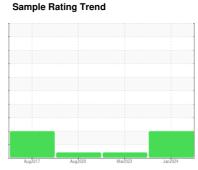


**OIL ANALYSIS REPORT** 

# Machine Id KAESER AS 30 4973707 (S/N 1264)

Compressor

KAESER SIGMA (OEM) S-460 (--- GAL)





### **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 a high amount of particulates present in the oil.

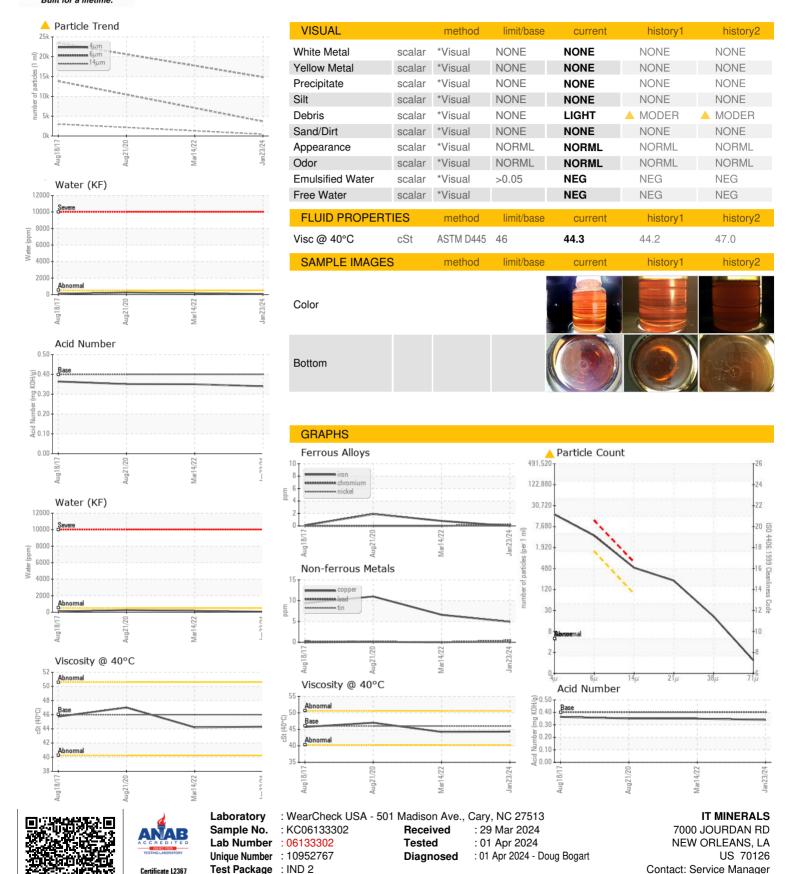
#### **Fluid Condition**

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

| Sample Number   Client Info   KC06133302   KC98586   KC848   Sample Date   Client Info   23 Jan 2024   14 Mar 2022   21 Aug  |        |
|--|--------|
| Sample Date         Client Info         23 Jan 2024         14 Mar 2022         21 Aug           Machine Age         hrs         Client Info         36933         28417         23166           Oil Age         hrs         Client Info         0         8578         0           Oil Changed         Client Info         N/A         Changed         Not Changed           Sample Status         Licination         N/A         Changed         Not Changed           WEAR METALS         method         limit/base         current         history1         history1           Iron         ppm         ASTM D5185m         >50         0         <1         0           Chromium         ppm         ASTM D5185m         >10         <1         0         0           Nickel         ppm         ASTM D5185m         >3         <1         0         0           Silver         ppm         ASTM D5185m         >2         0         0         <1           Aluminum         ppm         ASTM D5185m         >10         <1         0         <1           Copper         ppm         ASTM D5185m         >10         <1         0         <1           Chade         ppm   | story2 |
| Machine Age         hrs         Client Info         36933         28417         23166           Oil Age         hrs         Client Info         0         8578         0           Oil Changed         Client Info         N/A         Changed         Not Ch           Sample Status         MBNORMAL         ABNORMAL         ABNORMAL         ABNORMAL         ABNORMAL         ABNO           WEAR METALS         method         limit/base         current         history1         history1 <td>95</td>  | 95     |
| Oil Age         hrs         Client Info         N/A         Changed         Not Of Changed           Sample Status         Method         Ilimit/base         current         history1         history1           Iron         ppm         ASTM D5185m         >50         0         <1  | 2020   |
| Oil Changed Sample Status         Client Info         N/A         Changed ABNORMAL         Not Changed ABNORMAL         ABN |        |
| Sample Status         method         limit/base         current         history1         history2         history1         history1         history1         history1         history2         current         history1         history2         current         history2         his                                     |        |
| WEAR METALS         method         limit/base         current         history1         history1           Iron         ppm         ASTM D5185m         >50         0         <1  | angd   |
| Iron   | RMAL   |
| Chromium         ppm         ASTM D5185m         >10         <1         0         0           Nickel         ppm         ASTM D5185m         >3         0         0         0           Titanium         ppm         ASTM D5185m         >3         <1   | story2 |
| Nickel         ppm         ASTM D5185m         >3         0         0         0           Titanium         ppm         ASTM D5185m         >3         <1   |        |
| Titanium         ppm         ASTM D5185m         >3         <1         0         0           Silver         ppm         ASTM D5185m         >2         0         0         <1  |        |
| Silver         ppm         ASTM D5185m         >2         0         0         <1           Aluminum         ppm         ASTM D5185m         >10         3         <1         0           Lead         ppm         ASTM D5185m         >10         <1         0         <1           Copper         ppm         ASTM D5185m         >50         5         7         11           Tin         ppm         ASTM D5185m         >10         <1         0         <1           Antimony         ppm         ASTM D5185m           0         <1           Vanadium         ppm         ASTM D5185m         <1         0         0         <1           ADDITIVES         method         limit/base         current         history1         his           Boron         ppm         ASTM D5185m         0         <1         8           Barium         ppm         ASTM D5185m         0         <1         0         4           Molybdenum         ppm         ASTM D5185m         0         <1         0         4           Molybdenum         ppm         ASTM D5185m         0         <0         0         0 <td></td>   |        |
| Aluminum   |        |
| Lead         ppm         ASTM D5185m         >10         <1         0         <1           Copper         ppm         ASTM D5185m         >50         5         7         11           Tin         ppm         ASTM D5185m         >10         <1         0         <1           Antimony         ppm         ASTM D5185m            0           Vanadium         ppm         ASTM D5185m         <1         0         0         0           Cadmium         ppm         ASTM D5185m         <1         0         0         0           Boron         ppm         ASTM D5185m         0         <1         8         8           Barium         ppm         ASTM D5185m         90         <1         0         4           Molybdenum         ppm         ASTM D5185m         0         0         0         0           Manganese         ppm         ASTM D5185m         0         0         0         0           Magnesium         ppm         ASTM D5185m         2         3         0         <1           Calcium         ppm         ASTM D5185m         0         0         0 <th< td=""><td></td></th<>   |        |
| Copper         ppm         ASTM D5185m         >50         5         7         11           Tin         ppm         ASTM D5185m         >10         <1   |        |
| Tin ppm ASTM D5185m >10 <1 0 <1 Antimony ppm ASTM D5185m >10 <1 0 0 Vanadium ppm ASTM D5185m   |        |
| Antimony         ppm         ASTM D5185m           0           Vanadium         ppm         ASTM D5185m         <1   |        |
| Vanadium         ppm         ASTM D5185m         <1         0         0           Cadmium         ppm         ASTM D5185m         <1         0         0           ADDITIVES         method         limit/base         current         history1         his           Boron         ppm         ASTM D5185m         0         <1         8           Barium         ppm         ASTM D5185m         90         <1         0         4           Molybdenum         ppm         ASTM D5185m         0         0         0         0           Manganese         ppm         ASTM D5185m         0         0         0         0           Magnesium         ppm         ASTM D5185m         90         <1         1         <1           Calcium         ppm         ASTM D5185m         2         3         0         <1           Phosphorus         ppm         ASTM D5185m         0         0         0         2           Zinc         ppm         ASTM D5185m         0         0         0         0           CONTAMINANTS         method         limit/base         current         history1         his           Silicon         <   |        |
| Cadmium         ppm         ASTM D5185m         <1         0         0           ADDITIVES         method         limit/base         current         history1         history1 <t< td=""><td></td></t<>                                    |        |
| ADDITIVES         method         limit/base         current         history1         history2         history3         history3         history3         history3         history3         history3         history3         history4  |        |
| Boron         ppm         ASTM D5185m         0         <1         8           Barium         ppm         ASTM D5185m         90         <1         0         4           Molybdenum         ppm         ASTM D5185m         0         0         0         0           Manganese         ppm         ASTM D5185m         0         0         0         0           Magnesium         ppm         ASTM D5185m         90         <1         1         <1         <1           Calcium         ppm         ASTM D5185m         2         3         0         <1         <1         <1           Phosphorus         ppm         ASTM D5185m         0         0         0         2            Zinc         ppm         ASTM D5185m         0         0         0         0           CONTAMINANTS         method         limit/base         current         history1         his           Silicon         ppm         ASTM D5185m         >25         <1         <1         1           Sodium         ppm         ASTM D5185m         >20         <1         <1         0           Water         %         ASTM D5185m         >  |        |
| Barium         ppm         ASTM D5185m         90         <1         0         4           Molybdenum         ppm         ASTM D5185m         0         0         0           Manganese         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         90         <1  | story2 |
| Molybdenum         ppm         ASTM D5185m         0         0         0           Manganese         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         90         <1         1         <1           Calcium         ppm         ASTM D5185m         2         3         0         <1           Phosphorus         ppm         ASTM D5185m         0         0         2           Zinc         ppm         ASTM D5185m         0         0         0           CONTAMINANTS         method         limit/base         current         history1         his           Silicon         ppm         ASTM D5185m         >25         <1         <1         1           Sodium         ppm         ASTM D5185m         >20         <1         <1         0           Potassium         ppm         ASTM D6304         >0.05         0.006         0.016         0.02           Water         %         ASTM D6304         >500         68         162.4         252           FLUID CLEANLINESS         method         limit/base         current         history1         his           Particle   |        |
| Manganese         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         90         <1  |        |
| Magnesium         ppm         ASTM D5185m         90         <1         1         <1           Calcium         ppm         ASTM D5185m         2         3         0         <1           Phosphorus         ppm         ASTM D5185m         0         0         0         2           Zinc         ppm         ASTM D5185m         0         0         0         0           CONTAMINANTS         method         limit/base         current         history1         his           Silicon         ppm         ASTM D5185m         >25         <1         <1         1           Sodium         ppm         ASTM D5185m         20         <1         <1         0           Potassium         ppm         ASTM D5185m         >20         <1         <1         0           Water         %         ASTM D6304         >0.05         0.006         0.016         0.02           Popm Water         ppm         ASTM D6304         >500         68         162.4         252           FLUID CLEANLINESS         method         limit/base         current         history1         his           Particles >4μm         ASTM D7647         14857          <  |        |
| Calcium         ppm         ASTM D5185m         2         3         0         <1           Phosphorus         ppm         ASTM D5185m         0         0         2           Zinc         ppm         ASTM D5185m         0         0         0           CONTAMINANTS         method         limit/base         current         history1         his           Silicon         ppm         ASTM D5185m         >25         <1  |        |
| Phosphorus         ppm         ASTM D5185m         0         0         2           Zinc         ppm         ASTM D5185m         0         0         0           CONTAMINANTS         method         limit/base         current         history1         history1           Silicon         ppm         ASTM D5185m         >25         <1         <1         1           Sodium         ppm         ASTM D5185m         0         0         0         0           Potassium         ppm         ASTM D5185m         >20         <1         <1         0           Water         %         ASTM D6304         >0.05         0.006         0.016         0.02           ppm Water         ppm         ASTM D6304         >500         68         162.4         252           FLUID CLEANLINESS         method         limit/base         current         history1         hist           Particles >4μm         ASTM D7647         14857   |        |
| Zinc         ppm         ASTM D5185m         0         0         0           CONTAMINANTS         method         limit/base         current         history1         no         0   |        |
| CONTAMINANTS         method         limit/base         current         history1         history2  |        |
| Silicon         ppm         ASTM D5185m         >25         <1         <1         1           Sodium         ppm         ASTM D5185m         0         0         0         0           Potassium         ppm         ASTM D5185m         >20         <1         <1         0           Water         %         ASTM D6304         >0.05         0.006         0.016         0.02           ppm Water         ppm         ASTM D6304         >500         68         162.4         252           FLUID CLEANLINESS         method         limit/base         current         history1         hist           Particles >4μm         ASTM D7647         14857  |        |
| Sodium         ppm         ASTM D5185m         0         0         0         0           Potassium         ppm         ASTM D5185m         >20         <1         <1         0           Water         %         ASTM D6304         >0.05         0.006         0.016         0.02           ppm Water         ppm         ASTM D6304         >500         68         162.4         252           FLUID CLEANLINESS         method         limit/base         current         history1         his           Particles >4μm         ASTM D7647         14857   | story2 |
| Potassium         ppm         ASTM D5185m         >20         <1         <1         0           Water         %         ASTM D6304         >0.05         0.006         0.016         0.02           opm Water         ppm         ASTM D6304         >500         68         162.4         252           FLUID CLEANLINESS         method         limit/base         current         history1         his           Particles >4μm         ASTM D7647         14857  |        |
| Water         %         ASTM D6304         >0.05         0.006         0.016         0.02           ppm Water         ppm         ASTM D6304         >500         68         162.4         252           FLUID CLEANLINESS         method         limit/base         current         history1         his           Particles >4μm         ASTM D7647         14857  |        |
| ppm Water         ppm         ASTM D6304         >500         68         162.4         252           FLUID CLEANLINESS         method         limit/base         current         history1         his           Particles >4μm         ASTM D7647         14857  |        |
| FLUID CLEANLINESS     method     limit/base     current     history1     history1       Particles >4μm     ASTM D7647     14857  | 25     |
| Particles >4μm ASTM D7647 <b>14857</b>   | .1     |
| •  | story2 |
| Particles >6μm ASTM D7647 >1300 Δ <b>3679</b>  |        |
|  |        |
| Particles >14μm ASTM D7647 >80 <b>Δ 446</b>  |        |
| Particles >21μm ASTM D7647 >20 Δ 190   |        |
| Particles >38μm ASTM D7647 >4 <b>Δ 18</b>  |        |
| Particles >71µm ASTM D7647 >3 1  |        |
| Oil Cleanliness ISO 4406 (c) >/17/13 🔺 21/19/16  |        |
| FLUID DEGRADATION method limit/base current history1 his   |        |
| Acid Number (AN) mg KOH/g ASTM D8045 0.4 0.34 0.35 0.35  | story2 |



## **OIL ANALYSIS REPORT**



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)

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