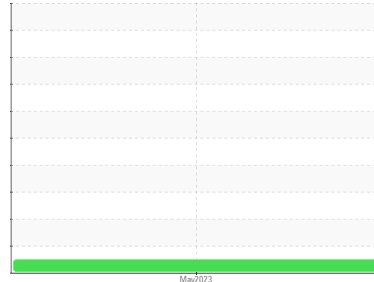




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**TECHTROL GOLD**  
 Machine Id  
**INGERSOLL RAND UNIT 13 POWER HOUSE - TVA (S/N R2200883)**  
 Component  
**Compressor**

## 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.

### 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>UCH05927363</b> | ---      | ---      |
| Sample Date        | Client Info |             |            | <b>25 May 2023</b> | ---      | ---      |
| Machine Age        | hrs         | Client Info |            | <b>83356</b>       | ---      | ---      |
| Oil Age            | hrs         | Client Info |            | <b>0</b>           | ---      | ---      |
| Oil Changed        | Client Info |             |            | <b>Not Chngd</b>   | ---      | ---      |
| Sample Status      |             |             |            | <b>NORMAL</b>      | ---      | ---      |

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

| ADDITIVES  |     | method      | limit/base | current      | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185m |            | <b>0</b>     | ---      | ---      |
| Barium     | ppm | ASTM D5185m |            | <b>420</b>   | ---      | ---      |
| Molybdenum | ppm | ASTM D5185m |            | <b>0</b>     | ---      | ---      |
| Manganese  | ppm | ASTM D5185m |            | <b>&lt;1</b> | ---      | ---      |
| Magnesium  | ppm | ASTM D5185m |            | <b>2</b>     | ---      | ---      |
| Calcium    | ppm | ASTM D5185m |            | <b>3</b>     | ---      | ---      |
| Phosphorus | ppm | ASTM D5185m |            | <b>5</b>     | ---      | ---      |
| Zinc       | ppm | ASTM D5185m |            | <b>0</b>     | ---      | ---      |
| Sulfur     | ppm | ASTM D5185m |            | <b>313</b>   | ---      | ---      |

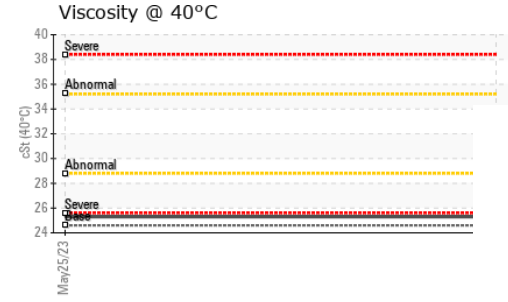
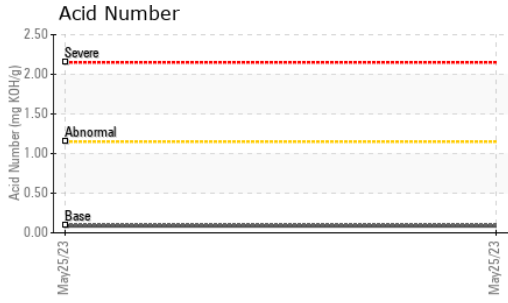
| CONTAMINANTS |     | method      | limit/base | current   | history1 | history2 |
|--------------|-----|-------------|------------|-----------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >25        | <b>15</b> | ---      | ---      |
| Sodium       | ppm | ASTM D5185m |            | <b>0</b>  | ---      | ---      |
| Potassium    | ppm | ASTM D5185m | >20        | <b>0</b>  | ---      | ---      |

| FLUID DEGRADATION |          | method     | limit/base | current      | history1 | history2 |
|-------------------|----------|------------|------------|--------------|----------|----------|
| Acid Number (AN)  | mg KOH/g | ASTM D8045 | 0.10       | <b>0.086</b> | ---      | ---      |

| VISUAL           |        | method  | limit/base | current      | history1 | history2 |
|------------------|--------|---------|------------|--------------|----------|----------|
| White Metal      | scalar | *Visual | NONE       | <b>NONE</b>  | ---      | ---      |
| Yellow Metal     | scalar | *Visual | NONE       | <b>NONE</b>  | ---      | ---      |
| Precipitate      | scalar | *Visual | NONE       | <b>NONE</b>  | ---      | ---      |
| Silt             | scalar | *Visual | NONE       | <b>NONE</b>  | ---      | ---      |
| Debris           | scalar | *Visual | NONE       | <b>NONE</b>  | ---      | ---      |
| Sand/Dirt        | scalar | *Visual | NONE       | <b>NONE</b>  | ---      | ---      |
| Appearance       | scalar | *Visual | NORML      | <b>NORML</b> | ---      | ---      |
| Odor             | scalar | *Visual | NORML      | <b>NORML</b> | ---      | ---      |
| Emulsified Water | scalar | *Visual | >0.1       | <b>NEG</b>   | ---      | ---      |
| Free Water       | scalar | *Visual |            | <b>NEG</b>   | ---      | ---      |



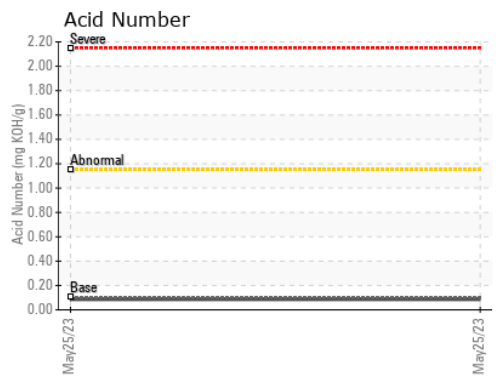
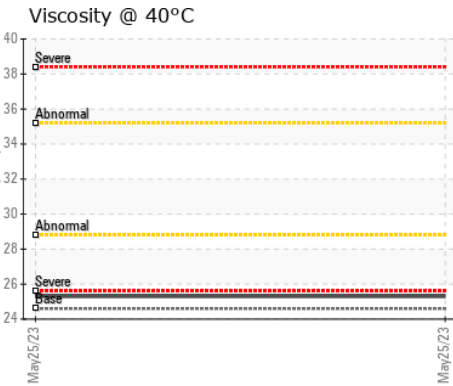
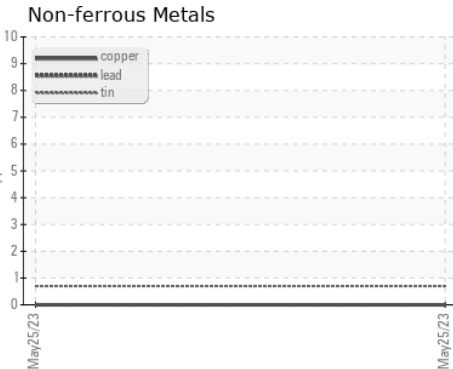
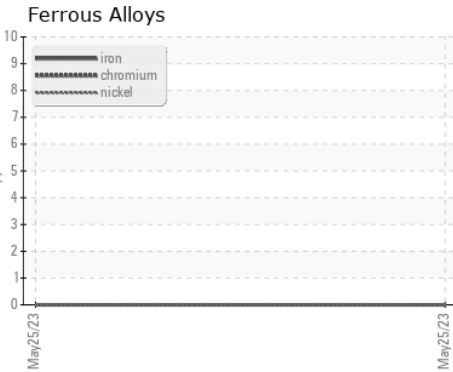
# OIL ANALYSIS REPORT



| FLUID PROPERTIES |     | method    | limit/base | current     | history1 | history2 |
|------------------|-----|-----------|------------|-------------|----------|----------|
| Visc @ 40°C      | cSt | ASTM D445 | 24.6       | <b>25.3</b> | ---      | ---      |

| 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.** : UCH05927363    **Received** : 17 Aug 2023  
**Lab Number** : 05927363    **Diagnosed** : 21 Aug 2023  
**Unique Number** : 10607310    **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2

**PFME - COMPRESSED AIR AND GAS SYSTEMS SPECIALISTS**  
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 CHARLOTTE, NC  
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 SMITCHELL@PFM-ENG.COM  
 T:  
 F:

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)