



# OIL ANALYSIS REPORT

Sample Rating Trend

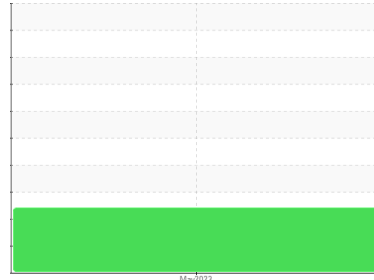
**WATER**



Machine Id  
**39 - DART CONTAINER**

Component  
**Gearbox**

Fluid  
**CITGO PAG 100 (--- LTR)**



## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor. Please note that this is a corrected copy for laboratory data updates.

### Wear

All component wear rates are normal.

### Contamination

There is a high amount of silt (particulates < 14 microns in size) 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. Additives confirmed.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>KFS0000219</b>	---	---
Sample Date	Client Info	<b>17 May 2023</b>	---	---
Machine Age	hrs Client Info	<b>0</b>	---	---
Oil Age	hrs Client Info	<b>0</b>	---	---
Oil Changed	Client Info	<b>N/A</b>	---	---
Sample Status		<b>ABNORMAL</b>	---	---

## WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184	<b>32</b>	---	---
Iron	ppm ASTM D5185m >200	<b>10</b>	---	---
Chromium	ppm ASTM D5185m >15	<b>&lt;1</b>	---	---
Nickel	ppm ASTM D5185m >15	<b>0</b>	---	---
Titanium	ppm ASTM D5185m	<b>0</b>	---	---
Silver	ppm ASTM D5185m	<b>0</b>	---	---
Aluminum	ppm ASTM D5185m >25	<b>0</b>	---	---
Lead	ppm ASTM D5185m >100	<b>0</b>	---	---
Copper	ppm ASTM D5185m >200	<b>&lt;1</b>	---	---
Tin	ppm ASTM D5185m >25	<b>&lt;1</b>	---	---
Vanadium	ppm ASTM D5185m	<b>0</b>	---	---
Cadmium	ppm ASTM D5185m	<b>0</b>	---	---

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	<b>0</b>	---	---
Barium	ppm ASTM D5185m	<b>0</b>	---	---
Molybdenum	ppm ASTM D5185m	<b>0</b>	---	---
Manganese	ppm ASTM D5185m	<b>&lt;1</b>	---	---
Magnesium	ppm ASTM D5185m	<b>0</b>	---	---
Calcium	ppm ASTM D5185m	<b>0</b>	---	---
Phosphorus	ppm ASTM D5185m	<b>1129</b>	---	---
Zinc	ppm ASTM D5185m	<b>0</b>	---	---
Sulfur	ppm ASTM D5185m	<b>217</b>	---	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >50	<b>2</b>	---	---
Sodium	ppm ASTM D5185m	<b>&lt;1</b>	---	---
Potassium	ppm ASTM D5185m >20	<b>2</b>	---	---
Water	% ASTM D6304 >0.2	<b>▲ 0.202</b>	---	---
ppm Water	ppm ASTM D6304 >2000	<b>▲ 2022.5</b>	---	---

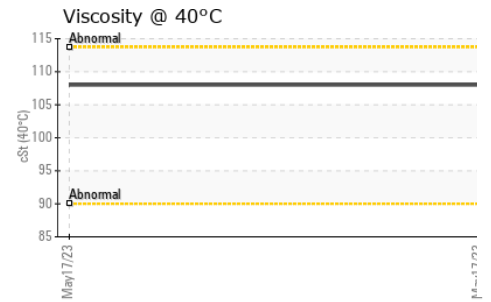
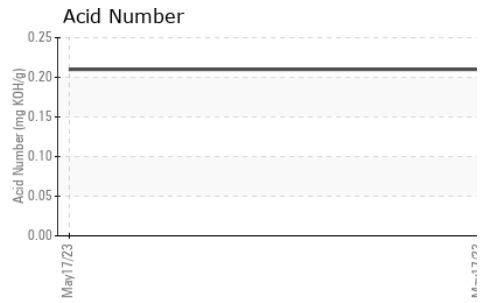
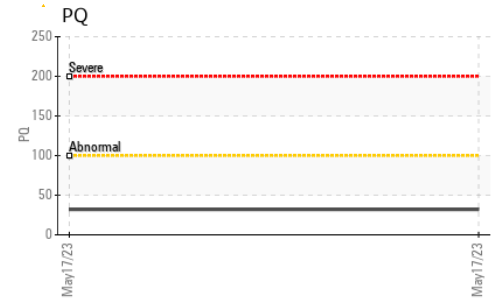
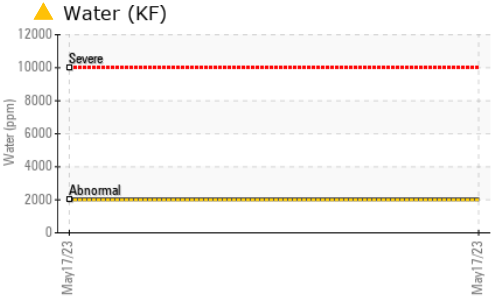
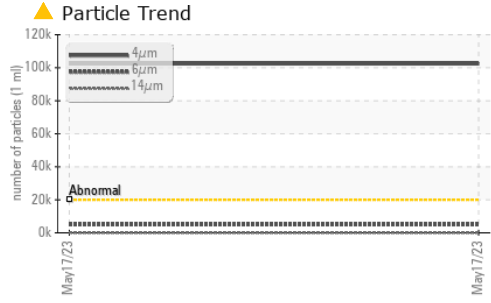
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >20000	<b>▲ 102365</b>	---	---
Particles >6µm	ASTM D7647 >5000	<b>4969</b>	---	---
Particles >14µm	ASTM D7647 >640	<b>43</b>	---	---
Particles >21µm	ASTM D7647 >160	<b>8</b>	---	---
Particles >38µm	ASTM D7647 >40	<b>0</b>	---	---
Particles >71µm	ASTM D7647 >10	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c) >21/19/16	<b>▲ 24/19/13</b>	---	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045	<b>0.21</b>	---	---

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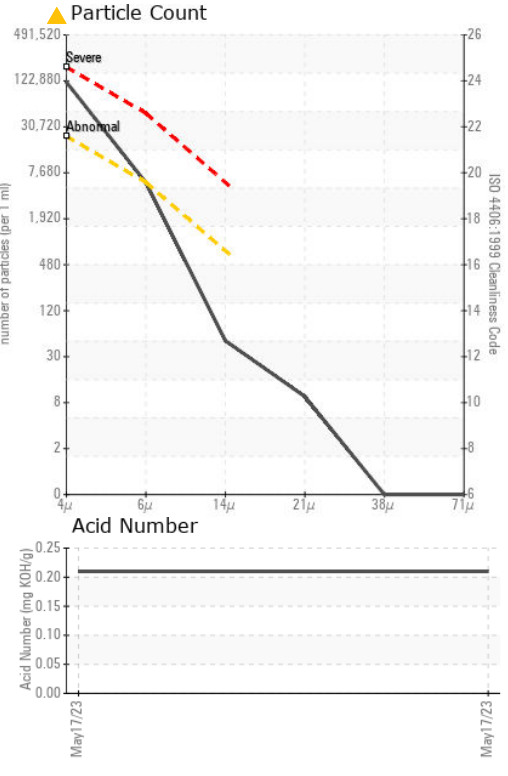
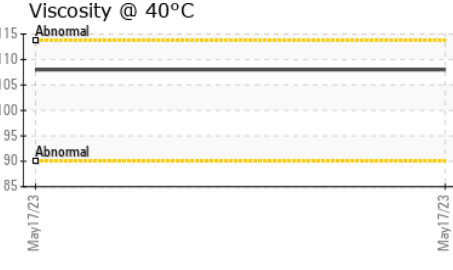
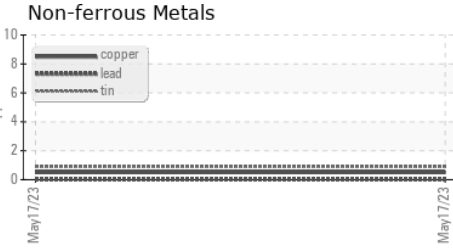
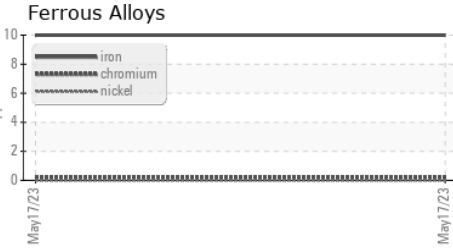
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
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	108	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color		no image	no image
Bottom		no image	no image

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KFS0000219      **Received** : 24 May 2023  
**Lab Number** : 05855647      **Tested** : 08 Jun 2023  
**Unique Number** : 10485002      **Diagnosed** : 08 Jun 2023 - Doug Bogart  
**Test Package** : IND 2 ( Additional Tests: KF, PQ, 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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