



# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**[CGKRF] CESSNA C-172 CGKRF**  
 Component  
**Front Piston Aircraft Engine**  
 Fluid  
**SHELL AEROSHELL W 15W50 MGR (8 LTR)**

## 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 oil viscosity is lower than typical, possibly indicating the addition of lighter grade oil. The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0825453</b>	---	---
Sample Date	Client Info		<b>03 Jul 2024</b>	---	---
TSN	hrs	Client Info	<b>0</b>	---	---
TSO	hrs	Client Info	<b>2068</b>	---	---
Oil Age	hrs	Client Info	<b>59</b>	---	---
Oil Changed		Client Info	<b>Changed</b>	---	---
Sample Status			<b>NORMAL</b>	---	---

## CONTAMINATION

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

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>90	<b>18</b>	---
Chromium	ppm	ASTM D5185(m)	>20	<b>2</b>	---
Nickel	ppm	ASTM D5185(m)	>15	<b>1</b>	---
Titanium	ppm	ASTM D5185(m)		<b>0</b>	---
Silver	ppm	ASTM D5185(m)	>5	<b>0</b>	---
Aluminum	ppm	ASTM D5185(m)	>25	<b>6</b>	---
Lead	ppm	ASTM D5185(m)	>20000	<b>4681</b>	---
Copper	ppm	ASTM D5185(m)	>25	<b>11</b>	---
Tin	ppm	ASTM D5185(m)	>30	<b>&lt;1</b>	---
Antimony	ppm	ASTM D5185(m)		<b>0</b>	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	---
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	---
Cadmium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---

## ADDITIVES

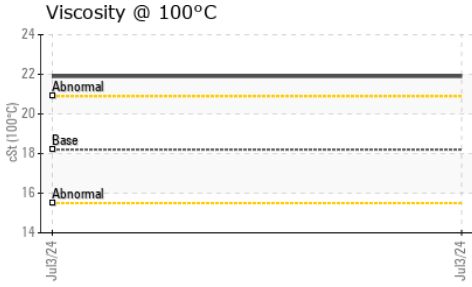
	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<b>&lt;1</b>	---
Barium	ppm	ASTM D5185(m)		<b>0</b>	---
Molybdenum	ppm	ASTM D5185(m)	5	<b>0</b>	---
Manganese	ppm	ASTM D5185(m)		<b>0</b>	---
Magnesium	ppm	ASTM D5185(m)	10	<b>&lt;1</b>	---
Calcium	ppm	ASTM D5185(m)	10	<b>2</b>	---
Phosphorus	ppm	ASTM D5185(m)	1280	<b>1134</b>	---
Zinc	ppm	ASTM D5185(m)	10	<b>4</b>	---
Sulfur	ppm	ASTM D5185(m)	1800	<b>3957</b>	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	<b>5</b>	---
Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	---



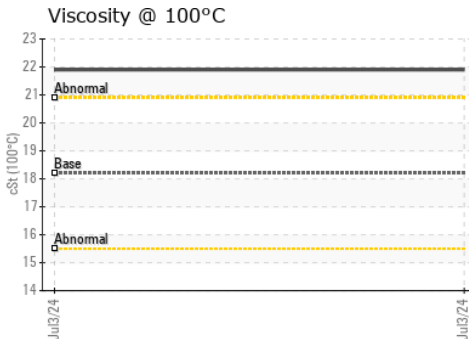
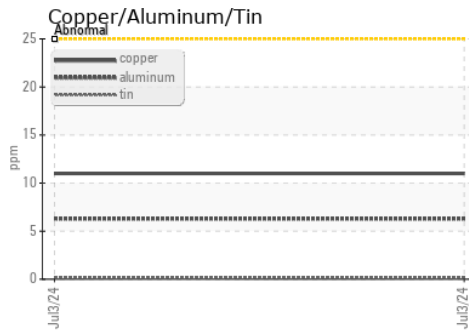
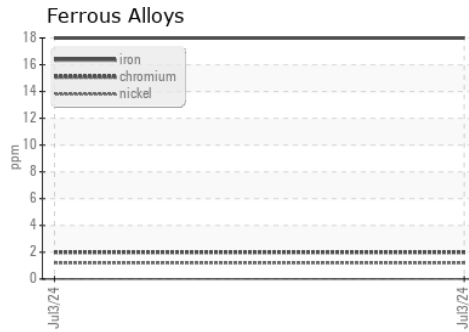
# OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D7279(m)	18.2	<b>21.9</b>	---	---

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0825453      **Received** : 10 Jul 2024  
**Lab Number** : **02646988**      **Tested** : 10 Jul 2024  
**Unique Number** : 5812540      **Diagnosed** : 10 Jul 2024 - Kevin Marson  
**Test Package** : AVI 1

**CANADIAN FLIGHT ACADEMY**  
 1250 AIRPORT BOULEVARD  
 OSHAWA, ON  
 CA L1J 8P5  
 Contact: John Bayes  
 bayesjohn@torontoairways.com  
 T: (905)404-9252  
 F: (905)404-8294

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.