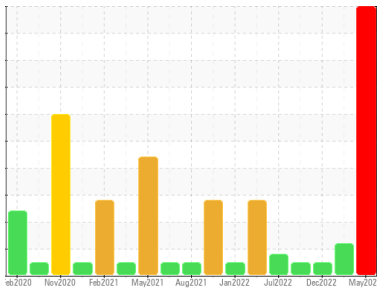
OIL DIAGNOSTICS

PROBLEM SUMMARY

Sample Rating Trend

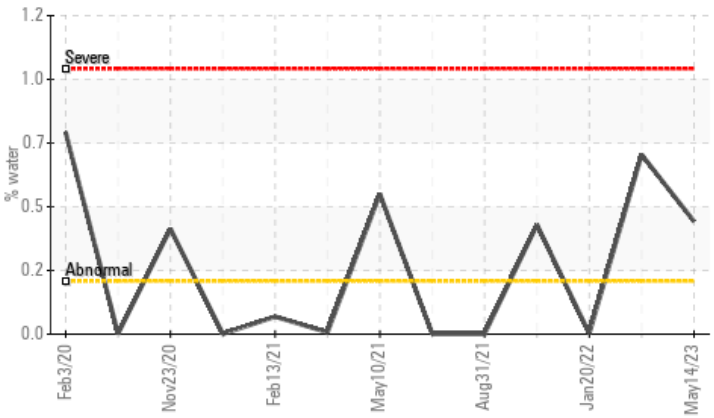


WATER

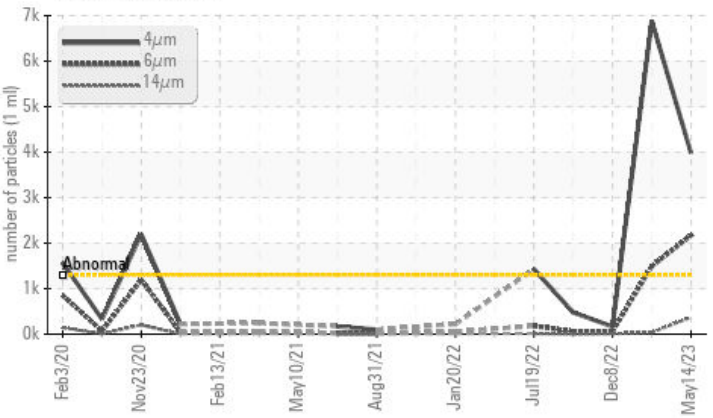
Area
Process Cheese [98242936 BEFORE]
Machine Id
BLENDER 2
Component
Gearbox
Fluid
GEAR OIL ISO 320 (--- GAL)

COMPONENT CONDITION SUMMARY

Water



Particle Trend



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.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	NORMAL
Water	%	ASTM D6304	>0.2	▲ **0.425**	---	---
ppm Water	ppm	ASTM D6304	>2000	▲ **4250**	---	---
Particles >4µm		ASTM D7647	>1300	▲ **3984**	▲ 6883	166
Particles >6µm		ASTM D7647	>320	▲ **2171**	▲ 1492	55
Particles >14µm		ASTM D7647	>80	▲ **369**	36	9
Particles >21µm		ASTM D7647	>20	▲ **124**	5	3
Particles >38µm		ASTM D7647	>4	▲ **19**	0	0
Particles >71µm		ASTM D7647	>3	▲ **2**	0	0
Oil Cleanliness		ISO 4406 (c)	>17/15/13	▲ **19/18/16**	▲ 20/18/12	15/13/10
Appearance	scalar	*Visual	NORML	▲ **HAZY**	NORML	NORML
Free Water	scalar	*Visual		⬢ **10.0**	NEG	NEG

Customer Id: KRASPRMO
Sample No.: PCA0088326
Lab Number: 05856659
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

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

24 Jan 2023 Diag: Don Baldridge

ISO

The oil change at the time of sampling has been noted. We recommend you service the filters on this component if applicable. 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

08 Dec 2022 Diag: Jonathan Hester

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

13 Sep 2022 Diag: Aaron Black

NORMAL

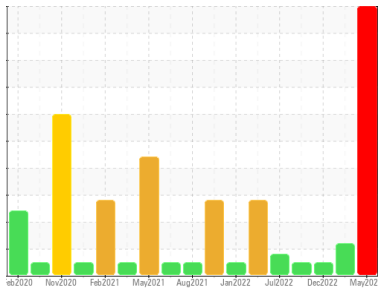
Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL DIAGNOSTICS

OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Area
Process Cheese [98242936 BEFORE]
Machine Id
BLENDER 2
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.

Wear

All component wear rates are normal.

Contamination

Appearance is hazy. There is a high amount of particulates present in the oil. Excessive free water present. There is a moderate concentration of water 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		**PCA0088326**	PCA0081535	PCA0073980
Sample Date		Client Info		**14 May 2023**	24 Jan 2023	08 Dec 2022
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**Changed**	Filtered	Filtered
Sample Status				**SEVERE**	ABNORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	**19**	0	0
Chromium	ppm	ASTM D5185m	>15	**0**	0	0
Nickel	ppm	ASTM D5185m	>15	**<1**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**2**	0	0
Lead	ppm	ASTM D5185m	>100	**0**	0	0
Copper	ppm	ASTM D5185m	>200	**0**	0	0
Tin	ppm	ASTM D5185m	>25	**0**	0	0
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	50	**0**	0	0
Barium	ppm	ASTM D5185m	15	**0**	0	0
Molybdenum	ppm	ASTM D5185m	15	**0**	0	0
Manganese	ppm	ASTM D5185m		**<1**	0	0
Magnesium	ppm	ASTM D5185m	50	**0**	0	0
Calcium	ppm	ASTM D5185m	50	**1**	0	0
Phosphorus	ppm	ASTM D5185m	350	**314**	343	486
Zinc	ppm	ASTM D5185m	100	**11**	2	14
Sulfur	ppm	ASTM D5185m	12500	**524**	394	548

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**2**	2	3
Sodium	ppm	ASTM D5185m		**<1**	0	0
Potassium	ppm	ASTM D5185m	>20	**2**	<1	0
Water	%	ASTM D6304	>0.2	▲ **0.425**	---	---
ppm Water	ppm	ASTM D6304	>2000	▲ **4250**	---	---

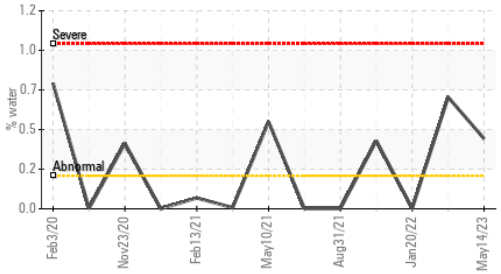
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>1300	▲ **3984**	▲ 6883	166
Particles >6µm		ASTM D7647	>320	▲ **2171**	▲ 1492	55
Particles >14µm		ASTM D7647	>80	▲ **369**	36	9
Particles >21µm		ASTM D7647	>20	▲ **124**	5	3
Particles >38µm		ASTM D7647	>4	▲ **19**	0	0
Particles >71µm		ASTM D7647	>3	▲ **2**	0	0
Oil Cleanliness		ISO 4406 (c)	>17/15/13	▲ **19/18/16**	▲ 20/18/12	15/13/10

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.85	**0.16**	0.32	0.37

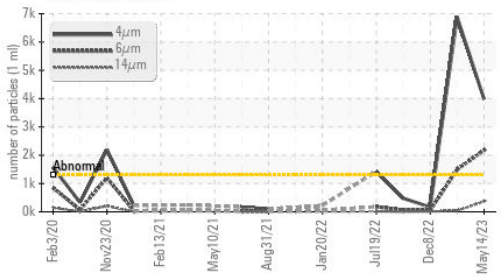
OIL ANALYSIS REPORT

OIL DIAGNOSTICS

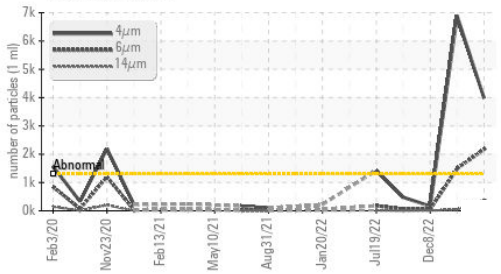
Water



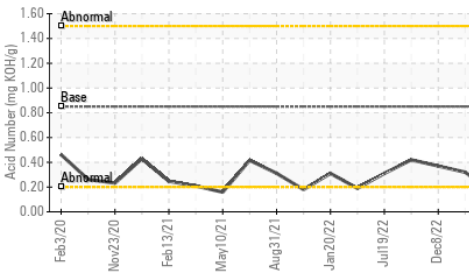
Particle Trend



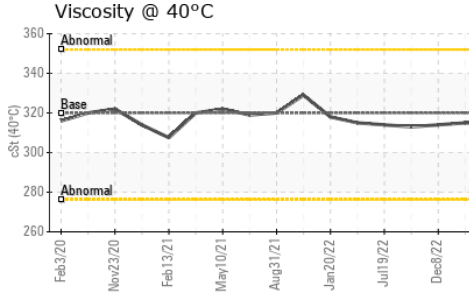
Particle Trend



Acid Number

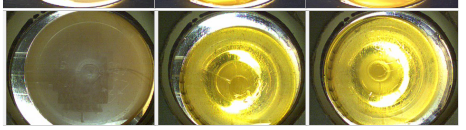


Viscosity @ 40°C



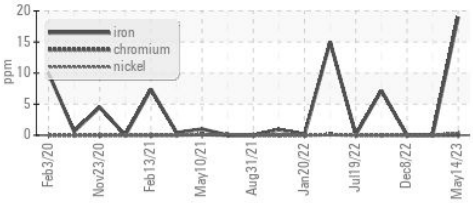
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**MODER**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	▲ **HAZY**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	**0.2%**	NEG	NEG
Free Water	scalar	*Visual		⬢ **10.0**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	320	**315**	315	314

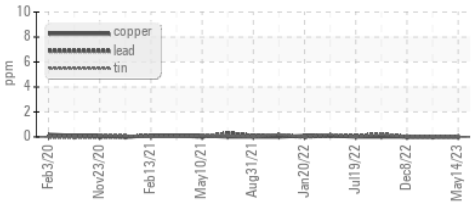
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

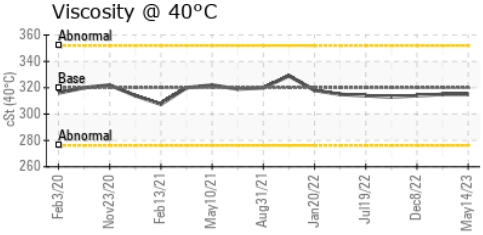
Ferrous Alloys



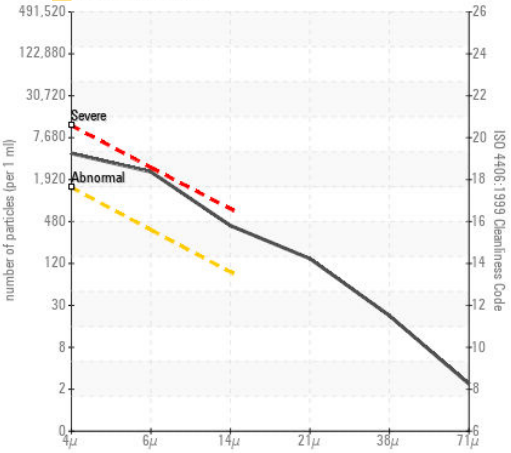
Non-ferrous Metals



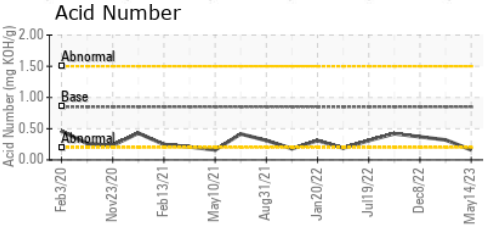
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0088326 **Received** : 25 May 2023
Lab Number : 05856659 **Diagnosed** : 31 May 2023
Unique Number : 10486014 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

Certificate L2367

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)

KraftHeinz - Springfield - Plant 8311 PCA
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SPRINGFIELD, MO
US 65804
Contact: Service Manager

T:
F: