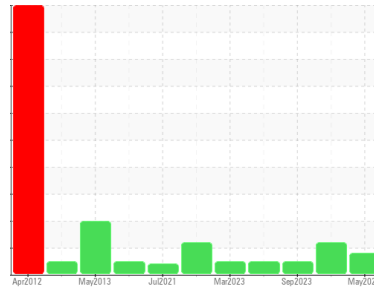




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area

NER

Machine Id

RHEINSTAHL NH3 - NER-C1 OK20010 (S/N 98M-139-0100D)

Component

Refrigeration Compressor

Fluid

USPI 1009-68 SC (200 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 14 microns in size) 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 INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | USP0012716 | USP0003609 | USP242779 |
| Sample Date | Client Info | | 29 May 2024 | 19 Nov 2023 | 27 Sep 2023 |
| Machine Age | hrs | Client Info | 0 | 0 | 0 |
| Oil Age | hrs | Client Info | 0 | 0 | 0 |
| Oil Changed | Client Info | | N/A | N/A | N/A |
| Sample Status | | | ATTENTION | ATTENTION | NORMAL |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|----------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m >8 | 2 | 0 | 0 |
| Chromium | ppm | ASTM D5185m >2 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m >2 | 0 | <1 | 0 |
| Aluminum | ppm | ASTM D5185m >3 | 0 | <1 | <1 |
| Lead | ppm | ASTM D5185m >2 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m >8 | 0 | 0 | 0 |
| Tin | ppm | ASTM D5185m >4 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | <1 | <1 | 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 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | 0 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | 0 | <1 | 0 |
| Calcium | ppm | ASTM D5185m | <1 | 1 | 0 |
| Phosphorus | ppm | ASTM D5185m | 0 | 1 | 0 |
| Zinc | ppm | ASTM D5185m | 3 | 0 | 0 |
| Sulfur | ppm | ASTM D5185m 50 | 7 | 18 | 2 |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|------------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m >15 | <1 | 0 | <1 |
| Sodium | ppm | ASTM D5185m | 0 | <1 | <1 |
| Potassium | ppm | ASTM D5185m >20 | 0 | 2 | 0 |
| Water | % | ASTM D6304 >0.01 | 0.003 | 0.001 | 0.001 |
| ppm Water | ppm | ASTM D6304 >100 | 34 | 9.6 | 5.4 |

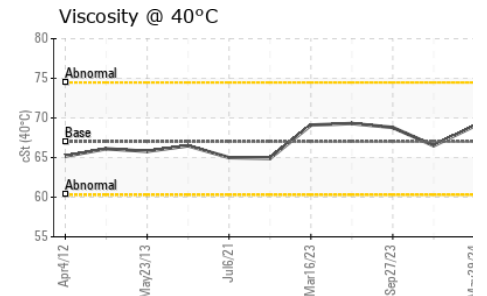
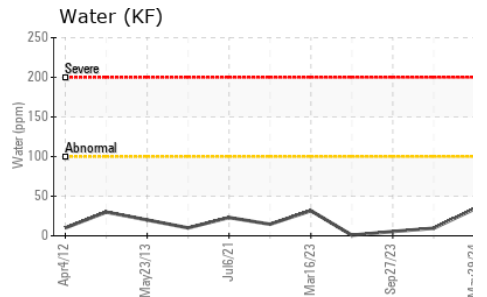
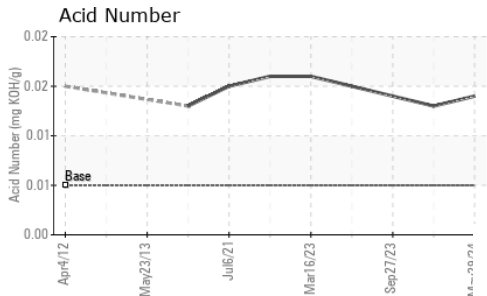
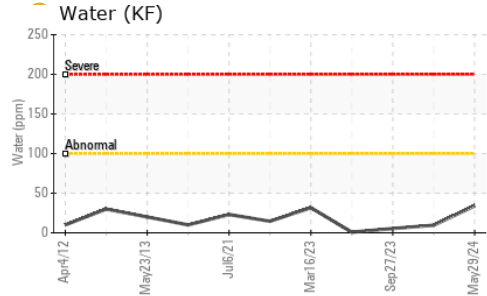
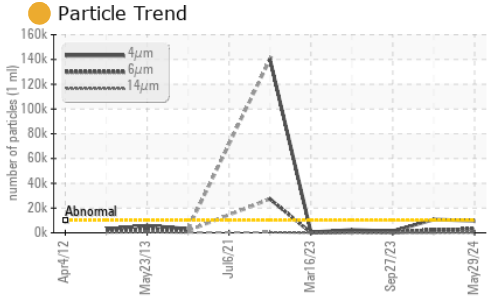
FLUID CLEANLINESS

| | method | limit/base | current | history1 | history2 |
|-----------------|--------------|------------|-----------------|----------|----------|
| Particles >4µm | ASTM D7647 | >10000 | 9723 | 10768 | 1368 |
| Particles >6µm | ASTM D7647 | >2500 | 2981 | 2518 | 369 |
| Particles >14µm | ASTM D7647 | >320 | 176 | 108 | 16 |
| Particles >21µm | ASTM D7647 | >80 | 42 | 23 | 3 |
| Particles >38µm | ASTM D7647 | >20 | 1 | 1 | 0 |
| Particles >71µm | ASTM D7647 | >4 | 0 | 0 | 0 |
| Oil Cleanliness | ISO 4406 (c) | >20/18/15 | 20/19/15 | 21/19/14 | 18/16/11 |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|-----------------|--------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D974 0.005 | 0.014 | 0.013 | 0.014 |

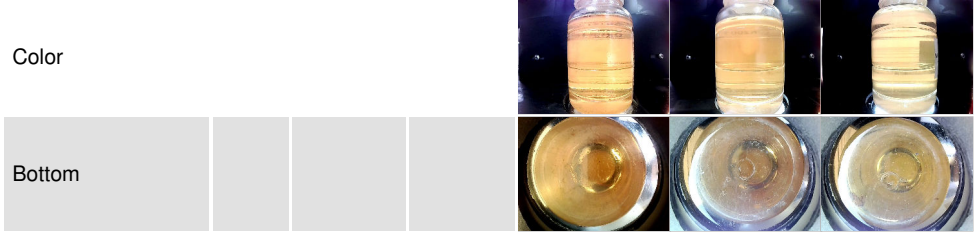
OIL ANALYSIS REPORT



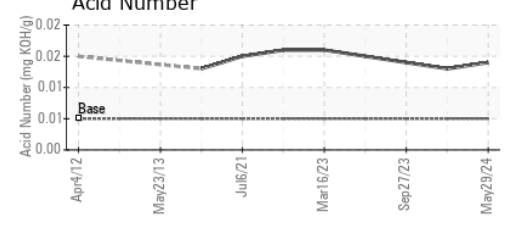
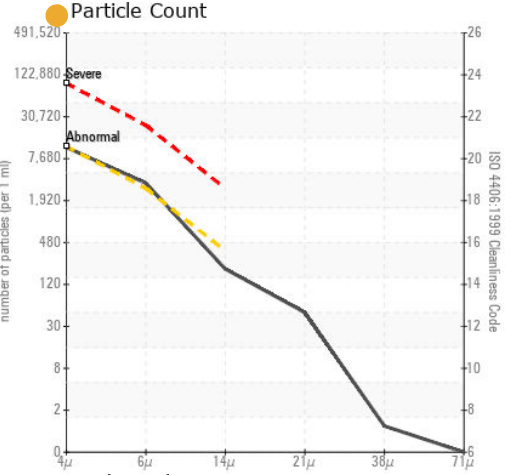
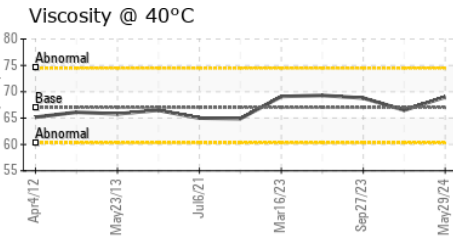
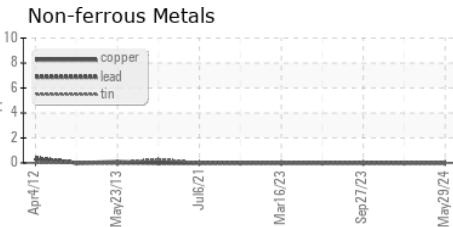
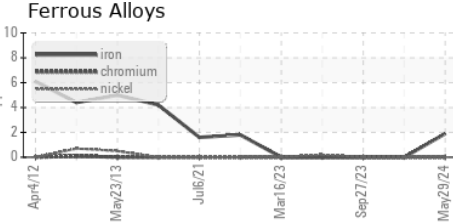
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | LIGHT |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.01 | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|--------------|-------------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 67 | 69.0 | 66.5 | 68.8 |

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



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP0012716 **Received** : 30 May 2024
Lab Number : 06195959 **Tested** : 02 Jun 2024
Unique Number : 11058082 **Diagnosed** : 02 Jun 2024 - Doug Bogart
Test Package : IND 2

SCHWANS BAKERY
 5 EAST WALNUT
 STILWELL, OK
 US 74960
 Contact: DENNIS LONGSHORE

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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F: