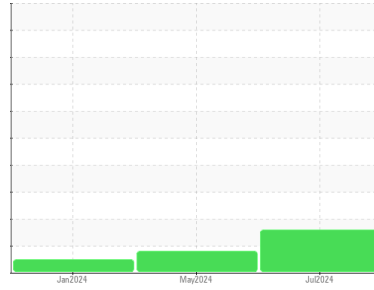




OIL ANALYSIS REPORT

Machine Id
CATERPILLAR 980M LDR008
 Component
Rear Differential
 Fluid
MOBIL TO-4 30 (--- GAL)

Sample Rating Trend



VISUAL METAL



DIAGNOSIS

▲ Recommendation

We advise that you check for visible metal particles in the oil. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. The fluid was specified as MOBIL TO-4 30, however, a fluid match indicates that this fluid is SAE 20 Transmission/Drive Train Oil. Please confirm the oil type and grade on your next sample.

▲ Wear

Light concentration of visible metal present. Gear wear is indicated.

Contamination

There is no indication of any contamination in the oil.

▲ Fluid Condition

Viscosity of sample indicates oil is within SAE 20 range, advise investigate. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0952411	WC0937655	WC0892445
Sample Date	Client Info		08 Jul 2024	05 May 2024	25 Jan 2024
Machine Age	hrs	Client Info	20838	20352	19826
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Not Changed	Not Changd	Not Changed
Sample Status			ABNORMAL	ATTENTION	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 D5185(m)	>500	17	72	129
Chromium	ppm	ASTM D5185(m)	>3	0	0	<1
Nickel	ppm	ASTM D5185(m)	>3	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>30	3	11	31
Lead	ppm	ASTM D5185(m)	>13	0	2	14
Copper	ppm	ASTM D5185(m)	>103	17	95	14
Tin	ppm	ASTM D5185(m)	>5	0	0	4
Antimony	ppm	ASTM D5185(m)	>5	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

ADDITIVES

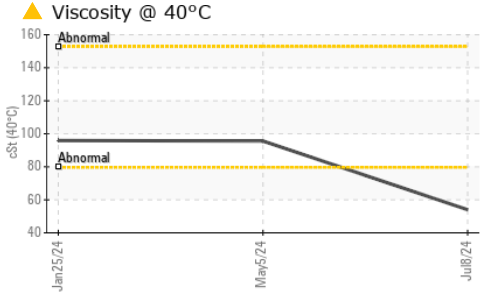
	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)		5	23	109
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)		12	11	<1
Calcium	ppm	ASTM D5185(m)		2832	2852	60
Phosphorus	ppm	ASTM D5185(m)		915	985	276
Zinc	ppm	ASTM D5185(m)		1139	1115	4
Sulfur	ppm	ASTM D5185(m)		3727	6129	1075
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>100	4	5	6
Sodium	ppm	ASTM D5185(m)		<1	1	9
Potassium	ppm	ASTM D5185(m)	>20	<1	7	2



OIL ANALYSIS REPORT



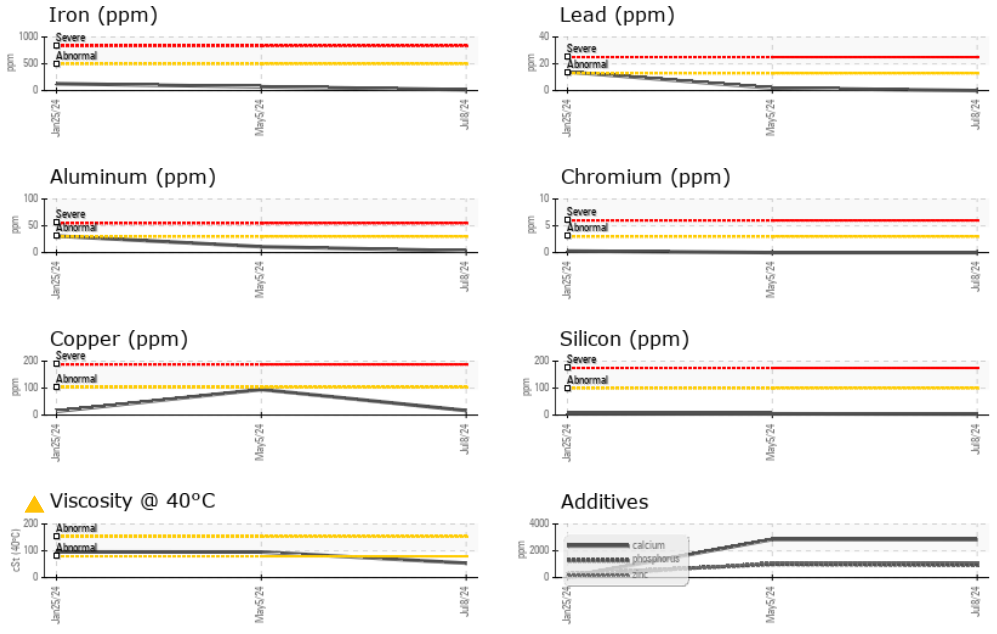
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	▲ LTMOD	NONE	LIGHT
Yellow Metal	scalar	Visual*	NONE	NONE	LIGHT	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	▲ 54.0	95.6	95.9

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color			
Bottom			
PrtFilter		no image	no image

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0952411 **Received** : 11 Jul 2024
Lab Number : **02647386** **Tested** : 12 Jul 2024
Unique Number : 5812938 **Diagnosed** : 15 Jul 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: Bottom, BottomAnalysis, FILTERPATCH)

Agnico Eagle Canada
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 Kirkland Lake, ON
 CA P2N 3J1
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 AEM_KL_macassaoilsampleresults@agnicoeagle.com
 T: (705)567-5208
 F: (705)567-5221

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.