

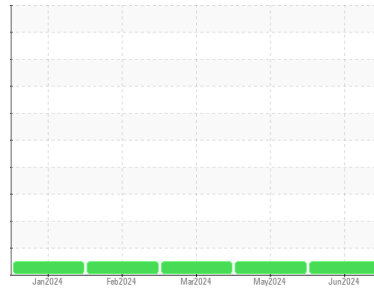


OIL ANALYSIS REPORT



Area
MINING
 Machine Id
ME-61 CATERPILLAR 980M MK700210
 Component
Rear Differential
 Fluid
CAT TDTO SAE 50 (22 GAL)

Sample Rating Trend



NORMAL



DIAGNOSIS

Recommendation

The oil 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 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			WC0950839	WC0910901	WC0909689
Sample Date	Client Info			04 Jun 2024	01 May 2024	28 Mar 2024
Machine Age	hrs	Client Info		12200	11790	11312
Oil Age	hrs	Client Info		2000	1500	1000
Oil Changed	Client Info			Changed	Not Changd	N/A
Sample Status				NORMAL	NORMAL	NORMAL

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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	46	34	27
Chromium	ppm	ASTM D5185m	>3	0	<1	<1
Nickel	ppm	ASTM D5185m	>3	<1	0	<1
Titanium	ppm	ASTM D5185m	>2	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>30	2	<1	2
Lead	ppm	ASTM D5185m	>13	<1	0	0
Copper	ppm	ASTM D5185m	>103	6	5	4
Tin	ppm	ASTM D5185m	>5	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	<1

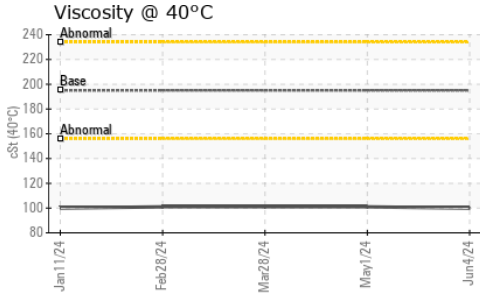
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		8	2	1
Barium	ppm	ASTM D5185m		0	1	0
Molybdenum	ppm	ASTM D5185m		1	0	2
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		24	23	22
Calcium	ppm	ASTM D5185m	2980	3013	2965	3092
Phosphorus	ppm	ASTM D5185m	1100	1053	1094	1066
Zinc	ppm	ASTM D5185m	1270	1219	1221	1251
Sulfur	ppm	ASTM D5185m		7965	7312	7024

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>100	17	11	11
Sodium	ppm	ASTM D5185m		1	<1	<1
Potassium	ppm	ASTM D5185m	>20	<1	0	2

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



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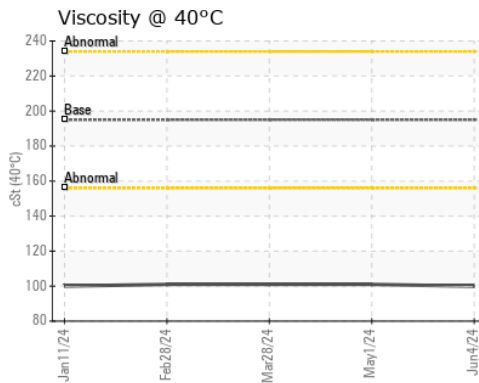
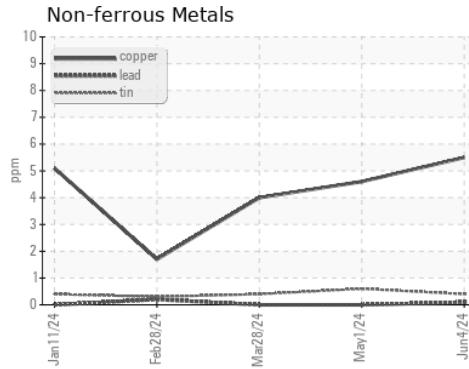
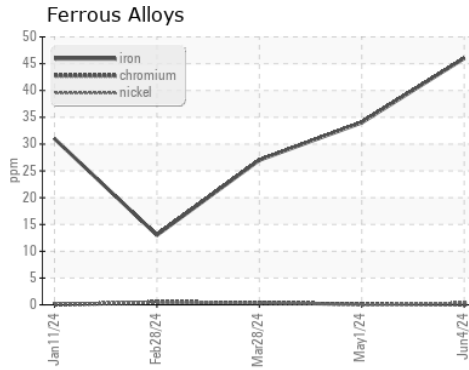


FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	195	99.9	101	101

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. : WC0950839 **Received** : 11 Jun 2024
Lab Number : **06206960** **Tested** : 13 Jun 2024
Unique Number : 11074421 **Diagnosed** : 13 Jun 2024 - Don Baldrige
Test Package : CONST

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)

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