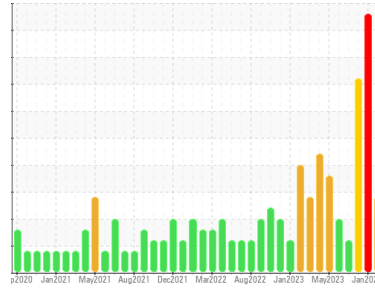


# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Area  
**PROCESS CHEESE [98880466]**  
 Machine Id  
**4625-CMX**  
 Component  
**Pump**  
 Fluid  
**R&O OIL ISO 68 (--- GAL)**

**DIAGNOSIS**

**Recommendation**

The oil change at the time of sampling has been noted. We recommend you service the filters on this component. Resample at the next service interval to monitor.

**Wear**

The iron level has decreased, but is still abnormal. All other 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>PCA0117978</b>	PCA0096802	PCA0096855
Sample Date	Client Info			<b>09 Mar 2024</b>	29 Jan 2024	11 Nov 2023
Machine Age	mths	Client Info		<b>0</b>	0	0
Oil Age	mths	Client Info		<b>0</b>	1	1
Oil Changed	Client Info			<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	SEVERE	SEVERE

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>.1	<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	<b>▲ 116</b>	▲ 625	▲ 413
Chromium	ppm	ASTM D5185m	>5	<b>1</b>	2	2
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m	>3	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>7	<b>0</b>	<1	2
Lead	ppm	ASTM D5185m	>12	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>30	<b>0</b>	<1	1
Tin	ppm	ASTM D5185m	>9	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	<1

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	4
Molybdenum	ppm	ASTM D5185m	5	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>1</b>	4	3
Magnesium	ppm	ASTM D5185m	5	<b>0</b>	0	<1
Calcium	ppm	ASTM D5185m	5	<b>35</b>	5	5
Phosphorus	ppm	ASTM D5185m	100	<b>147</b>	● 529	76
Zinc	ppm	ASTM D5185m	25	<b>102</b>	● 163	89
Sulfur	ppm	ASTM D5185m	1500	<b>158</b>	● 1206	0

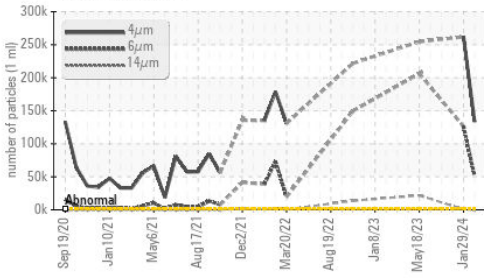
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>60	<b>2</b>	4	4
Sodium	ppm	ASTM D5185m		<b>7</b>	6	5
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	<1	2

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>1300	<b>▲ 133493</b>	▲ 261932	---	
Particles >6µm	ASTM D7647	>320	<b>▲ 50938</b>	▲ 126331	---	
Particles >14µm	ASTM D7647	>80	<b>▲ 344</b>	▲ 954	---	
Particles >21µm	ASTM D7647	>20	<b>▲ 34</b>	▲ 129	---	
Particles >38µm	ASTM D7647	>4	<b>0</b>	3	---	
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	---	
Oil Cleanliness	ISO 4406 (c)	>17/15/13	<b>▲ 24/23/16</b>	▲ 25/24/17	---	

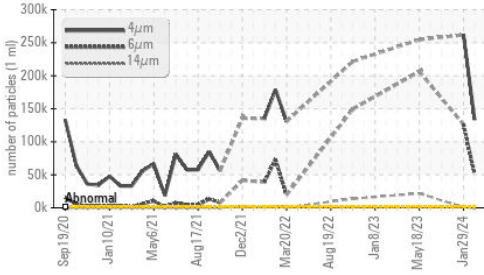
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.08	<b>0.17</b>	0.13	0.091

# OIL ANALYSIS REPORT

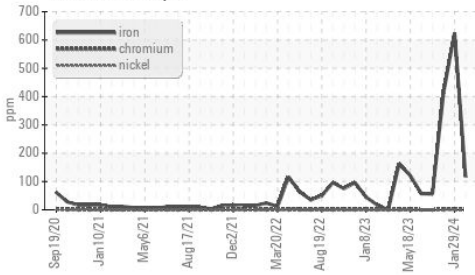
## ▲ Particle Trend



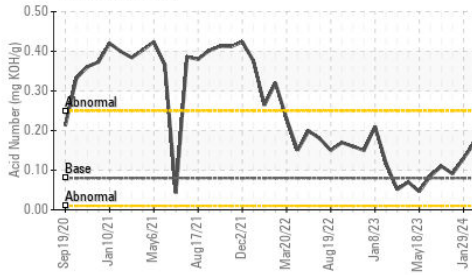
## ▲ Particle Trend



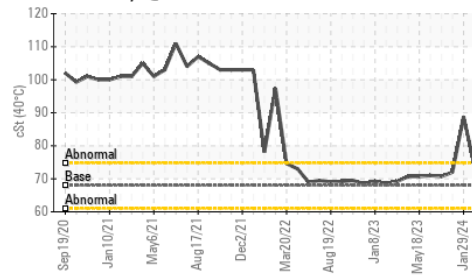
## ▲ Ferrous Alloys



## Acid Number



## Viscosity @ 40°C



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	LIGHT	▲ HEAVY
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	HAZY	● HAZY
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 68	73.8	● 88.8	72.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

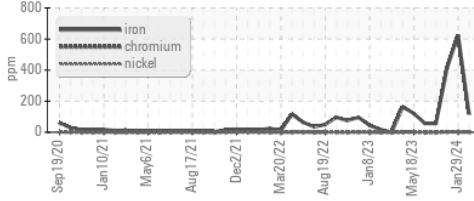


Bottom

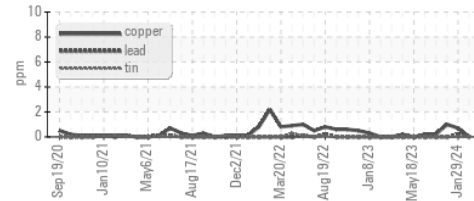


## GRAPHS

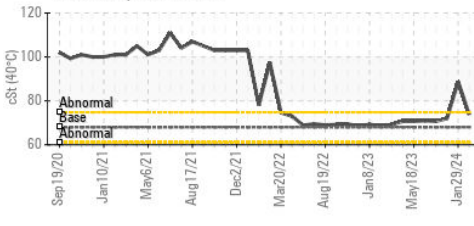
### ▲ Ferrous Alloys



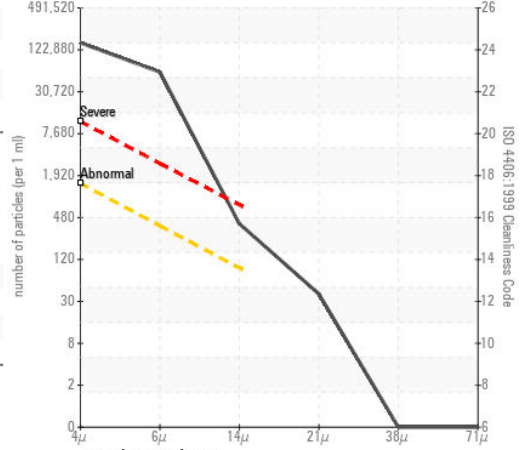
### Non-ferrous Metals



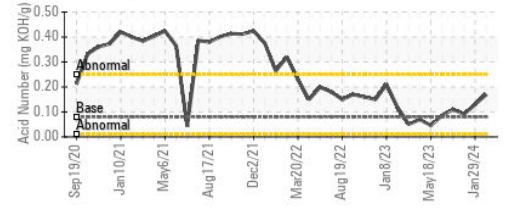
### Viscosity @ 40°C



### ▲ Particle Count



### Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : PCA0117978

**Lab Number** : 06120819

**Unique Number** : 10929652

**Test Package** : IND 2 ( Additional Tests: PrtCount )

**Received** : 18 Mar 2024

**Tested** : 19 Mar 2024

**Diagnosed** : 20 Mar 2024 - Don Baldrige

**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: