

OIL ANALYSIS REPORT

Sample Rating Trend

ISO

Machine Id

KAESER AS 30T 7330001 (S/N 1496)

Component Compressor Fluid

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 suitable for further service.

| SAMPLE INFORM | ATION | method | limit/base | current | history1 | history2 |
|------------------|------------|-----------------|------------|-------------------|-------------|---------------|
| Sample Number | | Client Info | | KC128576 | KC124518 | KC101510 |
| Sample Date | | Client Info | | 22 May 2024 | 18 Sep 2023 | 20 Mar 2023 |
| Machine Age | hrs | Client Info | | 19756 | 14764 | 11752 |
| Oil Age | hrs | Client Info | | 5000 | 0 | 2500 |
| Oil Changed | | Client Info | | Not Changd | N/A | Not Changd |
| Sample Status | | | | ABNORMAL | ATTENTION | ABNORMAL |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >50 | 0 | 0 | <1 |
| Chromium | ppm | ASTM D5185m | >10 | <1 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >3 | 0 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >10 | 2 | 0 | 1 |
| Lead | ppm | ASTM D5185m | >10 | 0 | 0 | <1 |
| Copper | ppm | | >50 | 7 | 9 | 6 |
| Tin | ppm | ASTM D5185m | >10 | <1 | 0 | <1 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Barium | ppm | ASTM D5185m | 90 | 0 | 0 | 25 |
| Molybdenum | | ASTM D5185m | 30 | 0 | 0 | 0 |
| Manganese | ppm ppm | ASTM D5185m | | 0 | 0 | 0 |
| Magnesium | ppm | ASTM D5185m | 90 | 10 | 4 | 41 |
| Calcium | ppm | ASTM D5185m | | 0 | 2 | 1 |
| Phosphorus | ppm | ASTM D5185m | 2 | 0 | 3 | 16 |
| Zinc | ppm | ASTM D5185m | | 8 | 9 | 6 |
| | | AUTIVI DUTUUIII | | U | 5 | |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >25 | 0 | 0 | 2 |
| Sodium | ppm | ASTM D5185m | | 2 | <1 | 17 |
| Potassium | ppm | ASTM D5185m | >20 | <1 | 0 | 10 |
| Water | % | ASTM D6304 | | 0.004 | 0.007 | 0.013 |
| ppm Water | ppm | ASTM D6304 | | 46 | 71.0 | 133.5 |
| FLUID CLEANLIN | IESS | method | limit/base | current | history1 | history2 |
| Particles >4µm | | ASTM D7647 | | 5109 | 2078 | 27147 |
| Particles >6µm | | ASTM D7647 | | <u> </u> | 876 | ▲ 7631 |
| Particles >14µm | | ASTM D7647 | >80 | <u> </u> | 84 | A 380 |
| Particles >21µm | | | | <u> </u> | 20 | <u>▲</u> 91 |
| Particles >38µm | | ASTM D7647 | >4 | 1 | 1 | 2 |
| Particles >71µm | | ASTM D7647 | >3 | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >/17/13 | A 20/18/15 | 18/17/14 | ▲ 22/20/16 |
| FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.4 | 0.35 | 0.33 | 0.37 |



30k

1 20k 15k

umhar n 10

12000

8000

6000 Water 4000

> 2000 Ab 0 Sep29/22

10000 Se

800

6000 Water (

4000

2000 Ab

5

48 ()-41 ()-41 ()-44 ()-44

42

3

Sep29/22

B

Abnom 40

Ser 10000

Ac 0.50 Ba (^B/H0,40 Ê0.30 Ê 0.20 Pio 0.10

OIL ANALYSIS REPORT

method

method

ASTM D445

method

Sep18/23 -

Viscosity @ 40°C

55

50

35

B

Abnorma 40

* - 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)

(0-0+) 45

ŝ

limit/base

NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

limit/base

limit/base

>0.05

46

current

NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

curren

current

NEG

NEG

45.3

history1

NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

history

historv1

NEG

NEG

44.7

history2

NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

history

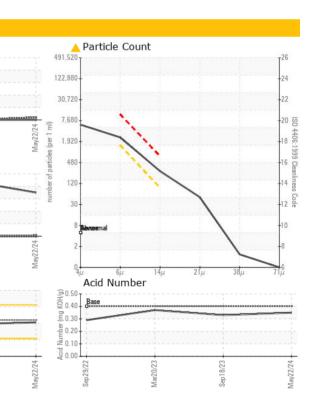
history2

NEG

NEG

44.6

| It for a lifetime." | | | | |
|--|--|--------------------|-----------|-----------|
| Particle Trend | | VISUAL | | metho |
| 4μm 6μm | | White Metal | scalar | *Visual |
| 14µm | | Yellow Metal | scalar | *Visual |
| $\langle \rangle$ | | Precipitate | scalar | *Visual |
| | | Silt | scalar | *Visual |
| States and a state of the state | \mathbf{i} | Debris | scalar | *Visual |
| | Constant of the second se | Sand/Dirt | scalar | *Visual |
| Mar20/23 | Sep 18/23 | Appearance Odor | scalar | *Visual |
| Marź | Sep1 | M Odor | scalar | *Visual |
| (KF) | | Emulsified Wat | er scalar | *Visual |
| | | Free Water | scalar | *Visual |
| | | FLUID PROF | PERTIES | metho |
| | | Visc @ 40°C | cSt | ASTM D |
| | | SAMPLE IM | AGES | metho |
| nal | | | | |
| Mar20/23 - | Sep18/23 - | May22/24 | | |
| 6 | | Bottom | | |
| | | GRAPHS | | |
| | 3 | Ferrous Alloy | S | |
| Mar20/23 | Sep18/23 | 8- iron | | |
| r (KF) | | E 6 4 nickel | J | |
| | | 04 | | ~ |
| | | Sep 29/2 | Mar20/23 | Sep 18/23 |
| | | | - | Sel |
| | | Non-ferrous | Metals | |
| | | 8 copper | | |
| mal | | | | |
| Mar20/23 - | Sep18/23 . | 2 | | |
| Mar2 | Sep1 | 2 | | |
| sity @ 40°C | | Sep 29/22 | Mar20/23 | Sep 18/23 |
| normal | | Sep. | Mar | Sep |





Sep29/22 Mar20/23 Sep 18/23 Mar20/23 Laboratory Sample No. : KC128576 Lab Number :06202719 Unique Number : 11070180 Test Package : IND 2 Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 07 Jun 2024 Tested : 10 Jun 2024 Diagnosed : 10 Jun 2024 - Don Baldridge

MONTAUK ENERGY 11 CO RD 78 AMSTERDAM, OH US 434903 Contact: Service Manager

Contact/Location: Service Manager - MONAMS Page 2 of 2