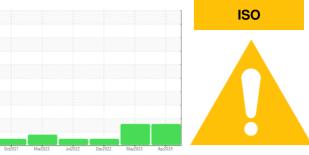


## **OIL ANALYSIS REPORT**

Sample Rating Trend



Machine Id

# 6173957 (S/N 1022)

### Component Compressor Fluid KAESER SIGMA (OEM) FG-460 (--- GAL)

#### DIAGNOSIS

#### Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is a high amount of particulates present in the oil.

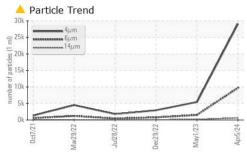
#### Fluid Condition

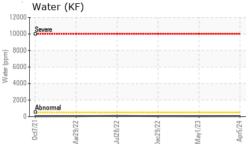
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

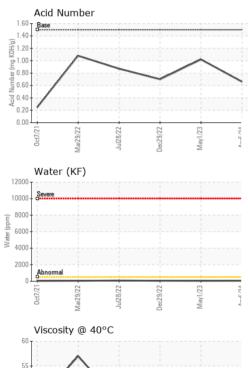
| SAMPLE INFORM   | IATION                        | method  | limit/base   | current  | history1   | history2  |
|---|-------------------------------|---|--|--|--|---|
| Sample Number   |                               | Client Info   |  | KCPA016349   | KCP53905   | KCP46585D   |
| Sample Date   |                               | Client Info   |  | 05 Apr 2024  | 01 May 2023  | 29 Dec 2022   |
| Machine Age   | hrs                           | Client Info   |  | 21295  | 13216  | 10292   |
| Oil Age   | hrs                           | Client Info   |  | 0  | 3000   | 3697  |
| Oil Changed   |                               | Client Info   |  | Changed  | Changed  | Changed   |
| Sample Status   |                               |   |  | ABNORMAL   | ATTENTION  | NORMAL  |
| WEAR METALS   |                               | method  | limit/base   | current  | history1   | history2  |
| Iron  | ppm                           | ASTM D5185m   | >50  | 2  | 1  | <1  |
| Chromium  | ppm                           | ASTM D5185m   | >10  | <1   | 0  | 0   |
| Nickel  | ppm                           | ASTM D5185m   | >3   | <1   | 0  | 0   |
| Titanium  | ppm                           | ASTM D5185m   | >3   | <1   | 0  | 0   |
| Silver  | ppm                           | ASTM D5185m   | >2   | <1   | 0  | 0   |
| Aluminum  | ppm                           | ASTM D5185m   | >10  | 12   | 6  | 5   |
| Lead  | ppm                           | ASTM D5185m   | >10  | <1   | 0  | 0   |
| Copper  | ppm                           | ASTM D5185m   |  | 3  | 5  | 3   |
| Tin   | ppm                           |   | >10  | <1   | 0  | 0   |
| Vanadium  | ppm                           | ASTM D5185m   | -  | <1   | 0  | 0   |
| Cadmium   | ppm                           | ASTM D5185m   |  | <1   | 0  | 0   |
| ADDITIVES   |                               | method  | limit/base   | current  | history1   | history2  |
| Boron   | ppm                           | ASTM D5185m   |  | 0  | 0  | 0   |
| Barium  | ppm                           | ASTM D5185m   |  | 0  | 0  | 0   |
| Molybdenum  | ppm                           | ASTM D5185m   |  | <1   | 0  | 0   |
| Manganese   | ppm                           | ASTM D5185m   |  | <1   | <1   | 0   |
| Magnesium   | ppm                           | ASTM D5185m   |  | 5  | 0  | 0   |
| Calcium   | ppm                           | ASTM D5185m   |  | 0  | 19   | 0   |
| Phosphorus  | ppm                           | ASTM D5185m   | 500  | 163  | 346  | 261   |
| Zinc  | ppm                           | ASTM D5185m   |  | 40   | 149  | 100   |
|   |                               | A OTH DELOS   |  | 10057  | 0000   |   |
| Sulfur  | ppm                           | ASTM D5185m   |  | 10057  | 2268   | 1253  |
| Sulfur<br>CONTAMINANTS  |                               | ASTM D5185m<br>method   | limit/base   | current  | 2268<br>history1   | 1253<br>history2  |
| CONTAMINANTS  |                               |   |  |  |  |   |
| Sulfur<br>CONTAMINANTS<br>Silicon<br>Sodium   |                               | method  |  | current  | history1   | history2  |
| CONTAMINANTS<br>Silicon   | ppm                           | method<br>ASTM D5185m<br>ASTM D5185m  |  | current<br><1  | history1<br>0  | <mark>history2</mark><br><1   |
| CONTAMINANTS<br>Silicon<br>Sodium   | ppm<br>ppm                    | method<br>ASTM D5185m<br>ASTM D5185m  | >25<br>>20   | current<br><1<br>0   | history1<br>0<br>5   | history2<br><1<br><1  |
| CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>Water   | ppm<br>ppm<br>ppm             | method<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m   | >25<br>>20<br>>0.05  | current<br><1<br>0<br>2  | history1<br>0<br>5<br>3  | history2<br><1<br><1<br>0   |
| CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>Water   | ppm<br>ppm<br>ppm<br>%<br>ppm | method<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D6304   | >25<br>>20<br>>0.05  | current<br><1<br>0<br>2<br>0.005   | history1<br>0<br>5<br>3<br>0.004   | history2<br><1<br><1<br>0<br>0.005<br>57.6                            |
| CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>Water<br>ppm Water<br>FLUID CLEANLIN<br>Particles >4µm  | ppm<br>ppm<br>ppm<br>%<br>ppm | method<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D6304<br>ASTM D6304<br>ASTM D6304<br>ASTM D6304  | >25<br>>20<br>>0.05<br>>500<br>limit/base                                    | current     <1     0     2     0.005     54     current     29067                | history1<br>0<br>5<br>3<br>0.004<br>41.1<br>history1<br>5453                                 | history2<br><1<br><1<br>0<br>0.005<br>57.6<br>history2<br>2943        |
| CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>Water<br>ppm Water<br>FLUID CLEANLIN<br>Particles >4µm<br>Particles >6µm  | ppm<br>ppm<br>ppm<br>%<br>ppm | method<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D6304<br>ASTM D6304<br>method   | >25<br>>20<br>>0.05<br>>500<br>limit/base                                    | current   <1   0   2   0.005   54   current   29067   ▲ 9706                     | history1<br>0<br>5<br>3<br>0.004<br>41.1<br>history1<br>5453<br>0 1520                       | history2<br><1<br><1<br>0<br>0.005<br>57.6<br>history2<br>2943<br>793 |
| CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>Water<br>ppm Water<br>FLUID CLEANLIN<br>Particles >4µm<br>Particles >6µm<br>Particles >14µm                                       | ppm<br>ppm<br>ppm<br>%<br>ppm | method<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D6304<br>ASTM D6304<br>Method<br>ASTM D7647<br>ASTM D7647<br>ASTM D7647  | >25<br>>20<br>>0.05<br>>500<br>limit/base<br>>1300<br>>80                    | current   <1   0   2   0.005   54   current   29067   ▲ 9706   ▲ 629             | history1<br>0<br>5<br>3<br>0.004<br>41.1<br>history1<br>5453<br>● 1520<br>● 150              | history2<br><1<br><1<br>0<br>0.005<br>57.6<br>history2<br>2943        |
| CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>Water<br>ppm Water<br>FLUID CLEANLIN<br>Particles >4µm<br>Particles >6µm<br>Particles >14µm                                       | ppm<br>ppm<br>ppm<br>%<br>ppm | methodASTM D5185mASTM D5185mASTM D6304ASTM D6304MethodASTM D7647ASTM D7647  | >25<br>>20<br>>0.05<br>>500<br>limit/base<br>>1300<br>>80                    | current   <1   0   2   0.005   54   current   29067   ▲ 9706                     | history1<br>0<br>5<br>3<br>0.004<br>41.1<br>history1<br>5453<br>0 1520                       | history2<br><1<br><1<br>0<br>0.005<br>57.6<br>history2<br>2943<br>793 |
| CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>Water<br>ppm Water<br>FLUID CLEANLIN<br>Particles >4µm<br>Particles >6µm<br>Particles >14µm<br>Particles >21µm<br>Particles >38µm | ppm<br>ppm<br>ppm<br>%<br>ppm | method<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D6304<br>ASTM D6304<br>Method<br>ASTM D7647<br>ASTM D7647<br>ASTM D7647  | >25<br>>20<br>>0.05<br>>500<br>limit/base<br>>1300<br>>80                    | current   <1   0   2   0.005   54   current   29067   ▲ 9706   ▲ 629   ▲ 143   2 | history1<br>0<br>5<br>3<br>0.004<br>41.1<br>history1<br>5453<br>● 1520<br>● 150              | history2     <1   |
| CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>Water<br>ppm Water<br>FLUID CLEANLIN<br>Particles >4µm<br>Particles >6µm<br>Particles >14µm<br>Particles >21µm<br>Particles >38µm | ppm<br>ppm<br>ppm<br>%<br>ppm | Method<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D6304<br>ASTM D6304<br>ASTM D6304<br>ASTM D7647<br>ASTM D7647<br>ASTM D7647<br>ASTM D7647  | >25<br>>20<br>>0.05<br>>500<br>limit/base<br>>1300<br>>80<br>>20<br>>4       | current   <1   0   2   0.005   54   current   29067   ▲ 9706   ▲ 629   ▲ 143     | history1<br>0<br>5<br>3<br>0.004<br>41.1<br>history1<br>5453<br>1520<br>150<br>38            | <1  |
| CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>Water<br>ppm Water<br>FLUID CLEANLIN<br>Particles >4µm  | ppm<br>ppm<br>ppm<br>%<br>ppm | Method<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D6304<br>ASTM D6304<br>ASTM D6304<br>ASTM D7647<br>ASTM D7647<br>ASTM D7647<br>ASTM D7647<br>ASTM D7647  | >25<br>>20<br>>0.05<br>>500<br>limit/base<br>>1300<br>>80<br>>20<br>>4       | current   <1   0   2   0.005   54   current   29067   ▲ 9706   ▲ 629   ▲ 143   2 | history1<br>0<br>5<br>3<br>0.004<br>41.1<br>history1<br>5453<br>1520<br>150<br>38<br>2       | <1  |
| CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>Water<br>ppm Water<br>FLUID CLEANLIN<br>Particles >4µm<br>Particles >6µm<br>Particles >21µm<br>Particles >38µm<br>Particles >71µm | ppm<br>ppm<br>%<br>ppm<br>ESS | methodASTM D5185mASTM D5185mASTM D5185mASTM D6304ASTM D6304ASTM D6304ASTM D7647ASTM D7647 | >25<br>>20<br>>0.05<br>>500<br>limit/base<br>>1300<br>>80<br>>20<br>>4<br>>3 | <1   0   2   0.005   54   29067   ▲ 9706   ▲ 629   ▲ 143   2   0                 | history1<br>0<br>5<br>3<br>0.004<br>41.1<br>history1<br>5453<br>1520<br>1520<br>38<br>2<br>0 | <1  |

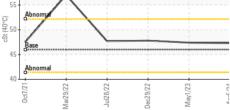


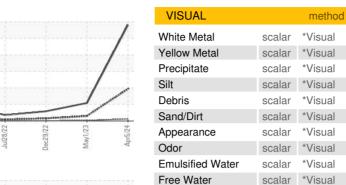
## **OIL ANALYSIS REPORT**











| Debris           | scalar | *Visual   | NONE       | NONE    | NONE     | VLITE    |
|------------------|--------|-----------|------------|---------|----------|----------|
| Sand/Dirt        | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Appearance       | scalar | *Visual   | NORML      | NORML   | NORML    | NORML    |
| Odor             | scalar | *Visual   | NORML      | NORML   | NORML    | NORML    |
| Emulsified Water | scalar | *Visual   | >0.05      | NEG     | NEG      | NEG      |
| Free Water       | scalar | *Visual   |            | NEG     | NEG      | NEG      |
|                  |        |           |            |         |          |          |
| FLUID PROPERTIES |        | method    | limit/base | current | history1 | history2 |
| Visc @ 40°C      | cSt    | ASTM D445 | 46         | 47.3    | 47.4     | 47.8     |
| SAMPLE IMAGES    |        | method    | limit/base | current | history1 | history2 |
|                  |        |           |            |         |          |          |

limit/base

NONE

NONE

NONE

NONE

current

NONE

NONE

NONE

NONE

Color



history1

NONE

NONE

NONE

NONE

history2

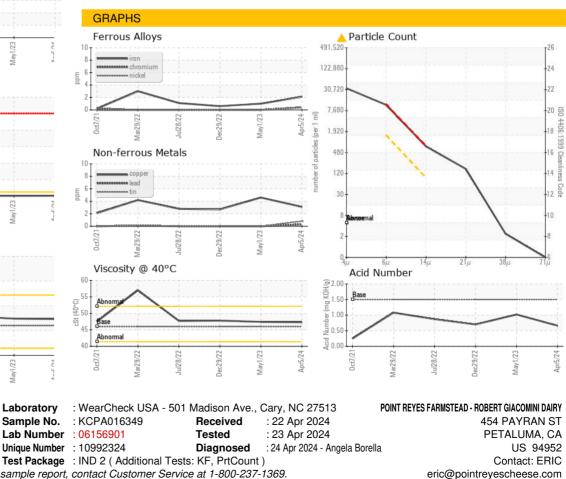
NONE

NONE

NONE

NONE

Bottom



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)

Report Id: POIPET [WUSCAR] 06156901 (Generated: 04/24/2024 17:26:52) Rev: 1

Certificate 12367

Contact/Location: ERIC ? - POIPET Page 2 of 2

T:

F: