



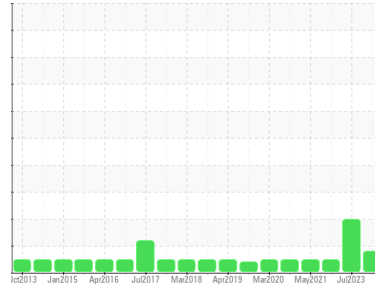
# OIL ANALYSIS REPORT

Sample Rating Trend

**SEDIMENT**



Machine Id  
**CATERPILLAR 316EL 8379 (S/N DZW00149)**  
Component  
**Hydraulic System**  
Fluid  
**{not provided} (--- GAL)**



## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is a moderate amount of visible silt present in the sample.

### 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>WC0831188</b>	WC0816200	WC0652155
Sample Date	Client Info		<b>10 Jan 2024</b>	13 Jul 2023	11 Jan 2022
Machine Age	hrs	Client Info	<b>8555</b>	8202	7782
Oil Age	hrs	Client Info	<b>8555</b>	8202	7782
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Sample Status			<b>ABNORMAL</b>	ABNORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<b>10</b>	11	10
Chromium	ppm	ASTM D5185m >10	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m >10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >10	<b>0</b>	1	<1
Lead	ppm	ASTM D5185m >10	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m >75	<b>3</b>	4	3
Tin	ppm	ASTM D5185m >10	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185m	<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>83</b>	99	93
Barium	ppm	ASTM D5185m	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m	<b>1</b>	2	2
Manganese	ppm	ASTM D5185m	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	<b>29</b>	30	32
Calcium	ppm	ASTM D5185m	<b>2711</b>	2949	2765
Phosphorus	ppm	ASTM D5185m	<b>1047</b>	1060	1006
Zinc	ppm	ASTM D5185m	<b>1136</b>	1172	1174
Sulfur	ppm	ASTM D5185m	<b>2670</b>	2810	2678

## CONTAMINANTS

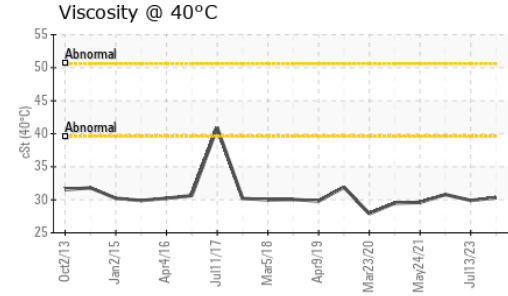
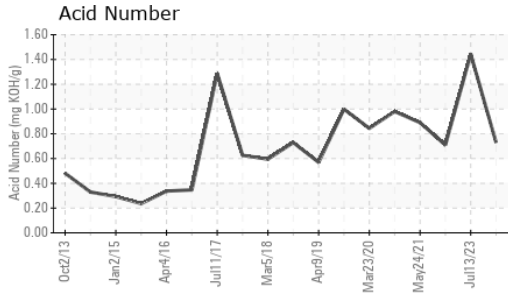
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>8</b>	9	8
Sodium	ppm	ASTM D5185m	<b>7</b>	2	6
Potassium	ppm	ASTM D5185m >20	<b>0</b>	3	0

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>---</b>	▲ 10588	828
Particles >6µm	ASTM D7647	>1300	<b>---</b>	▲ 2965	169
Particles >14µm	ASTM D7647	>160	<b>---</b>	▲ 357	21
Particles >21µm	ASTM D7647	>40	<b>---</b>	▲ 120	6
Particles >38µm	ASTM D7647	>10	<b>---</b>	7	0
Particles >71µm	ASTM D7647	>3	<b>---</b>	1	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>---</b>	▲ 21/19/16	17/15/12



# OIL ANALYSIS REPORT

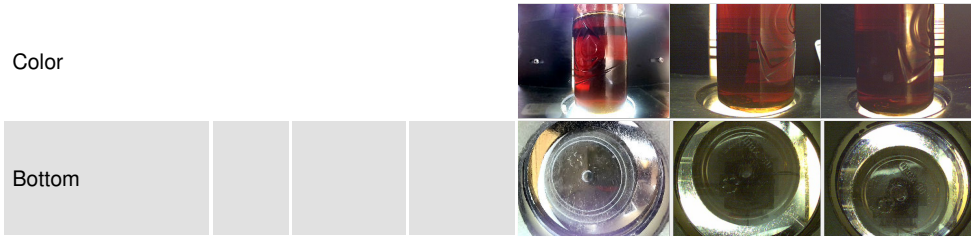


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.73</b>	1.443	0.709

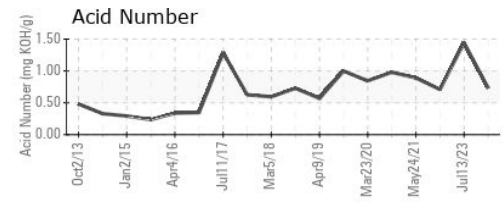
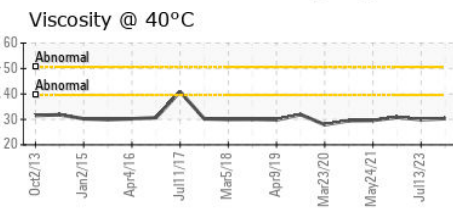
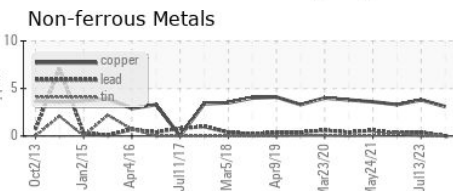
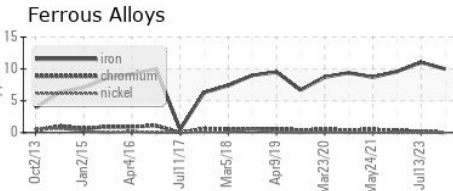
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual	NONE	<b>▲ MODER</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	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	>0.1	<b>NEG</b>	NEG	NEG
Free Water	scalar	*Visual		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		<b>30.3</b>	29.9	30.8

SAMPLE IMAGES		method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0831188 **Received** : 12 Jan 2024  
**Lab Number** : 06059232 **Diagnosed** : 15 Jan 2024  
**Unique Number** : 10830614 **Diagnostician** : Don Baldrige  
**Test Package** : CONST

**TRADER CONSTRUCTION CO.**  
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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)