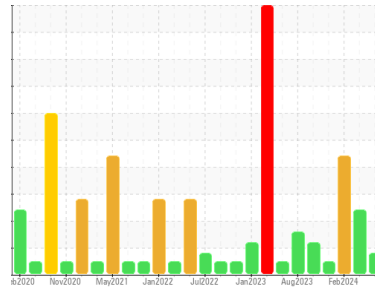


OIL ANALYSIS REPORT

Sample Rating Trend



SEDIMENT



Area
Process Cheese [98894050 BEFORE]
 Machine Id
BLENDER 2
 Component
Gearbox
 Fluid
GEAR OIL ISO 320 (--- GAL)

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of visible silt present in the sample.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

| method | limit/base | current | history1 | history2 |
|---------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | PCA0117970 | PCA0117969 | PCA0117985 |
| Sample Date | Client Info | 09 Mar 2024 | 21 Feb 2024 | 17 Feb 2024 |
| Machine Age | hrs | 0 | 0 | 0 |
| Oil Age | hrs | 0 | 0 | 0 |
| Oil Changed | Client Info | Changed | Filtered | Changed |
| Sample Status | | ABNORMAL | ABNORMAL | SEVERE |

CONTAMINATION

| method | limit/base | current | history1 | history2 |
|--------|----------------|------------|----------|----------|
| Water | WC Method >0.2 | NEG | NEG | NEG |

WEAR METALS

| method | limit/base | current | history1 | history2 |
|----------|----------------------|--------------|----------|----------|
| Iron | ppm ASTM D5185m >200 | 74 | 0 | 28 |
| Chromium | ppm ASTM D5185m >15 | <1 | <1 | <1 |
| Nickel | ppm ASTM D5185m >15 | <1 | 0 | 0 |
| Titanium | ppm ASTM D5185m | <1 | 0 | 0 |
| Silver | ppm ASTM D5185m | 0 | 0 | 0 |
| Aluminum | ppm ASTM D5185m >25 | 0 | 0 | 0 |
| Lead | ppm ASTM D5185m >100 | 0 | 0 | 0 |
| Copper | ppm ASTM D5185m >200 | <1 | 0 | 0 |
| Tin | ppm ASTM D5185m >25 | 0 | 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 50 | 0 | 0 | 0 |
| Barium | ppm ASTM D5185m 15 | 0 | 0 | 0 |
| Molybdenum | ppm ASTM D5185m 15 | 0 | 0 | 0 |
| Manganese | ppm ASTM D5185m | <1 | <1 | <1 |
| Magnesium | ppm ASTM D5185m 50 | <1 | <1 | 2 |
| Calcium | ppm ASTM D5185m 50 | 0 | 1 | 5 |
| Phosphorus | ppm ASTM D5185m 350 | 510 | 431 | 417 |
| Zinc | ppm ASTM D5185m 100 | 0 | 0 | 13 |
| Sulfur | ppm ASTM D5185m 12500 | 1628 | 1158 | 1187 |

CONTAMINANTS

| method | limit/base | current | history1 | history2 |
|-----------|---------------------|--------------|----------|----------|
| Silicon | ppm ASTM D5185m >50 | 3 | 2 | 1 |
| Sodium | ppm ASTM D5185m | 1 | 0 | 0 |
| Potassium | ppm ASTM D5185m >20 | <1 | 0 | 0 |

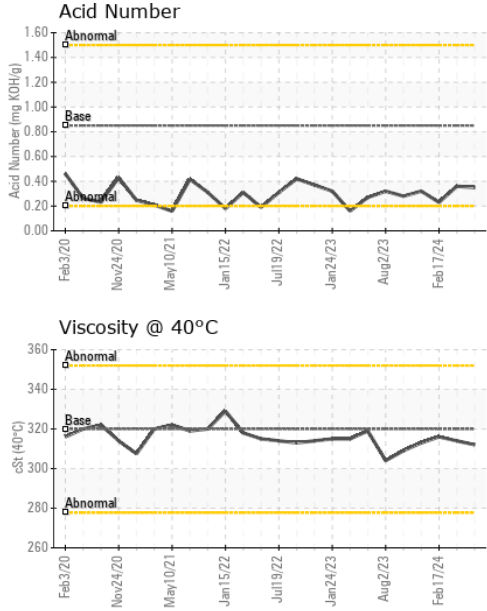
FLUID CLEANLINESS

| method | limit/base | current | history1 | history2 |
|-----------------|------------------------|---------|------------|----------|
| Particles >4µm | ASTM D7647 >1300 | --- | ▲ 15506 | --- |
| Particles >6µm | ASTM D7647 >320 | --- | ▲ 3588 | --- |
| Particles >14µm | ASTM D7647 >80 | --- | ▲ 195 | --- |
| Particles >21µm | ASTM D7647 >20 | --- | ▲ 44 | --- |
| Particles >38µm | ASTM D7647 >4 | --- | 1 | --- |
| Particles >71µm | ASTM D7647 >3 | --- | 0 | --- |
| Oil Cleanliness | ISO 4406 (c) >17/15/13 | --- | ▲ 21/19/15 | --- |

FLUID DEGRADATION

| method | limit/base | current | history1 | history2 |
|---------------------------|-----------------|-------------|----------|----------|
| Acid Number (AN) mg KOH/g | ASTM D8045 0.85 | 0.35 | 0.36 | 0.23 |

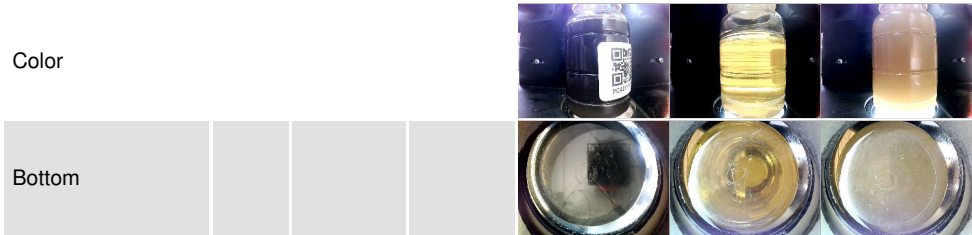
OIL ANALYSIS REPORT



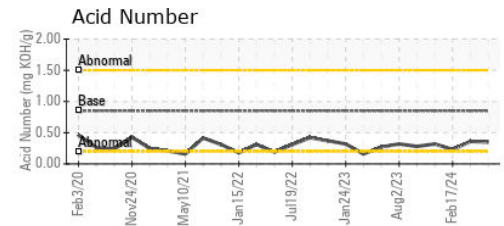
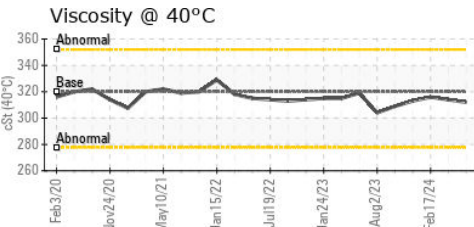
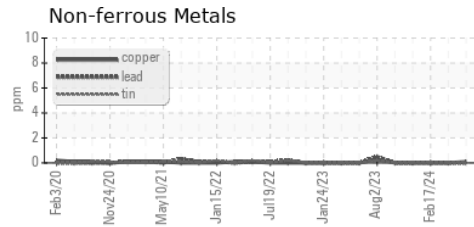
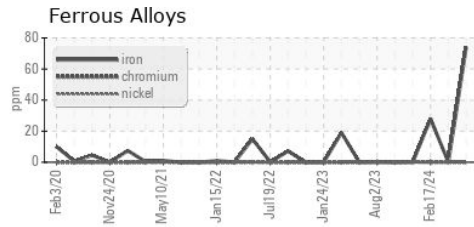
| VISUAL | method | limit/base | current | history1 | history2 | |
|------------------|--------|------------|---------|----------------|----------------|----------------|
| White Metal | scalar | *Visual | NONE | MODER | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
|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

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 | |
|------------------|--------|------------|---------|------------|----------|-----|
| Visc @ 40°C | cSt | ASTM D445 | 320 | 312 | 314 | 316 |

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



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0117970
Lab Number : **06120844**
Unique Number : 10929677
Test Package : IND 2 (Additional Tests: PrtCount)

KraftHeinz - Springfield - Plant 8311 PCA
 2035 E BENNETT
 SPRINGFIELD, MO
 US 65804
 Contact: Service Manager

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)

T:
F: