

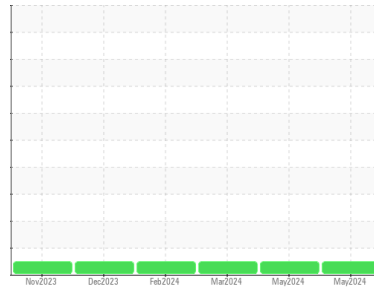


OIL ANALYSIS REPORT



Area
MINING
Machine Id
ME-60 CATERPILLAR 982M MK800210
Component
Front Differential
Fluid
CAT TDTO SAE 50 (22 GAL)

Sample Rating Trend



NORMAL



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 condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0910909	WC0910932	WC0909680
Sample Date	Client Info			31 May 2024	01 May 2024	28 Mar 2024
Machine Age	hrs	Client Info		12840	12420	11887
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	30	23	23
Chromium	ppm	ASTM D5185m	>3	<1	<1	<1
Nickel	ppm	ASTM D5185m	>3	0	0	<1
Titanium	ppm	ASTM D5185m	>2	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>30	3	2	3
Lead	ppm	ASTM D5185m	>13	0	0	0
Copper	ppm	ASTM D5185m	>103	6	3	3
Tin	ppm	ASTM D5185m	>5	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	<1

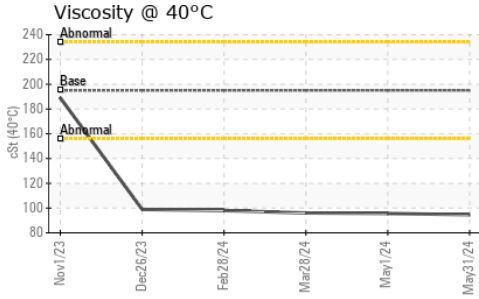
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		2	5	7
Barium	ppm	ASTM D5185m		0	1	0
Molybdenum	ppm	ASTM D5185m		2	0	2
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		2	26	26
Calcium	ppm	ASTM D5185m	2980	2852	2954	3031
Phosphorus	ppm	ASTM D5185m	1100	969	1074	1064
Zinc	ppm	ASTM D5185m	1270	1189	1239	1280
Sulfur	ppm	ASTM D5185m		6647	7117	7158

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>100	9	8	8
Sodium	ppm	ASTM D5185m		<1	1	<1
Potassium	ppm	ASTM D5185m	>20	0	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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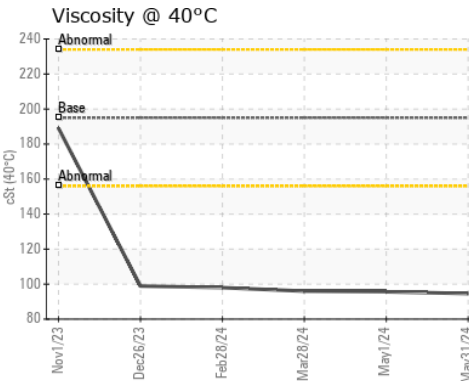
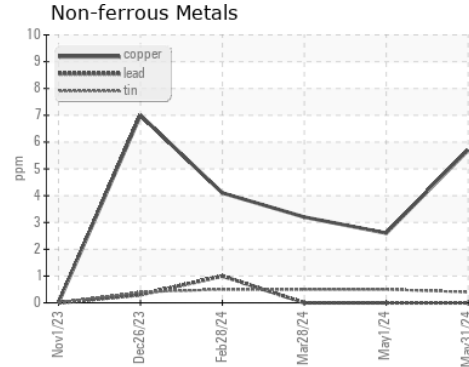
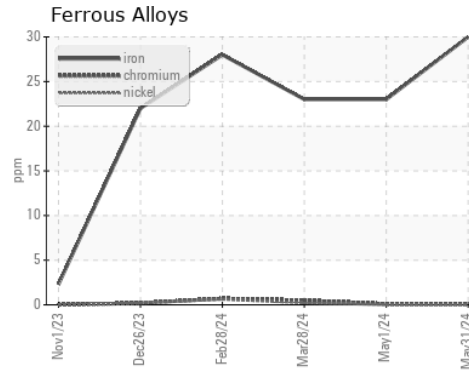
FLUID PROPERTIES

method	limit/base	current	history1	history2		
Visc @ 40°C	cSt	ASTM D445	195	94.6	95.6	96.0

SAMPLE IMAGES

method	limit/base	current	history1	history2
Color		<i>no image</i>	<i>no image</i>	<i>no image</i>
Bottom		<i>no image</i>	<i>no image</i>	<i>no image</i>

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0910909 **Received** : 06 Jun 2024
Lab Number : **06201891** **Tested** : 11 Jun 2024
Unique Number : 11069352 **Diagnosed** : 11 Jun 2024 - Wes Davis
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)