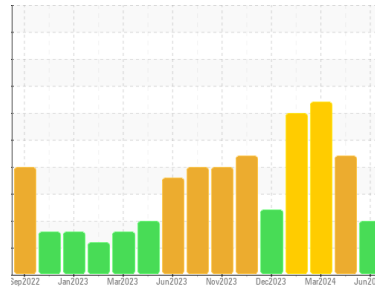




# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Area

**HOTLINE/120 MILL**

Machine Id

**120 MAIN DRIVE PINION 1415-014-1190**

Component

**Gearbox**

Fluid

**CITGO EP COMPOUND ISO 800 (5000 GAL)**

## DIAGNOSIS

### Recommendation

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

Moderate concentration of visible dirt/debris present in the oil. There is a light concentration of water present in the oil.

### Fluid Condition

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

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>KFS0004444</b>	KFS0004858	KFS0002560
Sample Date	Client Info	<b>21 Jun 2024</b>	02 Apr 2024	22 Mar 2024
Machine Age	hrs	<b>0</b>	0	0
Oil Age	hrs	<b>0</b>	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>ABNORMAL</b>	ABNORMAL	SEVERE

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >200	<b>3</b>	34	30
Chromium	ppm	ASTM D5185m >15	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m >15	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m >25	<b>&lt;1</b>	3	3
Lead	ppm	ASTM D5185m >100	<b>2</b>	15	14
Copper	ppm	ASTM D5185m >200	<b>0</b>	<1	2
Tin	ppm	ASTM D5185m >25	<b>0</b>	1	2
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	2

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	<b>0</b>	1	<1
Barium	ppm	ASTM D5185m	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>0</b>	4	2
Calcium	ppm	ASTM D5185m	<b>7</b>	17	17
Phosphorus	ppm	ASTM D5185m	<b>117</b>	144	141
Zinc	ppm	ASTM D5185m	<b>0</b>	5	15
Sulfur	ppm	ASTM D5185m	<b>6998</b>	6797	5725

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >50	<b>0</b>	1	3
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	6	5
Potassium	ppm	ASTM D5185m >20	<b>1</b>	3	2
Water	%	ASTM D6304 >0.2	<b>▲ 0.205</b>	▲ 0.209	▲ 1.08
ppm Water	ppm	ASTM D6304 >2000	<b>▲ 2050</b>	▲ 2090	▲ 10800

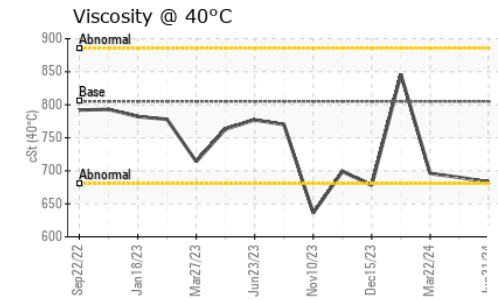
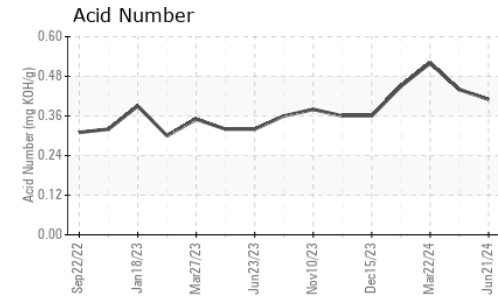
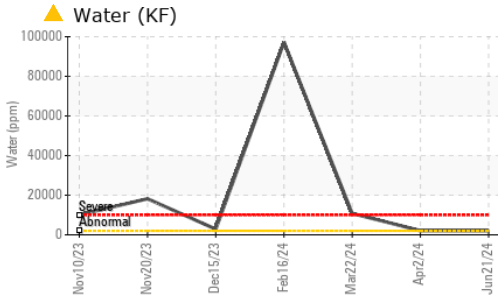
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >20000	---	9630	▲ 20409
Particles >6µm	ASTM D7647 >5000	---	● 5246	▲ 11118
Particles >14µm	ASTM D7647 >640	---	● 893	▲ 1892
Particles >21µm	ASTM D7647 >160	---	● 301	▲ 637
Particles >38µm	ASTM D7647 >40	---	● 46	▲ 98
Particles >71µm	ASTM D7647 >10	---	5	10
Oil Cleanliness	ISO 4406 (c) >21/19/16	---	● 20/20/17	▲ 22/21/18

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.41</b>	0.44	0.52

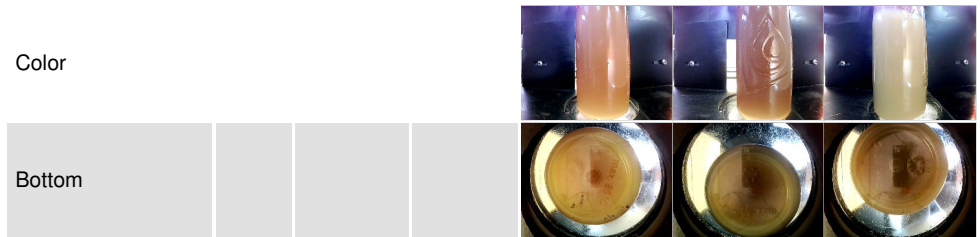
# OIL ANALYSIS REPORT



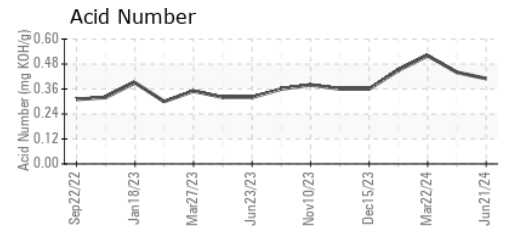
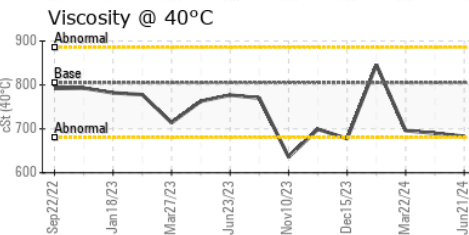
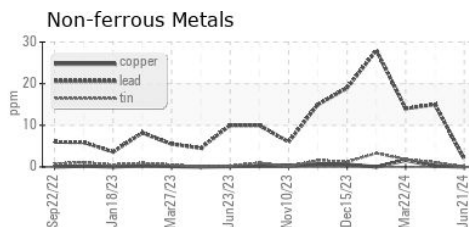
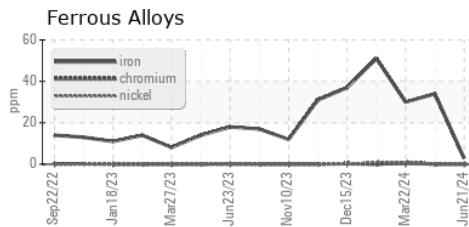
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	MODER
Debris	scalar	*Visual	NONE	▲ MODER	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 805	683	690	696

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.** : KFS0004444 **Received** : 25 Jun 2024  
**Lab Number** : 06219640 **Tested** : 26 Jun 2024  
**Unique Number** : 11097837 **Diagnosed** : 26 Jun 2024 - Don Baldrige  
**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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