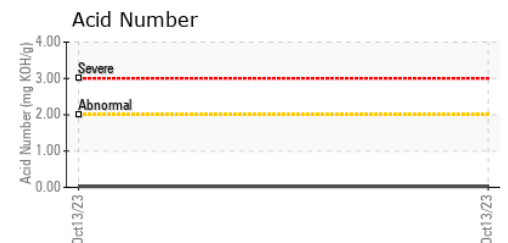
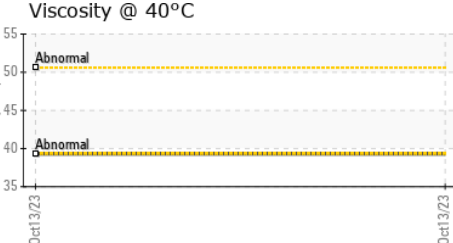
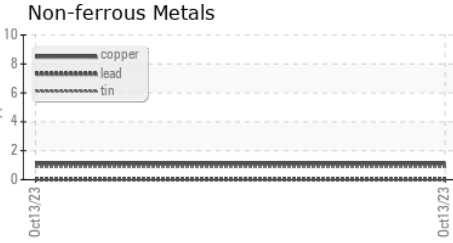
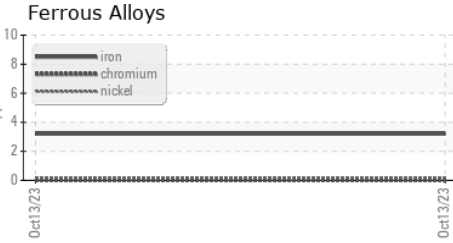
| VISUAL           | method | limit/base | current | history1 | history2 |     |
|------------------|--------|------------|---------|----------|----------|-----|
| White Metal      | scalar | *Visual    | NONE    | NONE     | ---      | --- |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | ---      | --- |
| 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    | >0.1    | NEG      | ---      | --- |
| Free Water       | scalar | *Visual    |         | NEG      | ---      | --- |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445  | 39.3    | ---      | ---      |

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

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

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0618835 **Received** : 01 Nov 2023  
**Lab Number** : 05995682 **Diagnosed** : 02 Nov 2023  
**Unique Number** : 10724042 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF )

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