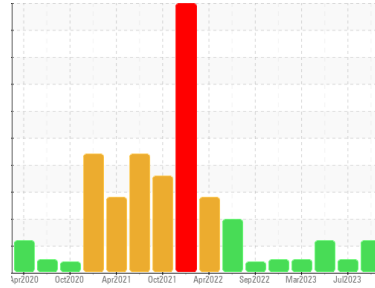


# PROBLEM SUMMARY

Machine Id  
**KR-GR-003227 - REWORK GRINDER (S/N GRIND A - 11555379)**  
 Component  
**Gearbox**  
 Fluid  
**GEAR OIL ISO 220 (--- LTR)**

Sample Rating Trend



## COMPONENT CONDITION SUMMARY

No relevant graphs to display


### RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to metal particles present in this sample.

### PROBLEMATIC TEST RESULTS

Sample Status	ABNORMAL	NORMAL	ABNORMAL
White Metal	▲ MODER	MODER	▲ HEAVY

**Customer Id:** KRAKIR  
**Sample No.:** PCA0104775  
**Lab Number:** 05945712  
**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](mailto:jhester@wearcheckusa.com)

*To change component or sample information:*  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component.
Alert	---	---	?	We were unable to perform a particle count due to metal particles present in this sample.

## HISTORICAL DIAGNOSIS

**07 Jul 2023 Diag: Don Baldrige**

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 condition of the oil is acceptable for the time in service.

view report



**02 May 2023 Diag: Jonathan Hester**

VISUAL METAL



We suspect abnormal metal contamination may be due to sampling method. No corrective action is recommended at this time. Resample at the next service interval to monitor. High concentration of visible metal present. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

view report



**22 Mar 2023 Diag: Doug Bogart**

NORMAL



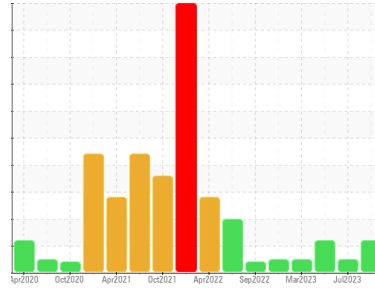
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

view report



# OIL ANALYSIS REPORT

Sample Rating Trend



**VISUAL METAL**



Machine Id  
**KR-GR-003227 - REWORK GRINDER (S/N GRIND A - 11555379)**  
 Component  
**Gearbox**  
 Fluid  
**GEAR OIL ISO 220 (--- LTR)**

**DIAGNOSIS**

**Recommendation**

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to metal particles present in this sample.

**Wear**

Moderate concentration of visible metal present. All component wear rates are normal.

**Contamination**

There is no indication of any contamination 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>PCA0104775</b>	PCA0099345	PCA0073076
Sample Date	Client Info	<b>01 Sep 2023</b>	07 Jul 2023	02 May 2023
Machine Age	hrs	<b>0</b>	0	0
Oil Age	hrs	<b>0</b>	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>ABNORMAL</b>	NORMAL	ABNORMAL

**WEAR METALS**

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >200	<b>91</b>	96	86
Chromium	ppm	ASTM D5185m >15	<b>2</b>	2	<1
Nickel	ppm	ASTM D5185m >15	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>9</b>	9	3
Lead	ppm	ASTM D5185m >100	<b>4</b>	<1	0
Copper	ppm	ASTM D5185m >200	<b>136</b>	123	116
Tin	ppm	ASTM D5185m >25	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</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>13</b>	9	10
Barium	ppm	ASTM D5185m 15	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 15	<b>84</b>	81	82
Manganese	ppm	ASTM D5185m	<b>2</b>	3	2
Magnesium	ppm	ASTM D5185m 50	<b>0</b>	0	3
Calcium	ppm	ASTM D5185m 50	<b>8</b>	14	4
Phosphorus	ppm	ASTM D5185m 350	<b>441</b>	436	411
Zinc	ppm	ASTM D5185m 100	<b>79</b>	74	67
Sulfur	ppm	ASTM D5185m 12500	<b>9466</b>	9981	9568

**CONTAMINANTS**

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >50	<b>24</b>	23	21
Sodium	ppm	ASTM D5185m	<b>7</b>	6	6
Potassium	ppm	ASTM D5185m >20	<b>4</b>	4	4

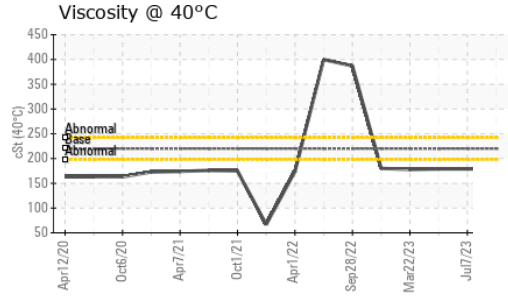
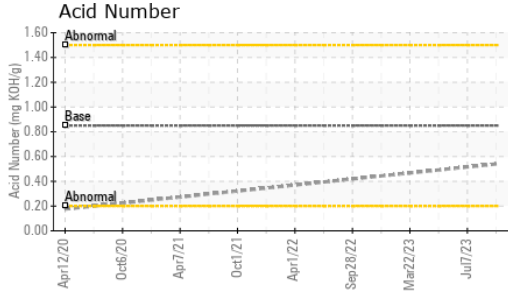
**FLUID DEGRADATION**

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.85	<b>0.54</b>	---	---

**VISUAL**

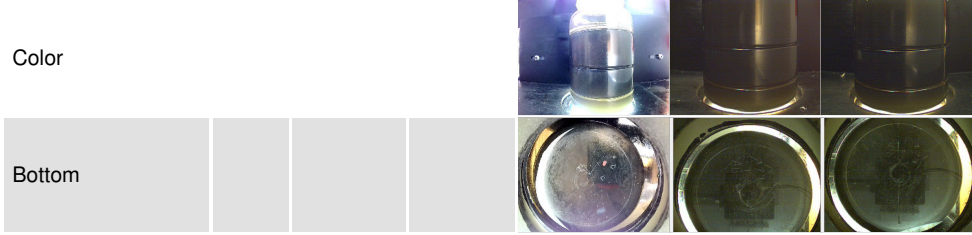
method	limit/base	current	history1	history2	
White Metal	scalar	*Visual NONE	<b>▲ MODER</b>	MODER	<b>▲ HEAVY</b>
Yellow Metal	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual >0.2	<b>NEG</b>	NEG	NEG
Free Water	scalar	*Visual	<b>NEG</b>	NEG	NEG

# OIL ANALYSIS REPORT

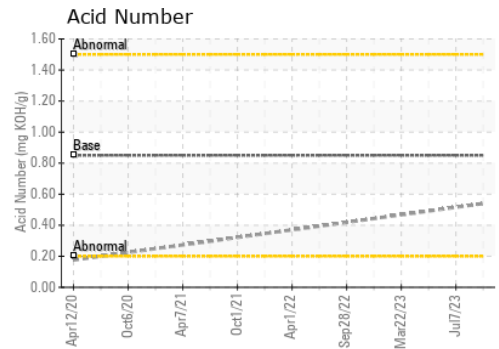
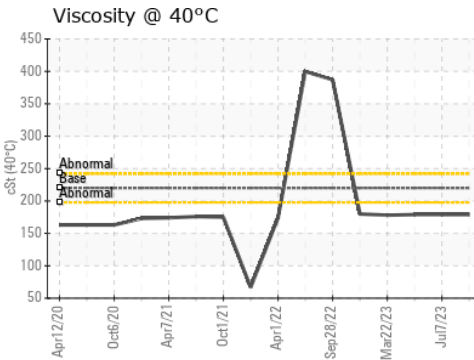
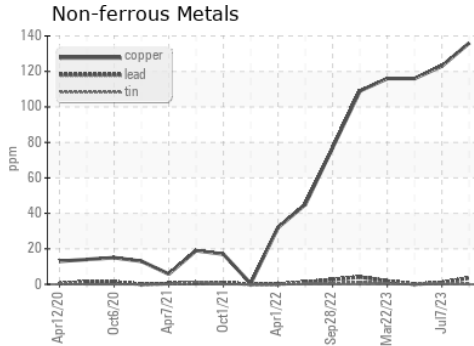
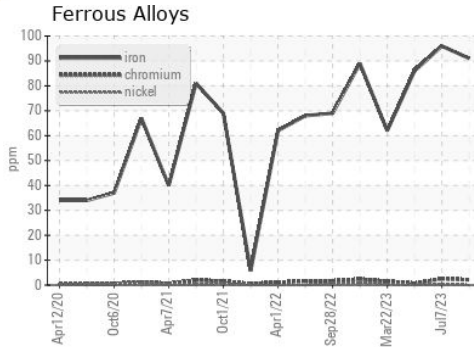


FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	<b>179</b>	179	179

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.** : PCA0104775 **Received** : 08 Sep 2023  
**Lab Number** : **05945712** **Diagnosed** : 13 Sep 2023  
**Unique Number** : 10636324 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: PrtCount )

**KraftHeinz - Kirksville - Plant 8333 PCA**  
 2504 INDUSTRIAL DR  
 KIRKSVILLE, MO  
 US 63501  
 Contact: WALLACE WARD  
 wallace.ward@kraftheinzcompany.com  
 T: (660)627-1031  
 F: (660)627-5887

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)