

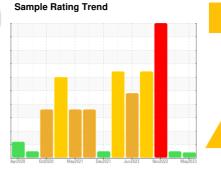
# **PROBLEM SUMMARY**

[98139019]

KR-GR-002930 - GRINDER A1 (EAST) (S/N GRIND A - 11513021)

Gearbox

**GEAR OIL ISO 220 (6 QTS)** 





# **COMPONENT CONDITION SUMMARY**

No relevant graphs to display

# RECOMMENDATION

We suspect abnormal contamination may be due to sampling method. No corrective action is recommended at this time. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS										
Sample Status				ABNORMAL	NORMAL	SEVERE				
Debris	scalar	*Visual	NONE	▲ MODER	NONE	NONE				

**Customer Id: KRAKIR** Sample No.: PCA0093106 Lab Number: 05839684 Test Package: IND 1

To manage this report scan the QR code

To discuss the diagnosis or test data: Jonathan Hester +1 919-379-4092 x4092 ihester@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

## 07 Feb 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.



#### WEAR



# 08 Nov 2022 Diag: Jonathan Hester

We advise that you check for the source of water entry. We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Bearing and/or gear wear is indicated. Appearance is milky. Free water present. There is a high concentration of water present in the oil. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. Viscosity of sample indicates oil is within ISO 460 range, advise investigate. Confirm oil type. The oil is no longer serviceable due to the presence of contaminants.



#### WATER



### 21 Jul 2022 Diag: Don Baldridge

We advise that you check for the source of water entry. We advise that you follow the water drain-off procedure for this component. We recommend an early resample to monitor this condition. Bearing and/or gear wear is indicated. Elemental level of silicon (Si) above normal indicating ingress of seal material. There is a moderate concentration of water present in the oil. Free water present. The condition of the oil is acceptable for the time in service.





# **OIL ANALYSIS REPORT**

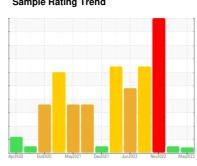
# Sample Rating Trend

# Area [98139019]

# KR-GR-002930 - GRINDER A1 (EAST) (S/N GRIND A - 11513021)

Gearbox

**GEAR OIL ISO 220 (6 QTS)** 





# **DIAGNOSIS**

#### Recommendation

We suspect abnormal contamination may be due to sampling method. No corrective action is recommended at this time. Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

### Contamination

Moderate concentration of visible dirt/debris present in the oil.

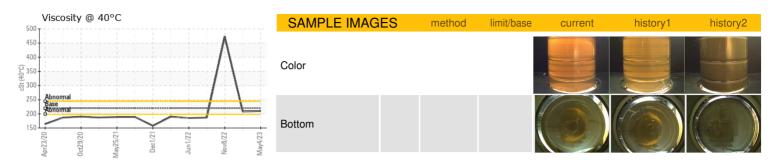
#### **Fluid Condition**

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

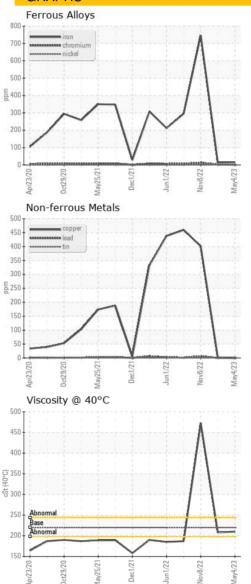
		Apr2020	Oct2020 May2021	Des2021 Jun2022 Nov2022	May2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0093106	PCA0089554	PCA0081591
Sample Date		Client Info		04 May 2023	07 Feb 2023	08 Nov 2022
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	SEVERE
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	16	14	<b>1</b> 747
Chromium	ppm	ASTM D5185m	>15	2	2	13
Nickel	ppm	ASTM D5185m	>15	0	0	4
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	0	2	<u> </u>
Lead	ppm	ASTM D5185m	>100	0	0	6
Copper	ppm	ASTM D5185m	>200	<1	2	<b>4</b> 01
Tin	ppm	ASTM D5185m	>25	0	<1	1
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES	le le	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	50	0	<1 2	0
Barium	ppm	ASTM D5185m	15	-		
Molybdenum	ppm	ASTM D5185m	15	0	<1	101
Manganese	ppm	ASTM D5185m	F0	0	<1 <1	3
Magnesium	ppm	ASTM D5185m	50	<1		2
Calcium	ppm	ASTM D5185m	50	0	2	21
Phosphorus	ppm	ASTM D5185m	350	370	324	534
Zinc	ppm	ASTM D5185m	100	0	4	264
Sulfur	ppm	ASTM D5185m	12500	2005	1600	15721
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	2	3	<u> </u>
Sodium	ppm	ASTM D5185m		0	0	2
Potassium	ppm	ASTM D5185m	>20	<1	<1	1
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	MODER	MODER	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	▲ MILKY
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG	NEG	0.2%
Free Water	scalar	*Visual		NEG	NEG	<u>▲</u> 1.0
FLUID PROPE	RTIES	method	limit/base	current	history1	history2



# **OIL ANALYSIS REPORT**









Certificate L2367

Laboratory Sample No. Lab Number Unique Number : 10458487

: PCA0093106 : 05839684 Test Package : IND 1

To discuss this sample report, contact Customer Service at 1-800-237-1369.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 05 May 2023 Diagnosed : 10 May 2023 Diagnostician : Jonathan Hester

KraftHeinz - Kirksville - Plant 8333 PCA

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wallace.ward@kraftheinzcompany.com T: (660)627-1031

\* - 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)

Contact/Location: WALLACE WARD - KRAKIR