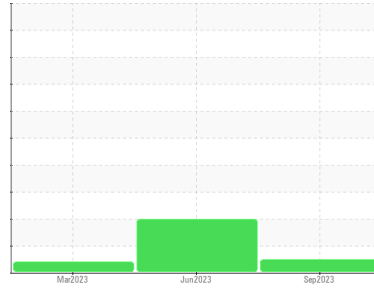




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**4534272 (S/N 1064)**

Component  
**Compressor**

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

## DIAGNOSIS

### Recommendation

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.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

### 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>KC125750</b>    | KC102356    | KC98092     |
| Sample Date        | Client Info |             |            | <b>16 Sep 2023</b> | 29 Jun 2023 | 25 Mar 2023 |
| Machine Age        | hrs         | Client Info |            | <b>53147</b>       | 51165       | 48999       |
| Oil Age            | hrs         | Client Info |            | <b>0</b>           | 1590        | 2925        |
| Oil Changed        | Client Info |             |            | <b>N/A</b>         | Changed     | Changed     |
| Sample Status      |             |             |            | <b>NORMAL</b>      | ABNORMAL    | ABNORMAL    |

| WEAR METALS |     | method      | limit/base | current      | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| Iron        | ppm | ASTM D5185m | >50        | <b>0</b>     | 6        | <1       |
| 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>&lt;1</b> | <1       | 0        |
| Silver      | ppm | ASTM D5185m | >2         | <b>0</b>     | 0        | 0        |
| Aluminum    | ppm | ASTM D5185m | >10        | <b>0</b>     | 7        | 4        |
| Lead        | ppm | ASTM D5185m | >10        | <b>0</b>     | 0        | 0        |
| Copper      | ppm | ASTM D5185m | >50        | <b>1</b>     | 14       | 1        |
| Tin         | ppm | ASTM D5185m | >10        | <b>0</b>     | <1       | 0        |
| Vanadium    | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Cadmium     | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |

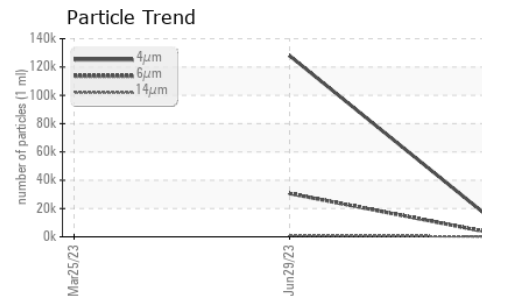
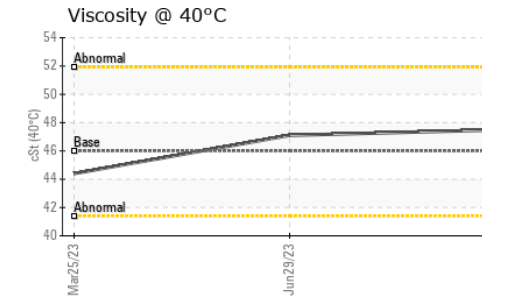
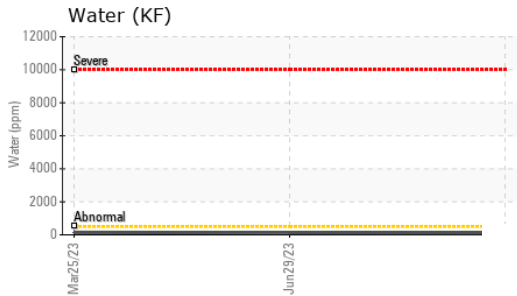
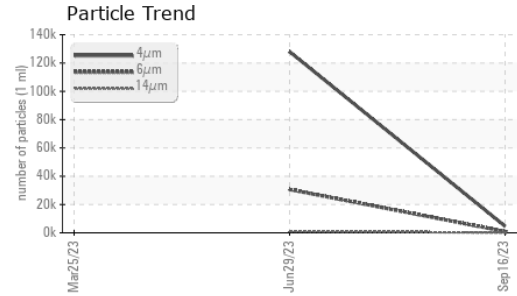
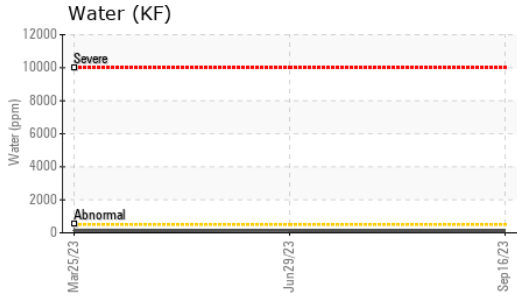
| ADDITIVES  |     | method      | limit/base | current      | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Barium     | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Molybdenum | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Manganese  | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | <1       |
| Magnesium  | ppm | ASTM D5185m |            | <b>0</b>     | 6        | 0        |
| Calcium    | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Phosphorus | ppm | ASTM D5185m | 500        | <b>16</b>    | 163      | 111      |
| Zinc       | ppm | ASTM D5185m |            | <b>0</b>     | 149      | 44       |

| CONTAMINANTS |     | method      | limit/base | current      | history1 | history2 |
|--------------|-----|-------------|------------|--------------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >25        | <b>&lt;1</b> | 2        | <1       |
| Sodium       | ppm | ASTM D5185m |            | <b>&lt;1</b> | <1       | 0        |
| Potassium    | ppm | ASTM D5185m | >20        | <b>0</b>     | 0        | 0        |
| Water        | %   | ASTM D6304  | >0.05      | <b>0.011</b> | 0.013    | 0.014    |
| ppm Water    | ppm | ASTM D6304  | >500       | <b>114.4</b> | 130.2    | 148.5    |

| FLUID CLEANLINESS |  | method       | limit/base | current         | history1   | history2 |
|-------------------|--|--------------|------------|-----------------|------------|----------|
| Particles >4µm    |  | ASTM D7647   |            | <b>4672</b>     | 127991     | ---      |
| Particles >6µm    |  | ASTM D7647   | >1300      | <b>924</b>      | ▲ 30627    | ---      |
| Particles >14µm   |  | ASTM D7647   | >80        | <b>60</b>       | ▲ 1063     | ---      |
| Particles >21µm   |  | ASTM D7647   | >20        | <b>20</b>       | ▲ 265      | ---      |
| Particles >38µm   |  | ASTM D7647   | >4         | <b>2</b>        | ▲ 13       | ---      |
| Particles >71µm   |  | ASTM D7647   | >3         | <b>1</b>        | 1          | ---      |
| Oil Cleanliness   |  | ISO 4406 (c) | >--/17/13  | <b>19/17/13</b> | ▲ 24/22/17 | ---      |

| FLUID DEGRADATION |          | method     | limit/base | current     | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN)  | mg KOH/g | ASTM D8045 | 1.5        | <b>0.17</b> | 0.46     | 0.41     |

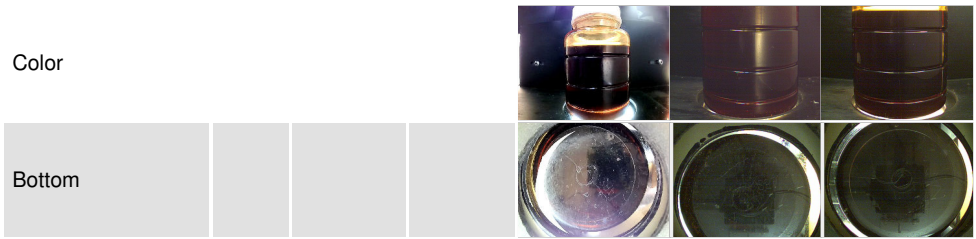
# OIL ANALYSIS REPORT



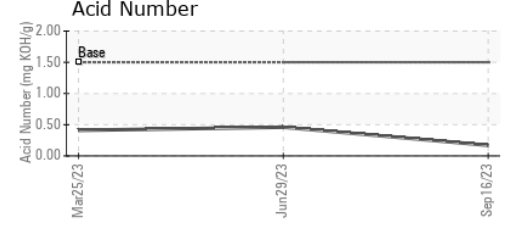
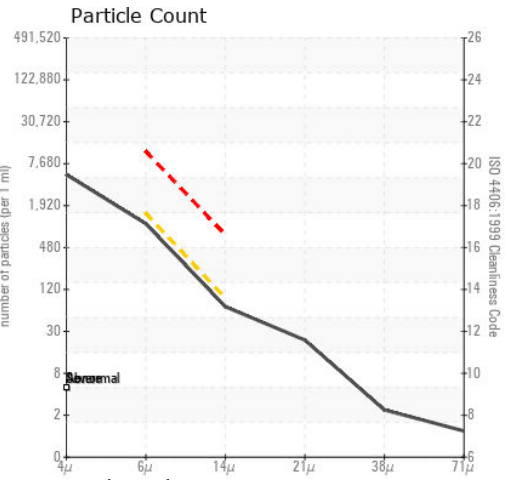
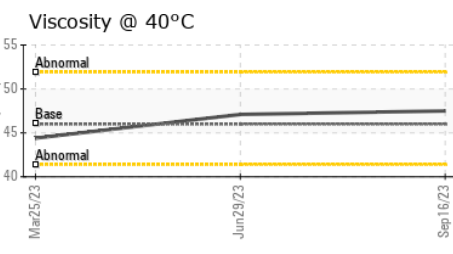
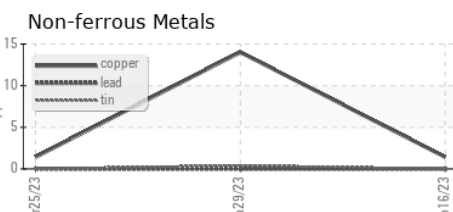
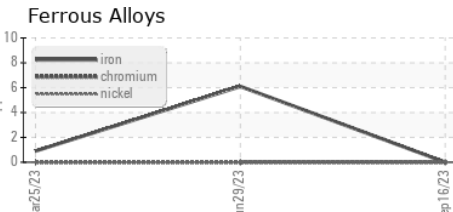
| VISUAL           | method | limit/base | current | history1     | history2     |
|------------------|--------|------------|---------|--------------|--------------|
| White Metal      | scalar | *Visual    | NONE    | NONE         | NONE         |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE         | NONE         |
| Precipitate      | scalar | *Visual    | NONE    | NONE         | NONE         |
| Silt             | scalar | *Visual    | NONE    | NONE         | NONE         |
| Debris           | scalar | *Visual    | NONE    | <b>LIGHT</b> | NONE ▲ MODER |
| Sand/Dirt        | scalar | *Visual    | NONE    | NONE         | NONE         |
| Appearance       | scalar | *Visual    | NORML   | NORML        | NORML        |
| Odor             | scalar | *Visual    | NORML   | NORML        | NORML        |
| Emulsified Water | scalar | *Visual    | >0.05   | <b>NEG</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>47.5</b> | 47.1     | 44.4     |

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KC125750 **Received** : 27 Sep 2023  
**Lab Number** : 05962898 **Diagnosed** : 28 Sep 2023  
**Unique Number** : 10669449 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2

**MISSION FOODS**  
 2125 INTERSTATE DR  
 LAKELAND, FL  
 US 33805  
 Contact: Service Manager

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: