

## **PROBLEM SUMMARY**

Sample Rating Trend

ISO

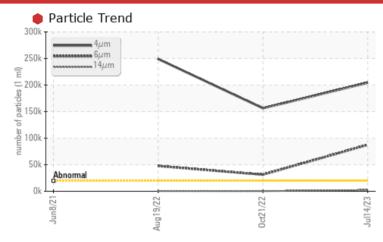
# FINISHING/1255

1255-003-0500 - REWIND 1 1255-003-0500 - REWIND 1

Component Gearbox

CITGO COMPOUND EP 320 (--- GAL)

## COMPONENT CONDITION SUMMARY



## **RECOMMENDATION**

We recommend you service the filters on this component. Resample at the next service interval to monitor.

PROBLEMATIC TE	ST RESULTS				
Sample Status			SEVERE	ABNORMAL	SEVERE
Particles >4µm	ASTM D7647	>20000	<b>204365</b>	<u>▲</u> 156242	<b>2</b> 49129
Particles >6µm	ASTM D7647	>5000	<b>87542</b>	<b>▲</b> 31349	<b>47674</b>
Particles >14µm	ASTM D7647	>640	<b>2335</b>	284	334
Particles >21µm	ASTM D7647	>160	<b>282</b>	47	25
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<b>25/24/18</b>	<u>4</u> 24/22/15	<b>25/23/16</b>

Customer Id: CONMUSAL Sample No.: KFS0003846 Lab Number: 05899869 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Angela Borella +1 800-237-1369 angela.borella@wearcheckusa.com

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

### **RECOMMENDED ACTIONS**

Action	Status	Date	Done By	Description
Change Filter			?	We recommend you service the filters on this component.

## HISTORICAL DIAGNOSIS

## 21 Oct 2022 Diag: Wes Davis



We recommend you service the filters on this component. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. Oil Cleanliness are abnormally high. Particles >4µm are abnormally high. Particles >6µm are abnormally high. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.



### 19 Aug 2022 Diag: Wes Davis





Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.All component wear rates are normal. Particles >6µm are severely high. Oil Cleanliness are severely high. Particles >4µm are severely high. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.



### 08 Jun 2021 Diag: Don Baldridge

#### 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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





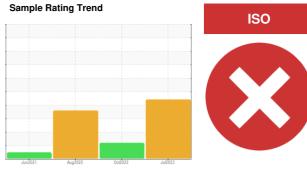
## **OIL ANALYSIS REPORT**

FINISHING/1255

## 1255-003-0500 - REWIND 1 1255-003-0500 - REWIND 1

Gearbox

CITGO COMPOUND EP 320 (--- GAL)



## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

## Contamination

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

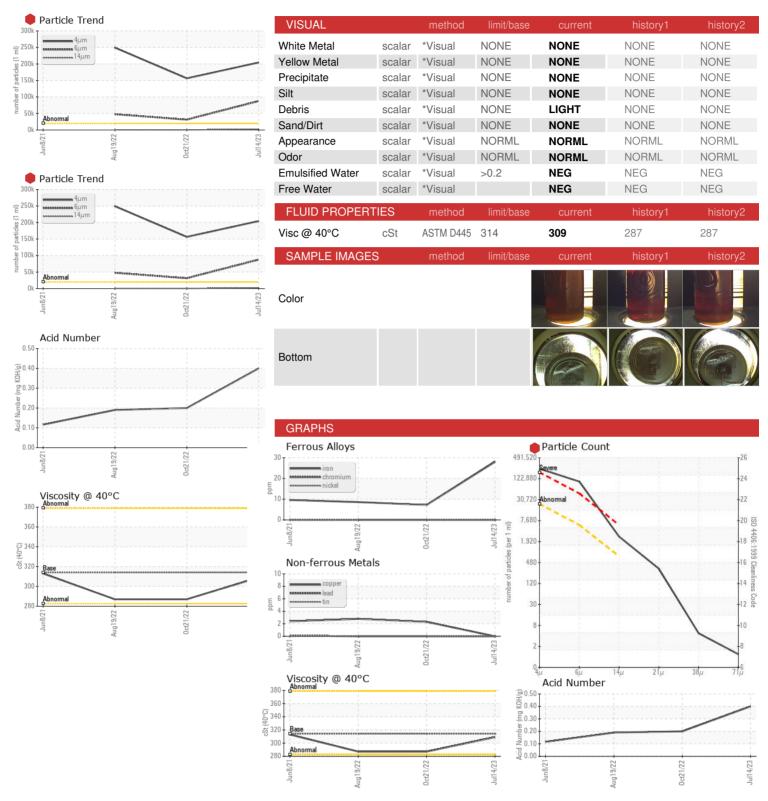
### **Fluid Condition**

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

<u> </u>						<u> </u>
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KFS0003846	KFS0002252	KFS0001878
Sample Date		Client Info		14 Jul 2023	21 Oct 2022	19 Aug 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				SEVERE	ABNORMAL	SEVERE
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	28	7	9
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	0	<1	<1
Lead	ppm	ASTM D5185m	>100	0	0	0
Copper	ppm	ASTM D5185m	>200	0	2	3
Tin	ppm	ASTM D5185m	>25	0	0	0
Antimony	ppm	ASTM D5185m	>5			
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		55	<1	3
Barium	ppm	ASTM D5185m		0	0	0
	PP					
Molybdenum	ppm	ASTM D5185m		0	0	0
				0 <1	0	0
Molybdenum	ppm	ASTM D5185m		-		
Molybdenum Manganese	ppm	ASTM D5185m ASTM D5185m		<1	0	0
Molybdenum Manganese Magnesium	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		<1 0	0	0
Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		<1 0 2	0 0 0	0 0 <1
Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		<1 0 2 246	0 0 0 87	0 0 <1 93
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	<1 0 2 246 0 8616	0 0 0 87 0	0 0 <1 93 <1
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >50	<1 0 2 246 0 8616	0 0 0 87 0 7149	0 0 <1 93 <1 6427
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method		<1 0 2 246 0 8616	0 0 0 87 0 7149 history1	0 0 <1 93 <1 6427 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m		<1 0 2 246 0 8616 current	0 0 0 87 0 7149 history1	0 0 <1 93 <1 6427 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	>50	<1 0 2 246 0 8616 current 18 <1 <1	0 0 0 87 0 7149 history1 0	0 0 0 <1 93 <1 6427 history2 <1 0
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	>50 >20	<1 0 2 246 0 8616 current 18 <1 <1	0 0 0 87 0 7149 history1 0 0	0 0 0 <1 93 <1 6427 history2 <1 0 <1
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	>50 >20 limit/base	<1 0 2 246 0 8616 current 18 <1 <1	0 0 0 87 0 7149 history1 0 0	0 0 0 <1 93 <1 6427 history2 <1 0 <1
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m	>50 >20 limit/base >20000	<1 0 2 246 0 8616 current 18 <1 <1 current	0 0 0 87 0 7149 history1 0 0 0 history1 156242	0 0 0 <1 93 <1 6427 history2 <1 0 <1 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>50 >20 limit/base >20000 >5000	<1 0 2 246 0 8616 current 18 <1 <1 current 204365 87542	0 0 0 87 0 7149 history1 0 0 0 history1 ▲ 156242 ▲ 31349	0 0 0 <1 93 <1 6427 history2 <1 0 <1 history2  249129 47674
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>50 >20 limit/base >20000 >5000 >640	<1 0 2 246 0 8616 current 18 <1 <1 <1 <204365 \$7542 \$7542 \$2335	0 0 0 87 0 7149 history1 0 0 0 history1 △ 156242 △ 31349 284	0 0 0 <1 93 <1 6427 history2 <1 0 <1 history2 249129 47674 334
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	>50 >20 limit/base >20000 >5000 >640 >160	<1 0 2 246 0 8616  current 18 <1 <1 <1 current  204365 87542 A 2335 A 282	0 0 0 87 0 7149 history1 0 0 0 history1 △ 156242 △ 31349 284 47	0 0 0 <1 93 <1 6427 history2 <1 0 <1 history2 249129 47674 334 25
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur  CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>50 >20 limit/base >20000 >5000 >640 >160 >40	<1 0 2 246 0 8616  current 18 <1 <1 <1 current  204365 87542 2335 282 4	0 0 0 87 0 7149 history1 0 0 0 history1 ▲ 156242 ▲ 31349 284 47 0	0 0 0 <1 93 <1 6427 history2 <1 0 <1 history2  249129 47674 334 25 1
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  MEthod ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>50 >20 limit/base >20000 >5000 >640 >160 >40 >10	<1 0 2 246 0 8616 current 18 <1 <1 <1 <21 <21 204365 ● 87542 ▲ 2335 ▲ 282 4 1 ● 25/24/18	0 0 0 87 0 7149 history1 0 0 0 history1 △ 156242 △ 31349 284 47 0	0 0 0 <1 93 <1 6427 history2 <1 0 <1 history2  249129 47674 334 25 1



## **OIL ANALYSIS REPORT**







Certificate L2367

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

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

: KFS0003846 : 05899869 : 10561225

Received : 17 Jul 2023 Diagnosed

: 18 Jul 2023 Diagnostician : Angela Borella

Test Package : IND 2 ( Additional Tests: PrtCount )

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) **CONSTELLIUM** 

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