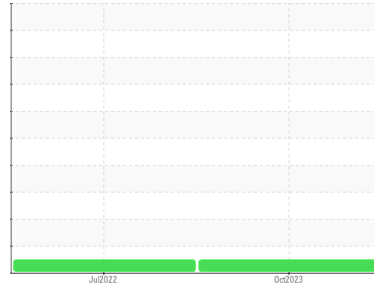




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
(C-GVBG) MIKE MOON
 Machine Id
[C-GVBG] CESSNA 177RG RL-1626-80E
 Component
Front Piston Aircraft Engine
 Fluid
PHILLIPS 66 AVIATION TYPE M SAE 20W50 (8 LTR)

DIAGNOSIS

Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. 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

Additive levels indicate the addition of a different brand, or type of 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		WC0722105	WC0518462	---
Sample Date	Client Info		26 Oct 2023	07 Jul 2022	---
TSN	hrs	Client Info	145	69	---
TSO	hrs	Client Info	145	0	---
Oil Age	hrs	Client Info	41	48	---
Oil Changed		Client Info	N/A	Changed	---
Sample Status			NORMAL	NORMAL	---

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>90	24	39
Chromium	ppm	ASTM D5185(m)	>20	4	8
Nickel	ppm	ASTM D5185(m)	>15	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0
Silver	ppm	ASTM D5185(m)	>5	<1	0
Aluminum	ppm	ASTM D5185(m)	>25	8	10
Lead	ppm	ASTM D5185(m)	>20000	3670	4927
Copper	ppm	ASTM D5185(m)	>25	11	41
Tin	ppm	ASTM D5185(m)	>30	0	1
Antimony	ppm	ASTM D5185(m)		0	0
Vanadium	ppm	ASTM D5185(m)		0	0
Beryllium	ppm	ASTM D5185(m)		0	0
Cadmium	ppm	ASTM D5185(m)		14	66

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<1	<1
Barium	ppm	ASTM D5185(m)		<1	0
Molybdenum	ppm	ASTM D5185(m)		0	0
Manganese	ppm	ASTM D5185(m)		0	0
Magnesium	ppm	ASTM D5185(m)		2	8
Calcium	ppm	ASTM D5185(m)		78	8
Phosphorus	ppm	ASTM D5185(m)		33	7
Zinc	ppm	ASTM D5185(m)		46	198
Sulfur	ppm	ASTM D5185(m)		1332	975
Lithium	ppm	ASTM D5185(m)		<1	<1

CONTAMINANTS

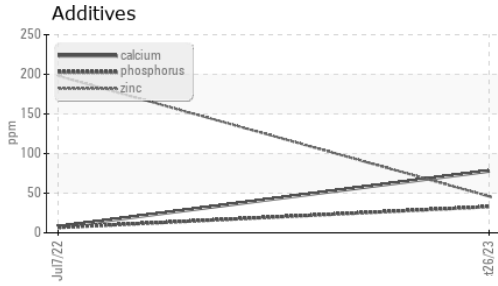
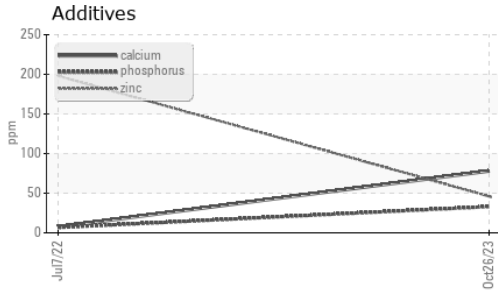
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	10	20
Sodium	ppm	ASTM D5185(m)		1	2
Potassium	ppm	ASTM D5185(m)	>20	0	<1

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		0	---
Nitration	Abs/cm	ASTM D7624*	>20	5.9	---
Sulfation	Abs./1mm	ASTM D7415*	>30	20.2	---



OIL ANALYSIS REPORT

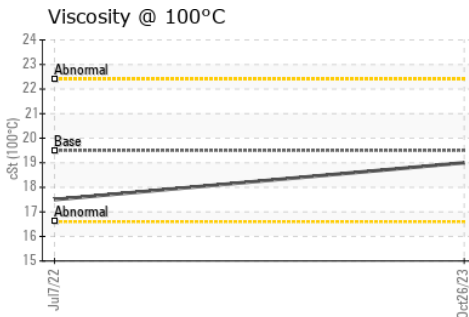
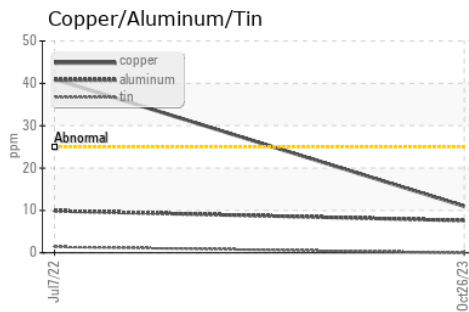
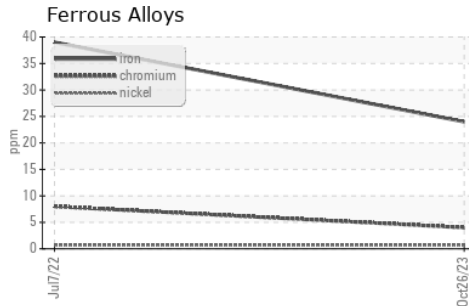


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	19.1	---	---

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	VLITE	NONE	---
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)	19.5	19.0	17.5	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0722105
Lab Number : 02592384
Unique Number : 5669463
Test Package : AVI 1 (Additional Tests: FT-IR)

BRAMPTON FLIGHT CENTRE
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 CALEDON, ON
 CA L0P 1C0
 Contact: Jennifer Blunt
 parts@bramfly.com
 T: (905)838-1400
 F: (905)838-3612

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.