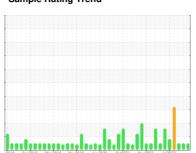


# **OIL ANALYSIS REPORT**

**Sample Rating Trend** 



NORMAL



# KAESER MR-AIRC-10 (S/N 1403)

Component

Compressor

**ULTRACHEM OMNILUBE 32/46 (--- GAL)** 

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|-------|----|-----|------|---------|-----|
| DI    | Αι | GII | V.   | $\circ$ | 0   |
|       |    |     |      |         |     |

## Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

## Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

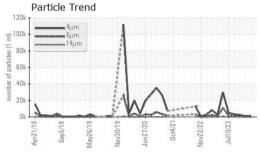
## **Fluid Condition**

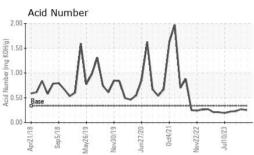
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

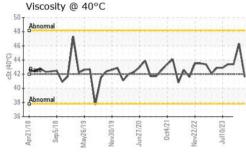
|                  |          | r2018 Sep20  | 18 May2019 Nov2019 | Jun2020 Oct2021 Nov2022 | Jul2023     |             |
|------------------|----------|--------------|--------------------|-------------------------|-------------|-------------|
| SAMPLE INFORM    | MATION   | method       | limit/base         | current                 | history1    | history2    |
| Sample Number    |          | Client Info  |                    | WC0826096               | WC0808569   | WC0842401   |
| Sample Date      |          | Client Info  |                    | 30 Oct 2023             | 03 Oct 2023 | 05 Sep 2023 |
| Machine Age      | hrs      | Client Info  |                    | 7929                    | 7378        | 6806        |
| Oil Age          | hrs      | Client Info  |                    | 0                       | 0           | 0           |
| Oil Changed      |          | Client Info  |                    | Changed                 | Not Changd  | Not Changd  |
| Sample Status    |          |              |                    | NORMAL                  | NORMAL      | NORMAL      |
| WEAR METALS      |          | method       | limit/base         | current                 | history1    | history2    |
| Iron             | ppm      | ASTM D5185m  | >50                | 0                       | 0           | <1          |
| Chromium         | ppm      | ASTM D5185m  | >10                | 0                       | 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                | <1                      | <1          | 0           |
| Lead             | ppm      | ASTM D5185m  | >10                | 0                       | 0           | 0           |
| Copper           | ppm      | ASTM D5185m  | >50                | 0                       | <1          | <1          |
| Tin              | ppm      | ASTM D5185m  | >10                | 0                       | 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  | 1                  | 0                       | 0           | 0           |
| Barium           | ppm      | ASTM D5185m  | 0.3                | 0                       | 0           | 0           |
| Molybdenum       | ppm      | ASTM D5185m  | 0                  | 0                       | 0           | 0           |
| Manganese        | ppm      | ASTM D5185m  | 0                  | 0                       | 0           | <1          |
| Magnesium        | ppm      | ASTM D5185m  | 0                  | 0                       | 3           | 2           |
| Calcium          | ppm      | ASTM D5185m  | 0.5                | 0                       | 0           | 0           |
| Phosphorus       | ppm      | ASTM D5185m  | 536                | 283                     | 28          | 33          |
| Zinc             | ppm      | ASTM D5185m  | 0.2                | 4                       | 0           | 0           |
| Sulfur           | ppm      | ASTM D5185m  | 649                | 1139                    | 1151        | 1548        |
| CONTAMINANTS     | \$       | method       | limit/base         | current                 | history1    | history2    |
| Silicon          | ppm      | ASTM D5185m  | >25                | 0                       | <1          | <1          |
| Sodium           | ppm      | ASTM D5185m  |                    | <1                      | <1          | <1          |
| Potassium        | ppm      | ASTM D5185m  | >20                | 0                       | <1          | <1          |
| FLUID CLEANLIN   | IESS     | method       | limit/base         | current                 | history1    | history2    |
| Particles >4µm   |          | ASTM D7647   |                    | 1469                    | 1095        | 2622        |
| Particles >6µm   |          | ASTM D7647   | >1300              | 477                     | 265         | 745         |
| Particles >14µm  |          | ASTM D7647   | >80                | 37                      | 20          | 35          |
| Particles >21µm  |          | ASTM D7647   | >20                | 10                      | 5           | 7           |
| Particles >38µm  |          | ASTM D7647   | >4                 | 0                       | 0           | 0           |
| Particles >71µm  |          | ASTM D7647   | >3                 | 0                       | 0           | 0           |
| Oil Cleanliness  |          | ISO 4406 (c) | >/17/13            | 18/16/12                | 17/15/11    | 19/17/12    |
| FLUID DEGRADA    | NOITA    | method       | limit/base         | current                 | history1    | history2    |
| Acid Number (AN) | mg KOH/g | ASTM D8045   | 0.337              | 0.25                    | 0.27        | 0.23        |

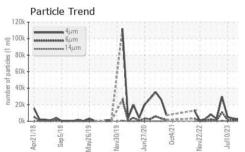


# **OIL ANALYSIS REPORT**









| VISUAL                  |        | method  | limit/base | current | history1 | history2 |
|-------------------------|--------|---------|------------|---------|----------|----------|
| White Metal             | scalar | *Visual | NONE       | NONE    | NONE     | NONE     |
| Yellow Metal            | scalar | *Visual | NONE       | NONE    | NONE     | NONE     |
| Precipitate             | scalar | *Visual | NONE       | NONE    | NONE     | NONE     |
| Silt                    | scalar | *Visual | NONE       | NONE    | NONE     | NONE     |
| Debris                  | scalar | *Visual | NONE       | NONE    | NONE     | LIGHT    |
| Sand/Dirt               | scalar | *Visual | NONE       | NONE    | NONE     | NONE     |
| Appearance              | scalar | *Visual | NORML      | NORML   | NORML    | NORML    |
| Odor                    | scalar | *Visual | NORML      | NORML   | NORML    | NORML    |
| <b>Emulsified Water</b> | scalar | *Visual | >0.05      | NEG     | NEG      | NEG      |
| Free Water              | scalar | *Visual |            | NEG     | NEG      | NEG      |
| FLUID DDODEDT           | 150    |         | 12 22 //   |         | 111      | 1        |

| FLUID PROPER | THES | method    | ilmit/base |      | nistory i | nistory |
|--------------|------|-----------|------------|------|-----------|---------|
| Visc @ 40°C  | cSt  | ASTM D445 | 42.0       | 41.6 | 46.3      | 43.4    |

| SAMI     | PLE IN | MAGE             | S |
|----------|--------|------------------|---|
| O, 11111 |        | <i>,,,,</i> ,,,, | _ |

Color

**Bottom** 



| Ferrous     | Alloys     |          |            |         |                    |          | Particle Count   |         |
|-------------|------------|----------|------------|---------|--------------------|----------|--|---------|
|             | 000000     |          |            |         |                    |          | 491,520  | Ī       |
|             |            |          |            |         |                    |          | 122,880  | +       |
| *********   | nickel     |          |            |         |                    |          | 30,720   |         |
| 1111111     | 777711     |          | -          | 4       | 1                  | _        | 7,680  | 1       |
| Sep5/18     | May26/19   | Nov30/19 | Jun27/20   | 0ct4/21 | Nov22/22           | Jul10/23 | 1 1,920 to auticles (per 1 120 - 120   |         |
| lon-fer     |            |          |            |         | ( <del>100</del> ) |          | \$5 OF THE RESERVE TO SERVE THE RESERVE TO SERVE THE RESERVE THE RE  |         |
|             | copper     |          |            |         |                    |          | 120  |         |
| t           |            |          |            |         | A                  |          | 30-  | +       |
| 2           | $\nearrow$ | A        | $\Lambda$  | A       |                    |          | 8 Sebresemal   |         |
| Sep5/18     | May26/19   | Nov30/19 | Jun27/20 - | 0ct4/21 | Nov22/22           | Jul10/23 | 2  |         |
|             |            |          | Juni       | ŏ       | Novi               | 3        | $04\mu$ $6\mu$ $14\mu$ $21\mu$   | 38µ 71µ |
| iscosity/   | y @ 40     | °C       |            |         |                    |          | Acid Number  | 30µ 11) |
| Abnormal    | A          |          |            |         |                    |          | \(\frac{\text{\tinit}\\ \text{\tin}\tint{\tinit}\\ \tint{\text{\text{\text{\text{\text{\text{\text{\text{\texi}\tint{\text{\texi}\tint{\text{\texi}\tint{\text{\texi}\tin}\tint{\text{\texi}\tint{\text{\ti}\tint{\text{\tinit}\tex{   |         |
| Base        | 1          | _        | 1          | 1       |                    | لسا      | (S) 2.00<br>(S) 1.50<br>(S) 1. |         |
| The same of |            | -        | -          | -       | ~                  | -        | 9 100  | h       |





Certificate L2367

Laboratory

Sample No. Lab Number **Unique Number** 

: WC0826096 : 05999806 : 10728166

cSt (40°C)

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received Diagnosed

: 08 Nov 2023

Diagnostician : Don Baldridge

: 06 Nov 2023

Test Package : IND 2 ( Additional Tests: PrtCount )

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) **BURKE CORPORATION.** 

1516 SOUTH D AVE NEVADA, IA US 50201

Contact: EDWARDO COBIO JECOBIO@BURKECORP.COM

T:

Contact/Location: EDWARDO COBIO - BURNEV

F: (515)382-3955