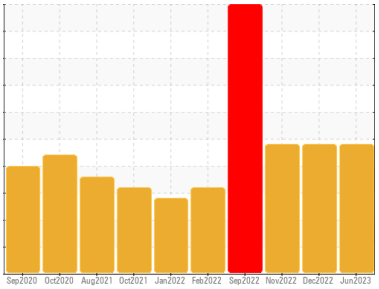
OIL DIAGNOSTICS

PROBLEM SUMMARY

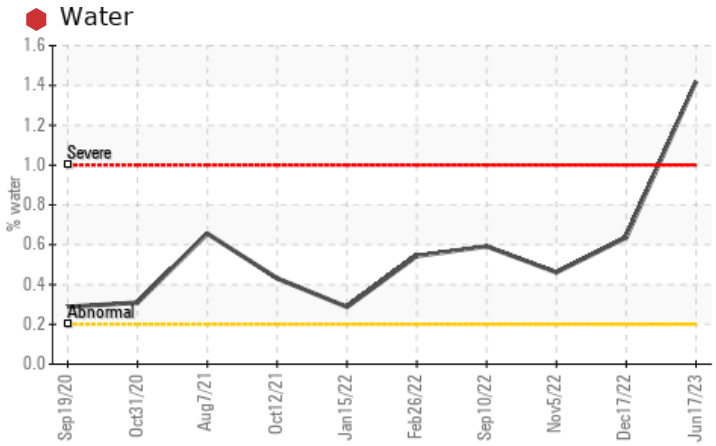
Sample Rating Trend



WATER

Area
PROCESS CHEESE [98316595]
Machine Id
COOKER 10
Component
Gearbox
Fluid
GEAR OIL ISO 320 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

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. There is too much water present in this sample to perform a particle count.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	ABNORMAL
Water	%	ASTM D6304	>0.2	**1.42**	0.636	0.461
ppm Water	ppm	ASTM D6304	>2000	**14200**	6360	4610
Silt	scalar	*Visual	NONE	**HEAVY**	NONE	NONE
Appearance	scalar	*Visual	NORML	**MILKY**	MILKY	MILKY
Emulsified Water	scalar	*Visual	>0.2	**0.2%**	0.2%	0.2%

Customer Id: KRASPRMO
Sample No.: PCA0100128
Lab Number: 05887825
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldridge +1
don.b505@comcast.net

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Water Access	---	---	?	We advise that you check for the source of water entry.

HISTORICAL DIAGNOSIS

17 Dec 2022 Diag: Doug Bogart

WATER

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.Gear wear is indicated. There is a moderate concentration of water present in the oil. Free water present. The AN level is acceptable for this fluid.

view report

05 Nov 2022 Diag: Don Baldridge

WATER

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.All component wear rates are normal. There is a moderate concentration of water present in the oil. Free water present. The AN level is acceptable for this fluid.

view report

10 Sep 2022 Diag: Jonathan Hester

WATER

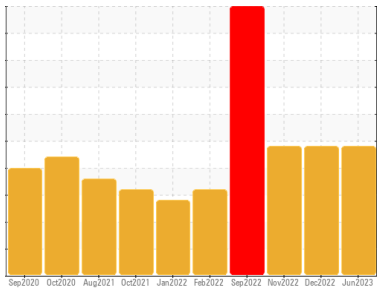
We advise that you check for the source of water entry. We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition.All component wear rates are normal.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

view report

OIL DIAGNOSTICS

OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Area
PROCESS CHEESE [98316595]
Machine Id
COOKER 10
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. We recommend an early resample to monitor this condition. 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 high concentration of water present in the oil. There is a high amount of visible silt present in the sample.

Fluid Condition

The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history 1	history 2
Sample Number		Client Info		**PCA0100128**	PCA0076157	PCA0081571
Sample Date		Client Info		**17 Jun 2023**	17 Dec 2022	05 Nov 2022
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**SEVERE**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m	>200	**92**	▲ 289	▲ 289
Chromium	ppm	ASTM D5185m	>15	**<1**	2	3
Nickel	ppm	ASTM D5185m	>15	**0**	0	0
Titanium	ppm	ASTM D5185m		**<1**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**<1**	<1	<1
Lead	ppm	ASTM D5185m	>100	**0**	0	0
Copper	ppm	ASTM D5185m	>200	**0**	<1	<1
Tin	ppm	ASTM D5185m	>25	**<1**	0	<1
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	50	**21**	0	0
Barium	ppm	ASTM D5185m	15	**16**	0	0
Molybdenum	ppm	ASTM D5185m	15	**<1**	<1	0
Manganese	ppm	ASTM D5185m		**1**	2	3
Magnesium	ppm	ASTM D5185m	50	**16**	1	2
Calcium	ppm	ASTM D5185m	50	**26**	5	<1
Phosphorus	ppm	ASTM D5185m	350	**316**	546	625
Zinc	ppm	ASTM D5185m	100	**123**	0	<1
Sulfur	ppm	ASTM D5185m	12500	**18017**	1115	1573

CONTAMINANTS		method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m	>50	**3**	4	2
Sodium	ppm	ASTM D5185m		**29**	15	12
Potassium	ppm	ASTM D5185m	>20	**4**	<1	0
Water	%	ASTM D6304	>0.2	⬢ **1.42**	▲ 0.636	▲ 0.461
ppm Water	ppm	ASTM D6304	>2000	⬢ **14200**	▲ 6360	▲ 4610

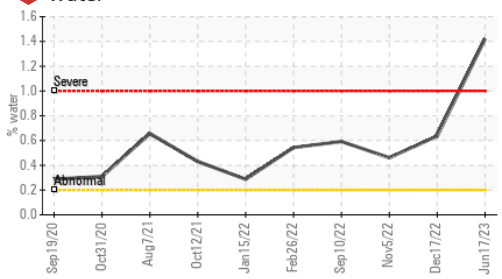
FLUID CLEANLINESS		method	limit/base	current	history 1	history 2
Particles >4µm		ASTM D7647	>1300	**---**	---	---
Particles >6µm		ASTM D7647	>320	**---**	---	---
Particles >14µm		ASTM D7647	>80	**---**	---	---
Particles >21µm		ASTM D7647	>20	**---**	---	---
Particles >38µm		ASTM D7647	>4	**---**	---	---
Particles >71µm		ASTM D7647	>3	**---**	---	---
Oil Cleanliness		ISO 4406 (c)	>17/15/13	**---**	---	---

FLUID DEGRADATION		method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.85	**1.20**	0.36	0.30

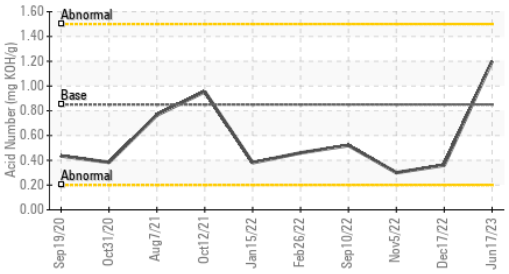
OIL ANALYSIS REPORT

OIL DIAGNOSTICS

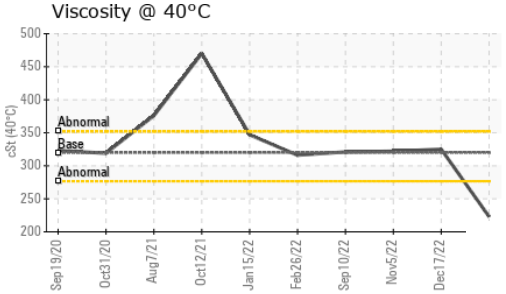
Water



Acid Number

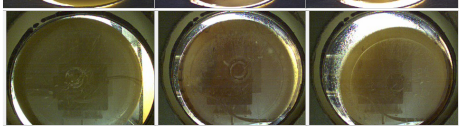


Viscosity @ 40°C



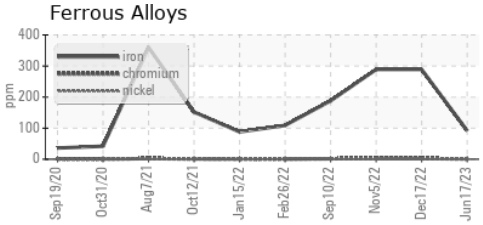
VISUAL		method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	▲ **HEAVY**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	LIGHT	NONE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

FLUID PROPERTIES		method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	320	**223**	325	322

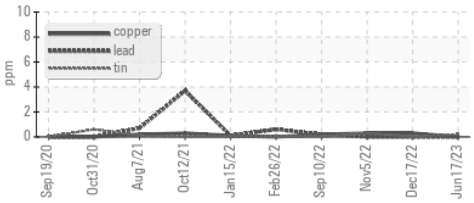
SAMPLE IMAGES	method	limit/base	current	history 1	history 2
Color					
Bottom					

GRAPHS

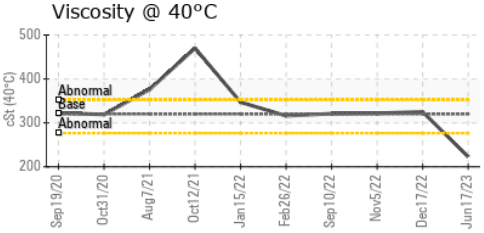
Ferrous Alloys



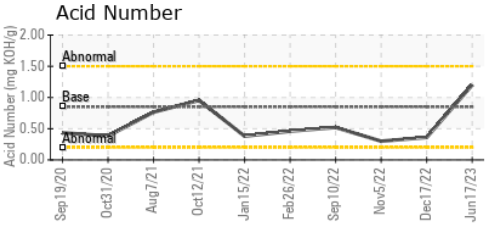
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0100128
Lab Number : 05887825
Unique Number : 10538308
Test Package : IND 2 (Additional Tests: KF, PrtCount)

Received : 30 Jun 2023
Diagnosed : 04 Jul 2023
Diagnostician : Don Baldridge

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: