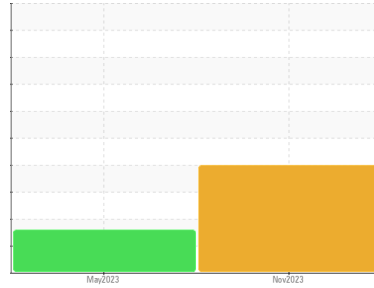




# PROBLEM SUMMARY

Area  
**HOTLINE/120 MILL**  
 Machine Id  
**#1 PINCH ROLL REDUCER BTM 1415-004-0010 BTM**  
 Component  
**Bottom Gearbox**  
 Fluid  
**CITGO COMPOUND EP 320 (20 GAL)**

Sample Rating Trend

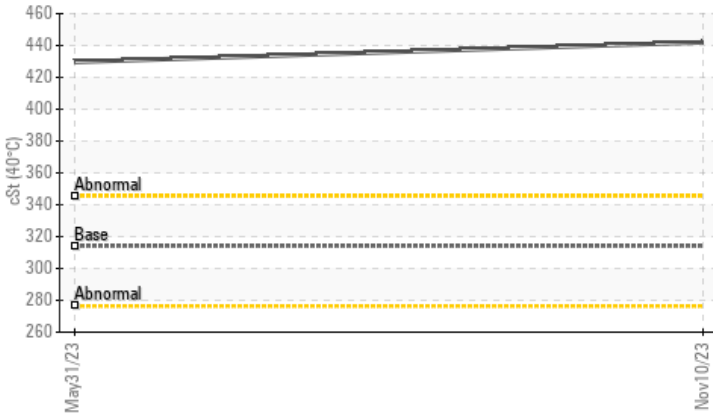


**WATER**

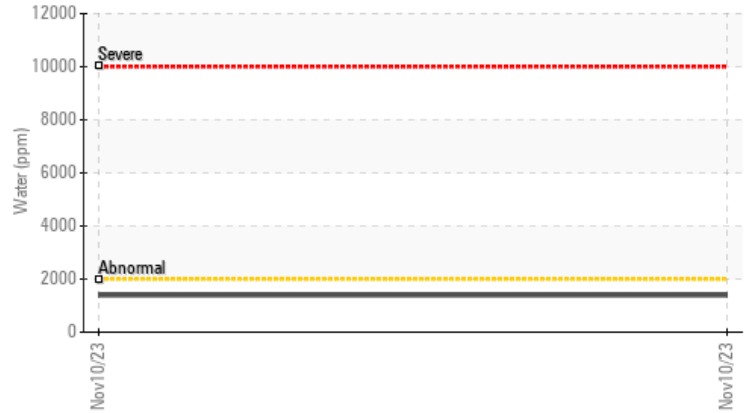


## COMPONENT CONDITION SUMMARY

▲ Viscosity @ 40°C



▲ Water (KF)



## RECOMMENDATION

We advise that you perform a filter service, 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				<b>ABNORMAL</b>	ABNORMAL	---
Water	%	ASTM D6304	>0.2	▲ <b>0.139</b>	---	---
ppm Water	ppm	ASTM D6304	>2000	▲ <b>1390</b>	---	---
Silt	scalar	*Visual	NONE	▲ <b>MODER</b>	NONE	---
Debris	scalar	*Visual	NONE	▲ <b>MODER</b>	LIGHT	---
Appearance	scalar	*Visual	NORML	▲ <b>HAZY</b>	NORML	---
Visc @ 40°C	cSt	ASTM D445	314	▲ <b>442</b>	▲ 429.7	---

Customer Id: CONMUSAL  
 Sample No.: KFS0004814  
 Lab Number: 06007673  
 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](mailto:dougb@wearcheckusa.com)

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

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Alert	---	---	?	We were unable to perform a particle count due to a high concentration of particles present in this sample.
Filter Fluid	---	---	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.

## HISTORICAL DIAGNOSIS

**31 May 2023 Diag: Jonathan Hester**

### VISCOSITY



No corrective action is recommended at this time. 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. Viscosity of sample indicates oil is within ISO 460 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

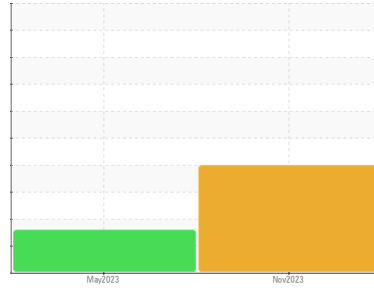
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Area  
**HOTLINE/120 MILL**  
 Machine Id  
**#1 PINCH ROLL REDUCER BTM 1415-004-0010 BTM**  
 Component  
**Bottom Gearbox**  
 Fluid  
**CITGO COMPOUND EP 320 (20 GAL)**

## DIAGNOSIS

### Recommendation

We advise that you perform a filter service, 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. Moderate concentration of visible dirt/debris present in the oil. There is a moderate amount of visible silt present in the sample. There is a trace of moisture present in the oil.

### Fluid Condition

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

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>KFS0004814</b>	KFS0003344	---
Sample Date	Client Info		<b>10 Nov 2023</b>	31 May 2023	---
Machine Age	hrs	Client Info	<b>0</b>	0	---
Oil Age	hrs	Client Info	<b>0</b>	0	---
Oil Changed	Client Info		<b>N/A</b>	N/A	---
Sample Status			<b>ABNORMAL</b>	ABNORMAL	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >200	<b>5</b>	28	---
Chromium	ppm	ASTM D5185m >15	<b>0</b>	0	---
Nickel	ppm	ASTM D5185m >15	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	---
Silver	ppm	ASTM D5185m	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m >25	<b>&lt;1</b>	<1	---
Lead	ppm	ASTM D5185m >100	<b>0</b>	0	---
Copper	ppm	ASTM D5185m >200	<b>2</b>	2	---
Tin	ppm	ASTM D5185m >25	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	2	---
Barium	ppm	ASTM D5185m	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	---
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	---
Magnesium	ppm	ASTM D5185m	<b>2</b>	0	---
Calcium	ppm	ASTM D5185m	<b>4</b>	<1	---
Phosphorus	ppm	ASTM D5185m	<b>116</b>	95	---
Zinc	ppm	ASTM D5185m	<b>9</b>	0	---
Sulfur	ppm	ASTM D5185m	<b>5274</b>	6628	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>&lt;1</b>	3	---
Sodium	ppm	ASTM D5185m	<b>0</b>	<1	---
Potassium	ppm	ASTM D5185m >20	<b>1</b>	<1	---
Water	%	ASTM D6304 >0.2	<b>▲ 0.139</b>	---	---
ppm Water	ppm	ASTM D6304 >2000	<b>▲ 1390</b>	---	---

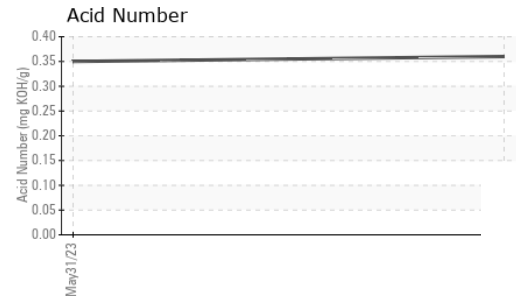
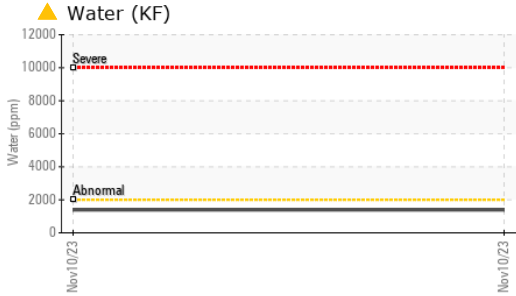
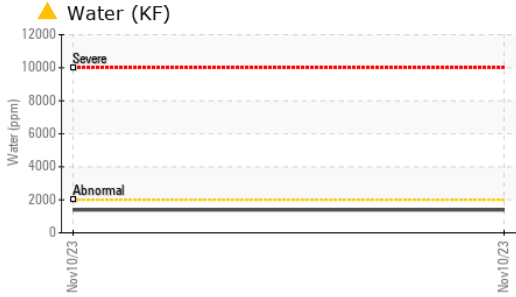
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	---	<b>▲ 52875</b>	---
Particles >6µm	ASTM D7647	>5000	---	<b>▲ 7526</b>	---
Particles >14µm	ASTM D7647	>640	---	395	---
Particles >21µm	ASTM D7647	>160	---	75	---
Particles >38µm	ASTM D7647	>40	---	4	---
Particles >71µm	ASTM D7647	>10	---	0	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	---	<b>▲ 23/20/16</b>	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.36</b>	0.35	---

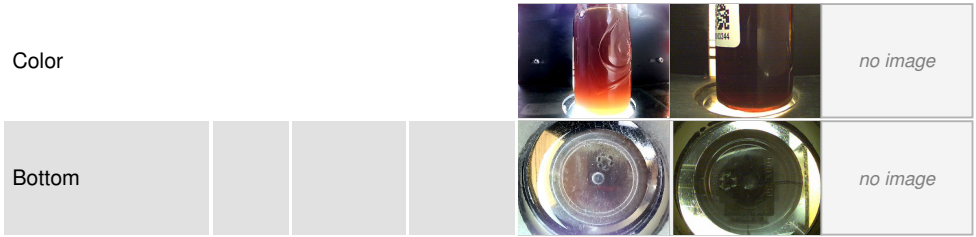
# OIL ANALYSIS REPORT



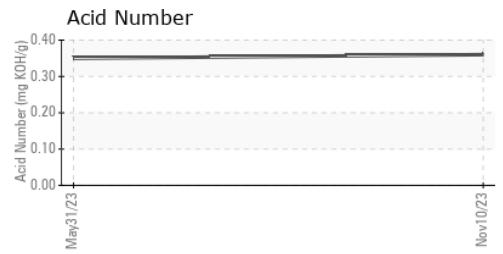
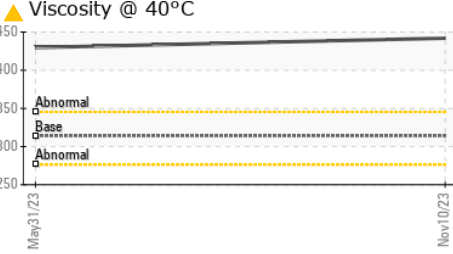
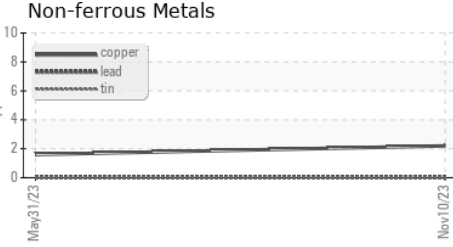
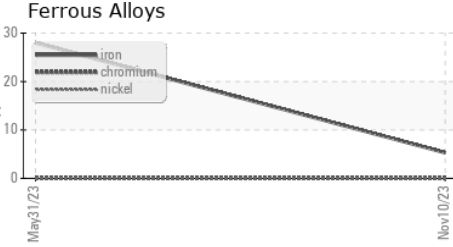
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	▲ MODER	---
Debris	scalar	*Visual	NONE	▲ MODER	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 314	▲ 442	▲ 429.7	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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### GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KFS0004814 **Received** : 14 Nov 2023  
**Lab Number** : 06007673 **Diagnosed** : 06 Dec 2023  
**Unique Number** : 10741435 **Diagnostician** : Doug Bogart  
**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)

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