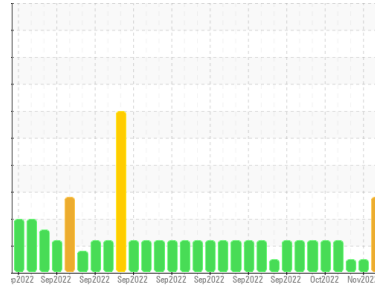




PROBLEM SUMMARY

Sample Rating Trend



WATER



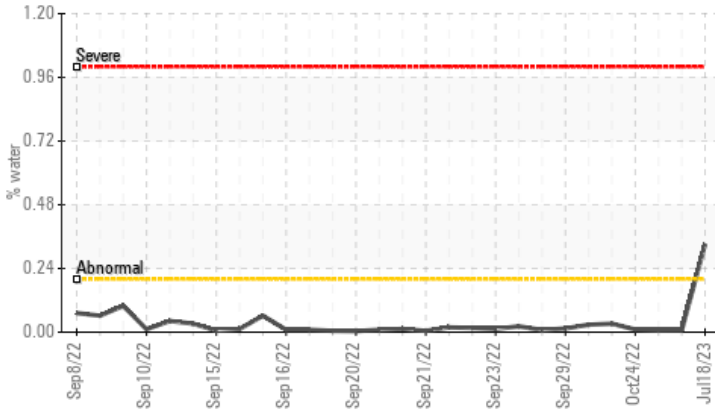
Machine Id **B LINE KRONES - AGGREGATE**

Component
Gearbox

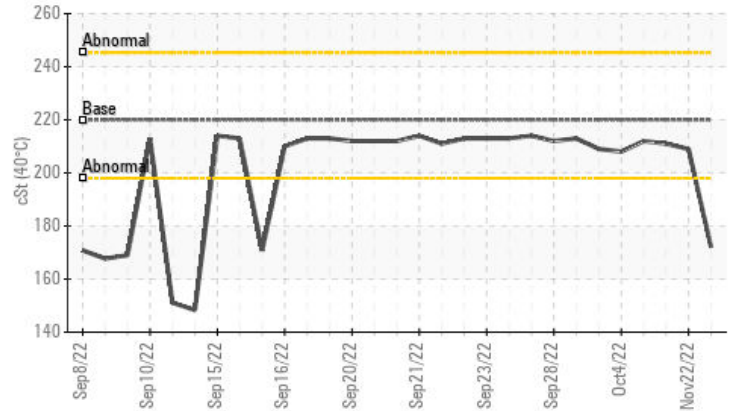
Fluid
GEAR OIL (PAG) ISO 220 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Water



▲ Viscosity @ 40°C



RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	NORMAL	NORMAL
Water	%	ASTM D6304	>0.2	▲ 0.331	0.007	0.006
ppm Water	ppm	ASTM D6304	>2000	▲ 3310	71.7	65.5
Appearance	scalar	*Visual	NORML	▲ HAZY	NORML	NORML
Visc @ 40°C	cSt	ASTM D445	220	▲ 172.1	209	211

Customer Id: KRAWOIL
 Sample No.: USPM5902311
 Lab Number: 05902311
 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

22 Nov 2022 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 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



25 Oct 2022 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 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



24 Oct 2022 Diag: Doug Bogart

ISO



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 condition of the oil is acceptable for the time in service. Insufficient sample was received to conduct TAN test.

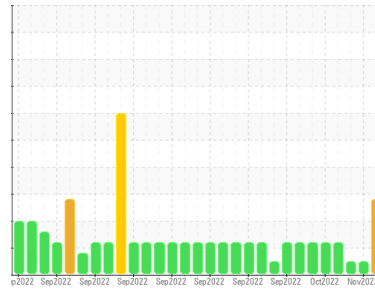
view report





OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Machine Id **B LINE KRONES - AGGREGATE**

Component
Gearbox
Fluid
GEAR OIL (PAG) ISO 220 (--- GAL)

DIAGNOSIS

▲ Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

▲ Contamination

Appearance is hazy. There is a light concentration of water present in the oil. The amount and size of particulates present in the system are acceptable.

▲ Fluid Condition

The oil viscosity is lower than normal. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	USPM5902311	USP05701401	USP05676723
Sample Date	Client Info	18 Jul 2023	22 Nov 2022	25 Oct 2022
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ABNORMAL	NORMAL	NORMAL

WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185m	>200	0	4	2
Chromium	ppm	ASTM D5185m	>15	0	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	<1	<1	0
Lead	ppm	ASTM D5185m	>100	0	0	0
Copper	ppm	ASTM D5185m	>200	0	0	0
Tin	ppm	ASTM D5185m	>25	0	<1	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	5	0	0	0
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	5	0	0	0
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m	5	<1	0	0
Calcium	ppm	ASTM D5185m	5	0	2	3
Phosphorus	ppm	ASTM D5185m	775	445	566	562
Zinc	ppm	ASTM D5185m	5	0	<1	<1
Sulfur	ppm	ASTM D5185m	2000	535	648	660

CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>50	1	<1	0
Sodium	ppm	ASTM D5185m		0	0	0
Potassium	ppm	ASTM D5185m	>20	<1	0	0
Water	%	ASTM D6304	>0.2	▲ 0.331	0.007	0.006
ppm Water	ppm	ASTM D6304	>2000	▲ 3310	71.7	65.5

FLUID CLEANLINESS

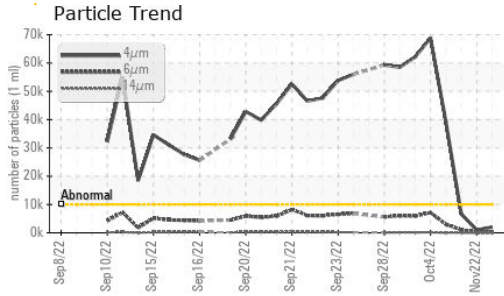
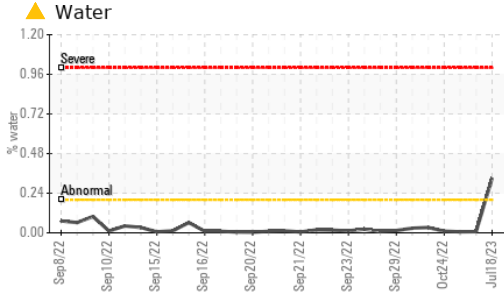
method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>10000	2038	969	6696
Particles >6µm	ASTM D7647	>2500	321	196	1095
Particles >14µm	ASTM D7647	>640	14	15	40
Particles >21µm	ASTM D7647	>160	5	3	5
Particles >38µm	ASTM D7647	>40	0	1	0
Particles >71µm	ASTM D7647	>10	0	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/16	18/16/11	17/15/11	20/17/12

FLUID DEGRADATION

method	limit/base	current	history1	history2		
Acid Number (AN)	mg KOH/g	ASTM D8045	2.00	0.25	0.56	0.60



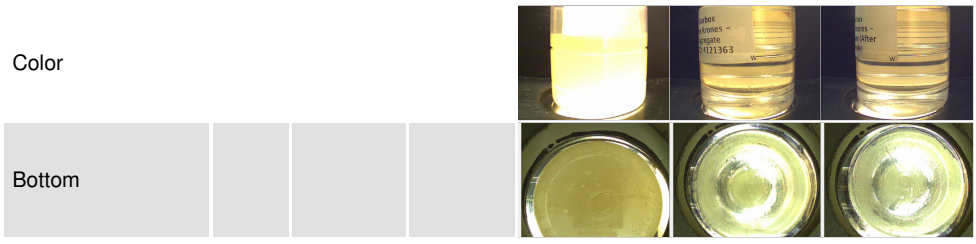
OIL ANALYSIS REPORT



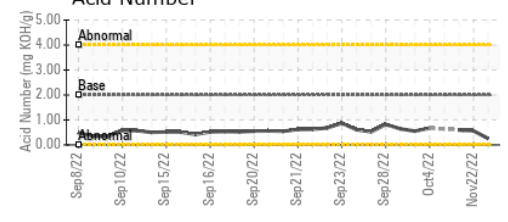
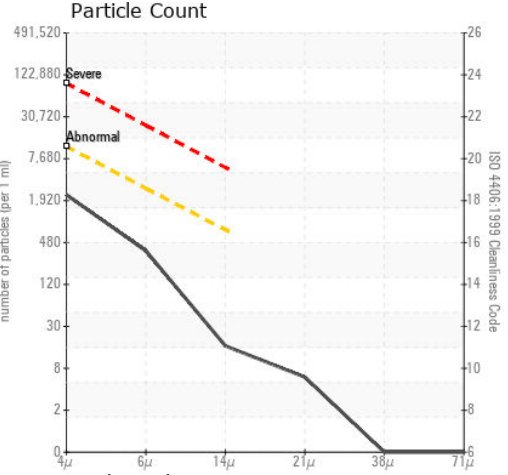
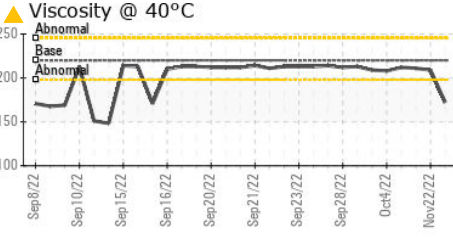
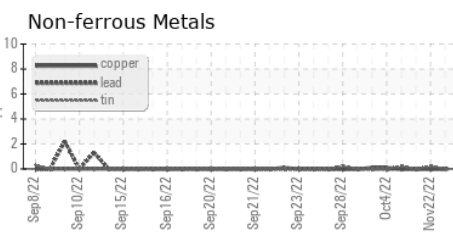
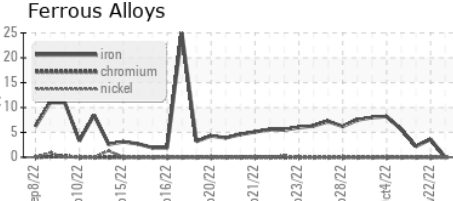
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	▲ 172.1	209

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USPM5902311 **Received** : 19 Jul 2023
Lab Number : 05902311 **Diagnosed** : 21 Jul 2023
Unique Number : 10563667 **Diagnostician** : Doug Bogart
Test Package : IND 2

KraftHeinz - Woodstock - Plant 8337
 1300 CLAUSSEN DR
 WOODSTOCK, IL
 US 60098
 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)