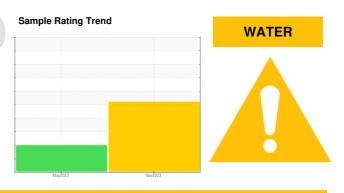


PROBLEM SUMMARY

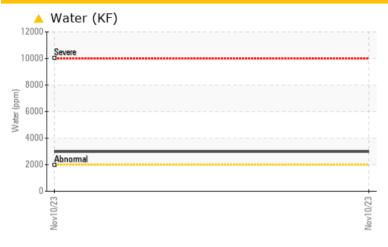
HOTLINE/120 MILL #2 PINCH ROLL REDUCER BTM 1415-004-0080 BTM

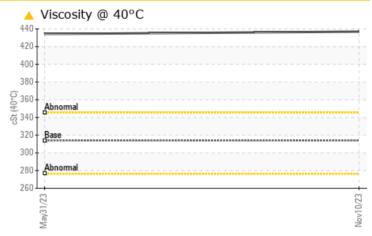
Bottom Gearbox

CITGO COMPOUND EP 320 (20 GAL)









RECOMMENDATION

We advise that you check for the source of water entry. We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. 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				ABNORMAL	ABNORMAL						
Water	%	ASTM D6304	>0.2	△ 0.298							
ppm Water	ppm	ASTM D6304	>2000	2980							
Silt	scalar	*Visual	NONE	▲ HEAVY	NONE						
Appearance	scalar	*Visual	NORML	HAZY	NORML						
Free Water	scalar	*Visual		<u> </u>	NEG						
Visc @ 40°C	cSt	ASTM D445	314	437	A 434.3						

Customer Id: CONMUSAL **Sample No.:** KFS0004816 Lab Number: 06007671 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 Date Done By Description Action **Status** We advise that you follow the water drain-off procedure for this component, Water Drain-off ? and use off-line filtration to improve the cleanliness of the system fluid. 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. Check Water Access ? We advise that you check for the source of water entry.

HISTORICAL DIAGNOSIS

31 May 2023 Diag: Jonathan Hester

VISCOSITY



We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. Viscosity of sample indicates oil is within ISO 460 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.





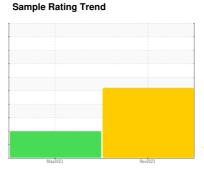
OIL ANALYSIS REPORT

HOTLINE/120 MILL

#2 PINCH ROLL REDUCER BTM 1415-004-0080 BTM

Bottom Gearbox

CITGO COMPOUND EP 320 (20 GAL)





DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. 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

All component wear rates are normal.

Contamination

Appearance is hazy. There is a high amount of visible silt present in the sample. There is a light concentration of water present in the oil. Free water present.

Fluid Condition

The oil viscosity is higher than normal. The AN level is acceptable for this fluid.

			May2023	Nov2023		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KFS0004816	KFS0003346	
Sample Date		Client Info		10 Nov 2023	31 May 2023	
Machine Age	hrs	Client Info		0	0	
Oil Age	hrs	Client Info		0	0	
Oil Changed		Client Info		N/A	N/A	
Sample Status				ABNORMAL	ABNORMAL	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	7	97	
Chromium	ppm	ASTM D5185m	>15	0	0	
Nickel	ppm	ASTM D5185m	>15	0	0	
Titanium	ppm	ASTM D5185m		0	<1	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm	ASTM D5185m	>25	<1	4	
Lead	ppm	ASTM D5185m	>100	0	<1	
Copper	ppm	ASTM D5185m	>200	4	11	
Tin	ppm		>25	0	0	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	3	
Barium	ppm	ASTM D5185m		0	0	
Molybdenum	ppm	ASTM D5185m		0	0	
Manganese	ppm	ASTM D5185m		0	1	
Magnesium	ppm	ASTM D5185m		<1	0	
Calcium	ppm	ASTM D5185m		1	<1	
Phosphorus		ASTM D5185m		104	91	
Zinc	ppm	ASTM D5185m		2	0	
Sulfur	ppm	ASTM D5185m		5135	7374	
			Parada da a a a a			
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	<1	2	
Sodium	ppm	ASTM D5185m		0	2	
Potassium	ppm	ASTM D5185m	>20	<1	<1	
Water	%	ASTM D6304		<u> </u>		
ppm Water	ppm	ASTM D6304	>2000	<u>^</u> 2980		
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000		<u>^</u> 235713	
Particles >6µm		ASTM D7647	>5000		△ 99834	
Particles >14μm		ASTM D7647	>640		△ 698	
Particles >21µm		ASTM D7647	>160		102	
Particles >38μm		ASTM D7647	>40		7	
Particles >71μm		ASTM D7647	>10		1	
Oil Cleanliness		ISO 4406 (c)	>21/19/16		<u>△</u> 25/24/17	
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Asid Number (AN)	ma 1/011/a	ACTM DODAE		0.27	0.00	

Acid Number (AN)

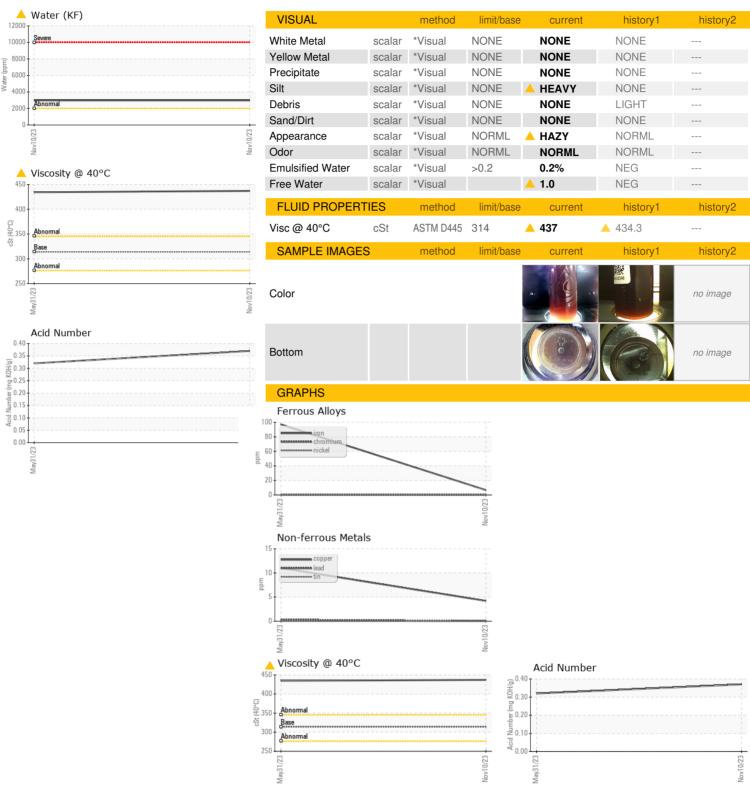
mg KOH/g ASTM D8045

0.32

0.37



OIL ANALYSIS REPORT







Certificate L2367

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

: KFS0004816 : 06007671

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

Diagnosed : 10741433

: 06 Dec 2023 Diagnostician : Doug Bogart

: 14 Nov 2023

Test Package : IND 2 (Additional Tests: KF, 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**

4805 SECOND STREET MUSCLE SHOALS, AL US 35661 Contact: Joel Even

joel.even@constellium.com T: (256)740-7490