



OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
(C-FROP)
 Machine Id
[C-FROP] CESSNA 172R L-31065-51A
 Component
Piston Aircraft Engine
 Fluid
SHELL AEROSHELL W 80 (--- 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		WC0882501	---	---
Sample Date	Client Info		15 Dec 2023	---	---
TSN	hrs Client Info		0	---	---
TSO	hrs Client Info		1003	---	---
Oil Age	hrs Client Info		57	---	---
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	45	---	---
Chromium	ppm ASTM D5185(m)	>20	9	---	---
Nickel	ppm ASTM D5185(m)	>15	2	---	---
Titanium	ppm ASTM D5185(m)		0	---	---
Silver	ppm ASTM D5185(m)	>5	0	---	---
Aluminum	ppm ASTM D5185(m)	>25	9	---	---
Lead	ppm ASTM D5185(m)	>20000	5274	---	---
Copper	ppm ASTM D5185(m)	>25	19	---	---
Tin	ppm ASTM D5185(m)	>30	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

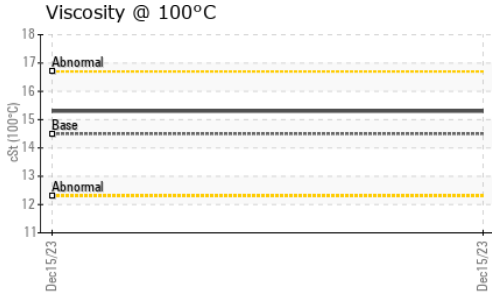
	method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m)		<1	---	---
Barium	ppm ASTM D5185(m)		0	---	---
Molybdenum	ppm ASTM D5185(m)		0	---	---
Manganese	ppm ASTM D5185(m)		0	---	---
Magnesium	ppm ASTM D5185(m)		1	---	---
Calcium	ppm ASTM D5185(m)		3	---	---
Phosphorus	ppm ASTM D5185(m)		1165	---	---
Zinc	ppm ASTM D5185(m)		8	---	---
Sulfur	ppm ASTM D5185(m)	3000	2431	---	---
Lithium	ppm ASTM D5185(m)		<1	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m)	>15	9	---	---
Sodium	ppm ASTM D5185(m)		<1	---	---
Potassium	ppm ASTM D5185(m)	>20	17	---	---



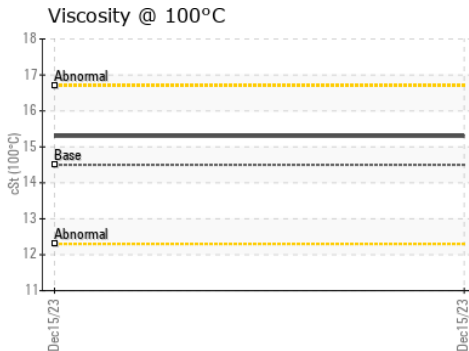
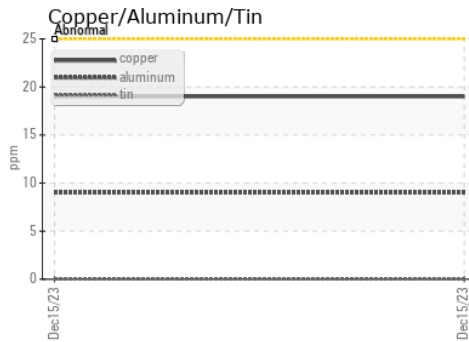
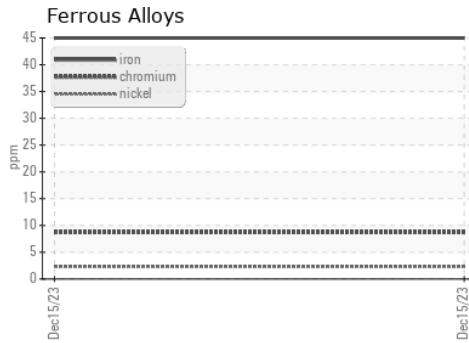
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VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Precipitate	scalar	Visual*	NONE	NONE	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	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 @ 100°C	cSt	ASTM D7279(m)	14.5	15.3	---	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0882501 **Received** : 02 Jan 2024
Lab Number : **02605878** **Diagnosed** : 02 Jan 2024
Unique Number : 5706964 **Diagnostician** : Kevin Marson
Test Package : AVI 1 (Additional Tests: FT-IR)

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.

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