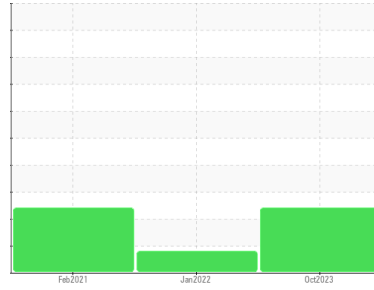


PROBLEM SUMMARY

Area
PROCESS CHEESE [98620100]
 Machine Id
SCALE HOPPER 9-10
 Component
Gearbox
 Fluid
GEAR OIL ISO 320 (--- GAL)

Sample Rating Trend

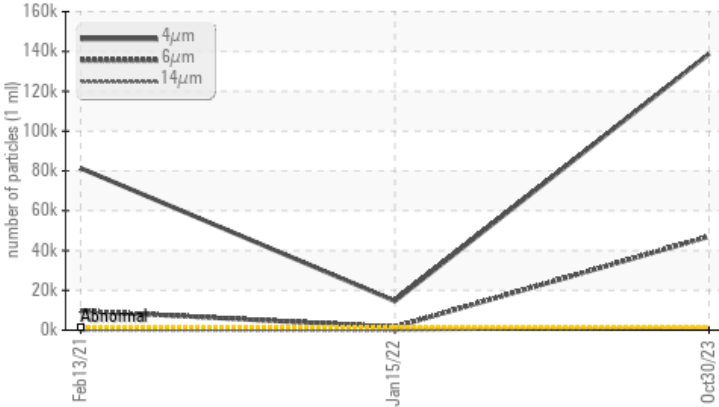


VISCOSITY

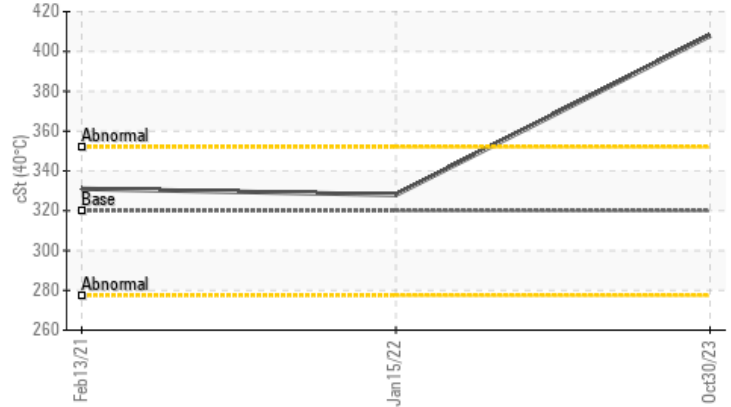


COMPONENT CONDITION SUMMARY

▲ Particle Trend



▲ Viscosity @ 40°C



RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	ABNORMAL	ABNORMAL
Particles >4µm	ASTM D7647	>1300	▲ 138822	▲ 14644	▲ 81367
Particles >6µm	ASTM D7647	>320	▲ 47069	▲ 1589	▲ 9674
Particles >14µm	ASTM D7647	>80	▲ 1333	46	▲ 203
Particles >21µm	ASTM D7647	>20	▲ 144	14	▲ 64
Oil Cleanliness	ISO 4406 (c)	>17/15/13	▲ 24/23/18	▲ 21/18/13	▲ 24/20/15
Visc @ 40°C	cSt	ASTM D445 320	▲ 407.9	328	331

Customer Id: KRASPRMO
 Sample No.: PCA0067393
 Lab Number: 06001543
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

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

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

15 Jan 2022 Diag: Doug Bogart

ISO



No corrective action is recommended at this time. 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



13 Feb 2021 Diag: Don Baldrige

CONTAMINANT



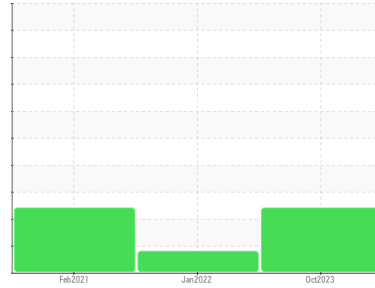
No corrective action is recommended at this time. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. Appearance is hazy. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Area
PROCESS CHEESE [98620100]
 Machine Id
SCALE HOPPER 9-10
 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.

Wear

All component wear rates are normal.

Contamination

There is a high amount of particulates present in the oil.

Fluid Condition

Viscosity of sample indicates oil is within ISO 460 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PCA0067393	PCA0065339	PCA0033298
Sample Date	Client Info	30 Oct 2023	15 Jan 2022	13 Feb 2021
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	Changed	Changed	Changed
Sample Status		ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >200	47	<1	2
Chromium	ppm	ASTM D5185m >15	<1	0	0
Nickel	ppm	ASTM D5185m >15	0	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	<1	0	0
Tin	ppm	ASTM D5185m >25	0	<1	0
Antimony	ppm	ASTM D5185m >5	---	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	<1
Barium	ppm	ASTM D5185m 15	1	0	0
Molybdenum	ppm	ASTM D5185m 15	0	0	0
Manganese	ppm	ASTM D5185m	1	0	0
Magnesium	ppm	ASTM D5185m 50	7	0	0
Calcium	ppm	ASTM D5185m 50	11	0	0
Phosphorus	ppm	ASTM D5185m 350	389	30	43
Zinc	ppm	ASTM D5185m 100	27	0	0
Sulfur	ppm	ASTM D5185m 12500	551	0	9

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >50	8	<1	1
Sodium	ppm	ASTM D5185m	5	0	0
Potassium	ppm	ASTM D5185m >20	18	0	0

FLUID CLEANLINESS

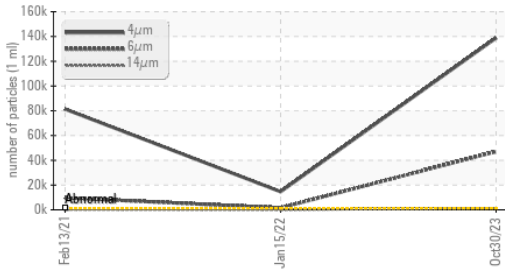
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >1300	▲ 138822	▲ 14644	▲ 81367
Particles >6µm	ASTM D7647 >320	▲ 47069	▲ 1589	▲ 9674
Particles >14µm	ASTM D7647 >80	▲ 1333	46	▲ 203
Particles >21µm	ASTM D7647 >20	▲ 144	14	▲ 64
Particles >38µm	ASTM D7647 >4	3	2	2
Particles >71µm	ASTM D7647 >3	1	0	0
Oil Cleanliness	ISO 4406 (c) >17/15/13	▲ 24/23/18	▲ 21/18/13	▲ 24/20/15

FLUID DEGRADATION

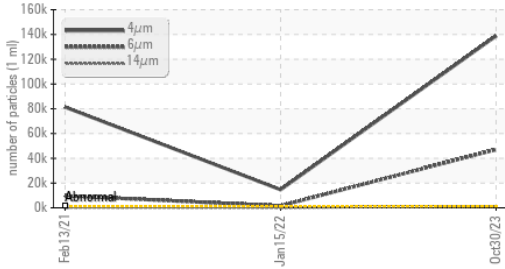
method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.85	1.16	0.25	0.290

OIL ANALYSIS REPORT

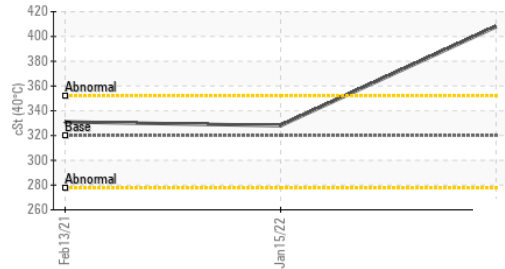
▲ Particle Trend



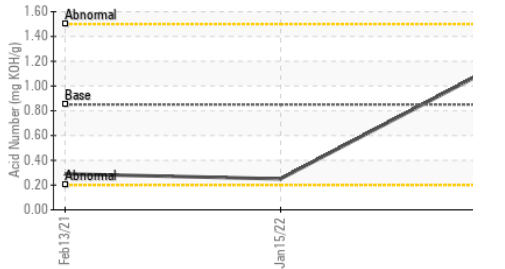
▲ Particle Trend



▲ Viscosity @ 40°C



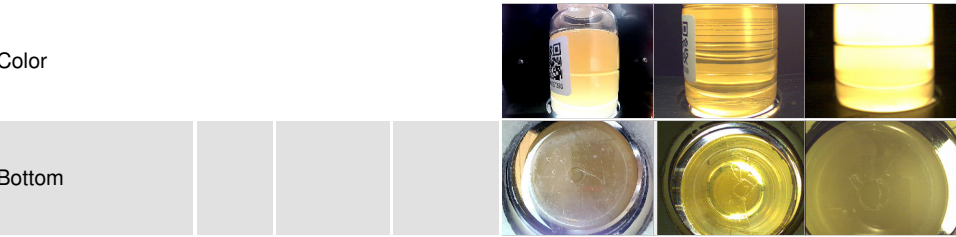
Acid Number



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	NONE
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	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

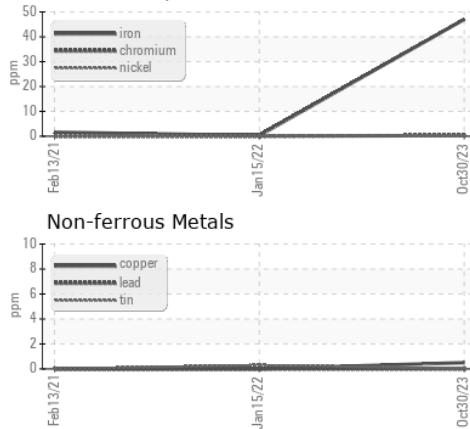
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 320	▲ 407.9	328	331

SAMPLE IMAGES	method	limit/base	current	history1	history2
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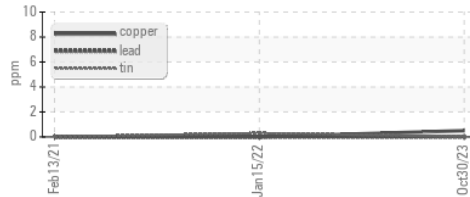


GRAPHS

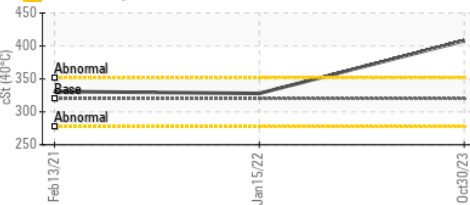
Ferrous Alloys



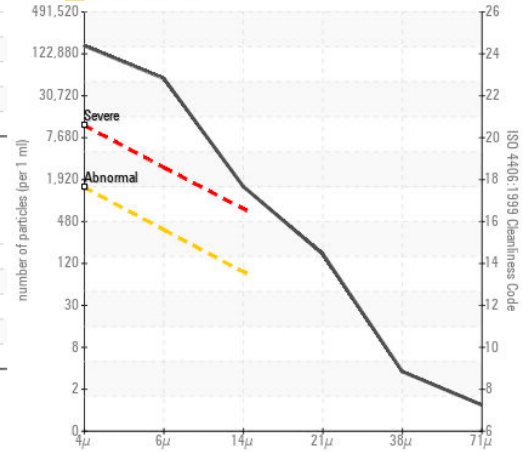
Non-ferrous Metals



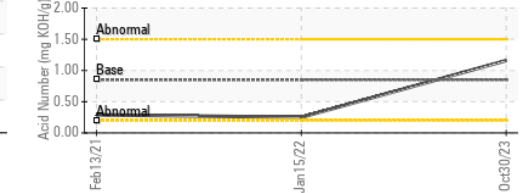
▲ Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0067393
Lab Number : 06001543
Unique Number : 10729903
Test Package : IND 2 (Additional Tests: 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: