



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area  
**(C-GIST)**  
Machine Id  
**[C-GIST] CESSNA 172 L-28663-51A**  
Component  
**Front Piston Aircraft Engine**  
Fluid  
**SHELL AEROSHELL W 15W50 MGR (8 LTR)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0743832</b>	WC0858922	WC0858924
Sample Date		Client Info		<b>17 Apr 2024</b>	08 Mar 2024	09 Feb 2024
TSN	hrs	Client Info		<b>0</b>	0	0
TSO	hrs	Client Info		<b>3952</b>	3902	3850
Oil Age	hrs	Client Info		<b>50</b>	52	49
Filter Age	hrs	Client Info		<b>50</b>	52	49
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>90	<b>16</b>	13	9
Chromium	ppm	ASTM D5185(m)	>20	<b>2</b>	1	<1
Nickel	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>25	<b>3</b>	3	3
Lead	ppm	ASTM D5185(m)	>20000	<b>3841</b>	4277	3296
Copper	ppm	ASTM D5185(m)	>25	<b>6</b>	7	5
Tin	ppm	ASTM D5185(m)	>30	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

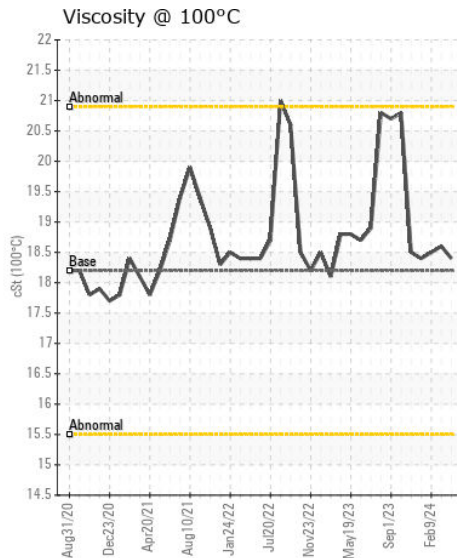
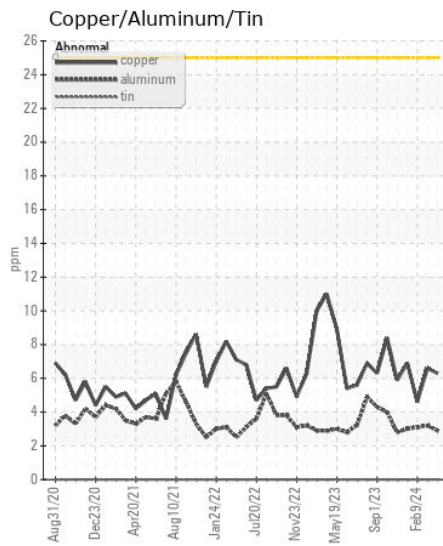
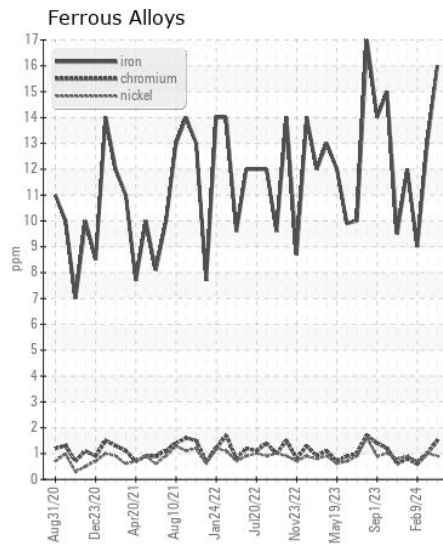
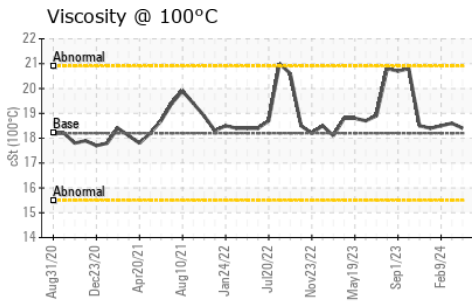
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	<b>5</b>	5	5
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	<1
Fuel		WC Method	>4.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Silt	scalar	Visual*	NONE	<b>VLITE</b>	NONE	LIGHT
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1
Boron	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	0
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	5	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	10	<b>2</b>	<1	<1
Calcium	ppm	ASTM D5185(m)	10	<b>2</b>	<1	<1
Phosphorus	ppm	ASTM D5185(m)	1280	<b>1138</b>	1207	1169
Zinc	ppm	ASTM D5185(m)	10	<b>5</b>	4	3
Sulfur	ppm	ASTM D5185(m)	1800	<b>1369</b>	1650	1526
Visc @ 100°C	cSt	ASTM D7279(m)	18.2	<b>18.4</b>	18.6	18.5



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

**Sample No.** : WC0743832

**Lab Number** : 02630173

**Unique Number** : 5763305

**Test Package** : AVI 1

**Received** : 19 Apr 2024

**Tested** : 19 Apr 2024

**Diagnosed** : 19 Apr 2024 - Kevin Marson

**CANADIAN FLIGHT ACADEMY**

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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.