

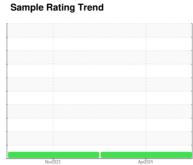
OIL ANALYSIS REPORT



MINING ME-62 CATERPILLAR 336 CYBN20963

Component
Left Final Drive

CAT TDTO SAE 50 (2 GAL)





Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

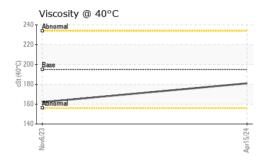
Fluid Condition

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

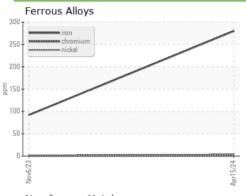
AL)			Nov2023	Apr2024		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0909685	WC0866095	
Sample Date		Client Info		15 Apr 2024	06 Nov 2023	
Machine Age	hrs	Client Info		2600	0	
Oil Age	hrs	Client Info		1000	2000	
Oil Changed		Client Info		Not Changd	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINATIO	N	method	limit/base	current	history1	history2
Vater		WC Method	>0.2	NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
ron	ppm	ASTM D5185m	>800	280	92	
Chromium	ppm	ASTM D5185m	>10	3	<1	
Nickel	ppm	ASTM D5185m	>5	0	0	
- itanium	ppm	ASTM D5185m	>15	2	<1	
Silver	ppm	ASTM D5185m	>2	0	0	
Aluminum	ppm	ASTM D5185m		22	5	
_ead	ppm	ASTM D5185m	>10	0	0	
Copper	ppm	ASTM D5185m		0	<1	
Fin	ppm	ASTM D5185m	>8	<1	0	
/anadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	<1	
ADDITIVES	Pp	method	limit/base	current	history1	history2
			mint bass		•	
Boron	ppm	ASTM D5185m		3	8	
Barium	ppm	ASTM D5185m		4	10	
Nolybdenum	ppm	ASTM D5185m		<1	<1	
-				2	<1	
Manganese	ppm	ASTM D5185m				
Manganese Magnesium	ppm	ASTM D5185m		29	22	
Manganese Magnesium Calcium		ASTM D5185m ASTM D5185m		2990	2974	
Manganese Magnesium Calcium Phosphorus	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2980 1100	2990 1095		
Manganese Magnesium Calcium Phosphorus Zinc	ppm	ASTM D5185m ASTM D5185m ASTM D5185m		2990	2974	
Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	1100	2990 1095	2974 968	
Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1100	2990 1095 1272	2974 968 1181	
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1100 1270 limit/base	2990 1095 1272 8985	2974 968 1181 9097	
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	1100 1270 limit/base	2990 1095 1272 8985 current	2974 968 1181 9097 history1	
Manganese Magnesium Calcium Phosphorus Zinc Gulfur CONTAMINANTS Silicon Godium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	1100 1270 limit/base >400	2990 1095 1272 8985 current	2974 968 1181 9097 history1	 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Godium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	1100 1270 limit/base >400	2990 1095 1272 8985 current 162 2	2974 968 1181 9097 history1 33	 history2
Manganese Magnesium Calcium Phosphorus Zinc Gulfur CONTAMINANTS Silicon Godium Potassium VISUAL	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m	1100 1270 limit/base >400 >20	2990 1095 1272 8985 current 162 2	2974 968 1181 9097 history1 33 0	 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm ppm ppm	ASTM D5185m	1100 1270 limit/base >400 >20 limit/base	2990 1095 1272 8985 current 162 2 1	2974 968 1181 9097 history1 33 0 4	history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm ppm ppm ppm ppm	ASTM D5185m *Visual	limit/base >400 >20 limit/base NONE	2990 1095 1272 8985 current 162 2 1 current NONE	2974 968 1181 9097 history1 33 0 4 history1 NONE	history2
Manganese Magnesium Calcium Phosphorus Zinc Gulfur CONTAMINANTS Silicon Godium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm ppm ppm ppm ppm scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual	limit/base >400 >20 limit/base NONE	2990 1095 1272 8985 current 162 2 1 current NONE	2974 968 1181 9097 history1 33 0 4 history1 NONE	history2
Manganese Magnesium Calcium Phosphorus Zinc Gulfur CONTAMINANTS Silicon Godium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m METHOD ASTM D5185m METHOD ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual	limit/base >400 >20 limit/base NONE NONE	2990 1095 1272 8985 current 162 2 1 current NONE NONE	2974 968 1181 9097 history1 33 0 4 history1 NONE NONE	history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual	limit/base >400 limit/base NONE NONE NONE	2990 1095 1272 8985 current 162 2 1 current NONE NONE NONE NONE	2974 968 1181 9097 history1 33 0 4 history1 NONE NONE NONE NONE	history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual	1100 1270 limit/base >400 >20 limit/base NONE NONE NONE NONE NONE NONE	2990 1095 1272 8985 current 162 2 1 current NONE NONE NONE NONE NONE NONE	2974 968 1181 9097 history1 33 0 4 history1 NONE NONE NONE NONE NONE NONE	history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Vellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	limit/base >400 >20 limit/base NONE NONE NONE NONE NONE NONE NONE NON	2990 1095 1272 8985 current 162 2 1 current NONE NONE NONE NONE NONE NONE NONE NON	2974 968 1181 9097 history1 33 0 4 history1 NONE NONE NONE NONE NONE NONE NONE NON	history2
Manganese Magnesium Calcium Phosphorus Zinc Gulfur CONTAMINANTS Silicon Godium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m *Visual	limit/base >400 >20 limit/base NONE NONE NONE NONE NONE NONE NONE NON	2990 1095 1272 8985 current 162 2 1 current NONE NONE NONE NONE NONE NONE NONE NON	2974 968 1181 9097 history1 33 0 4 history1 NONE NONE NONE NONE NONE NONE NONE NON	history2 history2

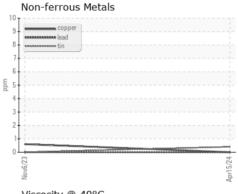


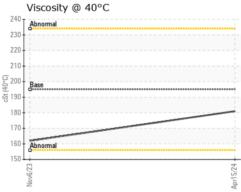
OIL ANALYSIS REPORT













Certificate 12367

Laboratory **Sample No.** : WC0909685 Lab Number : 06159500

Unique Number : 10994923 Test Package : CONST

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 24 Apr 2024 Tested : 25 Apr 2024

Diagnosed : 25 Apr 2024 - Wes Davis **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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