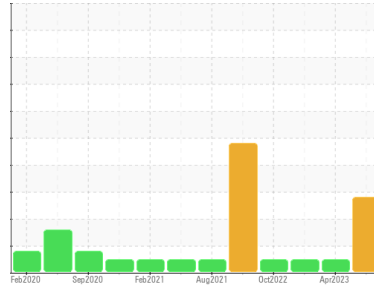


# PROBLEM SUMMARY

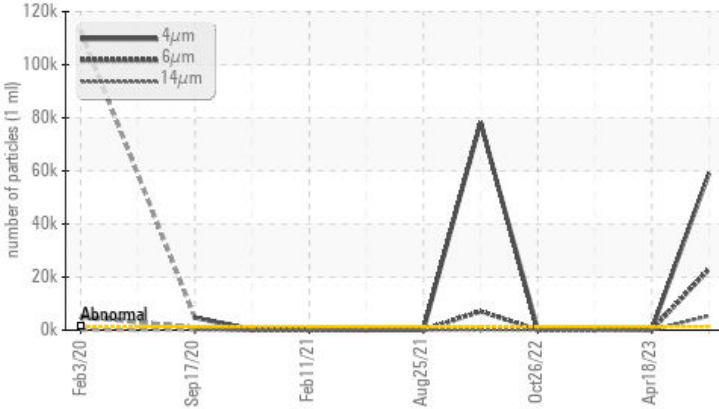
Area  
**Process Cheese [98482910]**  
 Machine Id  
**BLENDER 11**  
 Component  
**Gearbox**  
 Fluid  
**GEAR OIL ISO 320 (--- GAL)**

Sample Rating Trend



## COMPONENT CONDITION SUMMARY

▲ Particle Trend



## RECOMMENDATION

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

| Sample Status   |              |           | ABNORMAL   | NORMAL   | NORMAL   |
|-----------------|--------------|-----------|------------|----------|----------|
| Particles >4µm  | ASTM D7647   | >1300     | ▲ 59125    | 312      | 856      |
| Particles >6µm  | ASTM D7647   | >320      | ▲ 23017    | 67       | 184      |
| Particles >14µm | ASTM D7647   | >80       | ▲ 5385     | 9        | 13       |
| Particles >21µm | ASTM D7647   | >20       | ▲ 1936     | 4        | 3        |
| Particles >38µm | ASTM D7647   | >4        | ▲ 61       | 0        | 1        |
| Particles >71µm | ASTM D7647   | >3        | ▲ 11       | 0        | 0        |
| Oil Cleanliness | ISO 4406 (c) | >17/15/13 | ▲ 23/22/20 | 15/13/10 | 17/15/11 |

Customer Id: KRASPRMO  
 Sample No.: PCA0094574  
 Lab Number: 05945700  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@wearcheckusa.com)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

| Action        | Status | Date | Done By | Description   |
|---------------|--------|------|---------|---|
| Change Filter | ---    | ---  | ?       | We recommend you service the filters on this component if applicable. |

## HISTORICAL DIAGNOSIS

**18 Apr 2023 Diag: Jonathan Hester**

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



**19 Jan 2023 Diag: Angela Borella**

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the component. The amount and size of particulates present in the system is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



**26 Oct 2022 Diag: Don Baldrige**

NORMAL

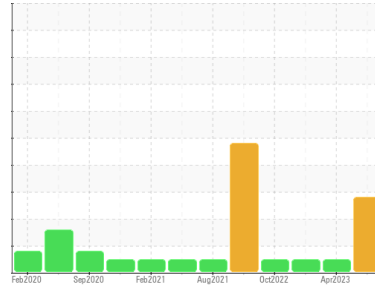


Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



Area  
**Process Cheese [98482910]**  
 Machine Id  
**BLENDER 11**  
 Component  
**Gearbox**  
 Fluid  
**GEAR OIL ISO 320 (--- GAL)**



## DIAGNOSIS

**Recommendation**  
 We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

**Wear**  
 All component wear rates are normal.

**Contamination**  
 There is a high amount of particulates 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 | <b>PCA0094574</b>  | PCA0088319  | PCA0081556  |
| Sample Date   | Client Info | <b>28 Aug 2023</b> | 18 Apr 2023 | 19 Jan 2023 |
| Machine Age   | hrs         | 0                  | 0           | 0           |
| Oil Age       | hrs         | 0                  | 0           | 0           |
| Oil Changed   | Client Info | <b>Filtered</b>    | Filtered    | Filtered    |
| Sample Status |             | <b>ABNORMAL</b>    | NORMAL      | NORMAL      |

## WEAR METALS

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

## 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>   | 0        | 0   |
| Molybdenum | ppm        | ASTM D5185m 15    | <b>0</b>   | 0        | 0   |
| Manganese  | ppm        | ASTM D5185m       | <b>0</b>   | <1       | 0   |
| Magnesium  | ppm        | ASTM D5185m 50    | <b>0</b>   | 0        | 0   |
| Calcium    | ppm        | ASTM D5185m 50    | <b>0</b>   | <1       | 0   |
| Phosphorus | ppm        | ASTM D5185m 350   | <b>400</b> | 329      | 312 |
| Zinc       | ppm        | ASTM D5185m 100   | <b>5</b>   | 12       | 9   |
| Sulfur     | ppm        | ASTM D5185m 12500 | <b>598</b> | 550      | 311 |

## CONTAMINANTS

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

## FLUID CLEANLINESS

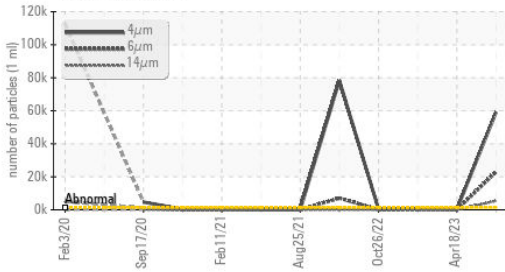
| method          | limit/base             | current           | history1 | history2 |
|-----------------|------------------------|-------------------|----------|----------|
| Particles >4µm  | ASTM D7647 >1300       | <b>▲ 59125</b>    | 312      | 856      |
| Particles >6µm  | ASTM D7647 >320        | <b>▲ 23017</b>    | 67       | 184      |
| Particles >14µm | ASTM D7647 >80         | <b>▲ 5385</b>     | 9        | 13       |
| Particles >21µm | ASTM D7647 >20         | <b>▲ 1936</b>     | 4        | 3        |
| Particles >38µm | ASTM D7647 >4          | <b>▲ 61</b>       | 0        | 1        |
| Particles >71µm | ASTM D7647 >3          | <b>▲ 11</b>       | 0        | 0        |
| Oil Cleanliness | ISO 4406 (c) >17/15/13 | <b>▲ 23/22/20</b> | 15/13/10 | 17/15/11 |

## FLUID DEGRADATION

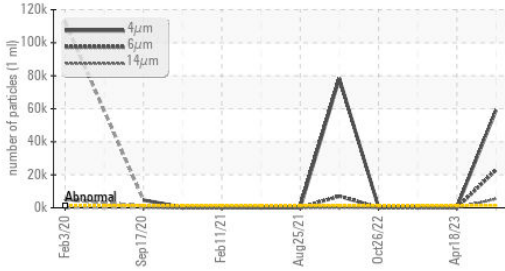
| method           | limit/base | current         | history1    | history2 |      |
|------------------|------------|-----------------|-------------|----------|------|
| Acid Number (AN) | mg KOH/g   | ASTM D8045 0.85 | <b>0.35</b> | 0.35     | 0.36 |

# OIL ANALYSIS REPORT

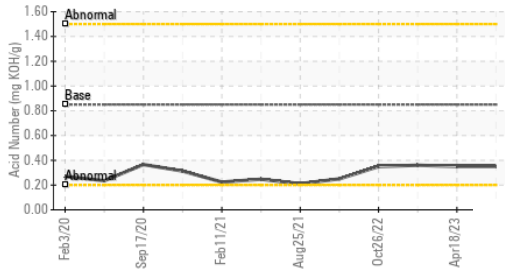
## ▲ Particle Trend



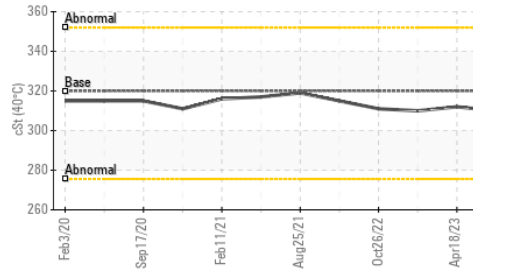
## ▲ Particle Trend



## Acid Number



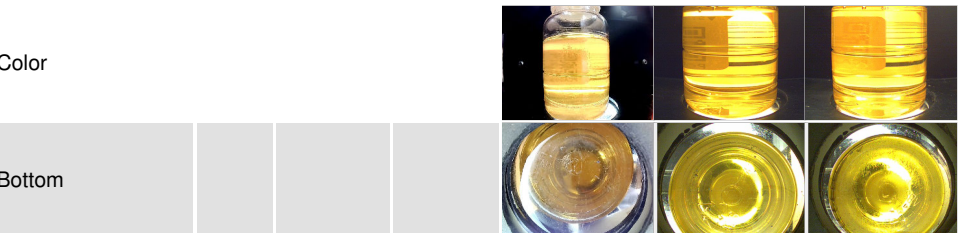
## Viscosity @ 40°C



| 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      |

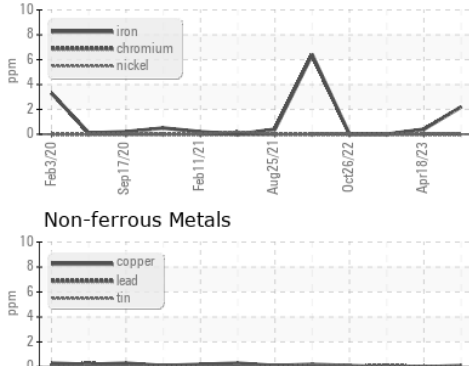
| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445  | 320     | 310      | 312      |

## SAMPLE IMAGES

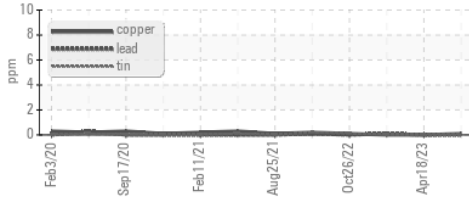


## GRAPHS

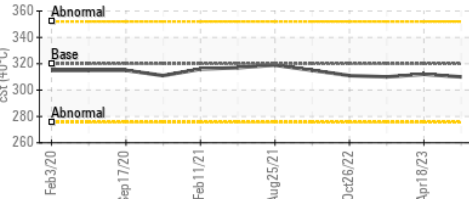
### Ferrous Alloys



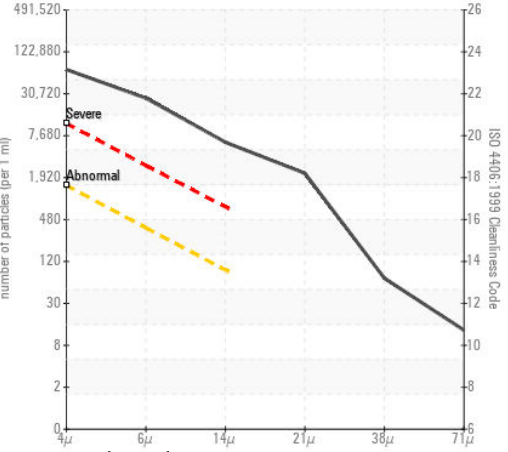
### Non-ferrous Metals



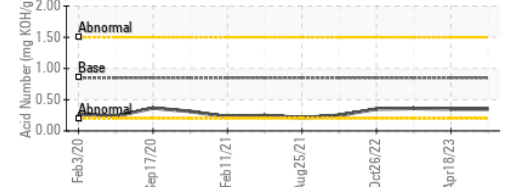
### Viscosity @ 40°C



### ▲ Particle Count



### Acid Number



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0094574  
**Lab Number** : 05945700  
**Unique Number** : 10636312  
**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: