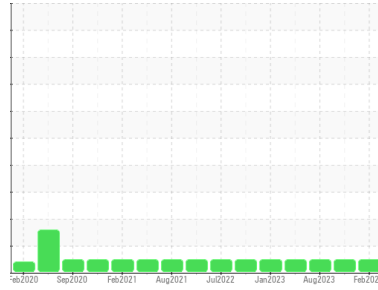


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**Process Cheese [98778533]**  
 Machine Id  
**BLENDER 10**  
 Component  
**Gearbox**  
 Fluid  
**GEAR OIL ISO 320 (--- GAL)**

## 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. 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.

## SAMPLE INFORMATION

| method        | limit/base      | current            | history1    | history2    |
|---------------|-----------------|--------------------|-------------|-------------|
| Sample Number | Client Info     | <b>PCA0117979</b>  | PCA0101649  | PCA0094568  |
| Sample Date   | Client Info     | <b>01 Feb 2024</b> | 09 Nov 2023 | 28 Aug 2023 |
| Machine Age   | hrs Client Info | <b>0</b>           | 0           | 0           |
| Oil Age       | hrs Client Info | <b>0</b>           | 0           | 0           |
| Oil Changed   | Client Info     | <b>Filtered</b>    | Filtered    | Filtered    |
| Sample Status |                 | <b>NORMAL</b>      | NORMAL      | NORMAL      |

## CONTAMINATION

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

## WEAR METALS

| method   | limit/base           | current      | history1 | history2 |
|----------|----------------------|--------------|----------|----------|
| Iron     | ppm ASTM D5185m >200 | <b>0</b>     | 1        | 0        |
| Chromium | ppm ASTM D5185m >15  | <b>0</b>     | <1       | <1       |
| Nickel   | ppm ASTM D5185m >15  | <b>0</b>     | <1       | 0        |
| Titanium | ppm ASTM D5185m      | <b>0</b>     | <1       | <1       |
| Silver   | ppm ASTM D5185m      | <b>0</b>     | 0        | 0        |
| Aluminum | ppm ASTM D5185m >25  | <b>0</b>     | 2        | 0        |
| Lead     | ppm ASTM D5185m >100 | <b>0</b>     | 0        | <1       |
| Copper   | ppm ASTM D5185m >200 | <b>&lt;1</b> | <1       | <1       |
| Tin      | ppm ASTM D5185m >25  | <b>&lt;1</b> | <1       | <1       |
| Vanadium | ppm ASTM D5185m      | <b>0</b>     | 0        | <1       |
| Cadmium  | ppm ASTM D5185m      | <b>0</b>     | <1       | <1       |

## ADDITIVES

| method     | limit/base            | current      | history1 | history2 |
|------------|-----------------------|--------------|----------|----------|
| Boron      | ppm ASTM D5185m 50    | <b>0</b>     | 0        | 0        |
| Barium     | ppm ASTM D5185m 15    | <b>0</b>     | 4        | 0        |
| Molybdenum | ppm ASTM D5185m 15    | <b>0</b>     | <1       | 0        |
| Manganese  | ppm ASTM D5185m       | <b>&lt;1</b> | <1       | <1       |
| Magnesium  | ppm ASTM D5185m 50    | <b>0</b>     | 0        | 6        |
| Calcium    | ppm ASTM D5185m 50    | <b>0</b>     | 0        | 0        |
| Phosphorus | ppm ASTM D5185m 350   | <b>423</b>   | 442      | 361      |
| Zinc       | ppm ASTM D5185m 100   | <b>&lt;1</b> | 11       | 18       |
| Sulfur     | ppm ASTM D5185m 12500 | <b>843</b>   | 774      | 560      |

## CONTAMINANTS

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

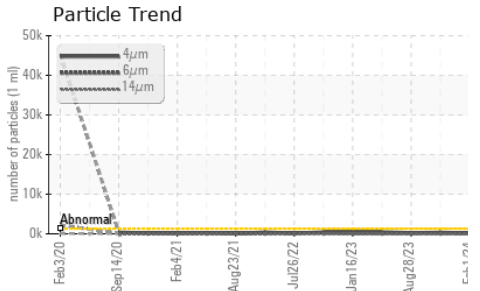
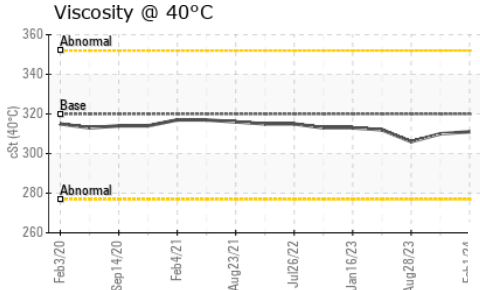
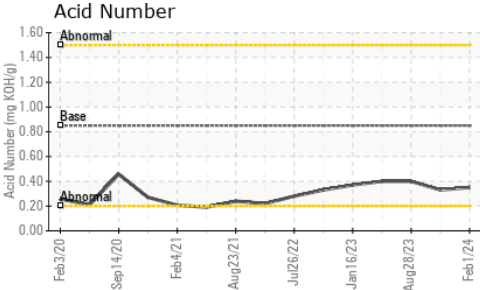
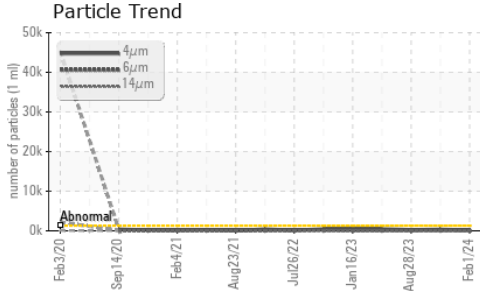
## FLUID CLEANLINESS

| method          | limit/base             | current         | history1 | history2 |
|-----------------|------------------------|-----------------|----------|----------|
| Particles >4µm  | ASTM D7647 >1300       | <b>192</b>      | 366      | 261      |
| Particles >6µm  | ASTM D7647 >320        | <b>37</b>       | 87       | 54       |
| Particles >14µm | ASTM D7647 >80         | <b>5</b>        | 9        | 8        |
| Particles >21µm | ASTM D7647 >20         | <b>2</b>        | 4        | 3        |
| Particles >38µm | ASTM D7647 >4          | <b>0</b>        | 0        | 1        |
| Particles >71µm | ASTM D7647 >3          | <b>0</b>        | 0        | 0        |
| Oil Cleanliness | ISO 4406 (c) >17/15/13 | <b>15/12/10</b> | 16/14/10 | 15/13/10 |

## FLUID DEGRADATION

| method                    | limit/base      | current     | history1 | history2 |
|---------------------------|-----------------|-------------|----------|----------|
| Acid Number (AN) mg KOH/g | ASTM D8045 0.85 | <b>0.35</b> | 0.33     | 0.40     |

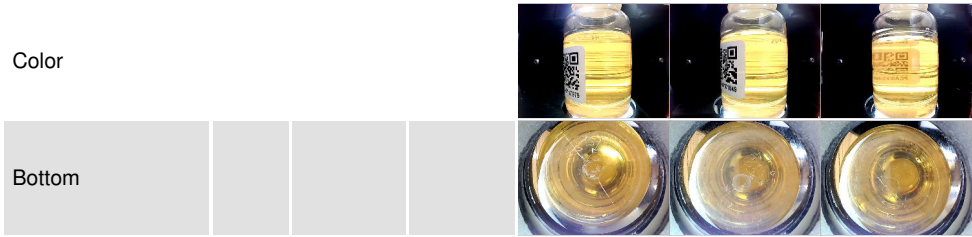
# OIL ANALYSIS REPORT



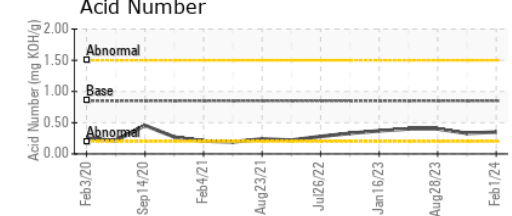
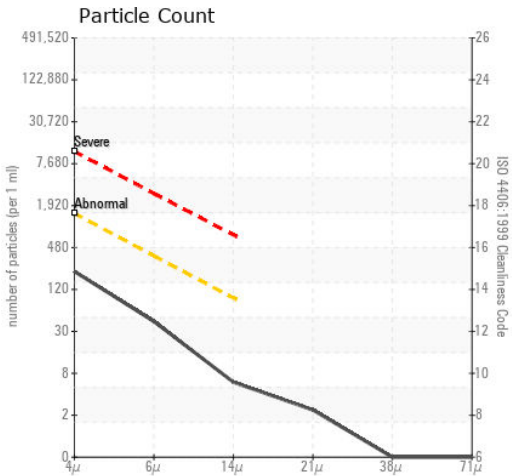
| PARAMETER        | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
|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

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445  | 320     | 311      | 310      |

### SAMPLE IMAGES



### GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0117979  
**Lab Number** : 06090128  
**Unique Number** : 10882981  
**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: