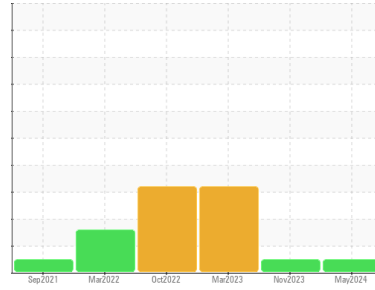




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
CS-46 [PLC1742026]
 Machine Id
KAESER 1088 - CAL BIO
 Component
Compressor

DIAGNOSIS

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.

Fluid Condition

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

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | UCH06208808 | UCH06027913 | UCH05817671 |
| Sample Date | Client Info | | 31 May 2024 | 30 Nov 2023 | 30 Mar 2023 |
| Machine Age | hrs | Client Info | 23685 | 20251 | 16226 |
| Oil Age | hrs | Client Info | 23685 | 4000 | 0 |
| Oil Changed | Client Info | | Changed | Not Changd | Changed |
| Sample Status | | | NORMAL | NORMAL | ATTENTION |

CONTAMINATION

| | method | limit/base | current | history1 | history2 |
|-------|-----------|------------|------------|----------|----------|
| Water | WC Method | >0.05 | NEG | NEG | NEG |

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 | 0 |
| Titanium | ppm | ASTM D5185m >3 | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m >10 | <1 | 1 | 1 |
| Lead | ppm | ASTM D5185m >10 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m >50 | 1 | 4 | 4 |
| Tin | ppm | ASTM D5185m >10 | <1 | 0 | 0 |
| 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 1.5 | 0 | 0 | 0 |
| Barium | ppm | ASTM D5185m 0 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m 0 | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m 0.3 | 0 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m 0 | 0 | 0 | 0 |
| Calcium | ppm | ASTM D5185m 0 | 0 | 0 | 0 |
| Phosphorus | ppm | ASTM D5185m 406 | 135 | 152 | 134 |
| Zinc | ppm | ASTM D5185m 0 | 0 | <1 | 0 |
| Sulfur | ppm | ASTM D5185m 1283 | 1754 | 1759 | 5104 |

CONTAMINANTS

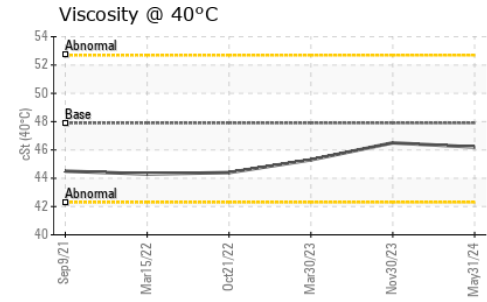
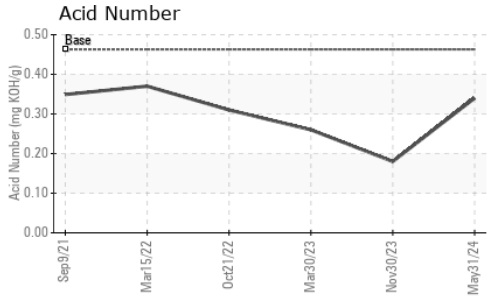
| | method | limit/base | current | history1 | history2 |
|-----------|--------|-----------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m >25 | <1 | <1 | 3 |
| Sodium | ppm | ASTM D5185m | <1 | 3 | <1 |
| Potassium | ppm | ASTM D5185m >20 | 0 | 2 | 0 |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|------------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 0.463 | 0.34 | 0.18 | 0.26 |



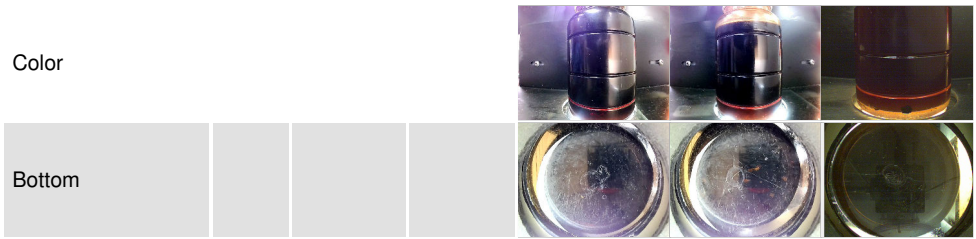
OIL ANALYSIS REPORT



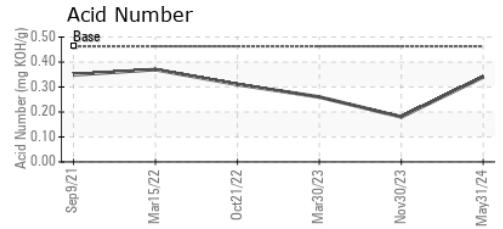
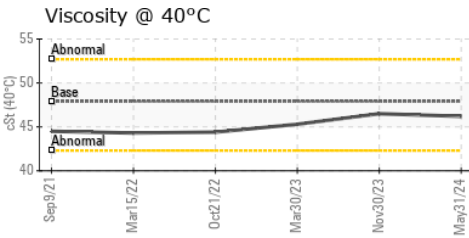
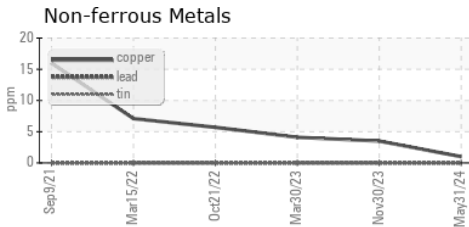
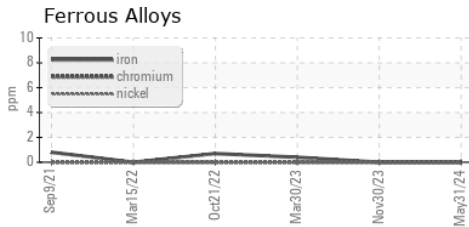
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | MODER |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.05 | NEG | 0.2% |
| Free Water | scalar | *Visual | | NEG | 10.0 |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 47.9 | 46.2 | 46.5 |

| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|----------|----------|
|---------------|--------|------------|---------|----------|----------|



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : UCH06208808 **Received** : 13 Jun 2024
Lab Number : 06208808 **Tested** : 14 Jun 2024
Unique Number : 11076269 **Diagnosed** : 14 Jun 2024 - Wes Davis
Test Package : IND 2

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 214 27TH ST
 SACRAMENTO, CA
 US 95816
 Contact: BARRY FRKOVICH
 barryfrkovich@ciscoair.com
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 F: x:

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)