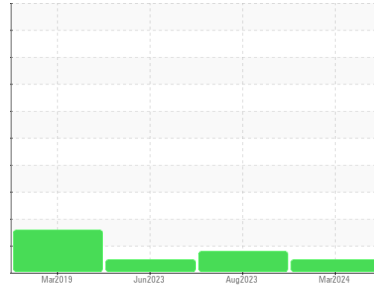




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**(C-GGDM)**  
Machine Id  
**[C-GGDM] CESSNA 180 0-470-50**  
Component  
**Center Piston Aircraft Engine**  
Fluid  
**SHELL AEROSHELL OIL W 100 PLUS (12 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 condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0831805</b>	WC0498974	WC0831799
Sample Date	Client Info		<b>15 Mar 2024</b>	27 Aug 2023	16 Jun 2023
TSN	hrs	Client Info	<b>0</b>	0	0
TSO	hrs	Client Info	<b>407</b>	395	348
Oil Age	hrs	Client Info	<b>10</b>	44	19
Oil Changed		Client Info	<b>Changed</b>	Changed	N/A
Sample Status			<b>NORMAL</b>	ABNORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
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

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>90	<b>21</b>	77	63
Chromium	ppm	ASTM D5185(m)	>20	<b>2</b>	12	10
Nickel	ppm	ASTM D5185(m)	>15	<b>6</b>	▲ 35	28
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>25	<b>7</b>	18	14
Lead	ppm	ASTM D5185(m)	>20000	<b>902</b>	7220	4643
Copper	ppm	ASTM D5185(m)	>25	<b>3</b>	13	10
Tin	ppm	ASTM D5185(m)	>30	<b>0</b>	<1	<1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	2	1

## ADDITIVES

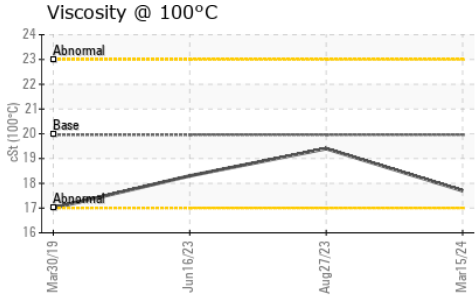
	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)		<b>1</b>	6	7
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Calcium	ppm	ASTM D5185(m)	0	<b>2</b>	4	4
Phosphorus	ppm	ASTM D5185(m)		<b>1105</b>	1095	832
Zinc	ppm	ASTM D5185(m)	0	<b>7</b>	9	5
Sulfur	ppm	ASTM D5185(m)	2600	<b>1797</b>	3412	3143
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>15	<b>7</b>	9	11
Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	0



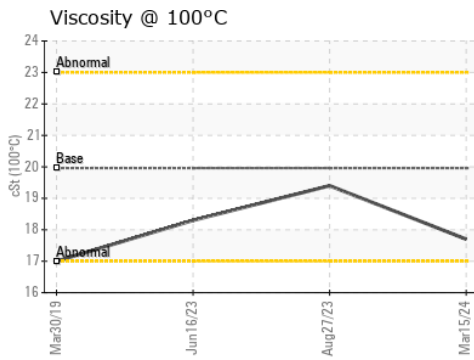
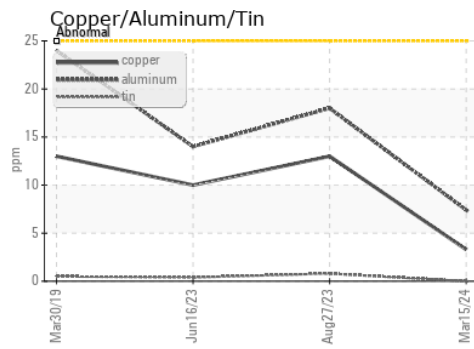
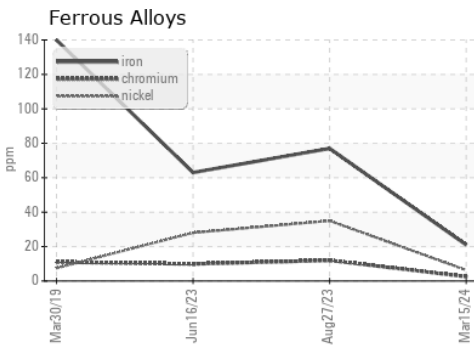
# OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D7279(m)	19.96	<b>17.7</b>	19.4	18.3

### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0831805  
**Lab Number** : **02623703**  
**Unique Number** : 5748822  
**Test Package** : AVI 1  
**Received** : 21 Mar 2024  
**Tested** : 21 Mar 2024  
**Diagnosed** : 21 Mar 2024 - Kevin Marson

**PETE MCLEOD AERO SPORTS**  
 750 HICKORY STICK KEY  
 LONDON, ON  
 CA N6G 0M9  
 Contact: Patrick Phillips  
 patrick.phillips@rogers.com  
 T:  
 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.