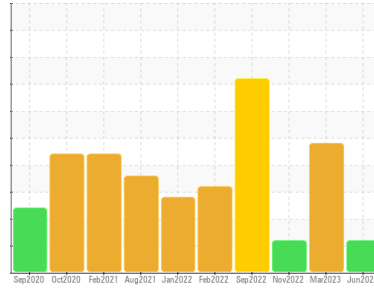


# PROBLEM SUMMARY

Area  
**PROCESS CHEESE [98316595]**  
 Machine Id  
**COOKER 5**  
 Component  
**Gearbox**  
 Fluid  
**GEAR OIL ISO 320 (--- GAL)**

Sample Rating Trend



## CONTAMINANT



## COMPONENT CONDITION SUMMARY

No relevant graphs to display


## 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.

## PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Debris	scalar	*Visual	NONE	▲ MODER	NONE	NONE
Appearance	scalar	*Visual	NORML	▲ HAZY	▲ HAZY	NORML

**Customer Id:** KRASPRMO  
**Sample No.:** PCA0100133  
**Lab Number:** 05887826  
**Test Package:** IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

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
Alert	---	---	?	We were unable to perform a particle count due to a high concentration of particles present in this sample.

## HISTORICAL DIAGNOSIS

### 18 Mar 2023 Diag: Don Baldrige

WATER



We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. Appearance is hazy. There is a high amount of particulates present in the oil. Free water present. The AN level is acceptable for this fluid.

view report



### 05 Nov 2022 Diag: Jonathan Hester

ISO



The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 10 Sep 2022 Diag: Jonathan Hester

WATER

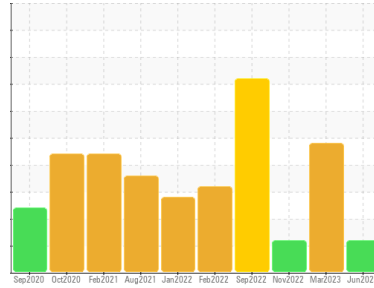


We advise that you check for the source of water entry. We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. Gear wear is indicated. Appearance is hazy. There is a high amount of particulates present in the oil. Free water present. There is a light concentration of water present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



# OIL ANALYSIS REPORT

**Sample Rating Trend**

**CONTAMINANT**


Area  
**PROCESS CHEESE [98316595]**  
 Machine Id  
**COOKER 5**  
 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**

Moderate concentration of visible dirt/debris present in the oil.

**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	history 1	history 2
Sample Number	Client Info	<b>PCA0100133</b>	PCA0088295	PCA0081579
Sample Date	Client Info	<b>17 Jun 2023</b>	18 Mar 2023	05 Nov 2022
Machine Age	hrs	<b>0</b>	0	0
Oil Age	hrs	<b>0</b>	0	0
Oil Changed	Client Info	<b>Changed</b>	Changed	Changed
Sample Status		<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

**WEAR METALS**

method	limit/base	current	history 1	history 2	
Iron	ppm	ASTM D5185m >200	<b>74</b>	51	125
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>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>&lt;1</b>	1	<1
Lead	ppm	ASTM D5185m >100	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m >200	<b>0</b>	<1	<1
Tin	ppm	ASTM D5185m >25	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

**ADDITIVES**

method	limit/base	current	history 1	history 2	
Boron	ppm	ASTM D5185m 50	<b>0</b>	0	0
Barium	ppm	ASTM D5185m 15	<b>14</b>	0	0
Molybdenum	ppm	ASTM D5185m 15	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 50	<b>12</b>	0	0
Calcium	ppm	ASTM D5185m 50	<b>2</b>	0	0
Phosphorus	ppm	ASTM D5185m 350	<b>507</b>	458	620
Zinc	ppm	ASTM D5185m 100	<b>31</b>	4	<1
Sulfur	ppm	ASTM D5185m 12500	<b>1599</b>	1108	1319

**CONTAMINANTS**

method	limit/base	current	history 1	history 2	
Silicon	ppm	ASTM D5185m >50	<b>1</b>	4	2
Sodium	ppm	ASTM D5185m	<b>1</b>	0	1
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	0
Water	%	ASTM D6304 >0.2	<b>0.141</b>	0.188	0.176
ppm Water	ppm	ASTM D6304 >2000	<b>1410</b>	1880	1760

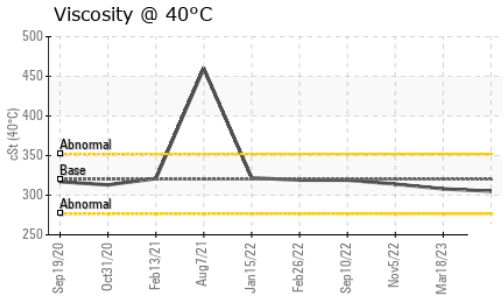
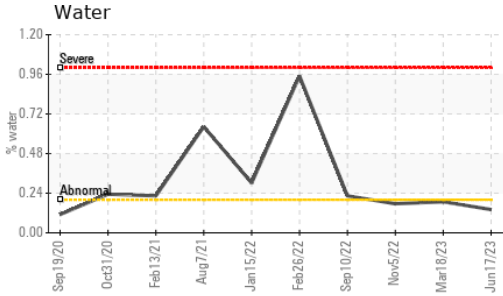
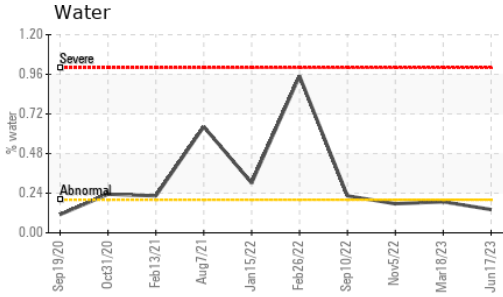
**FLUID CLEANLINESS**

method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647 >1300	---	▲ 1548	▲ 201141
Particles >6µm	ASTM D7647 >320	---	▲ 844	▲ 25343
Particles >14µm	ASTM D7647 >80	---	▲ 144	61
Particles >21µm	ASTM D7647 >20	---	▲ 48	7
Particles >38µm	ASTM D7647 >4	---	▲ 7	0
Particles >71µm	ASTM D7647 >3	---	▲ 1	0
Oil Cleanliness	ISO 4406 (c) >17/15/13	---	▲ 18/17/14	▲ 25/22/13

**FLUID DEGRADATION**

method	limit/base	current	history 1	history 2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.85	<b>0.34</b>	0.36	0.40

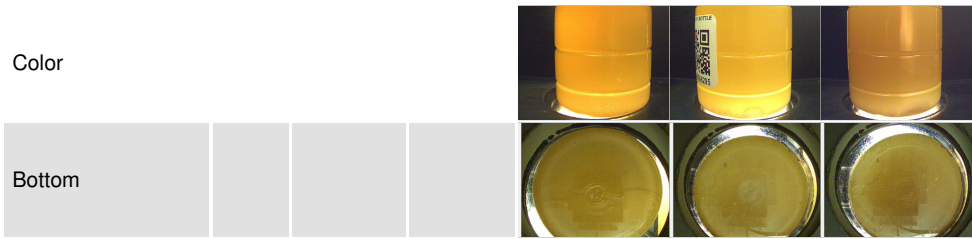
# OIL ANALYSIS REPORT



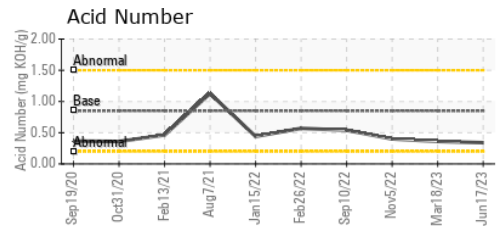
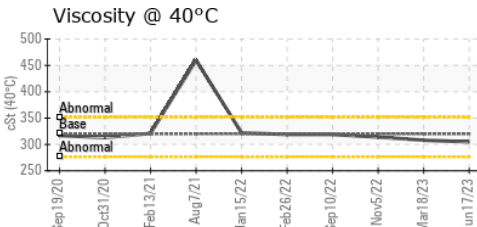
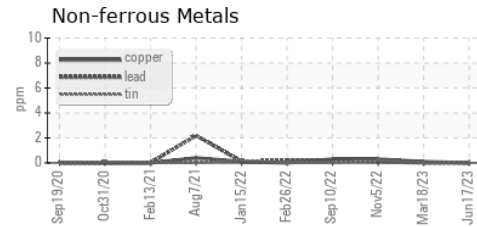
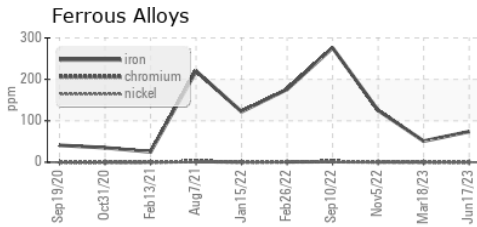
VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	▲ HAZY	▲ HAZY
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	0.2%	0.2%
Free Water	scalar	*Visual		NEG	▲ 1.0

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	320	305	308

SAMPLE IMAGES	method	limit/base	current	history 1	history 2
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## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0100133  
**Lab Number** : 05887826  
**Unique Number** : 10538309  
**Test Package** : IND 2 ( Additional Tests: KF, 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: