

PROBLEM SUMMARY

Sample Rating Trend



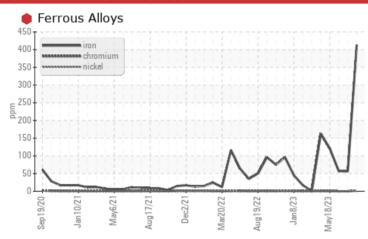
X

PROCESS CHEESE [98605329] Machine Id 4625-CMX

Component **Pump**

R&O OIL ISO 68 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample.

PROBLEMATIC TEST RESULTS										
Sample Status				SEVERE	ABNORMAL	ABNORMAL				
Iron	ppm	ASTM D5185m	>90	413	56	57				
Debris	scalar	*Visual	NONE	HEAVY	▲ HEAVY	▲ HEAVY				
Appearance	scalar	*Visual	NORMI	Α ΗΔΖΥ	NORMI	NORMI				

Customer Id: KRASPRMO Sample No.: PCA0096855 Lab Number: 06013981 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:

Don Baldridge +1 don.b505@comcast.net

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

RECOMMENDED ACTIONS Action **Status** Date Done By Description Inspect Wear Source ? We advise that you inspect for the source(s) of wear. Change Fluid ? Oil and filter change at the time of sampling has been noted. ? Change Filter Oil and filter change at the time of sampling has been noted. Resample ? We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of Alert particles present in this sample.

HISTORICAL DIAGNOSIS

15 Aug 2023 Diag: Angela Borella

SEDIMENT



Oil and filter 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 moderate amount of visible silt present in the sample. High concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.



12 Jun 2023 Diag: Don Baldridge

WATER



The oil change at the time of sampling has been noted. 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 a high concentration of particles present in this sample. All component wear rates are normal. There is a light concentration of water present in the oil. High concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.



18 May 2023 Diag: Jonathan Hester

WEAR



The oil change at the time of sampling has been noted. We recommend you service the filters on this component if applicable. We recommend an early resample to monitor this condition. The iron level is abnormal. There is a high amount of particulates present in the oil. Appearance is hazy. The AN level is acceptable for this fluid.



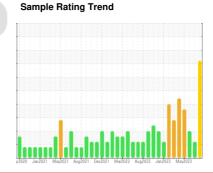


OIL ANALYSIS REPORT

PROCESS CHEESE [98605329] 4625-CMX

Component **Pump**

R&O OIL ISO 68 (--- GAL)





DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

The iron level is severe.

Contamination

Appearance is hazy. High concentration of visible dirt/debris present in the oil.

Fluid Condition

The AN level is acceptable for this fluid.

SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0096855	PCA0081541	PCA0096806
Sample Date		Client Info		11 Nov 2023	15 Aug 2023	12 Jun 2023
Machine Age	mths	Client Info		0	0	0
Oil Age	mths	Client Info		1	1	1
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				SEVERE	ABNORMAL	ABNORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
	ION					
Water		WC Method	>.1	NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	413	56	57
Chromium	ppm	ASTM D5185m	>5	2	0	0
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Titanium	ppm	ASTM D5185m	>3	<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>7	2	0	0
Lead	ppm	ASTM D5185m	>12	0	0	0
Copper	ppm	ASTM D5185m	>30	1	<1	<1
Tin	ppm	ASTM D5185m	>9	0	0	0
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
					,	•
Boron	ppm	ASTM D5185m	5	0	0	0
	ppm	ASTM D5185m ASTM D5185m	5			
Boron	• • • • • • • • • • • • • • • • • • • •			0	0	0
Boron Barium	ppm	ASTM D5185m	5	0 4	0	0 2
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m	5	0 4 <1	0 0 0	0 2 0
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	5	0 4 <1 3	0 0 0 <1	0 2 0 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5	0 4 <1 3 <1	0 0 0 <1 <1	0 2 0 <1
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5 5	0 4 <1 3 <1 5	0 0 0 <1 <1 0	0 2 0 <1 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5 5 100	0 4 <1 3 <1 5 76	0 0 0 <1 <1 0 22	0 2 0 <1 0 2 37
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5 5 100 25	0 4 <1 3 <1 5 76	0 0 0 <1 <1 0 22	0 2 0 <1 0 2 37 35
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5 5 100 25 1500	0 4 <1 3 <1 5 76 89 0	0 0 0 <1 <1 0 22 15 4	0 2 0 <1 0 2 37 35 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5 5 100 25 1500 limit/base	0 4 <1 3 <1 5 76 89 0	0 0 0 <1 <1 0 22 15 4	0 2 0 <1 0 2 37 35 0 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	5 5 5 5 100 25 1500 limit/base >60	0 4 <1 3 <1 5 76 89 0 current	0 0 0 <1 <1 0 22 15 4 history1	0 2 0 <1 0 2 37 35 0 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	5 5 5 5 100 25 1500 limit/base >60	0 4 <1 3 <1 5 76 89 0 current 4	0 0 0 <1 <1 0 22 15 4 history1	0 2 0 <1 0 2 37 35 0 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	5 5 5 5 100 25 1500 limit/base >60	0 4 <1 3 <1 5 76 89 0 current 4 5	0 0 0 <1 <1 <1 0 22 15 4 history1 1 2	0 2 0 <1 0 2 37 35 0 history2 2 0 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	5 5 5 100 25 1500 limit/base >60 >20 limit/base	0 4 <1 3 <1 5 76 89 0 current 4 5 2 current	0 0 0 <1 <1 0 22 15 4 history1	0 2 0 <1 0 2 37 35 0 history2 2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANL Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m	5 5 5 100 25 1500 limit/base >60 >20 limit/base >1300	0 4 <1 3 <1 5 76 89 0 current 4 5 2 current	0 0 0 <1 <1 0 22 15 4 history1 1 2 0	0 2 0 <1 0 2 37 35 0 history2 2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANL Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D7647 ASTM D7647	5 5 5 100 25 1500 limit/base >60 >20 limit/base >1300 >320 >80	0 4 <1 3 <1 5 76 89 0 current 4 5 2 current	0 0 0 <1 <1 0 22 15 4 history1 1 2 0 history1	0 2 0 <1 0 2 37 35 0 history2 2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m	5 5 5 100 25 1500 limit/base >60 >20 limit/base >1300 >320 >80	0 4 <1 3 <1 5 76 89 0 current 4 5 2 current	0 0 0 <1 <1 0 22 15 4 history1 1 2 0 history1	0 2 0 <1 0 2 37 35 0 history2 2 0 2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANL Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	5 5 5 100 25 1500 limit/base >60 >20 limit/base >1300 >320 >80 >20 >4	0 4 <1 3 <1 5 76 89 0 current 4 5 2 current	0 0 0 0 21 15 4 history1 1 2 0 history1	0 2 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	5 5 5 100 25 1500 limit/base >60 >20 limit/base >1300 >320 >80 >20 >4	0 4 <1 3 <1 5 76 89 0 current 4 5 2 current	0 0 0 0 <1 <1 0 22 15 4 history1 1 2 0 history1	0 2 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >6µm Particles >38µm Particles >71µm	ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647	5 5 5 100 25 1500 limit/base >60 >20 limit/base >1300 >320 >80 >20 >4 >3	0 4 <1 3 <1 5 76 89 0 current 4 5 2 current	0 0 0 <1 <1 <1 0 22 15 4 history1 1 2 0 history1	0 2 0 <1 0 2 37 35 0 history2 2 0 2 history2

Acid Number (AN)

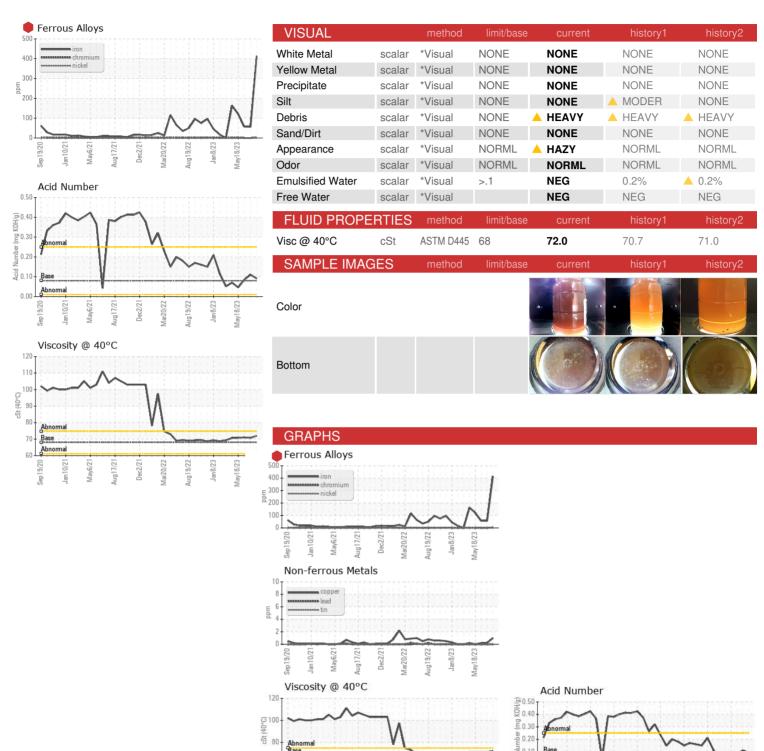
mg KOH/g ASTM D8045 0.08

0.091

0.085



OIL ANALYSIS REPORT







Certificate L2367

Laboratory Sample No. Lab Number **Unique Number**

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

: PCA0096855 : 06013981

: 10753125

Received Diagnosed Diagnostician

Test Package : IND 2 (Additional Tests: PrtCount)

: 24 Nov 2023

: Don Baldridge

: 21 Nov 2023

May18/23

SPRINGFIELD, MO

Contact: Service Manager

2035 E BENNETT

KraftHeinz - Springfield - Plant 8311 PCA

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)

US 65804

T: F: