



OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area

(C-FITY)

Machine Id

[C-FITY] CESSNA 180 47297-6-K

Component

Piston Aircraft Engine

Fluid

PHILLIPS 66 AVIATION TYPE M SAE 20W50 (--- GAL)

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		WC0622421	---	---
Sample Date	Client Info		16 Jun 2024	---	---
TSN	hrs	Client Info	3000	---	---
TSO	hrs	Client Info	700	---	---
Oil Age	hrs	Client Info	15	---	---
Oil Changed		Client Info	Changed	---	---
Sample Status			NORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>4.0	<1.0	---	---
Water	WC Method	>0.1	NEG	---	---
Glycol	WC Method		NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>90	62	---
Chromium	ppm	ASTM D5185(m)	>20	29	---
Nickel	ppm	ASTM D5185(m)	>15	9	---
Titanium	ppm	ASTM D5185(m)		<1	---
Silver	ppm	ASTM D5185(m)	>5	0	---
Aluminum	ppm	ASTM D5185(m)	>25	15	---
Lead	ppm	ASTM D5185(m)	>20000	1313	---
Copper	ppm	ASTM D5185(m)	>25	17	---
Tin	ppm	ASTM D5185(m)	>30	<1	---
Antimony	ppm	ASTM D5185(m)		0	---
Vanadium	ppm	ASTM D5185(m)		0	---
Beryllium	ppm	ASTM D5185(m)		0	---
Cadmium	ppm	ASTM D5185(m)		2	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<1	---
Barium	ppm	ASTM D5185(m)		0	---
Molybdenum	ppm	ASTM D5185(m)		0	---
Manganese	ppm	ASTM D5185(m)		2	---
Magnesium	ppm	ASTM D5185(m)		<1	---
Calcium	ppm	ASTM D5185(m)		5	---
Phosphorus	ppm	ASTM D5185(m)		26	---
Zinc	ppm	ASTM D5185(m)		5	---
Sulfur	ppm	ASTM D5185(m)		901	---
Lithium	ppm	ASTM D5185(m)		<1	---

CONTAMINANTS

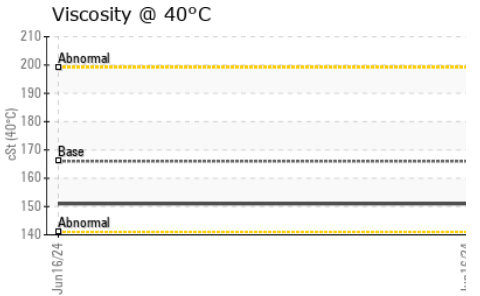
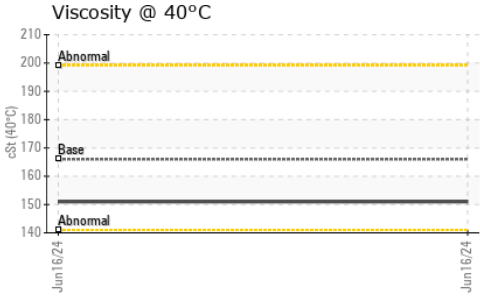
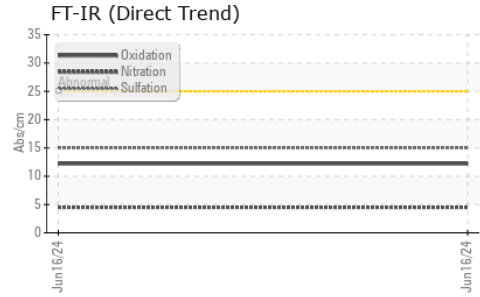
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	23	---
Sodium	ppm	ASTM D5185(m)		1	---
Potassium	ppm	ASTM D5185(m)	>20	0	---

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		0	---
Nitration	Abs/cm	ASTM D7624*	>20	4.5	---
Sulfation	Abs./1mm	ASTM D7415*	>30	15.0	---



OIL ANALYSIS REPORT

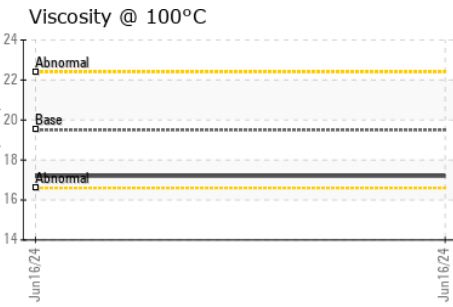
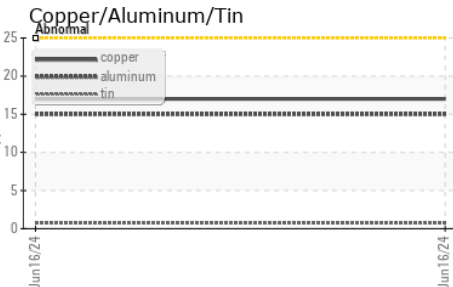
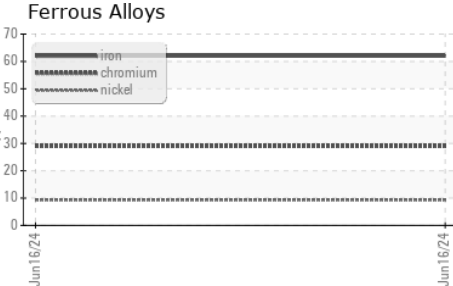


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	12.2	---	---

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	VLITE	---	---
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)	166	151	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	19.5	17.2	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	135	123	---	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0622421 **Received** : 18 Jun 2024
Lab Number : **02642577** **Tested** : 18 Jun 2024
Unique Number : 5800116 **Diagnosed** : 19 Jun 2024 - Kevin Marson
Test Package : AVI 1 (Additional Tests: FT-IR, KV40, VI)

NEAR NORTH AVIATION
 97 AIRPORT ROAD
 PARRY SOUND, ON
 CA P2A 2W8
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 F:

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.