

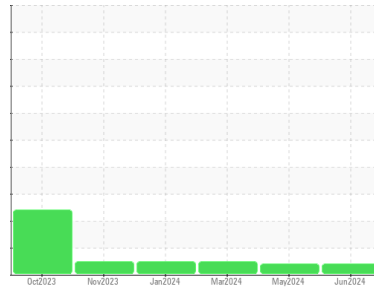


# OIL ANALYSIS REPORT



Area  
**MINING**  
Machine Id  
**ME-66 CATERPILLAR 980M MK700460**  
Component  
**Front Differential**  
Fluid  
**CAT TDTO 30W (--- GAL)**

## Sample Rating Trend



## VISCOSITY



### 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.

#### Fluid Condition

The oil viscosity is higher than normal. 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>WC0950848</b>	WC0910921	WC0909665
Sample Date	Client Info		<b>17 Jun 2024</b>	07 May 2024	12 Mar 2024
Machine Age	hrs	Client Info	<b>6540</b>	6064	5546
Oil Age	hrs	Client Info	<b>1000</b>	500	2000
Oil Changed	Client Info		<b>N/A</b>	Not Changd	Changed
Sample Status			<b>ATTENTION</b>	ATTENTION	NORMAL

### CONTAMINATION

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

### WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>500	<b>60</b>	41	96
Chromium	ppm	ASTM D5185m	>3	<b>0</b>	<1	1
Nickel	ppm	ASTM D5185m	>3	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>30	<b>2</b>	<1	3
Lead	ppm	ASTM D5185m	>13	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>103	<b>6</b>	2	12
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	<1
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>5</b>	3	6
Barium	ppm	ASTM D5185m		<b>0</b>	1	0
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	0	2
Manganese	ppm	ASTM D5185m		<b>1</b>	<1	1
Magnesium	ppm	ASTM D5185m		<b>28</b>	28	22
Calcium	ppm	ASTM D5185m	2980	<b>3038</b>	2971	2774
Phosphorus	ppm	ASTM D5185m	1100	<b>1106</b>	1091	960
Zinc	ppm	ASTM D5185m	1270	<b>1314</b>	1239	1184
Sulfur	ppm	ASTM D5185m		<b>8970</b>	8316	7227

### CONTAMINANTS

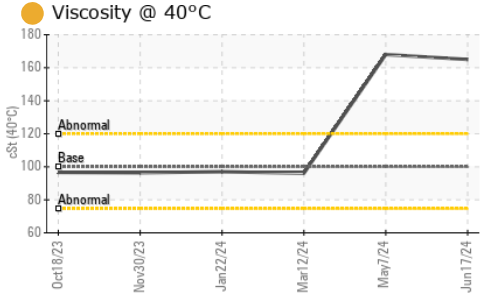
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>100	<b>8</b>	6	8
Sodium	ppm	ASTM D5185m		<b>2</b>	<1	0
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	0	2

### 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	>.2	<b>NEG</b>	NEG	NEG
Free Water	scalar	*Visual		<b>NEG</b>	NEG	NEG



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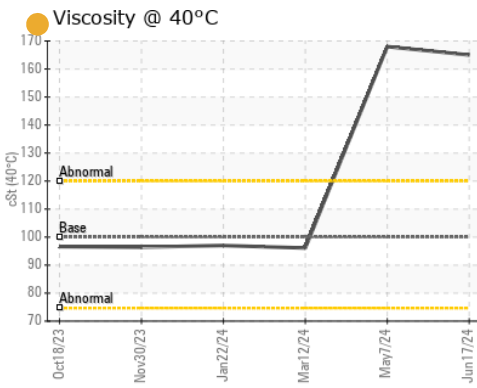
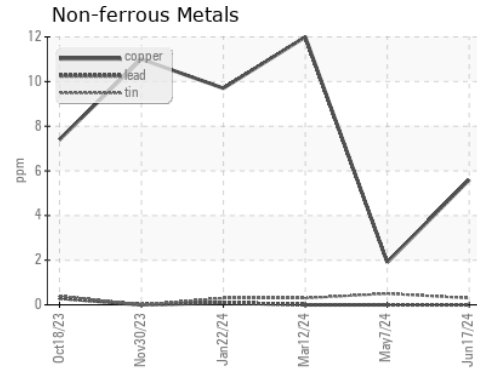
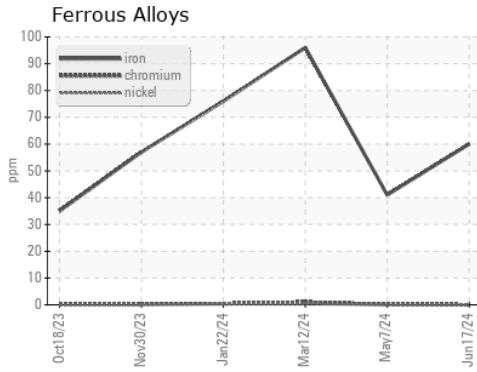
### FLUID PROPERTIES

method	limit/base	current	history1	history2
Visc @ 40°C	cSt ASTM D445	100	165	168

### SAMPLE IMAGES

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

### GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0950848  
**Lab Number** : 06218660  
**Unique Number** : 11096857  
**Test Package** : CONST  
**Received** : 24 Jun 2024  
**Tested** : 25 Jun 2024  
**Diagnosed** : 26 Jun 2024 - Sean Felton

**COVIA - CAMDEN - 094**  
 1700 SAND MILL RD  
 CAMDEN, TN  
 US 38320  
 Contact: TRACY KEE  
 tracy.kee@coviacorp.com

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)

T:  
F: