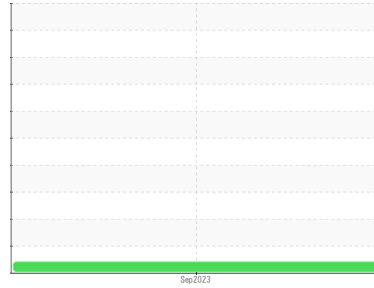




PROBLEM SUMMARY

Sample Rating Trend



VIS DEBRIS



Machine Id
8778932 (S/N 2054)

Component
Compressor
Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

COMPONENT CONDITION SUMMARY

No relevant graphs to display

RECOMMENDATION

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

PROBLEMATIC TEST RESULTS

| | | | | | | |
|---------------|--------|---------|------|-----------------|-----|-----|
| Sample Status | | | | ABNORMAL | --- | --- |
| Debris | scalar | *Visual | NONE | ▲ MODER | --- | --- |

Customer Id: COGMON
Sample No.: KCPA001057
Lab Number: 05962894
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

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

RECOMMENDED ACTIONS

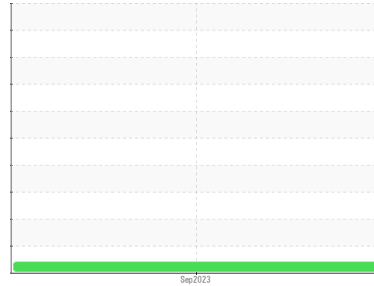
| Action | Status | Date | Done By | Description |
|--------|--------|------|---------|---|
| Alert | --- | --- | ? | We were unable to perform a particle count due to a high concentration of particles present in this sample. |

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Sample Rating Trend



VIS DEBRIS



Machine Id
8778932 (S/N 2054)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

▲ Recommendation

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

All component wear rates are normal.

▲ Contamination

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 | | KCPA001057 | --- | --- |
| Sample Date | Client Info | | 08 Sep 2023 | --- | --- |
| Machine Age | hrs | Client Info | 1967 | --- | --- |
| Oil Age | hrs | Client Info | 0 | --- | --- |
| Oil Changed | Client Info | | N/A | --- | --- |
| Sample Status | | | ABNORMAL | --- | --- |

WEAR METALS

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

ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|-------------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m 0 | 0 | --- | --- |
| Barium | ppm | ASTM D5185m 90 | 0 | --- | --- |
| Molybdenum | ppm | ASTM D5185m 0 | 0 | --- | --- |
| Manganese | ppm | ASTM D5185m | <1 | --- | --- |
| Magnesium | ppm | ASTM D5185m 100 | 0 | --- | --- |
| Calcium | ppm | ASTM D5185m 0 | 0 | --- | --- |
| Phosphorus | ppm | ASTM D5185m 0 | 5 | --- | --- |
| Zinc | ppm | ASTM D5185m 0 | 0 | --- | --- |
| Sulfur | ppm | ASTM D5185m 23500 | 16939 | --- | --- |

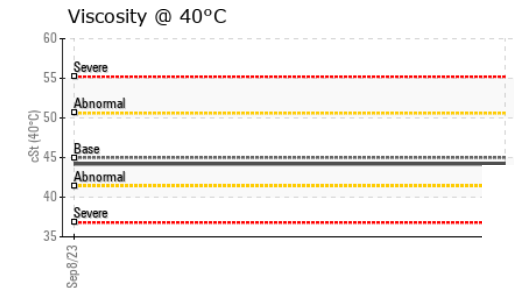
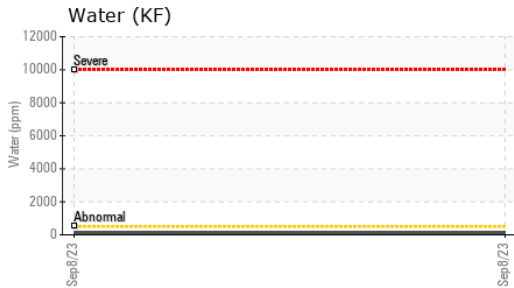
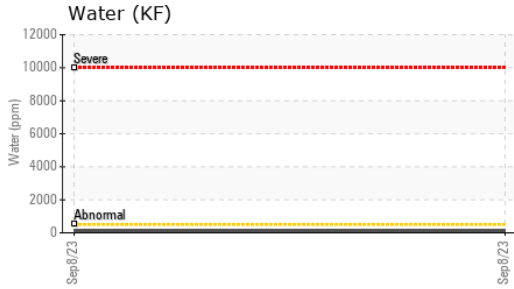
CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|------------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m >25 | 3 | --- | --- |
| Sodium | ppm | ASTM D5185m | <1 | --- | --- |
| Potassium | ppm | ASTM D5185m >20 | 0 | --- | --- |
| Water | % | ASTM D6304 >0.05 | 0.013 | --- | --- |
| ppm Water | ppm | ASTM D6304 >500 | 130.5 | --- | --- |

FLUID DEGRADATION

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

OIL ANALYSIS REPORT



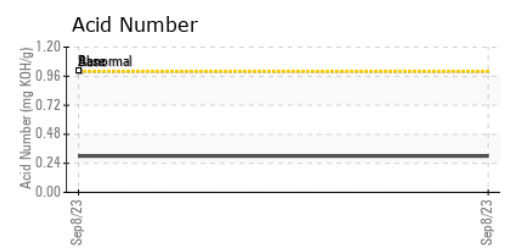
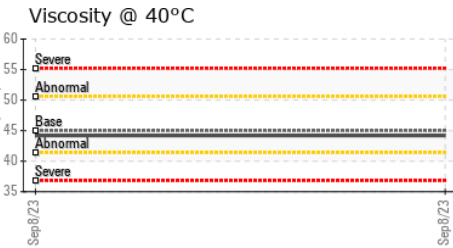
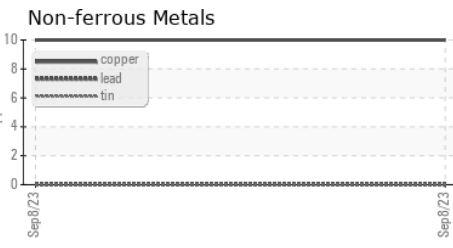
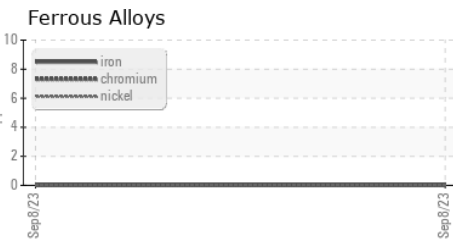
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------------|----------|
| White Metal | scalar | *Visual | NONE | LIGHT | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- |
| Precipitate | scalar | *Visual | NONE | NONE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

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|-------------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 45 | 44.2 | --- |

| 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. : KCPA001057 **Received** : 27 Sep 2023
Lab Number : 05962894 **Diagnosed** : 29 Sep 2023
Unique Number : 10669445 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

COGENTRIX - MPC GENERATING LLC
 208 CHERRY HILL RD
 MONROE, GA
 US 30656
 Contact: NICK SANZ
 nicksanz@cogentrix.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: