

### **OIL ANALYSIS REPORT**



Machine Id

# 6135668 (S/N 1679)

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

#### DIAGNOSIS

#### Recommendation

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. 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.

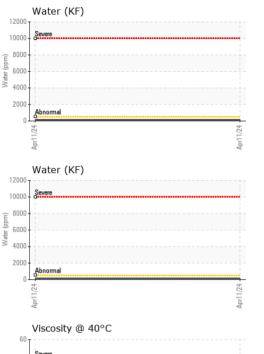
#### Fluid Condition

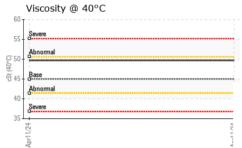
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

| SAMPLE INFORM   | <b>IATION</b>  | method   | limit/base  | current  | history1                     | history2                             |
|---|--|--|---|--|------------------------------|--------------------------------------|
| Sample Number   |  | Client Info  |   | KCPA013540   |                              |                                      |
| Sample Date   |  | Client Info  |   | 11 Apr 2024  |                              |                                      |
| Machine Age   | hrs  | Client Info  |   | 3445   |                              |                                      |
| Oil Age   | hrs  | Client Info  |   | 0  |                              |                                      |
| Oil Changed   |  | Client Info  |   | Changed  |                              |                                      |
| 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  | 1  |                              |                                      |
| Titanium  | ppm  | ASTM D5185m  | >3  | 0  |                              |                                      |
| Silver  | ppm  | ASTM D5185m  | >2  | 0  |                              |                                      |
| Aluminum  | ppm  | ASTM D5185m  | >10   | <1   |                              |                                      |
| Lead  | ppm  | ASTM D5185m  | >10   | 0  |                              |                                      |
| Copper  | ppm  | ASTM D5185m  | >50   | 17   |                              |                                      |
| Tin   | ppm  | ASTM D5185m  | >10   | <1   |                              |                                      |
| Vanadium  | ppm  | ASTM D5185m  |   | 0  |                              |                                      |
| Cadmium   | ppm  | ASTM D5185m  |   | 0  |                              |                                      |
|   |  |  |   |  |                              |                                      |
| ADDITIVES   |  | method   | limit/base  | current  | history1                     | history2                             |
| ADDITIVES<br>Boron  | ppm  | method<br>ASTM D5185m  | limit/base  | current<br>0   | history1                     | history2                             |
|   | ppm<br>ppm   |  |   |  |                              |                                      |
| Boron   |  | ASTM D5185m  | 0   | 0  |                              |                                      |
| Boron<br>Barium   | ppm  | ASTM D5185m<br>ASTM D5185m   | 0<br>90   | 0<br>0   |                              |                                      |
| Boron<br>Barium<br>Molybdenum   | ppm<br>ppm   | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m  | 0<br>90   | 0<br>0<br>0  |                              |                                      |
| Boron<br>Barium<br>Molybdenum<br>Manganese  | ppm<br>ppm<br>ppm  | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m   | 0<br>90<br>0  | 0<br>0<br>0<br>1   |                              | <br>                                 |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium   | ppm<br>ppm<br>ppm<br>ppm   | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m  | 0<br>90<br>0<br>100   | 0<br>0<br>0<br>1<br>2  |                              |                                      |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium  | ppm<br>ppm<br>ppm<br>ppm<br>ppm                                    | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m  | 0<br>90<br>0<br>100<br>0  | 0<br>0<br>1<br>2<br><1   | <br><br><br>                 | <br><br>                             |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus  | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm                             | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m  | 0<br>90<br>0<br>100<br>0<br>0   | 0<br>0<br>1<br>2<br><1<br>0  | <br><br><br>                 | <br><br><br>                         |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc  | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm               | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m  | 0<br>90<br>0<br>100<br>0<br>0<br>0  | 0<br>0<br>1<br>2<br><1<br>0<br>0   | <br><br><br><br>             | <br><br><br><br>                     |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur  | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm               | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m   | 0<br>90<br>0<br>100<br>0<br>0<br>0<br>23500                               | 0<br>0<br>1<br>2<br><1<br>0<br>0<br>23684  | <br><br><br><br><br>         |                                      |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS  | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm                      | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m  | 0<br>90<br>0<br>100<br>0<br>0<br>23500<br>limit/base                      | 0<br>0<br>1<br>2<br><1<br>0<br>0<br>23684<br>current                                   | <br><br><br><br><br>history1 | <br><br><br><br><br>history2         |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS<br>Silicon                                 | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm               | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br><b>method</b><br>ASTM D5185m                             | 0<br>90<br>0<br>100<br>0<br>0<br>23500<br>limit/base                      | 0<br>0<br>1<br>2<br><1<br>0<br>0<br>23684<br>current<br>1                              | <br><br><br><br>history1     | <br><br><br><br>history2             |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS<br>Silicon<br>Sodium                       | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm               | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br><b>method</b><br>ASTM D5185m                             | 0<br>90<br>0<br>100<br>0<br>0<br>23500<br>limit/base<br>>25               | 0<br>0<br>0<br>1<br>2<br><1<br>0<br>0<br>23684<br>23684<br>2urrent<br>1<br>2           | <br><br><br><br><br>history1 | <br><br><br><br>history2             |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium          | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm | ASTM D5185m<br>ASTM D5185m | 0<br>90<br>0<br>100<br>0<br>0<br>23500<br>limit/base<br>>25               | 0<br>0<br>0<br>1<br>2<br><1<br>0<br>0<br>23684<br>23684<br>2<br>2                      | <br><br><br><br><br>history1 | <br><br><br><br>history2             |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>Water | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm | ASTM D5185m<br>ASTM D5185m | 0<br>90<br>0<br>100<br>0<br>0<br>23500<br>limit/base<br>>25<br>>20<br>>20 | 0<br>0<br>0<br>1<br>2<br><1<br>0<br>0<br>23684<br>current<br>1<br>2<br>2<br>2<br>0.009 |                              | <br><br><br><br><br>history2<br><br> |



## **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                                      | A MODER                                      |          |  |
|                          | Sand/Dirt  | scalar                               | *Visual  | NONE                                      | NONE   |          |  |
| Apr11/24                 | Appearance   | scalar                               | *Visual  | NORML                                     | NORML  |          |  |
| Ap                       | Odor   | scalar                               | *Visual  | NORML                                     | NORML  |          |  |
|                          | Emulsified Water   | scalar                               | *Visual  | >0.05                                     | NEG  |          |  |
|                          | Free Water   | scalar                               | *Visual  |   | NEG  |          |  |
|                          | FLUID PROPERT  | IES                                  | method   | limit/base                                | current                                      | history1 | history2   |
|                          | Visc @ 40°C  | cSt                                  | ASTM D445  | 45  | 49.7   |          |  |
|                          | SAMPLE IMAGES  | S                                    | method   | limit/base                                | current                                      | history1 | history2   |
| Aprl 1/24 -              | Color  |                                      |  |   |  | no image | no image   |
|                          | Bottom   |                                      |  |   | a.   | no image | no image   |
|                          | Non-ferrous Metal  | 5                                    |  | April 1/24 April 1/24                     | Acid Number                                  |          |  |
|                          | Cooperation of the second of t |                                      |  | Apri 1/24<br>Acid Number (mg KOH(g)<br>.0 | 72<br>48<br>24<br>00<br>72/11/10<br>72/11/10 |          | 0.1174   |
| que Number<br>st Package | : WearCheck USA - 50<br>: KCPA013540<br>: 06151195<br>: 10981273<br>: IND 2 ( Additional Test<br>contact Customer Servi  | Recei<br>Teste<br>Diagr<br>ts: KF, P | ived : 16<br>id : 19<br>iosed : 19<br>irtCount ) | 6 Apr 2024<br>9 Apr 2024<br>Apr 2024 - Do | n Baldridge                                  | WAT      | 25 SAKATA LM<br>SONVILLE, CA<br>US 95076<br>t: J CORDOVA |

Test Package : IN Certificate L2367 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)

Contact/Location: J CORDOVA - LAKWAT Page 2 of 2

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