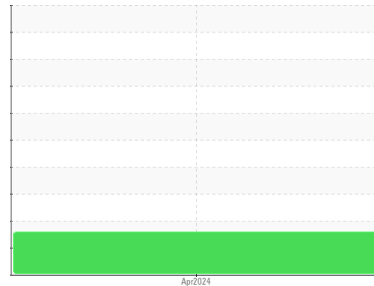




# OIL ANALYSIS REPORT

Machine Id  
**CATERPILLAR 745D 13405 (S/N 3T606094)**  
 Component  
**Rear Differential**  
 Fluid  
**{not provided} (--- GAL)**

### Sample Rating Trend



**WEAR**



### DIAGNOSIS

#### ▲ Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

#### ▲ Wear

The aluminum level is abnormal. The copper level is abnormal.

#### Contamination

There is no indication of any contamination in the oil.

#### Fluid Condition

The condition of the oil is acceptable for the time in service.

### SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0913167</b>	---	---
Sample Date	Client Info		<b>03 Apr 2024</b>	---	---
Machine Age	hrs	Client Info	<b>2240</b>	---	---
Oil Age	hrs	Client Info	<b>2240</b>	---	---
Oil Changed	Client Info		<b>Changed</b>	---	---
Sample Status			<b>ABNORMAL</b>	---	---

### CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>.2	<b>NEG</b>	---	---

### WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	<b>195</b>	---
Chromium	ppm	ASTM D5185m	>3	<b>2</b>	---
Nickel	ppm	ASTM D5185m	>3	<b>0</b>	---
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	---
Silver	ppm	ASTM D5185m	>2	<b>0</b>	---
Aluminum	ppm	ASTM D5185m	>30	<b>▲ 51</b>	---
Lead	ppm	ASTM D5185m	>13	<b>0</b>	---
Copper	ppm	ASTM D5185m	>103	<b>▲ 514</b>	---
Tin	ppm	ASTM D5185m	>5	<b>4</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>&lt;1</b>	---
Barium	ppm	ASTM D5185m		<b>1</b>	---
Molybdenum	ppm	ASTM D5185m		<b>2</b>	---
Manganese	ppm	ASTM D5185m		<b>4</b>	---
Magnesium	ppm	ASTM D5185m		<b>12</b>	---
Calcium	ppm	ASTM D5185m		<b>3277</b>	---
Phosphorus	ppm	ASTM D5185m		<b>1111</b>	---
Zinc	ppm	ASTM D5185m		<b>1247</b>	---
Sulfur	ppm	ASTM D5185m		<b>10129</b>	---

### CONTAMINANTS

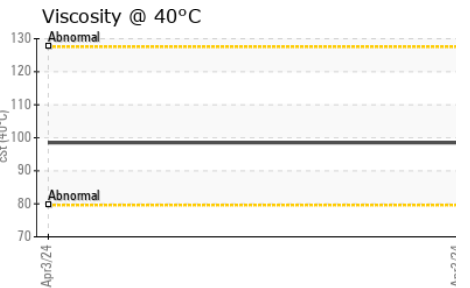
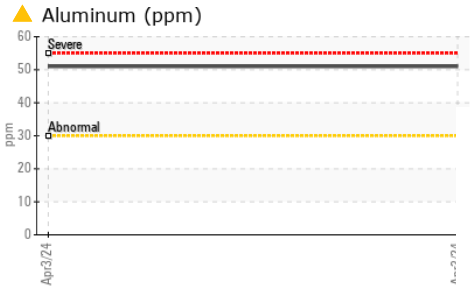
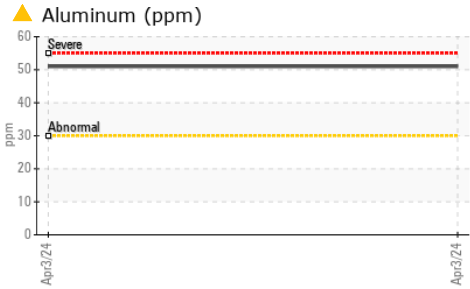
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>100	<b>25</b>	---
Sodium	ppm	ASTM D5185m		<b>2</b>	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	---

### VISUAL

	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	---
Emulsified Water	scalar	*Visual	>.2	<b>NEG</b>	---
Free Water	scalar	*Visual		<b>NEG</b>	---



# OIL ANALYSIS REPORT

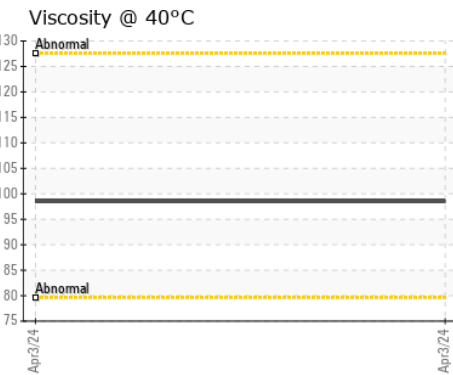
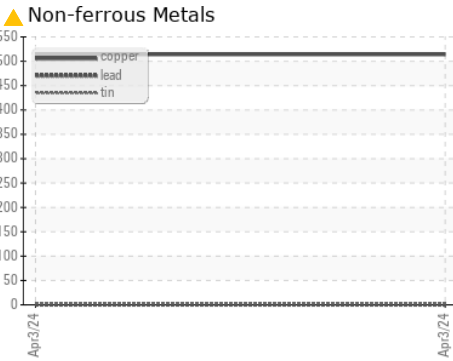
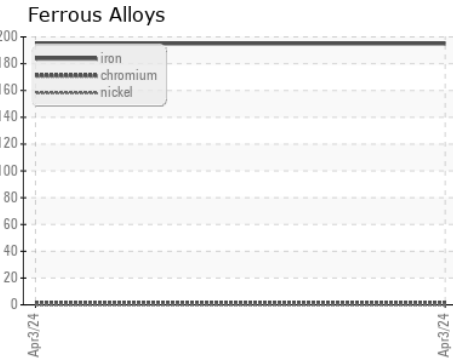


FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	<b>98.5</b>	---	---

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

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0913167      **Received** : 12 Apr 2024  
**Lab Number** : 06147687      **Tested** : 15 Apr 2024  
**Unique Number** : 10977765      **Diagnosed** : 16 Apr 2024 - Jonathan Hester  
**Test Package** : CONST

**TRADER CONSTRUCTION CO.**  
 PO DRAWER 1578  
 NEW BERN, NC  
 US 28563  
 Contact: MIKE WYATT  
 mwyatt@traderconstruction.com  
 T: (252)633-1399  
 F: (252)638-4871

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)