

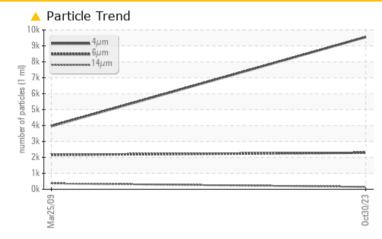
### **PROBLEM SUMMARY**

# KAESER SX 7 2562343 (S/N 1430)

Compressor

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

### COMPONENT CONDITION SUMMARY



### RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

# Sample Rating Trend ISO

| PROBLEMATIC TEST | RESULTS             |              |              |  |
|------------------|---------------------|--------------|--------------|--|
| Sample Status    |                     | ATTENTION    | NORMAL       |  |
| Particles >6µm   | ASTM D7647 >1300    | <u> </u>     | <u> </u>     |  |
| Particles >14µm  | ASTM D7647 >80      | <u> </u>     | <b>A</b> 367 |  |
| Particles >21µm  | ASTM D7647 >20      | <u> </u>     | <u> </u>     |  |
| Oil Cleanliness  | ISO 4406 (c) >/17/1 | 3 🔺 20/18/14 | 🔺 18/16      |  |

Customer Id: KEISOL Sample No.: KC125736 Lab Number: 05998454 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Don Baldridge +1 don.b505@comcast.net

*To change component or sample information:* Customer Service +1 1-800-237-1369 <u>customerservice@wearcheck.com</u> There are no recommended actions for this sample.

### HISTORICAL DIAGNOSIS

### 25 Mar 2009 Diag: Doug Bogart



No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate amount of particulates present in the oil. The condition of oil is suitable for further service.





### **OIL ANALYSIS REPORT**

# KAESER SX 7 2562343 (S/N 1430)

Compressor Fluid

Machine Id

Component

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

### DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

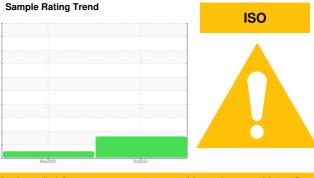
All component wear rates are normal.

### Contamination

There is a moderate 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.

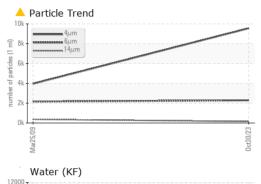


| SAMPLE INFORM    | MATION     | method        | limit/base | current         | history1     | history2 |
|------------------|------------|---------------|------------|-----------------|--------------|----------|
| Sample Number    |            | Client Info   |            | KC125736        | KC19270      |          |
| Sample Date      |            | Client Info   |            | 30 Oct 2023     | 25 Mar 2009  |          |
| Machine Age      | hrs        | Client Info   |            | 27983           | 10274        |          |
| Oil Age          | hrs        | Client Info   |            | 0               | 1381         |          |
| Oil Changed      |            | Client Info   |            | N/A             | N/A          |          |
| Sample Status    |            |               |            | ATTENTION       | NORMAL       |          |
| WEAR METALS      |            | method        | limit/base | current         | history1     | history2 |
| Iron             | ppm        | ASTM D5185m   | >50        | 0               | 1            |          |
| Chromium         | ppm        | ASTM D5185m   | >10        | 0               | 0            |          |
| Nickel           | ppm        | ASTM D5185m   |            | 0               | 0            |          |
| Titanium         | ppm        | ASTM D5185m   |            | 0               | 0            |          |
| Silver           | ppm        | ASTM D5185m   |            | 0               | <1           |          |
| Aluminum         | ppm        | ASTM D5185m   | >25        | 0               | <1           |          |
| Lead             | ppm        | ASTM D5185m   | >25        | 0               | <1           |          |
| Copper           | ppm        | ASTM D5185m   | >50        | 4               | 3            |          |
| Tin              | ppm        | ASTM D5185m   | >15        | 0               | 0            |          |
| Antimony         | ppm        | ASTM D5185m   | -          |                 | <1           |          |
| Vanadium         | ppm        | ASTM D5185m   |            | 0               | 0            |          |
| Cadmium          | ppm        | ASTM D5185m   |            | 0               | 0            |          |
|                  | ppiii      |               |            | -               |              |          |
| ADDITIVES        |            | method        | limit/base | current         | history1     | history2 |
| Boron            | ppm        | ASTM D5185m   |            | 0               | 0            |          |
| Barium           | ppm        | ASTM D5185m   | 90         | 0               | 9            |          |
| Molybdenum       | ppm        | ASTM D5185m   |            | 0               | 0            |          |
| Manganese        | ppm        | ASTM D5185m   |            | 0               | <1           |          |
| Magnesium        | ppm        | ASTM D5185m   | 90         | 22              | 38           |          |
| Calcium          | ppm        | ASTM D5185m   | 2          | 0               | <1           |          |
| Phosphorus       | ppm        | ASTM D5185m   |            | 0               | 3            |          |
| Zinc             | ppm        | ASTM D5185m   |            | 6               | 10           |          |
| CONTAMINANTS     | 6          | method        | limit/base | current         | history1     | history2 |
| Silicon          | ppm        | ASTM D5185m   | >25        | 16              | <1           |          |
| Sodium           | ppm        | ASTM D5185m   |            | 9               | 14           |          |
| Potassium        | ppm        | ASTM D5185m   | >20        | 0               | 8            |          |
| Water            | %          | ASTM D6304    | >0.1       | 0.015           | 0.012        |          |
| ppm Water        | ppm        | ASTM D6304    | >1000      | 157.4           | 120          |          |
| FLUID CLEANLIN   | NESS       | method        | limit/base | current         | history1     | history2 |
| Particles >4µm   |            | ASTM D7647    |            | 9554            | 3961         |          |
| Particles >6µm   |            | ASTM D7647    | >1300      | <u> </u>        | <u> </u>     |          |
| Particles >14µm  |            | ASTM D7647    | >80        | <b>150</b>      | <b>A</b> 367 |          |
| Particles >21µm  |            | ASTM D7647    | >20        | <b>A</b> 35     | <b>1</b> 24  |          |
| Particles >38µm  |            | ASTM D7647    | >4         | 1               | <b>1</b> 9   |          |
| Particles >71µm  |            | ASTM D7647    |            | 0               | <u>▲</u> 1   |          |
| Oil Cleanliness  |            | ISO 4406 (c)  | >/17/13    | <b>20/18/14</b> | ▲ 18/16      |          |
| FLUID DEGRADA    | ATION      | method        | limit/base | current         | history1     | history2 |
| Acid Number (AN) | mg KOH/g   | ASTM D8045    | 0.4        | 0.30            | 0.398        |          |
|                  | ing itoriy | , 10 HM D0040 | 0          | 0.00            | 0.000        |          |

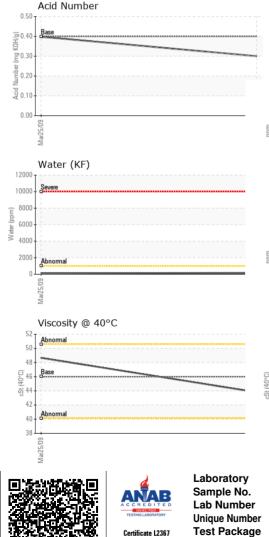


## **OIL ANALYSIS REPORT**

VISUAL







To discuss this s \* - Denotes test n

Statements of cor

history2

history1

|  | 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   | NONE               | LIGHT                    |   |
|  | Sand/Dirt   | scalar  | *Visual  | NONE   | NONE               | NONE                     |   |
| 0ct30/23   | Appearance  | scalar  | *Visual  | NORML  | NORML              | NORML                    |   |
| Oct  | Odor  | scalar  | *Visual  | NORML  | NORML              | NORML                    |   |
|  | Emulsified Water  | scalar  | *Visual  | >0.1   | NEG                | NEG                      |   |
|  | Free Water  | scalar  | *Visual  |  | NEG                | NEG                      |   |
|  | FLUID PROPER  | RTIES   | method   | limit/base   | current            | history1                 | history2  |
|  | Visc @ 40°C   | cSt   | ASTM D445  | 46   | 43.8               | 48.66                    |   |
|  | SAMPLE IMAG   | ES  | method   | limit/base   | current            | history1                 | history2  |
| 0ct30/23   | Color   |   |  |  |                    | • no image               | no image  |
|  | Bottom  |   |  |  |                    | no image                 | no image  |
|  | GRAPHS  |   | •  |  |                    |                          | 1   |
|  | Ferrous Alloys  |   |  | 100 APA 10.00  | Particle Cou       | nt                       |   |
|  | 10  |   |  | 491,520  | )<br>I             |                          | 1 <sup>26</sup>   |
|  | 6   |   |  | 122,880  | -                  |                          | -24   |
|  |   |   |  |  |                    |                          |   |
|  | 2   |   |  | 30,720   | 1                  |                          | -22   |
|  |   |   | <del></del>  | 7,680  | > `                |                          | -20   |
|  | 0   |   |  | 0ct30/23   | 1                  |                          | -10 (10 4466) -118 -118 -116 -116 -116 -116 -116 -116             |
|  | Mar25,09  |   |  | 0cc30/22<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>10 |                    | N                        | 18 86.19  |
|  | Non-ferrous Met   | als   |  | ap<br>12 480   |                    | \ •                      | 16 0  |
|  | 10 copper   |   |  | er of p  |                    |                          | aning   |
|  | o - nananananana lead   |   |  |  | 1                  |                          | TI+ 85 Co   |
|  | E 6   |   |  |  | -                  |                          | -12 8   |
|  |   |   |  |  |                    | 1                        | -10   |
|  |   |   |  |  | <b>Sibreve</b> mal | ·····                    | 10  |
|  |   |   |  | 0/23   | 2-                 |                          | -8  |
|  | Mar25/09  |   |  | 0ct30/23   |                    |                          |   |
|  | –<br>Viscosity @ 40°  | 2   |  |  | 4μ 6μ              | 14μ 21μ                  | 38µ 71µ   |
|  | 55 T  |   |  | -0.50  | Acid Numbe         | r<br>                    |   |
|  | 50 Abnormal   |   |  | Ho 0.40  | Base               | *****                    |   |
|  |   |   |  | <br>Ē0.30  | )-                 |                          |   |
|  | So of 45  |   |  | 은 0.20   |                    |                          |   |
|  | 40 - Abnormal   |   |  | (B) 10.50<br>(B) 20.40<br>(B) 20.30<br>(B) 20.30<br>(B) 20.30<br>(B) 20.30<br>(C) 20.50<br>(C) 20   | )                  |                          |   |
|  |   |   |  | 0.00   | )                  |                          |   |
|  | 35  |   |  | 0/23   | Mar25/09           |                          | 0ct30/23  |
|  |   |   |  | c.   |                    |                          |   |
|  | Mar25,09  | - 501 Madi  | son Ave Ca   | EZ/0510  |                    | KEITHI EY I              |   |
| ratory<br>le No.<br>umber  | : WearCheck USA<br>: KC125736<br>: 05998454   | Receive<br>Diagnos  | d :03 <br>ed :07   | ry, NC 27513<br>Nov 2023<br>Nov 2023   |                    |                          | NSTRUMENTS<br>URORA ROAD<br>SOLON, OH                             |
| ratory<br>le No.<br>lumber<br>e Number<br>Package                          | : WearCheck USA<br>: KC125736<br>: 05998454<br>: 10726814<br>: IND 2                        | Received<br>Diagnos<br>Diagnos                              | d : 03  <br>ed : 07  <br>tician : Dor                                  | ary, NC 27513<br>Nov 2023<br>Nov 2023<br>n Baldridge   |                    | 28775 A                  | NSTRUMENTS<br>URORA ROAD  |
| ratory<br>le No.<br>lumber<br>e Number<br>Package<br>e report, o           | : WearCheck USA<br>: KC125736<br>: 05998454<br>: 10726814<br>: IND 2<br>contact Customer Se | Received<br>Diagnos<br>Diagnost                             | d : 03  <br>ed : 07  <br>tician : Dor<br>800-237-1369                  | rry, NC 27513<br>Nov 2023<br>Nov 2023<br>n Baldridge<br>9.   |                    | 28775 A                  | NSTRUMENTS<br>IURORA ROAD<br>SOLON, OH<br>US 44139<br>ICE MANAGER |
| atory<br>le No.<br>umber<br>Number<br>Package<br>e report, o<br>ods that a | : WearCheck USA<br>: KC125736<br>: 05998454<br>: 10726814<br>: IND 2                        | Received<br>Diagnos<br>Diagnos<br>rvice at 1-&<br>17025 sco | d : 03  <br>ed : 07  <br>tician : Dor<br>800-237-1369<br>ope of accrea | rry, NC 27513<br>Nov 2023<br>Nov 2023<br>n Baldridge<br>9.<br><i>ditation.</i>   | 3                  | 28775 A<br>Contact: SERV | NSTRUMENTS<br>URORA ROAD<br>SOLON, OH<br>US 44139                 |

limit/base

current

method