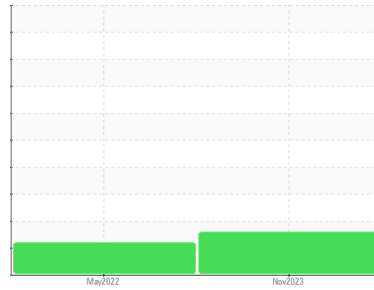




# PROBLEM SUMMARY

Sample Rating Trend



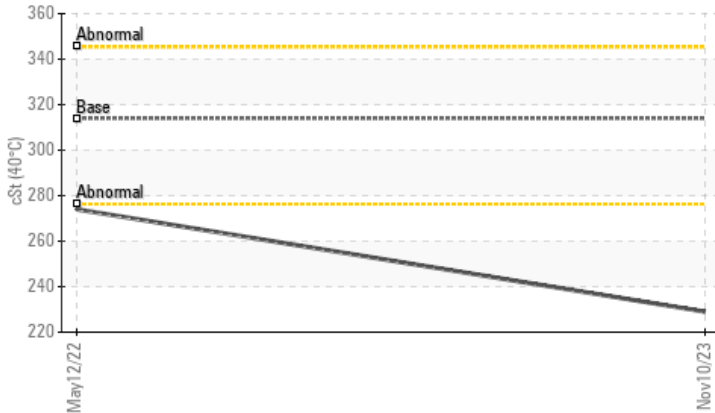
## VISCOSITY



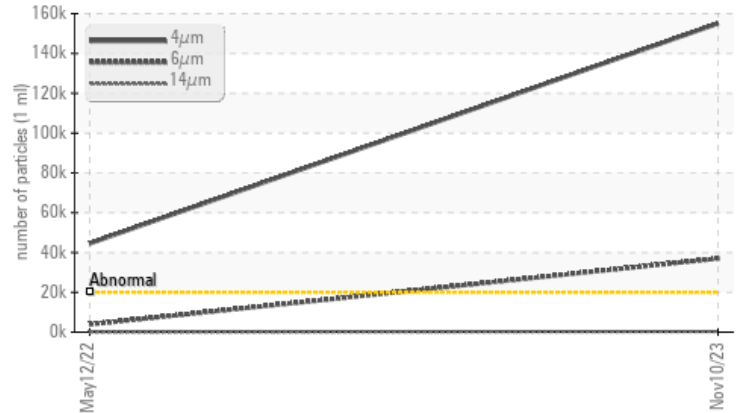
Area  
**HOTLINE/170 REVERSING MILL**  
 Machine Id  
**300 SHEAR MAIN DRIVE 1411-034-6030**  
 Component  
**Gearbox**  
 Fluid  
**CITGO COMPOUND EP 320 (435 GAL)**

### COMPONENT CONDITION SUMMARY

▲ Viscosity @ 40°C



▲ Particle Trend



### RECOMMENDATION

No corrective action is recommended at this time.  
 Resample at the next service interval to monitor.

### PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	ABNORMAL	---
Particles >4µm	ASTM D7647	>20000	▲ 155110	▲ 44559	---
Particles >6µm	ASTM D7647	>5000	▲ 36979	3886	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	▲ 24/22/15	▲ 23/19/13	---
Visc @ 40°C	cSt	ASTM D445	314	▲ 229	▲ 274

Customer Id: CONMUSAL  
 Sample No.: KFS0004930  
 Lab Number: 06007662  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

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

## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

**12 May 2022 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 < 6 microns in size) present in the oil. The oil viscosity is lower than normal. The AN level is acceptable for this fluid.

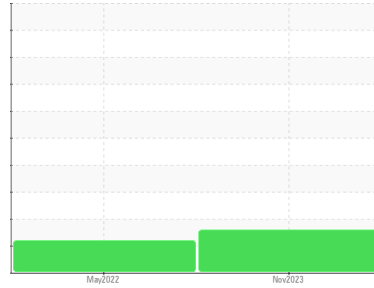
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Area  
**HOTLINE/170 REVERSING MILL**  
 Machine Id  
**300 SHEAR MAIN DRIVE 1411-034-6030**  
 Component  
**Gearbox**  
 Fluid  
**CITGO COMPOUND EP 320 (435 GAL)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is a high amount of silt (particulates < 6 microns in size) present in the oil.

### Fluid Condition

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

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>KFS0004930</b>	KFS0001305	---
Sample Date	Client Info	<b>10 Nov 2023</b>	12 May 2022	---
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>19</b>	4
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>	0
Silver	ppm	ASTM D5185m	<b>0</b>	0
Aluminum	ppm	ASTM D5185m >25	<b>0</b>	<1
Lead	ppm	ASTM D5185m >100	<b>12</b>	1
Copper	ppm	ASTM D5185m >200	<b>0</b>	<1
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>&lt;1</b>	3
Barium	ppm	ASTM D5185m	<b>0</b>	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0
Manganese	ppm	ASTM D5185m	<b>0</b>	0
Magnesium	ppm	ASTM D5185m	<b>0</b>	<1
Calcium	ppm	ASTM D5185m	<b>&lt;1</b>	0
Phosphorus	ppm	ASTM D5185m	<b>114</b>	93
Zinc	ppm	ASTM D5185m	<b>2</b>	0
Sulfur	ppm	ASTM D5185m	<b>4992</b>	5808

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>&lt;1</b>	<1
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	0
Potassium	ppm	ASTM D5185m >20	<b>0</b>	<1

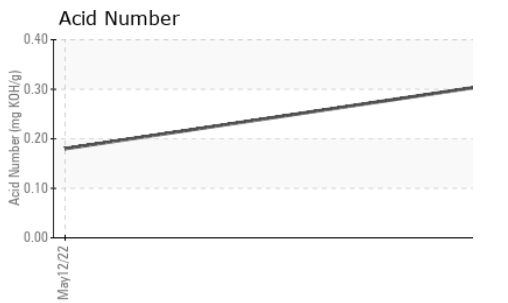
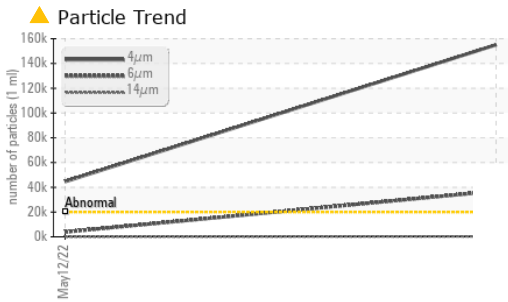
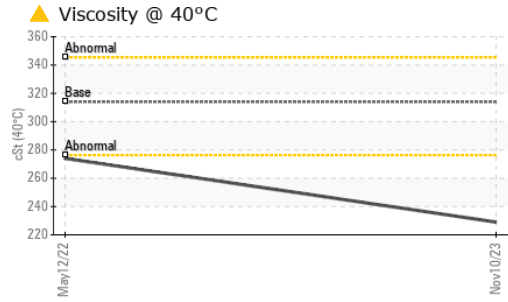
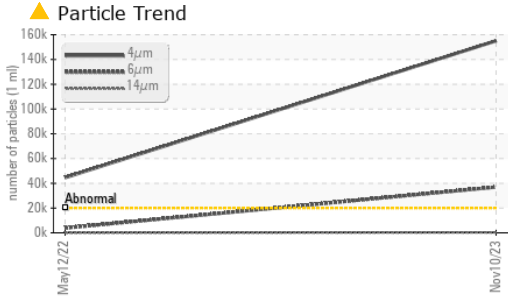
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >20000	<b>▲ 155110</b>	▲ 44559	---
Particles >6µm	ASTM D7647 >5000	<b>▲ 36979</b>	3886	---
Particles >14µm	ASTM D7647 >640	<b>297</b>	66	---
Particles >21µm	ASTM D7647 >160	<b>30</b>	13	---
Particles >38µm	ASTM D7647 >40	<b>1</b>	0	---
Particles >71µm	ASTM D7647 >10	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c) >21/19/16	<b>▲ 24/22/15</b>	▲ 23/19/13	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.31</b>	0.18

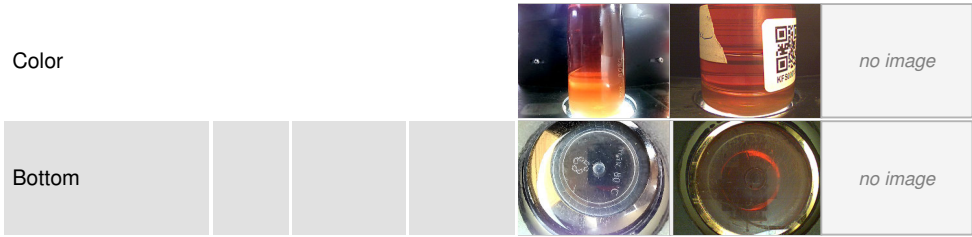
# OIL ANALYSIS REPORT



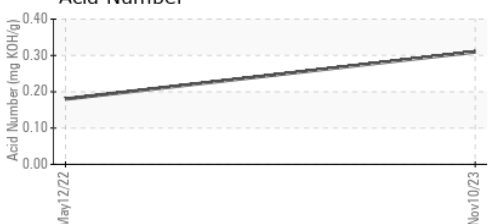
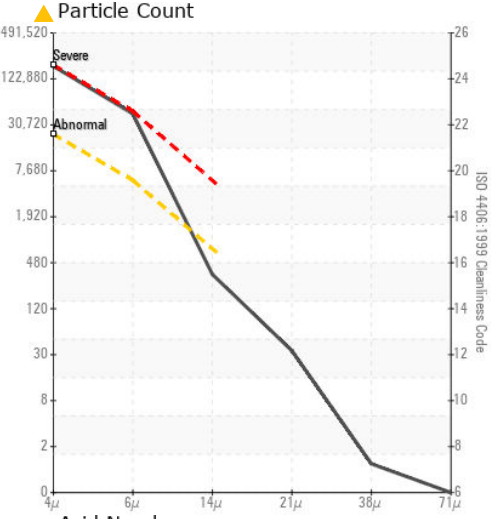
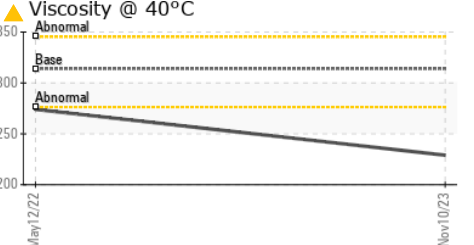
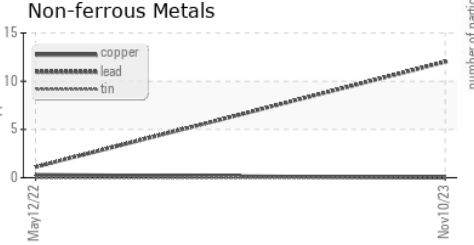
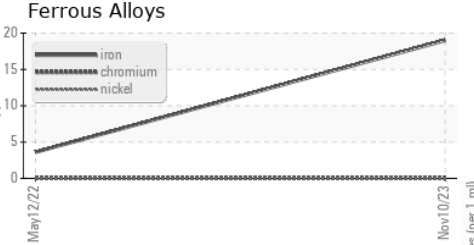
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 314	▲ 229	▲ 274	---

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.** : KFS0004930 **Received** : 14 Nov 2023  
**Lab Number** : 06007662 **Diagnosed** : 16 Nov 2023  
**Unique Number** : 10741424 **Diagnostician** : Don Baldrige  
**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)

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