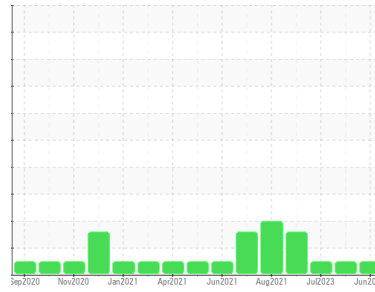




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**CATERPILLAR 374FL 8398 (S/N XWL00242)**  
 Component  
**Hydraulic System**  
 Fluid  
**TDH FLUID SAE 70W80 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

### 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>WC0899188</b>	WC0879304	WC0831257
Sample Date	Client Info	<b>07 Jun 2024</b>	27 Feb 2024	24 Jul 2023
Machine Age	hrs	<b>2095</b>	1619	7587
Oil Age	hrs	<b>9126</b>	8014	7587
Oil Changed	Client Info	<b>Not Changed</b>	Not Changed	Not Changed
Sample Status		<b>NORMAL</b>	NORMAL	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>11</b>	6	12
Chromium	ppm ASTM D5185m >10	<b>&lt;1</b>	<1	<1
Nickel	ppm ASTM D5185m >10	<b>&lt;1</b>	0	0
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	<1	<1
Silver	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Aluminum	ppm ASTM D5185m >10	<b>4</b>	2	5
Lead	ppm ASTM D5185m >10	<b>&lt;1</b>	<1	<1
Copper	ppm ASTM D5185m >75	<b>7</b>	6	11
Tin	ppm ASTM D5185m >10	<b>&lt;1</b>	<1	<1
Antimony	ppm ASTM D5185m	<b>---</b>	---	---
Vanadium	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm ASTM D5185m	<b>&lt;1</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 10	<b>77</b>	70	56
Barium	ppm ASTM D5185m 10	<b>&lt;1</b>	0	1
Molybdenum	ppm ASTM D5185m 10	<b>3</b>	2	3
Manganese	ppm ASTM D5185m	<b>&lt;1</b>	0	<1
Magnesium	ppm ASTM D5185m 100	<b>33</b>	31	37
Calcium	ppm ASTM D5185m 3500	<b>2730</b>	2585	2032
Phosphorus	ppm ASTM D5185m 1150	<b>902</b>	996	935
Zinc	ppm ASTM D5185m 1150	<b>1232</b>	1218	1181
Sulfur	ppm ASTM D5185m 5000	<b>3465</b>	3638	3174

## CONTAMINANTS

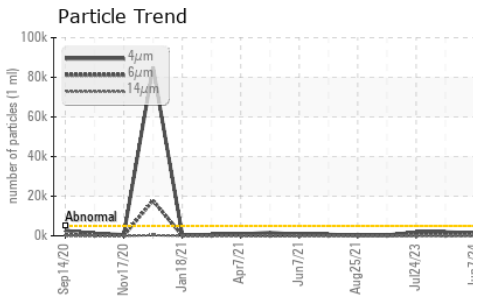
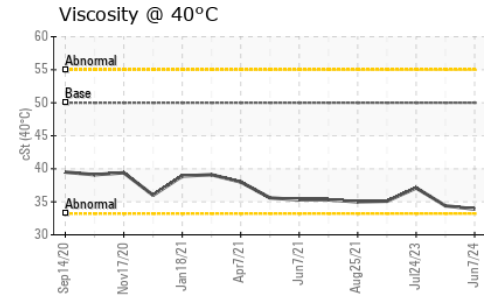
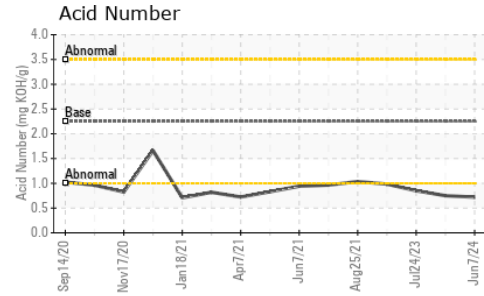
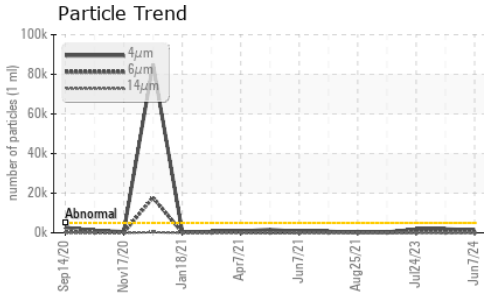
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	<b>16</b>	11	12
Sodium	ppm ASTM D5185m	<b>1</b>	0	0
Potassium	ppm ASTM D5185m >20	<b>3</b>	2	2

## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	<b>1470</b>	1933	1808
Particles >6µm	ASTM D7647 >1300	<b>193</b>	123	268
Particles >14µm	ASTM D7647 >160	<b>17</b>	6	35
Particles >21µm	ASTM D7647 >40	<b>3</b>	2	13
Particles >38µm	ASTM D7647 >10	<b>0</b>	0	2
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	<b>18/15/11</b>	18/14/10	18/15/12



# OIL ANALYSIS REPORT

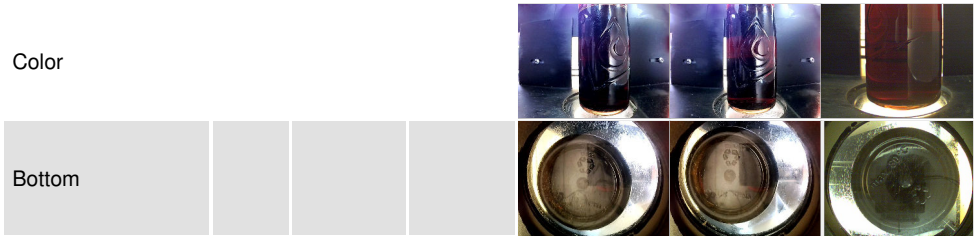


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	2.25	<b>0.72</b>	0.75	0.85

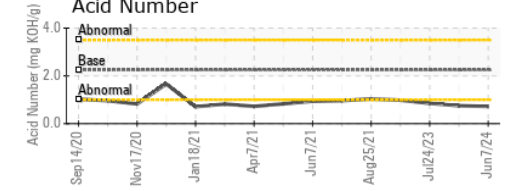
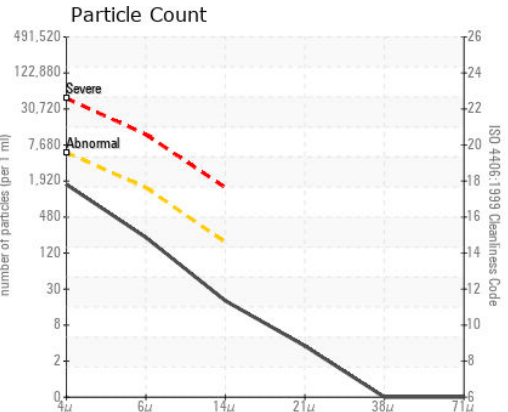
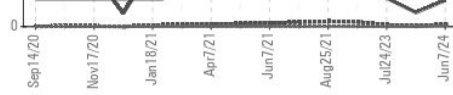
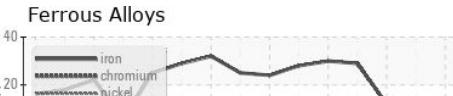
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	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	>0.1	<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	50	<b>33.9</b>	34.4	37.1

## SAMPLE IMAGES



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0899188  
**Lab Number** : 06213396  
**Unique Number** : 11086260  
**Test Package** : CONST  
**Received** : 18 Jun 2024  
**Tested** : 19 Jun 2024  
**Diagnosed** : 20 Jun 2024 - Don Baldrige

**TRADER CONSTRUCTION CO.**  
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 NEW BERN, NC  
 US 28563  
 Contact: MIKE WYATT  
 mw Wyatt@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)