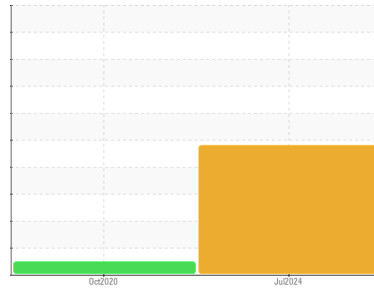




PROBLEM SUMMARY

Area
(C-GCFE)
 Machine Id
[C-GCFE] CESSNA C-182Q 820143R
 Component
Piston Aircraft Engine
 Fluid
SHELL AEROSHELL W 15W50 MGR (--- GAL)

Sample Rating Trend

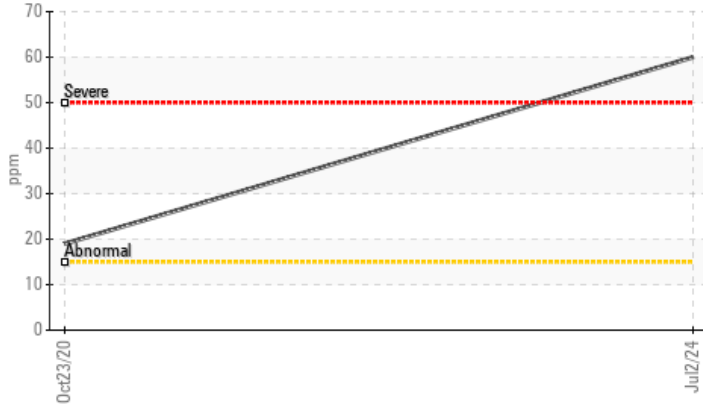


DIRT



COMPONENT CONDITION SUMMARY

▲ Silicon (ppm)



RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status		SEVERE	NORMAL	---
Silicon	ppm	▲ 60	19	---

Customer Id: ROC149OTT
 Sample No.: WC0930999
 Lab Number: 02646982
 Test Package: AVI 1



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Kevin Marson +1 (289)291-4644 x4644
Kevin.Marson@wearcheck.com

To change component or sample information:
 Gloria Gonzalez +1 (289)291-4643 x4643
gloria.gonzalez@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Dirt Access	---	---	?	We advise that you check the air filter, air induction system, and any areas where dirt may enter the component.

HISTORICAL DIAGNOSIS

NORMAL



23 Oct 2020 Diag: Kevin Marson

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

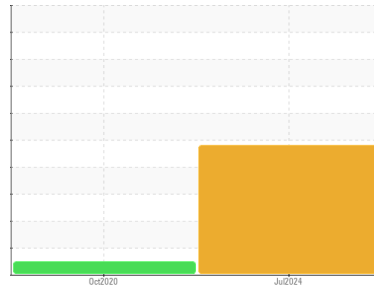
view report





OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Area

(C-GCFE)

Machine Id

[C-GCFE] CESSNA C-182Q 820143R

Component

Piston Aircraft Engine

Fluid

SHELL AEROSHELL W 15W50 MGR (--- GAL)

DIAGNOSIS

▲ Recommendation

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

▲ Contamination

High concentration of dirt present in the oil.

Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0930999	WC0519929	---
Sample Date	Client Info		02 Jul 2024	23 Oct 2020	---
TSN	hrs	Client Info	0	2006	---
TSO	hrs	Client Info	521	83	---
Oil Age	hrs	Client Info	25	24	---
Oil Changed		Client Info	Changed	Changed	---
Sample Status			SEVERE	NORMAL	---

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>90	45	39
Chromium	ppm	ASTM D5185(m)	>20	10	18
Nickel	ppm	ASTM D5185(m)	>15	5	5
Titanium	ppm	ASTM D5185(m)		0	0
Silver	ppm	ASTM D5185(m)	>5	0	<1
Aluminum	ppm	ASTM D5185(m)	>25	11	13
Lead	ppm	ASTM D5185(m)	>20000	5441	4052
Copper	ppm	ASTM D5185(m)	>25	6	24
Tin	ppm	ASTM D5185(m)	>30	0	1
Antimony	ppm	ASTM D5185(m)		0	<1
Vanadium	ppm	ASTM D5185(m)		0	<1
Beryllium	ppm	ASTM D5185(m)		0	0
Cadmium	ppm	ASTM D5185(m)		<1	5

ADDITIVES

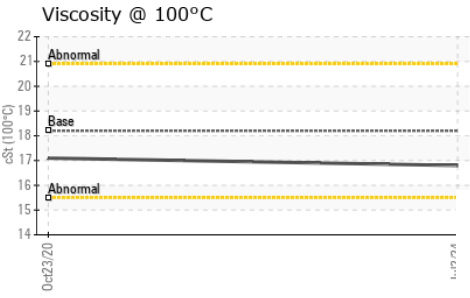
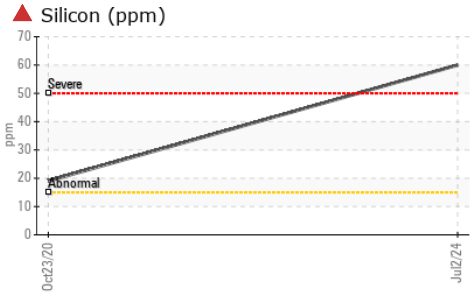
	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<1	<1
Barium	ppm	ASTM D5185(m)		0	0
Molybdenum	ppm	ASTM D5185(m)	5	4	10
Manganese	ppm	ASTM D5185(m)		0	<1
Magnesium	ppm	ASTM D5185(m)	10	<1	1
Calcium	ppm	ASTM D5185(m)	10	1	4
Phosphorus	ppm	ASTM D5185(m)	1280	1156	950
Zinc	ppm	ASTM D5185(m)	10	4	9
Sulfur	ppm	ASTM D5185(m)	1800	1495	1609
Lithium	ppm	ASTM D5185(m)		<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	▲ 60	19
Sodium	ppm	ASTM D5185(m)		<1	1
Potassium	ppm	ASTM D5185(m)	>20	<1	<1



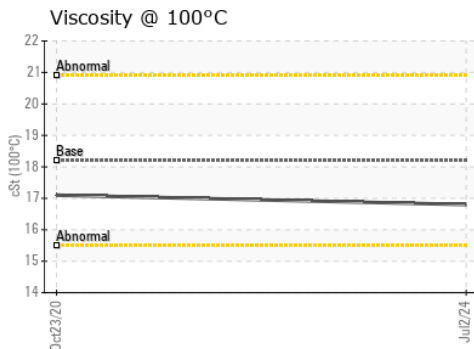
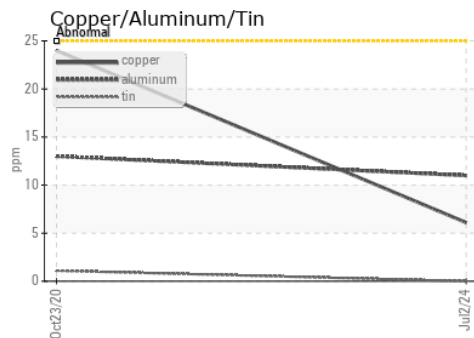
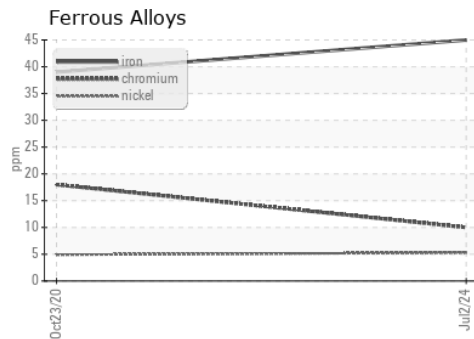
OIL ANALYSIS REPORT



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	VLITE	---
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)	18.2	16.8	17.1

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0930999 **Received** : 10 Jul 2024
Lab Number : 02646982 **Tested** : 10 Jul 2024
Unique Number : 5812534 **Diagnosed** : 10 Jul 2024 - Kevin Marson
Test Package : AVI 1

ROCKCLIFFE FLYING CLUB
 1495 SIR GEORGE-ETIENNE, CARTIER PARKWAY MAINTENANCE
 OTTAWA, ON
 CA K1K 4Y5
 Contact: Patrick Giunta
 maintenance@rfc.ca
 T: (613)746-4425
 F: x:

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.