

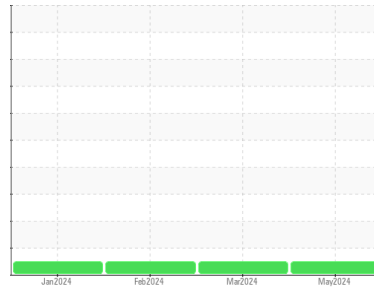


OIL ANALYSIS REPORT



Area
MINING
Machine Id
ME-61 CATERPILLAR 980M MK700210
Component
Front Differential
Fluid
CAT TDTO 30W (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			WC0910935	WC0909688	WC0909675
Sample Date	Client Info			01 May 2024	28 Mar 2024	28 Feb 2024
Machine Age	hrs	Client Info		11790	11312	10782
Oil Age	hrs	Client Info		1500	1000	500
Oil Changed	Client Info			Not Chngd	N/A	Not Chngd
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	71	57	34
Chromium	ppm	ASTM D5185m	>3	<1	<1	<1
Nickel	ppm	ASTM D5185m	>3	0	<1	<1
Titanium	ppm	ASTM D5185m	>2	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>30	5	6	5
Lead	ppm	ASTM D5185m	>13	0	<1	<1
Copper	ppm	ASTM D5185m	>103	6	5	3
Tin	ppm	ASTM D5185m	>5	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	<1	0

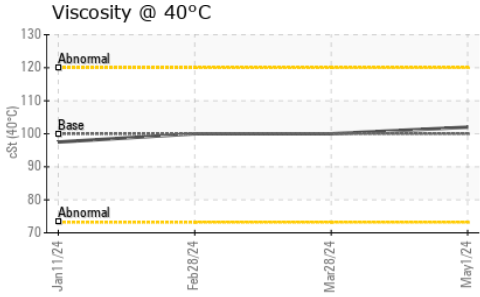
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		3	2	<1
Barium	ppm	ASTM D5185m		1	0	0
Molybdenum	ppm	ASTM D5185m		0	2	2
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		22	22	23
Calcium	ppm	ASTM D5185m	2980	2992	3078	3049
Phosphorus	ppm	ASTM D5185m	1100	1093	1034	1089
Zinc	ppm	ASTM D5185m	1270	1218	1235	1296
Sulfur	ppm	ASTM D5185m		7319	6750	7654

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>100	17	18	16
Sodium	ppm	ASTM D5185m		1	<1	<1
Potassium	ppm	ASTM D5185m	>20	0	2	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	LIGHT	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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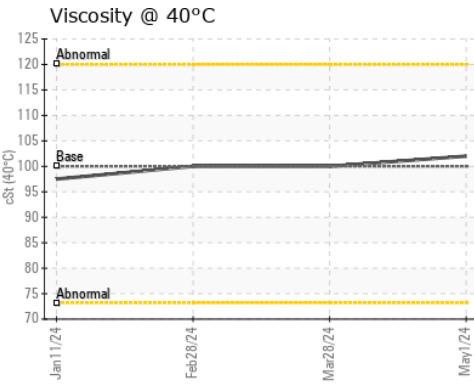
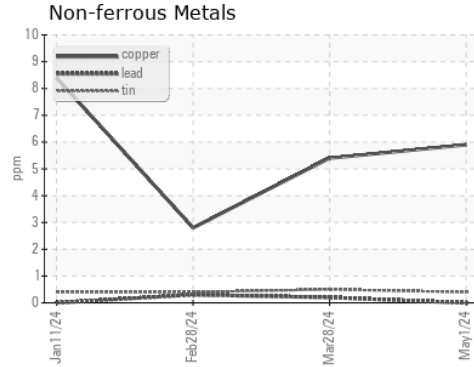
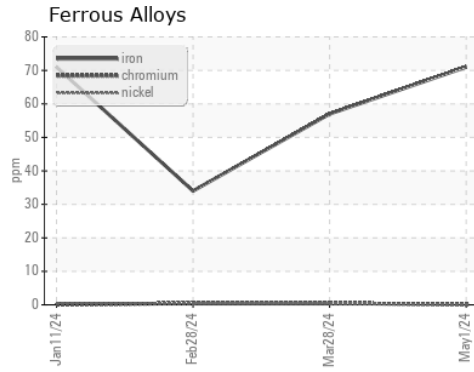


FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	100	102	100	100

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



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0910935 **Received** : 13 May 2024
Lab Number : 06177976 **Tested** : 14 May 2024
Unique Number : 11029302 **Diagnosed** : 14 May 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)

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F: