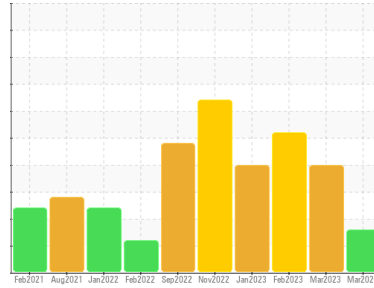


# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Area  
**PROCESS CHEESE [98859246]**  
 Machine Id  
**COOKER 11**  
 Component  
**Gearbox**  
 Fluid  
**GEAR OIL ISO 320 (--- GAL)**

## DIAGNOSIS

### Recommendation

We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. There is too much water present in this sample to perform a particle count.

### Wear

All component wear rates are normal.

### Contamination

There is a moderate concentration of water present in the oil.

### Fluid Condition

The AN level is acceptable for this fluid.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>PCA0117977</b>	PCA0088316	PCA0081566
Sample Date	Client Info	<b>09 Mar 2024</b>	12 Mar 2023	18 Feb 2023
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	history1	history2	
Iron	ppm	ASTM D5185m >200	<b>23</b>	43	196
Chromium	ppm	ASTM D5185m >15	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m	<b>0</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	0
Copper	ppm	ASTM D5185m >200	<b>0</b>	0	<1
Tin	ppm	ASTM D5185m >25	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</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>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m 50	<b>&lt;1</b>	0	<1
Calcium	ppm	ASTM D5185m 50	<b>0</b>	0	2
Phosphorus	ppm	ASTM D5185m 350	<b>592</b>	449	473
Zinc	ppm	ASTM D5185m 100	<b>0</b>	<1	0
Sulfur	ppm	ASTM D5185m 12500	<b>1977</b>	1265	1391

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >50	<b>2</b>	2	3
Sodium	ppm	ASTM D5185m	<b>4</b>	4	7
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	1	1
Water	%	ASTM D6304 >0.2	<b>▲ 0.667</b>	▲ 0.441	▲ 0.307
ppm Water	ppm	ASTM D6304 >2000	<b>▲ 6670</b>	▲ 4410	▲ 3070

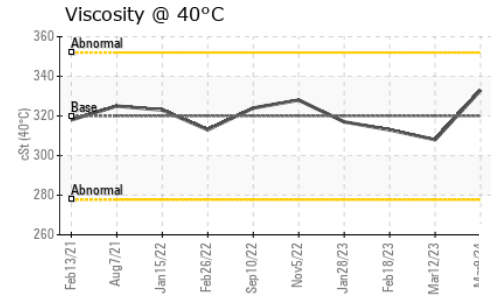
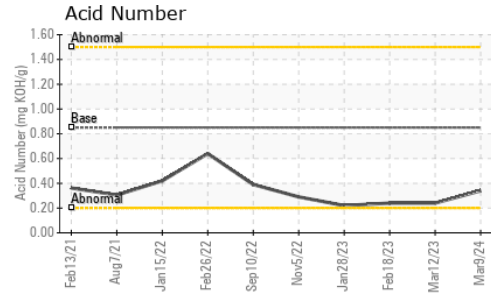
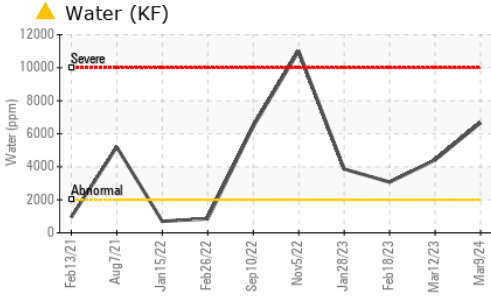
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >1300	<b>---</b>	---	▲ 16329
Particles >6µm	ASTM D7647 >320	<b>---</b>	---	▲ 8895
Particles >14µm	ASTM D7647 >80	<b>---</b>	---	▲ 1514
Particles >21µm	ASTM D7647 >20	<b>---</b>	---	▲ 510
Particles >38µm	ASTM D7647 >4	<b>---</b>	---	▲ 79
Particles >71µm	ASTM D7647 >3	<b>---</b>	---	▲ 8
Oil Cleanliness	ISO 4406 (c) >17/15/13	<b>---</b>	---	▲ 21/20/18

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.85	<b>0.34</b>	0.24	0.24

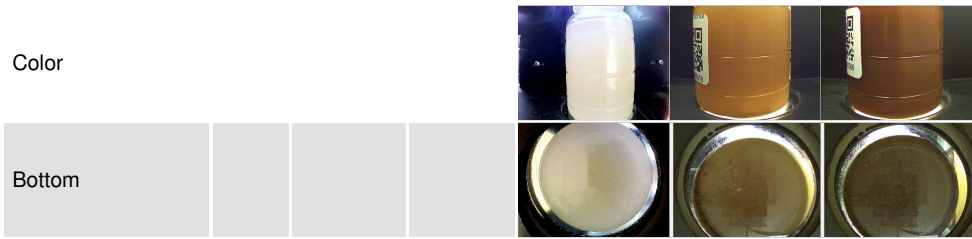
# OIL ANALYSIS REPORT



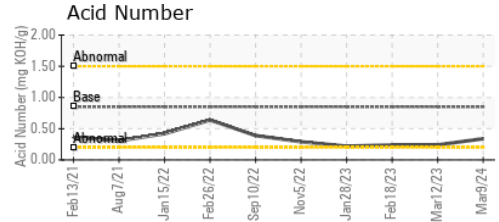
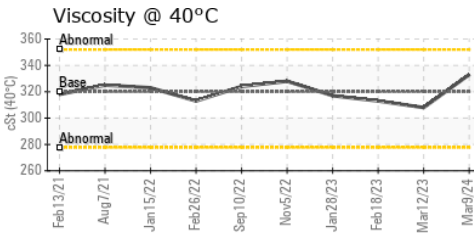
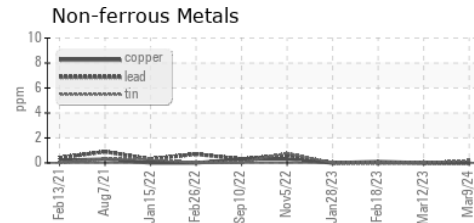
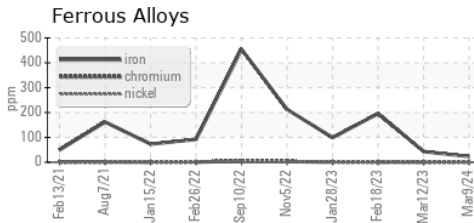
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	320	333	308

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0117977 **Received** : 18 Mar 2024  
**Lab Number** : 06120846 **Tested** : 20 Mar 2024  
**Unique Number** : 10929679 **Diagnosed** : 20 Mar 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PriCount )

**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: