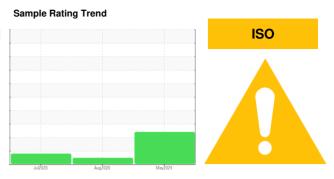


# **OIL ANALYSIS REPORT**

# PASTA [98890735] **B PRESS TRANSMISSION OIL COOLER**

Component **Gearbox** 

GEAR OIL ISO 320 (--- GAL)



### **DIAGNOSIS**

### Recommendation

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

All component wear rates are normal.

## Contamination

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

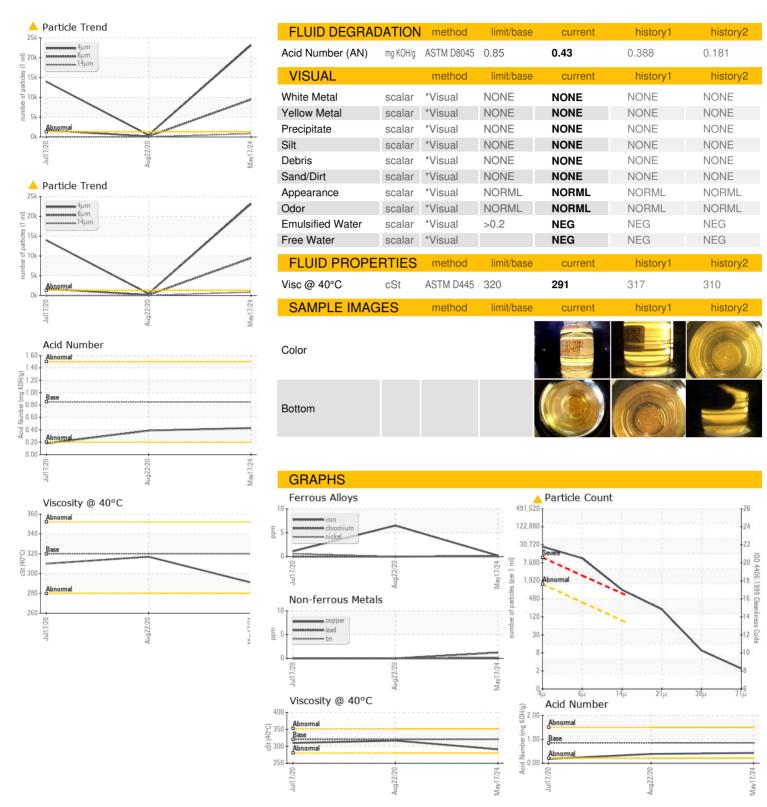
#### **Fluid Condition**

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0127828	PCA0027799	PCA0018910
Sample Date		Client Info		17 May 2024	22 Aug 2020	17 Jul 2020
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Filtered	Filtered	Filtered
Sample Status				ABNORMAL	NORMAL	ABNORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	<1	6	1
Chromium	ppm	ASTM D5185m	>15	<1	0	0
Nickel	ppm	ASTM D5185m	>15	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	4	0	0
Lead	ppm	ASTM D5185m	>100	0	0	0
Copper	ppm	ASTM D5185m	>200	1	0	0
Tin	ppm	ASTM D5185m	>25	<1	0	0
Antimony	ppm		>5		0	<1
Vanadium	ppm	ASTM D5185m		<1	0	2
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 0	history1	history2
	ppm					
Boron	• • • • • • • • • • • • • • • • • • • •	ASTM D5185m	50	0	0	0
Boron Barium	ppm	ASTM D5185m ASTM D5185m	50 15	0 0	0	0 <1
Boron Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	50 15	0 0 0	0 0 0	0 <1 0
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 15 15	0 0 0	0 0 0	0 <1 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 15 15 50	0 0 0 0 <1	0 0 0 0	0 <1 0 0 <1 <1 83
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 15 15 50 50 350 100	0 0 0 0 <1 3 313	0 0 0 0 0 0 0 131	0 <1 0 0 <1 <1 83 2
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	50 15 15 50 50 350	0 0 0 0 <1 3 313	0 0 0 0 0 0 0	0 <1 0 0 <1 <1 83
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 ASTM D5185m	50 15 15 50 50 350 100	0 0 0 0 <1 3 313	0 0 0 0 0 0 0 131	0 <1 0 0 <1 <1 83 2
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 ASTM D5185m	50 15 15 50 50 350 100 12500	0 0 0 0 <1 3 313 3	0 0 0 0 0 0 0 131 0 32	0 <1 0 0 <1 <1 83 2 55
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 ASTM D5185m	50 15 15 50 50 350 100 12500 limit/base	0 0 0 0 <1 3 313 3 1026	0 0 0 0 0 0 131 0 32 history1	0 <1 0 0 <1 <1 <1 83 2 55 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	50 15 15 50 50 350 100 12500 limit/base >50	0 0 0 0 <1 3 313 3 1026 current	0 0 0 0 0 0 131 0 32 history1	0 <1 0 0 <1 <1 83 2 55 history2 4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm	ASTM D5185m	50 15 15 50 50 350 100 12500 limit/base >50	0 0 0 0 <1 3 313 3 1026 current 2	0 0 0 0 0 0 131 0 32 history1	0 <1 0 0 <1 <1 83 2 55 history2 4 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm	ASTM D5185m	50 15 15 50 50 350 100 12500 limit/base >50 >20	0 0 0 0 <1 3 313 3 1026 current 2 6	0 0 0 0 0 0 131 0 32 history1 5 0	0 <1 0 0 <1 <1 83 2 55 history2 4 <1 8
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI	ppm	ASTM D5185m	50 15 15 50 50 350 100 12500 limit/base >50  limit/base >1300	0 0 0 0 <1 3 313 3 1026 current 2 6 2	0 0 0 0 0 0 131 0 32 history1 5 0	0 <1 0 0 <1 <1 83 2 55 history2 4 <1 8
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANL Particles >4µm	ppm	ASTM D5185m  method ASTM D5185m	50 15 15 50 50 350 100 12500 limit/base >50  limit/base >1300	0 0 0 0 <1 3 313 3 1026 current 2 6 2 current △ 23145 △ 9461 △ 841	0 0 0 0 0 0 131 0 32 history1 5 0 0 history1 469 163 17	0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur  CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >14µm Particles >21µm	ppm	ASTM D5185m  method ASTM D5185m	50 15 15 15 50 50 350 100 12500 limit/base >50 >20 limit/base >1300 >320	0 0 0 0 <1 3 313 3 1026 current 2 6 2 current ▲ 23145 ▲ 9461	0 0 0 0 0 0 131 0 32 history1 5 0 0 history1 469 163	0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur  CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >6µm Particles >14µm	ppm	ASTM D5185m  method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	50 15 15 15 50 50 350 100 12500 limit/base >50 >20 limit/base >1300 >320 >80 >20 >4	0 0 0 0 <1 3 313 3 1026 current 2 6 2 current  23145 9461 841 188 8	0 0 0 0 0 0 131 0 32 history1 5 0 0 history1 469 163 17	0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur  CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >14µm Particles >21µm	ppm	ASTM D5185m  method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	50 15 15 15 50 50 350 100 12500 limit/base >50 >20 limit/base >1300 >320 >80 >20 >4	0 0 0 0 <1 3 313 3 1026 current 2 6 2 current △ 23145 △ 9461 △ 841 △ 188	0 0 0 0 0 0 131 0 32 history1 5 0 0 history1 469 163 17	0



# OIL ANALYSIS REPORT







Certificate 12367

Report Id: KRASPRMO [WUSCAR] 06199096 (Generated: 06/07/2024 07:29:41) Rev: 1

Laboratory

Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0127828 Lab Number : 06199096

Unique Number : 11061219

Received **Tested** Diagnosed

: 04 Jun 2024 : 06 Jun 2024 : 06 Jun 2024 - Don Baldridge

KraftHeinz - Springfield - Plant 8311 PCA 2035 E BENNETT SPRINGFIELD, MO

US 65804

Test Package : IND 2 ( Additional Tests: PrtCount ) Contact: Service Manager

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

 $^st$  - 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: Service Manager - KRASPRMO

T:

F: