



# PROBLEM SUMMARY

Sample Rating Trend

WATER



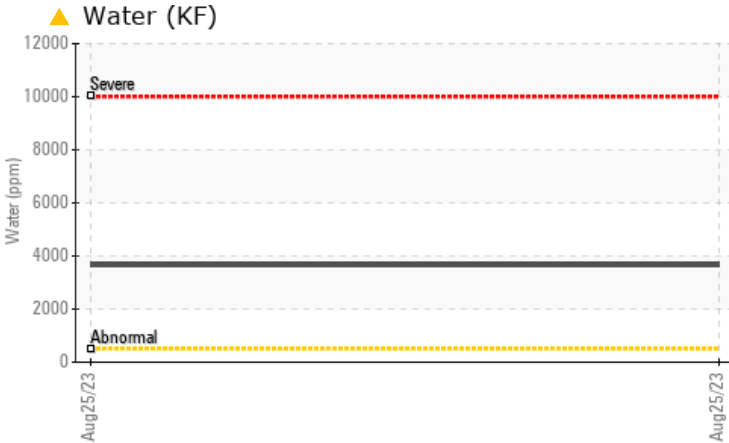
Machine Id  
**8387822 (S/N 1996)**

Component  
**Compressor**

Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**



## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

The filter change at the time of sampling has been noted. We were unable to perform a particle count due to a high concentration of particles present in this sample. We advise that you stop the unit and follow the water drain-off procedure for this component. We recommend an early resample in 500 hours to monitor this condition.

## PROBLEMATIC TEST RESULTS

| Sample Status |        |            |       | SEVERE         | --- | --- |
|---------------|--------|------------|-------|----------------|-----|-----|
| Water         | %      | ASTM D6304 | >0.05 | ▲ <b>0.366</b> | --- | --- |
| ppm Water     | ppm    | ASTM D6304 | >500  | ▲ <b>3660</b>  | --- | --- |
| Debris        | scalar | *Visual    | NONE  | ▲ <b>MODER</b> | --- | --- |
| Appearance    | scalar | *Visual    | NORML | ▲ <b>HAZY</b>  | --- | --- |
| Free Water    | scalar | *Visual    |       | ● <b>10.0</b>  | --- | --- |

Customer Id: 84LOXF  
Sample No.: KCPA005101  
Lab Number: 05962891  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@wearcheckusa.com)

To change component or sample information:  
Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

| Action | Status | Date | Done By | Description   |
|--------|--------|------|---------|---|
| Alert  | ---    | ---  | ?       | We were unable to perform a particle count due to a high concentration of particles present in this sample. |

## HISTORICAL DIAGNOSIS



# OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Machine Id  
**8387822 (S/N 1996)**

Component  
**Compressor**

Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## DIAGNOSIS

### Recommendation

The filter change at the time of sampling has been noted. We were unable to perform a particle count due to a high concentration of particles present in this sample. We advise that you stop the unit and follow the water drain-off procedure for this component. We recommend an early resample in 500 hours to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

Appearance is hazy. Excessive free water present. There is a moderate concentration of water present in the oil. Moderate concentration of visible dirt/debris present 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>KCPA005101</b>  | ---      | ---      |
| Sample Date   | Client Info |             | <b>25 Aug 2023</b> | ---      | ---      |
| Machine Age   | hrs         | Client Info | <b>2212</b>        | ---      | ---      |
| Oil Age       | hrs         | Client Info | <b>0</b>           | ---      | ---      |
| Oil Changed   | Client Info |             | <b>N/A</b>         | ---      | ---      |
| Sample Status |             |             | <b>SEVERE</b>      | ---      | ---      |

## WEAR METALS

|          | method | limit/base      | current      | history1 | history2 |
|----------|--------|-----------------|--------------|----------|----------|
| Iron     | ppm    | ASTM D5185m >50 | <b>&lt;1</b> | ---      | ---      |
| Chromium | ppm    | ASTM D5185m >10 | <b>0</b>     | ---      | ---      |
| Nickel   | ppm    | ASTM D5185m >3  | <b>0</b>     | ---      | ---      |
| Titanium | ppm    | ASTM D5185m >3  | <b>&lt;1</b> | ---      | ---      |
| Silver   | ppm    | ASTM D5185m >2  | <b>0</b>     | ---      | ---      |
| Aluminum | ppm    | ASTM D5185m >10 | <b>0</b>     | ---      | ---      |
| Lead     | ppm    | ASTM D5185m >10 | <b>1</b>     | ---      | ---      |
| Copper   | ppm    | ASTM D5185m >50 | <b>9</b>     | ---      | ---      |
| Tin      | ppm    | ASTM D5185m >10 | <b>0</b>     | ---      | ---      |
| Vanadium | ppm    | ASTM D5185m     | <b>&lt;1</b> | ---      | ---      |
| Cadmium  | ppm    | ASTM D5185m     | <b>0</b>     | ---      | ---      |

## ADDITIVES

|            | method | limit/base        | current      | history1 | history2 |
|------------|--------|-------------------|--------------|----------|----------|
| Boron      | ppm    | ASTM D5185m 0     | <b>0</b>     | ---      | ---      |
| Barium     | ppm    | ASTM D5185m 90    | <b>0</b>     | ---      | ---      |
| Molybdenum | ppm    | ASTM D5185m 0     | <b>0</b>     | ---      | ---      |
| Manganese  | ppm    | ASTM D5185m       | <b>&lt;1</b> | ---      | ---      |
| Magnesium  | ppm    | ASTM D5185m 100   | <b>27</b>    | ---      | ---      |
| Calcium    | ppm    | ASTM D5185m 0     | <b>3</b>     | ---      | ---      |
| Phosphorus | ppm    | ASTM D5185m 0     | <b>6</b>     | ---      | ---      |
| Zinc       | ppm    | ASTM D5185m 0     | <b>0</b>     | ---      | ---      |
| Sulfur     | ppm    | ASTM D5185m 23500 | <b>18136</b> | ---      | ---      |

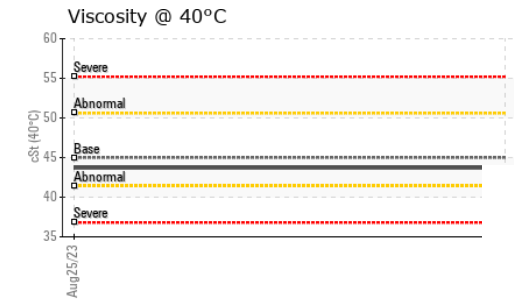
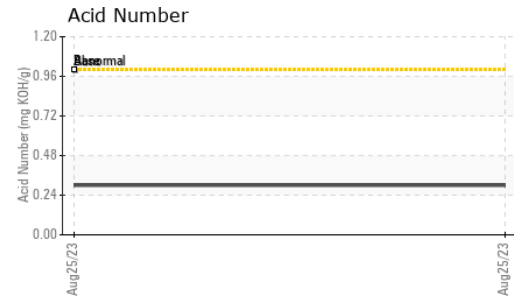
## CONTAMINANTS

|           | method | limit/base       | current        | history1 | history2 |
|-----------|--------|------------------|----------------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >25  | <b>&lt;1</b>   | ---      | ---      |
| Sodium    | ppm    | ASTM D5185m      | <b>4</b>       | ---      | ---      |
| Potassium | ppm    | ASTM D5185m >20  | <b>2</b>       | ---      | ---      |
| Water     | %      | ASTM D6304 >0.05 | <b>▲ 0.366</b> | ---      | ---      |
| ppm Water | ppm    | ASTM D6304 >500  | <b>▲ 3660</b>  | ---      | ---      |

## FLUID DEGRADATION

|                  | method   | limit/base     | current     | history1 | history2 |
|------------------|----------|----------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 1.0 | <b>0.30</b> | ---      | ---      |

# OIL ANALYSIS REPORT



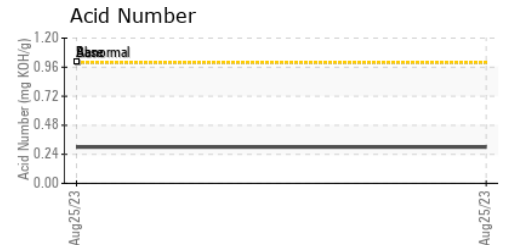
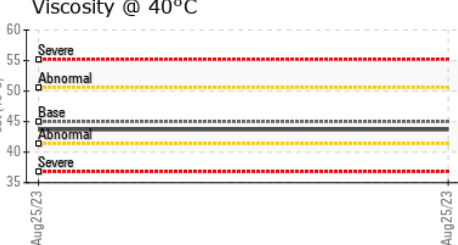
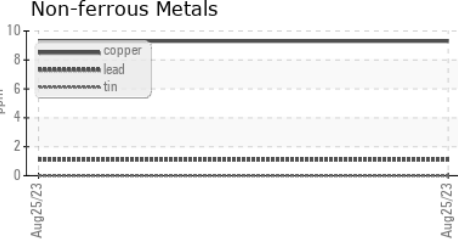
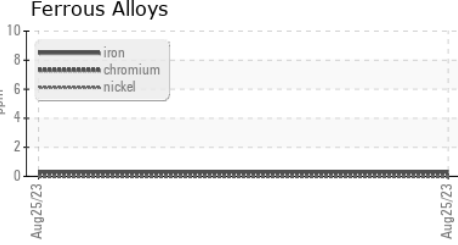
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | ---      |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | ---      |
| Precipitate      | scalar | *Visual    | NONE    | NONE     | ---      |
| Silt             | scalar | *Visual    | NONE    | NONE     | ---      |
| Debris           | scalar | *Visual    | NONE    | ▲ MODER  | ---      |
| Sand/Dirt        | scalar | *Visual    | NONE    | NONE     | ---      |
| Appearance       | scalar | *Visual    | NORML   | ▲ HAZY   | ---      |
| Odor             | scalar | *Visual    | NORML   | NORML    | ---      |
| Emulsified Water | scalar | *Visual    | >0.05   | 0.2%     | ---      |
| Free Water       | scalar | *Visual    |         | 10.0     | ---      |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445  | 45      | 43.7     | ---      |

| 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.** : KCPA005101 **Received** : 27 Sep 2023  
**Lab Number** : 05962891 **Diagnosed** : 29 Sep 2023  
**Unique Number** : 10669442 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**84 LUMBER COMPANY**  
 326 HWY 81  
 OXFORD, GA  
 US 30054  
 Contact: JOSHUA HONEYCUTT  
 joshua.honeycutt@84lumber.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)