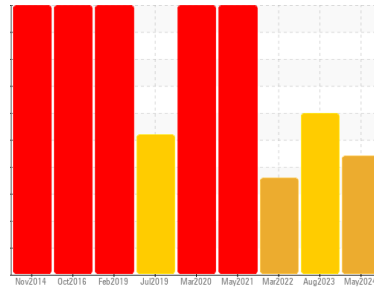




# GREASE ANALYSIS

Sample Rating Trend



Machine Id  
**TURBINA 15 - FRONT BEARING (S/N 101290)**  
 Component  
**Grease**  
 Fluid  
**KLUBER KLUBERPLEX BEM 41-141 (--- LTR)**

## DIAGNOSIS

**Recommendation**  
 No corrective action is recommended at this time. Resample at the next service interval to monitor.

**Wear**  
 All component wear rates appear stable.

**Grease Condition**  
 The condition of the grease is acceptable for the time in service.

**Contaminants**  
 There is no indication of any contamination in the grease.

## SAMPLE INFORMATION

|                 | method      | limit/base  | current            | history1    | history2    |
|-----------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number   | Client Info |             | <b>WC06194915</b>  | WC0831531   | WCI2352766  |
| Sample Date     | Client Info |             | <b>10 May 2024</b> | 10 Aug 2023 | 30 Mar 2022 |
| Machine Age     | yrs         | Client Info | <b>12</b>          | 11          | 6           |
| Grease Age      | yrs         | Client Info | <b>1</b>           | 1           | 0           |
| Grease Serviced | Client Info |             | <b>N/A</b>         | N/A         | N/A         |
| Sample Status   |             |             | <b>MARGINAL</b>    | ABNORMAL    | ABNORMAL    |

## CONTAMINATION

|       | method    | limit/base | current    | history1 | history2 |
|-------|-----------|------------|------------|----------|----------|
| Water | WC Method | >0.1       | <b>NEG</b> | NEG      | NEG      |

## WEAR METALS

|          | method     | limit/base  | current       | history1      | history2 |
|----------|------------|-------------|---------------|---------------|----------|
| PQ       | ASTM D8184 | >200        | <b>▲ 7635</b> | ▲ 7741        | ▲ 9086   |
| Iron     | ppm        | ASTM D5185m | >250          | <b>▲ 3471</b> | ▲ 9790   |
| Chromium | ppm        | ASTM D5185m | >10           | <b>▲ 226</b>  | ▲ 660    |
| Nickel   | ppm        | ASTM D5185m | >5            | <b>0</b>      | 0        |
| Cadmium  | ppm        | ASTM D5185m |               | <b>0</b>      | 0        |
| Titanium | ppm        | ASTM D5185m |               | <b>2</b>      | 5        |
| Vanadium | ppm        | ASTM D5185m |               | <b>1</b>      | 2        |
| Lead     | ppm        | ASTM D5185m | >25           | <b>0</b>      | 0        |
| Copper   | ppm        | ASTM D5185m | >75           | <b>▲ 256</b>  | ▲ 440    |
| Tin      | ppm        | ASTM D5185m | >5            | <b>0</b>      | 0        |
| Silver   | ppm        | ASTM D5185m | >5            | <b>0</b>      | 0        |

## ADDITIVES

|            | method | limit/base  | current | history1    | history2 |
|------------|--------|-------------|---------|-------------|----------|
| Boron      | ppm    | ASTM D5185m |         | <b>187</b>  | 427      |
| Magnesium  | ppm    | ASTM D5185m |         | <b>0</b>    | 4        |
| Manganese  | ppm    | ASTM D5185m |         | <b>38</b>   | 103      |
| Molybdenum | ppm    | ASTM D5185m |         | <b>2274</b> | 5773     |
| Phosphorus | ppm    | ASTM D5185m |         | <b>524</b>  | 983      |
| Zinc       | ppm    | ASTM D5185m |         | <b>363</b>  | 760      |
| Antimony   | ppm    | ASTM D5185m |         | <b>---</b>  | ---      |

## THICKENER/SOAP

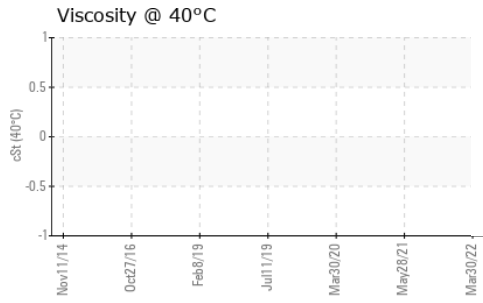
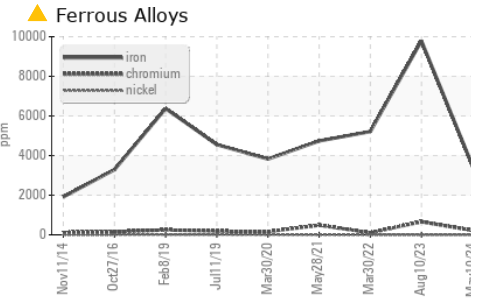
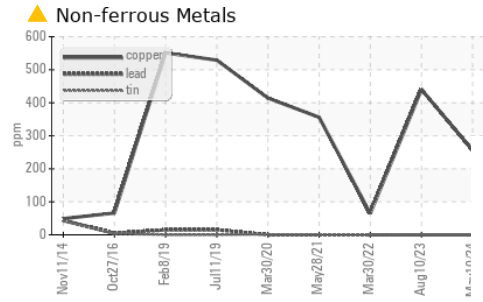
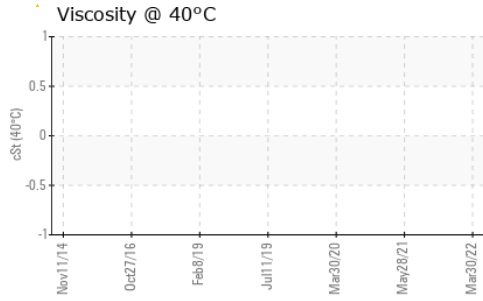
|          | method | limit/base  | current | history1    | history2 |
|----------|--------|-------------|---------|-------------|----------|
| Aluminum | ppm    | ASTM D5185m |         | <b>0</b>    | 14       |
| Barium   | ppm    | ASTM D5185m |         | <b>3</b>    | 15       |
| Calcium  | ppm    | ASTM D5185m |         | <b>99</b>   | 282      |
| Sodium   | ppm    | ASTM D5185m |         | <b>20</b>   | 85       |
| Lithium  | ppm    | ASTM D5185m |         | <b>2013</b> | 3438     |
| Sulfur   | ppm    | ASTM D5185m |         | <b>5465</b> | 12650    |

## CONTAMINANTS

|           | method | limit/base  | current | history1   | history2 |
|-----------|--------|-------------|---------|------------|----------|
| Silicon   | ppm    | ASTM D5185m | >150    | <b>330</b> | ▲ 1697   |
| Potassium | ppm    | ASTM D5185m |         | <b>5</b>   | 18       |

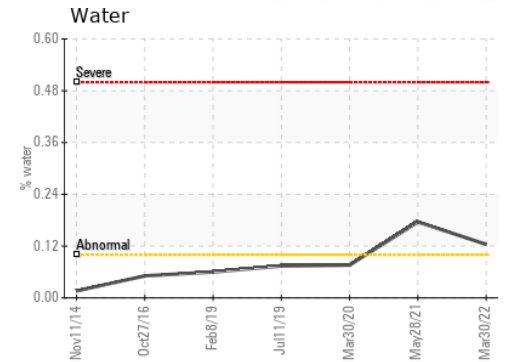
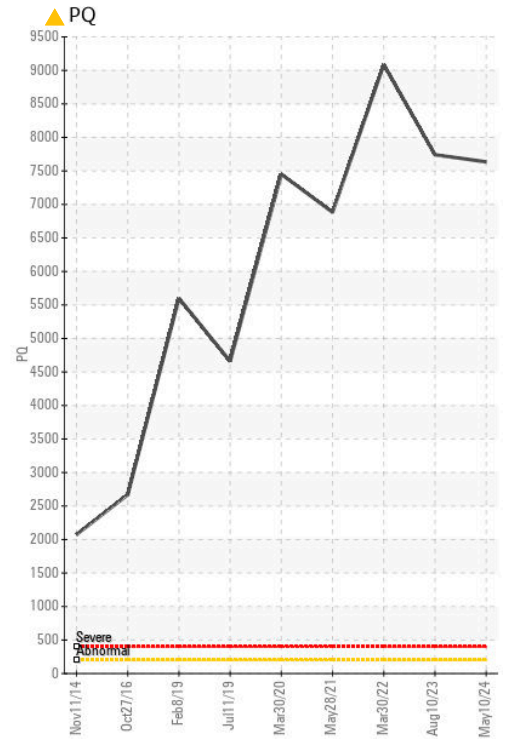
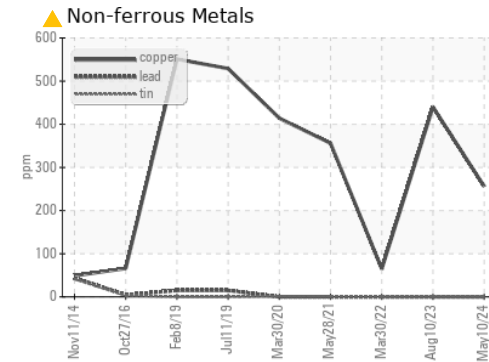
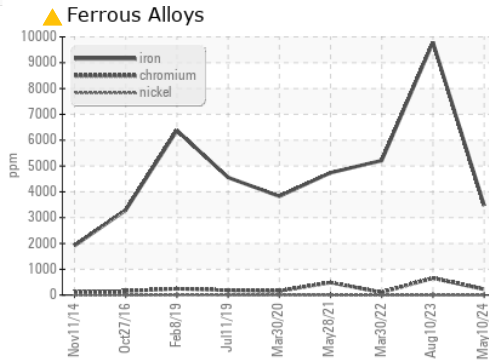
## GREASE CONDITION

|                  | method     | limit/base  | current        | history1    | history2 |
|------------------|------------|-------------|----------------|-------------|----------|
| Grease Color     | *Visual    | yellow      | <b>Brown</b>   | ---         | ---      |
| Texture          | *In-house  |             | <b>Buttery</b> | ---         | ---      |
| NLGI Consistency | NLGI Scale | *SKF Method | <b>1</b>       | <b>00-0</b> | ---      |



| SAMPLE IMAGES | method | limit/base | current  | history1 | history2 |
|---------------|--------|------------|----------|----------|----------|
| Color         |        |            |          |          |          |
| Bottom        |        |            |          |          |          |
| PrtFilter     |        |            | no image | no image | no image |

## GRAPHS



Certificate L2367

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

Sample No. : WC06194915

Lab Number : 06194915

Unique Number : 11057038

Test Package : GRS 1 ( Additional Tests: KV40, SCREEN )

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)

Received : 29 May 2024

Tested : 13 Jun 2024

Diagnosed : 13 Jun 2024 - Doug Bogart

**EOL DE NICARAGUA S.A.**

DEL SEMAFORO DEL CLUB TERRAZA, 1 CUADRA AL SUR

MANAGUA, ZZ

NI

Contact: Rafael Bermudez

T:

F: