

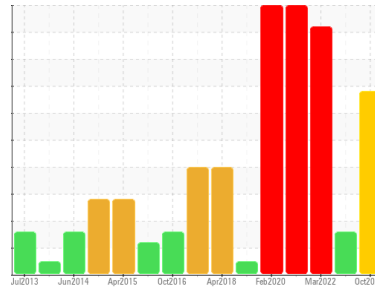


# PROBLEM SUMMARY



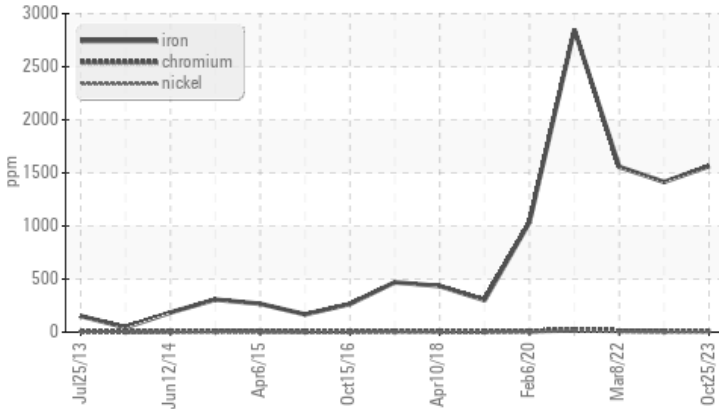
Machine Id  
**CATERPILLAR 308E 8378 (S/N GBJ00563)**  
 Component  
**Right Final Drive**  
 Fluid  
**TDTO FLUID SAE 30 (--- GAL)**

Sample Rating Trend



## COMPONENT CONDITION SUMMARY

### Ferrous Alloys



## RECOMMENDATION

The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

## PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	SEVERE
Iron	ppm	ASTM D5185m	>800	1564	1415	1557
Chromium	ppm	ASTM D5185m	>10	11	10	13

Customer Id: TRANEW  
 Sample No.: WC0862933  
 Lab Number: 05994641  
 Test Package: CONST



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

Action	Status	Date	Done By	Description
Inspect Wear Source	---	---	?	We advise that you inspect for the source(s) of wear.
Resample	---	---	?	We recommend an early resample to monitor this condition.

## HISTORICAL DIAGNOSIS

### 02 Mar 2023 Diag: Don Baldrige

#### WEAR



The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. The iron level has decreased, but is still abnormal. Gear wear is indicated. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

[view report](#)



### 08 Mar 2022 Diag: Don Baldrige

#### WEAR



We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. The iron level has decreased, but is still abnormal. Gear wear is indicated. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The oil is no longer serviceable due to the presence of contaminants.

[view report](#)



### 02 Mar 2021 Diag: Jonathan Hester

#### WEAR



We advise that you check all areas where dirt can enter the system. We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Gear wear is indicated. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. There is a high concentration of water present in the oil. The oil is no longer serviceable due to the presence of contaminants.

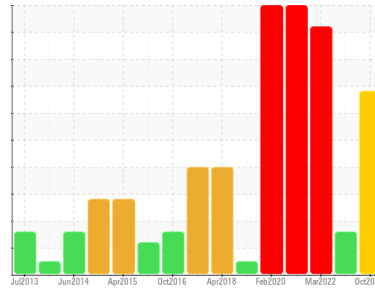
[view report](#)





# OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id  
**CATERPILLAR 308E 8378 (S/N GBJ00563)**  
 Component  
**Right Final Drive**  
 Fluid  
**TDTO FLUID SAE 30 (--- GAL)**

## DIAGNOSIS

### Recommendation

The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

### Wear

The iron level is severe. Gear wear is indicated.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0862933</b>	WC0776008	WC0674152
Sample Date	Client Info		<b>25 Oct 2023</b>	02 Mar 2023	08 Mar 2022
Machine Age	hrs	Client Info	<b>7955</b>	7497	7038
Oil Age	hrs	Client Info	<b>458</b>	459	440
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>SEVERE</b>	ABNORMAL	SEVERE

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >800	<b>1564</b>	1415	1557
Chromium	ppm	ASTM D5185m >10	<b>11</b>	10	13
Nickel	ppm	ASTM D5185m >5	<b>3</b>	2	4
Titanium	ppm	ASTM D5185m >15	<b>1</b>	1	3
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >75	<b>18</b>	11	33
Lead	ppm	ASTM D5185m >10	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m >75	<b>3</b>	2	2
Tin	ppm	ASTM D5185m >8	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185m >50	<b>---</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 37	<b>230</b>	169	208
Barium	ppm	ASTM D5185m 7	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 5	<b>0</b>	<1	1
Manganese	ppm	ASTM D5185m	<b>9</b>	9	11
Magnesium	ppm	ASTM D5185m 40	<b>16</b>	3	3
Calcium	ppm	ASTM D5185m 2650	<b>35</b>	50	53
Phosphorus	ppm	ASTM D5185m 1050	<b>1083</b>	747	1504
Zinc	ppm	ASTM D5185m 1075	<b>19</b>	0	18
Sulfur	ppm	ASTM D5185m 5750	<b>17293</b>	8500	21627

## CONTAMINANTS

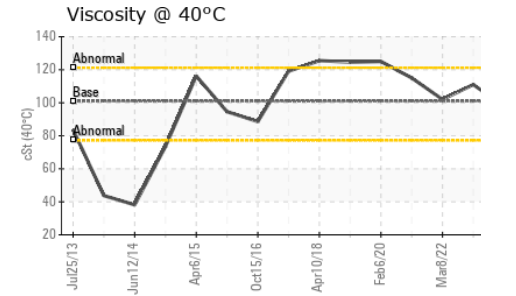
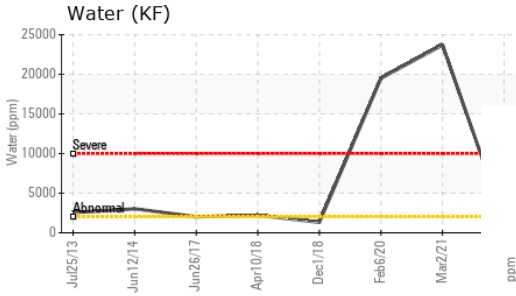
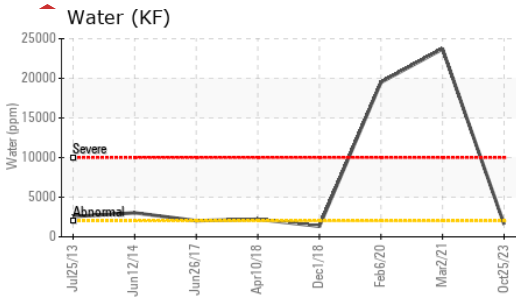
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >400	<b>84</b>	71	178
Sodium	ppm	ASTM D5185m	<b>4</b>	<1	1
Potassium	ppm	ASTM D5185m >20	<b>5</b>	3	7
Water	%	ASTM D6304 >0.2	<b>0.160</b>	---	---
ppm Water	ppm	ASTM D6304 >2000	<b>1600</b>	---	---

## VISUAL

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



# OIL ANALYSIS REPORT

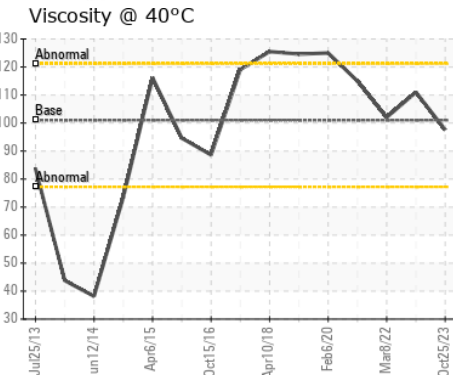
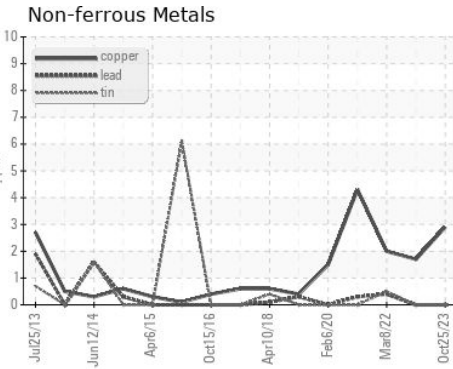
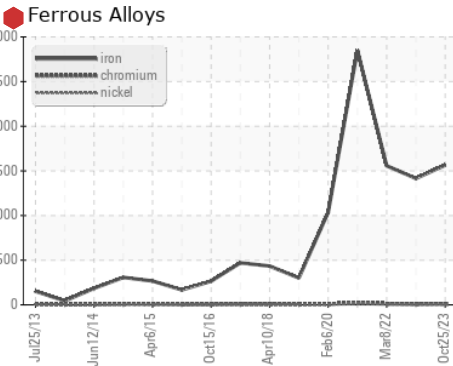


FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 101	97.6	111	102

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.** : WC0862933 **Received** : 31 Oct 2023  
**Lab Number** : 05994641 **Diagnosed** : 01 Nov 2023  
**Unique Number** : 10723001 **Diagnostician** : Don Baldridge  
**Test Package** : CONST ( Additional Tests: KF )

**TRADER CONSTRUCTION CO.**  
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 US 28563  
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 T: (252)633-1399  
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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)