



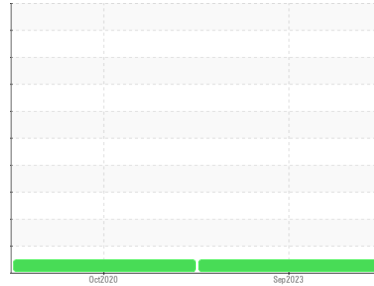
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**ACI-46 [J10904-V1]**  
 Machine Id  
**KAESER 2141 - ROCKINGHAM STEEL**  
 Component  
**Compressor**



## DIAGNOSIS

### Recommendation

We suspect abnormal metal contamination may be due to sampling method. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

### Wear

Moderate concentration of visible metal present. 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>UCH05967896</b> | UCH05104645 | ---      |
| Sample Date   | Client Info |             | <b>29 Sep 2023</b> | 22 Oct 2020 | ---      |
| Machine Age   | hrs         | Client Info | <b>44948</b>       | 39527       | ---      |
| Oil Age       | hrs         | Client Info | <b>1973</b>        | 3282        | ---      |
| Oil Changed   | Client Info |             | <b>Not Chngd</b>   | Changed     | ---      |
| Sample Status |             |             | <b>NORMAL</b>      | NORMAL      | ---      |

## WEAR METALS

|          | method | limit/base      | current      | history1 | history2 |
|----------|--------|-----------------|--------------|----------|----------|
| Iron     | ppm    | ASTM D5185m >50 | <b>0</b>     | 2        | ---      |
| Chromium | ppm    | ASTM D5185m >10 | <b>0</b>     | 0        | ---      |
| Nickel   | ppm    | ASTM D5185m >3  | <b>0</b>     | 0        | ---      |
| Titanium | ppm    | ASTM D5185m >3  | <b>0</b>     | 0        | ---      |
| Silver   | ppm    | ASTM D5185m >2  | <b>0</b>     | <1       | ---      |
| Aluminum | ppm    | ASTM D5185m >10 | <b>0</b>     | 1        | ---      |
| Lead     | ppm    | ASTM D5185m >10 | <b>0</b>     | <1       | ---      |
| Copper   | ppm    | ASTM D5185m >50 | <b>0</b>     | 2        | ---      |
| Tin      | ppm    | ASTM D5185m >10 | <b>&lt;1</b> | 0        | ---      |
| Antimony | ppm    | ASTM D5185m     | <b>---</b>   | 0        | ---      |
| Vanadium | ppm    | ASTM D5185m     | <b>0</b>     | 0        | ---      |
| Cadmium  | ppm    | ASTM D5185m     | <b>0</b>     | 0        | ---      |

## ADDITIVES

|            | method | limit/base       | current      | history1 | history2 |
|------------|--------|------------------|--------------|----------|----------|
| Boron      | ppm    | ASTM D5185m 1.5  | <b>0</b>     | 1        | ---      |
| Barium     | ppm    | ASTM D5185m 0    | <b>0</b>     | 0        | ---      |
| Molybdenum | ppm    | ASTM D5185m 0    | <b>0</b>     | 0        | ---      |
| Manganese  | ppm    | ASTM D5185m 0.3  | <b>&lt;1</b> | 0        | ---      |
| Magnesium  | ppm    | ASTM D5185m 0    | <b>&lt;1</b> | 1        | ---      |
| Calcium    | ppm    | ASTM D5185m 0    | <b>1</b>     | <1       | ---      |
| Phosphorus | ppm    | ASTM D5185m 406  | <b>205</b>   | 35       | ---      |
| Zinc       | ppm    | ASTM D5185m 0    | <b>0</b>     | 5        | ---      |
| Sulfur     | ppm    | ASTM D5185m 1283 | <b>593</b>   | 3        | ---      |

## CONTAMINANTS

|           | method | limit/base      | current      | history1 | history2 |
|-----------|--------|-----------------|--------------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >25 | <b>&lt;1</b> | <1       | ---      |
| Sodium    | ppm    | ASTM D5185m     | <b>0</b>     | 0        | ---      |
| Potassium | ppm    | ASTM D5185m >20 | <b>&lt;1</b> | <1       | ---      |

## FLUID DEGRADATION

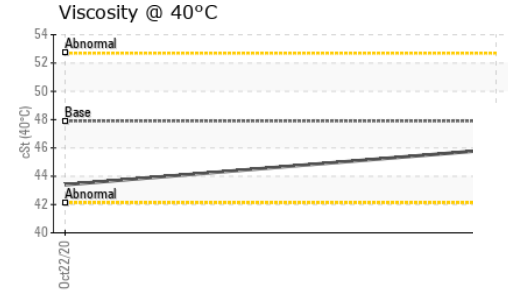
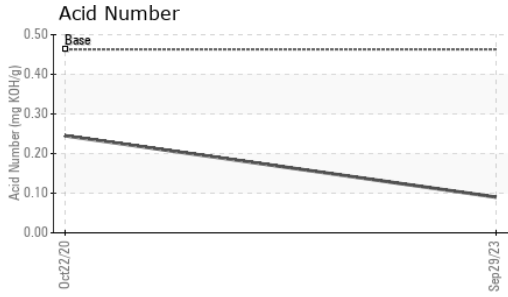
|                  | method   | limit/base       | current     | history1 | history2 |
|------------------|----------|------------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 0.463 | <b>0.09</b> | 0.245    | ---      |

## VISUAL

|                  | method | limit/base    | current      | history1 | history2 |
|------------------|--------|---------------|--------------|----------|----------|
| White Metal      | scalar | *Visual NONE  | <b>MODER</b> | NONE     | ---      |
| Yellow Metal     | scalar | *Visual NONE  | <b>NONE</b>  | NONE     | ---      |
| Precipitate      | scalar | *Visual NONE  | <b>NONE</b>  | NONE     | ---      |
| Silt             | scalar | *Visual NONE  | <b>NONE</b>  | NONE     | ---      |
| Debris           | scalar | *Visual NONE  | <b>NONE</b>  | NONE     | ---      |
| Sand/Dirt        | scalar | *Visual NONE  | <b>NONE</b>  | NONE     | ---      |
| Appearance       | scalar | *Visual NORML | <b>NORML</b> | NORML    | ---      |
| Odor             | scalar | *Visual NORML | <b>NORML</b> | NORML    | ---      |
| Emulsified Water | scalar | *Visual >0.05 | <b>NEG</b>   | NEG      | ---      |
| Free Water       | scalar | *Visual       | <b>NEG</b>   | NEG      | ---      |



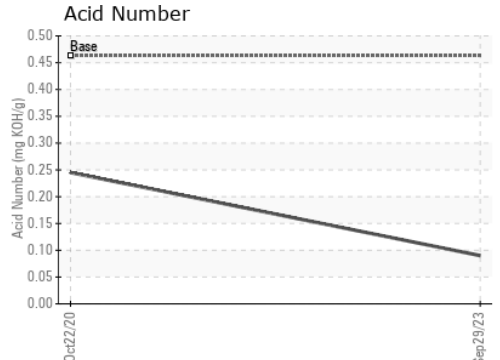
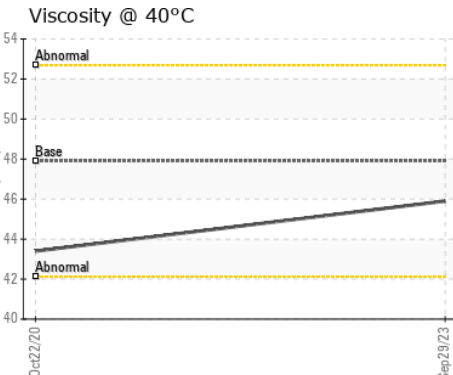
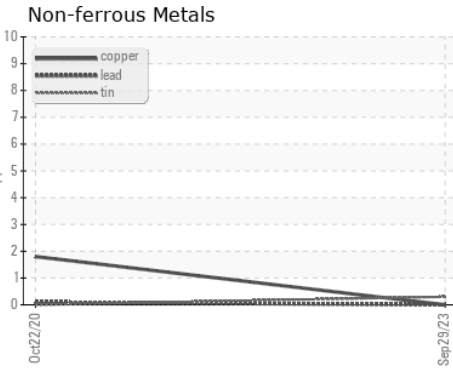
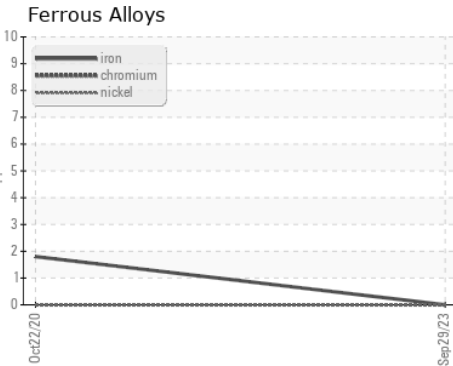
# OIL ANALYSIS REPORT



| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445  | 47.9    | 45.9     | 43.4     |

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

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : UCH05967896 **Received** : 03 Oct 2023  
**Lab Number** : 05967896 **Diagnosed** : 05 Oct 2023  
**Unique Number** : 10674447 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2

**ATLANTIC COMPRESSORS**  
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 SALEM, VA  
 US 24153  
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 bill@atlanticcompressors.com  
 T: (540)728-1147  
 F: (757)216-0134

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)