



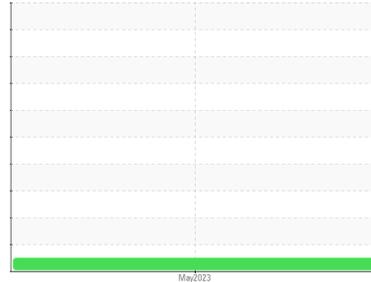
OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
[690007]
 Machine Id
CATERPILLAR WFX00664
 Component
Transmission (Manual)
 Fluid
CAT TDTO 30W (--- GAL)



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Fluid Condition

Viscosity of sample indicates oil is within SAE 10W30 range, advise investigate. The condition of the fluid is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PP	---	---
Sample Date	Client Info		23 May 2023	---	---
Machine Age	hrs Client Info		230	---	---
Oil Age	hrs Client Info		0	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			NORMAL	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m)	>200	14	---	---
Chromium	ppm ASTM D5185(m)	>5	0	---	---
Nickel	ppm ASTM D5185(m)	>5	<1	---	---
Titanium	ppm ASTM D5185(m)		<1	---	---
Silver	ppm ASTM D5185(m)	>7	0	---	---
Aluminum	ppm ASTM D5185(m)	>25	1	---	---
Lead	ppm ASTM D5185(m)	>45	<1	---	---
Copper	ppm ASTM D5185(m)	>225	3	---	---
Tin	ppm ASTM D5185(m)	>10	0	---	---
Antimony	ppm ASTM D5185(m)		0	---	---
Vanadium	ppm ASTM D5185(m)		0	---	---
Beryllium	ppm ASTM D5185(m)		0	---	---
Cadmium	ppm ASTM D5185(m)		0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m)		21	---	---
Barium	ppm ASTM D5185(m)		7	---	---
Molybdenum	ppm ASTM D5185(m)		0	---	---
Manganese	ppm ASTM D5185(m)		1	---	---
Magnesium	ppm ASTM D5185(m)		10	---	---
Calcium	ppm ASTM D5185(m)	2980	3121	---	---
Phosphorus	ppm ASTM D5185(m)	1100	1060	---	---
Zinc	ppm ASTM D5185(m)	1270	1182	---	---
Sulfur	ppm ASTM D5185(m)		4490	---	---
Lithium	ppm ASTM D5185(m)		<1	---	---

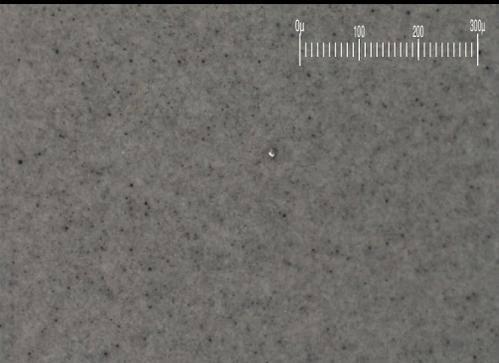
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m)	>125	6	---	---
Sodium	ppm ASTM D5185(m)		7	---	---
Potassium	ppm ASTM D5185(m)	>20	2	---	---

INFRA-RED

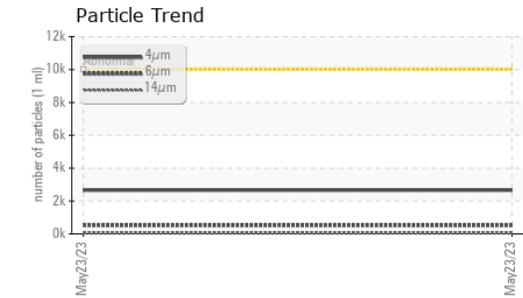
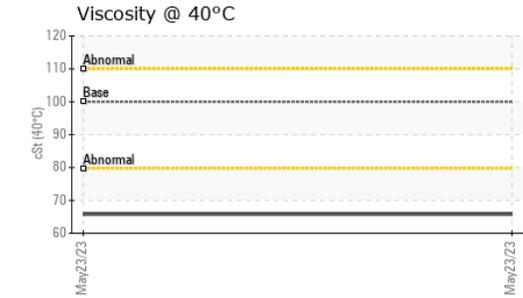
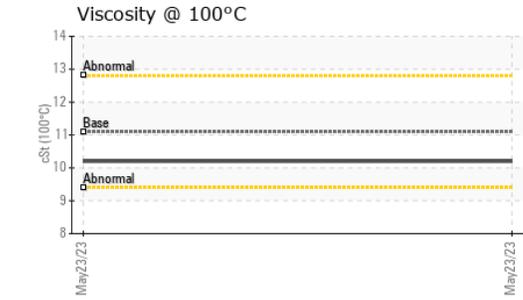
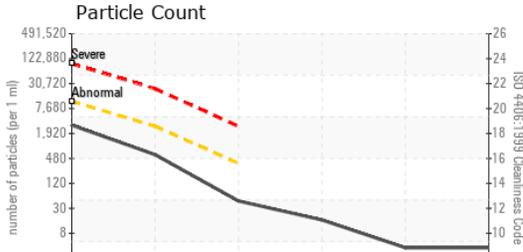
	method	limit/base	current	history1	history2
Soot %	% ASTM D7844*		0	---	---
Nitration	Abs/cm ASTM D7624*		3.6	---	---
Sulfation	Abs/.1mm ASTM D7415*		22.1	---	---

Particle Filter (Magn: 100 x)





OIL ANALYSIS REPORT



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	2658	---	---
Particles >6µm	ASTM D7647	>2500	520	---	---
Particles >14µm	ASTM D7647	>320	40	---	---
Particles >21µm	ASTM D7647	>80	14	---	---
Particles >38µm	ASTM D7647	>20	3	---	---
Particles >71µm	ASTM D7647	>4	3	---	---
Oil Cleanliness	ISO 4406 (c)	>20/18/15	19/16/12	---	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	9.8	---	---

VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.1	NEG	---
Free Water	scalar	Visual*		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	100	65.8	---
Visc @ 100°C	cSt	ASTM D7279(m)	11.1	10.2	---
Viscosity Index (VI)	Scale	ASTM D2270*	95	141	---

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



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PP
Lab Number : 02559346
Unique Number : 5580386
Test Package : MOB 1 (Additional Tests: BottomAnalysis, FilterPatch, FT-IR, KV100, PrtCount, PrtFilter, VI)

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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.