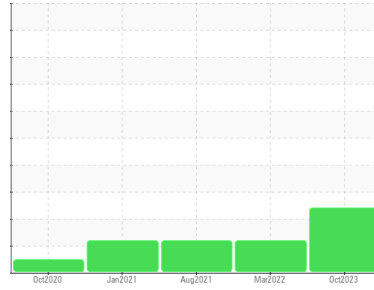




# PROBLEM SUMMARY

Sample Rating Trend



**WATER**



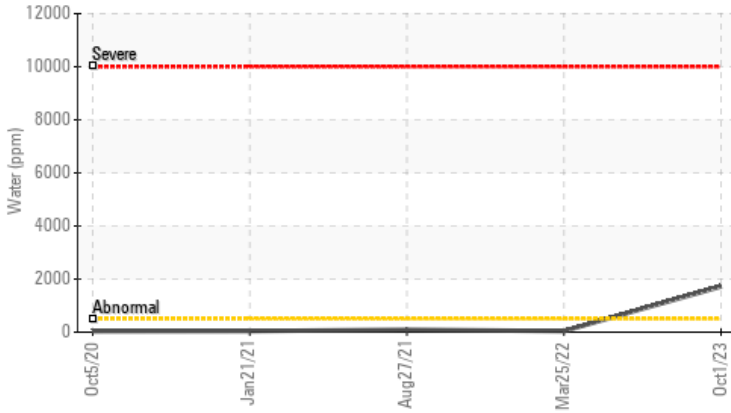
Machine Id  
**7249557 (S/N 1412)**

Component  
**Compressor**

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

## COMPONENT CONDITION SUMMARY

### ▲ Water (KF)



## 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 |        |            |       | <b>ABNORMAL</b> | ABNORMAL | ABNORMAL |
|---------------|--------|------------|-------|-----------------|----------|----------|
| Water         | %      | ASTM D6304 | >0.05 | ▲ <b>0.172</b>  | 0.004    | 0.009    |
| ppm Water     | ppm    | ASTM D6304 | >500  | ▲ <b>1720</b>   | 40.9     | 92.2     |
| Silt          | scalar | *Visual    | NONE  | ▲ <b>MODER</b>  | NONE     | NONE     |

**Customer Id:** DURLYN  
**Sample No.:** KC126068  
**Lab Number:** 05967022  
**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

### 25 Mar 2022 Diag: Don Baldrige

ISO



No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 27 Aug 2021 Diag: Angela Borella

ISO



No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report



### 21 Jan 2021 Diag: Don Baldrige

ISO



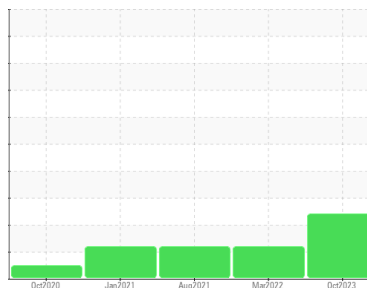
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Machine Id  
**7249557 (S/N 1412)**

Component  
**Compressor**

Fluid  
**KAESER SIGMA (OEM) FG-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

There is a light concentration of water present in the oil. There is a moderate amount of visible silt present in the sample.

### 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>KC126068</b>    | KC103507    | KC97769     |
| Sample Date   | Client Info | <b>01 Oct 2023</b> | 25 Mar 2022 | 27 Aug 2021 |
| Machine Age   | hrs         | <b>7722</b>        | 4558        | 3213        |
| Oil Age       | hrs         | <b>0</b>           | 2515        | 1170        |
| Oil Changed   | Client Info | <b>N/A</b>         | Changed     | Not Chngd   |
| Sample Status |             | <b>ABNORMAL</b>    | ABNORMAL    | ABNORMAL    |

## WEAR METALS

| method   | limit/base          | current      | history1 | history2 |
|----------|---------------------|--------------|----------|----------|
| Iron     | ppm ASTM D5185m >50 | <b>4</b>     | 9        | 10       |
| Chromium | ppm ASTM D5185m >10 | <b>0</b>     | 0        | 0        |
| Nickel   | ppm ASTM D5185m >3  | <b>0</b>     | 0        | 0        |
| Titanium | ppm ASTM D5185m >3  | <b>0</b>     | 0        | 0        |
| Silver   | ppm ASTM D5185m >2  | <b>0</b>     | 0        | 0        |
| Aluminum | ppm ASTM D5185m >10 | <b>5</b>     | 3        | 9        |
| Lead     | ppm ASTM D5185m >10 | <b>&lt;1</b> | 0        | 0        |
| Copper   | ppm ASTM D5185m >50 | <b>7</b>     | 2        | 2        |
| Tin      | ppm ASTM D5185m >10 | <b>0</b>     | 0        | 0        |
| Antimony | ppm ASTM D5185m     | <b>---</b>   | ---      | 0        |
| Vanadium | ppm ASTM D5185m     | <b>0</b>     | 0        | 0        |
| Cadmium  | ppm ASTM D5185m     | <b>0</b>     | 0        | 0        |

## ADDITIVES

| method     | limit/base          | current      | history1 | history2 |
|------------|---------------------|--------------|----------|----------|
| Boron      | ppm ASTM D5185m     | <b>0</b>     | <1       | 1        |
| Barium     | ppm ASTM D5185m     | <b>0</b>     | 0        | 0        |
| Molybdenum | ppm ASTM D5185m     | <b>0</b>     | <1       | 0        |
| Manganese  | ppm ASTM D5185m     | <b>0</b>     | 0        | 0        |
| Magnesium  | ppm ASTM D5185m     | <b>&lt;1</b> | 0        | 0        |
| Calcium    | ppm ASTM D5185m     | <b>&lt;1</b> | 0        | 0        |
| Phosphorus | ppm ASTM D5185m 500 | <b>191</b>   | 341      | 398      |
| Zinc       | ppm ASTM D5185m     | <b>200</b>   | 359      | 424      |

## CONTAMINANTS

| method    | limit/base          | current        | history1 | history2 |
|-----------|---------------------|----------------|----------|----------|
| Silicon   | ppm ASTM D5185m >25 | <b>&lt;1</b>   | <1       | 8        |
| Sodium    | ppm ASTM D5185m     | <b>0</b>       | 2        | 3        |
| Potassium | ppm ASTM D5185m >20 | <b>&lt;1</b>   | 0        | 0        |
| Water     | % ASTM D6304 >0.05  | <b>▲ 0.172</b> | 0.004    | 0.009    |
| ppm Water | ppm ASTM D6304 >500 | <b>▲ 1720</b>  | 40.9     | 92.2     |

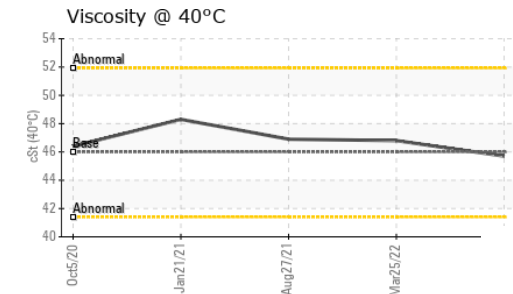
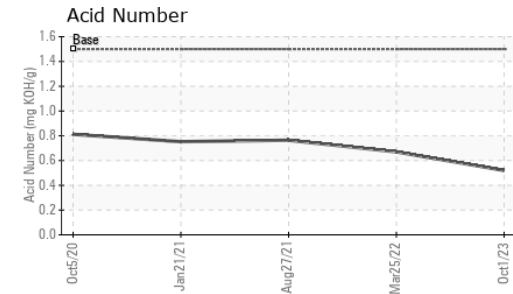
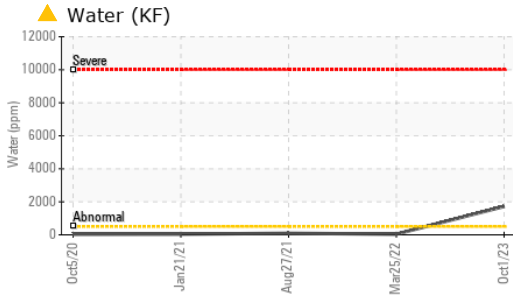
## FLUID CLEANLINESS

| method          | limit/base             | current    | history1 | history2 |
|-----------------|------------------------|------------|----------|----------|
| Particles >4µm  | ASTM D7647             | <b>---</b> | 20637    | 17230    |
| Particles >6µm  | ASTM D7647 >1300       | <b>---</b> | ▲ 4016   | ▲ 3472   |
| Particles >14µm | ASTM D7647 >80         | <b>---</b> | ▲ 226    | ▲ 444    |
| Particles >21µm | ASTM D7647 >20         | <b>---</b> | ▲ 53     | ▲ 134    |
| Particles >38µm | ASTM D7647 >4          | <b>---</b> | 2        | 4        |
| Particles >71µm | ASTM D7647 >3          | <b>---</b> | 0        | 0        |
| Oil Cleanliness | ISO 4406 (c) >--/17/13 | <b>---</b> | ▲ 19/15  | ▲ 19/16  |

## FLUID DEGRADATION

| method           | limit/base              | current     | history1 | history2 |
|------------------|-------------------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g ASTM D8045 1.5 | <b>0.52</b> | 0.67     | 0.764    |

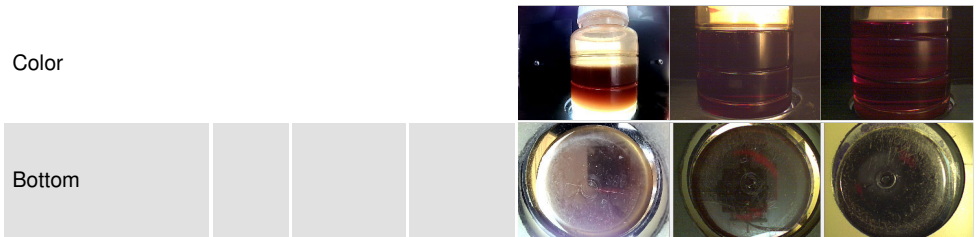
# OIL ANALYSIS REPORT



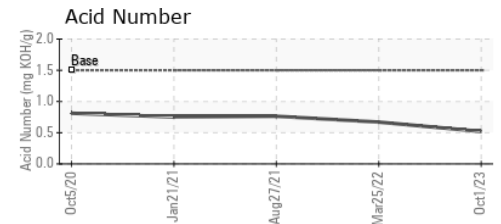
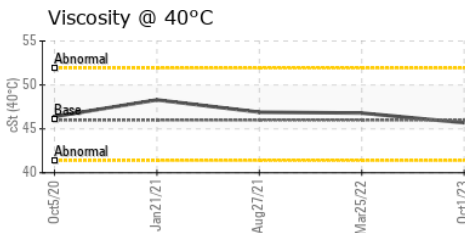
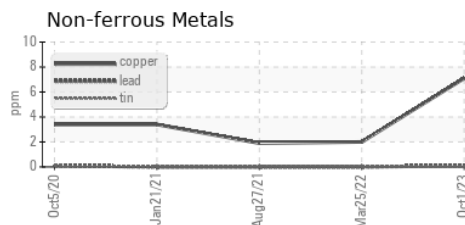
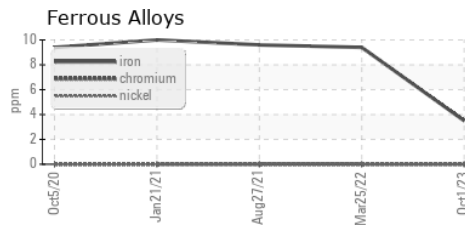
| VISUAL           | method | limit/base | current | history1       | history2 |
|------------------|--------|------------|---------|----------------|----------|
| White Metal      | scalar | *Visual    | NONE    | <b>NONE</b>    | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | <b>NONE</b>    | NONE     |
| Precipitate      | scalar | *Visual    | NONE    | <b>NONE</b>    | NONE     |
| Silt             | scalar | *Visual    | NONE    | <b>▲ MODER</b> | NONE     |
| Debris           | scalar | *Visual    | NONE    | <b>NONE</b>    | LIGHT    |
| 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>0.2%</b>    | NEG      |
| Free Water       | scalar | *Visual    |         | <b>NEG</b>     | NEG      |

| FLUID PROPERTIES | method | limit/base   | current     | history1 | history2 |
|------------------|--------|--------------|-------------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445 46 | <b>45.7</b> | 46.8     | 46.9     |

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



## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : KC126068 Received : 02 Oct 2023  
 Lab Number : **05967022** Diagnosed : 06 Oct 2023  
 Unique Number : 10673573 Diagnostician : Jonathan Hester  
 Test Package : IND 2

**DURKEE MOWER INC**  
 2 EMPIRE ST  
 LYNN, MA  
 US 01902

Contact: D. LEIGHTON  
 dleighton@marshmallowfluff.com

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)

T:  
F: