



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINANTS	NORMAL
OIL CONDITION	NORMAL

Area

(C-GWIE)

Machine Id

[C-GWIE] CESSNA 210-5A CS109299-R

Component

Piston Aircraft Engine

Fluid

PHILLIPS 66 AVIATION X/C OIL SAE20W50 (12 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0725558	---	---
Sample Date		Client Info		15 Apr 2024	---	---
TSN	hrs	Client Info		2524	---	---
TSO	hrs	Client Info		776	---	---
Oil Age	hrs	Client Info		26	---	---
Filter Age	hrs	Client Info		26	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				NORMAL	---	---

WEAR

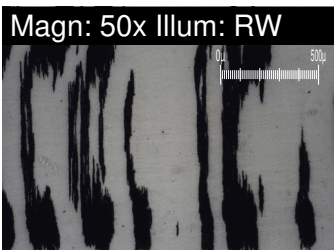
All component wear rates are normal. The ferrography results are normal indicating no abnormal wear in the system.

Iron	ppm	ASTM D5185(m)	>90	50	---	---
Chromium	ppm	ASTM D5185(m)	>20	8	---	---
Nickel	ppm	ASTM D5185(m)	>15	11	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)	>5	0	---	---
Aluminum	ppm	ASTM D5185(m)	>25	26	---	---
Lead	ppm	ASTM D5185(m)	>20000	2519	---	---
Copper	ppm	ASTM D5185(m)	>25	5	---	---
Tin	ppm	ASTM D5185(m)	>30	0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Large Particles		DR-Ferr*		14.5	---	---
Small Particles		DR-Ferr*		9.2	---	---
Total Particles		DR-Ferr*	>---	23.7	---	---
Large Particles Percentage	%	DR-Ferr*		22.4	---	---
Severity Index		DR-Ferr*		77	---	---
Ferrous Rubbing	Scale 0-10	ASTM D7684*		5		
Ferrous Sliding	Scale 0-10	ASTM D7684*				
Ferrous Cutting	Scale 0-10	ASTM D7684*				
Ferrous Rolling	Scale 0-10	ASTM D7684*		2		
Ferrous Break-in	Scale 0-10	ASTM D7684*				
Ferrous Spheres	Scale 0-10	ASTM D7684*				
Ferrous Black Oxides	Scale 0-10	ASTM D7684*		1		
Ferrous Red Oxides	Scale 0-10	ASTM D7684*				
Ferrous Corrosive	Scale 0-10	ASTM D7684*		2		
Ferrous Other	Scale 0-10	ASTM D7684*				
Nonferrous Rubbing	Scale 0-10	ASTM D7684*				
Nonferrous Sliding	Scale 0-10	ASTM D7684*				
Nonferrous Cutting	Scale 0-10	ASTM D7684*				
Nonferrous Rolling	Scale 0-10	ASTM D7684*				
Nonferrous Other	Scale 0-10	ASTM D7684*				

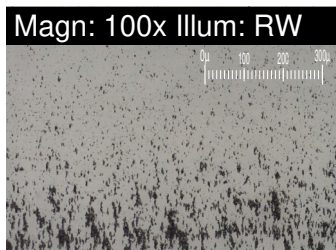
Magn: 200x Illum: BC



Magn: 50x Illum: RW



Magn: 100x Illum: RW



CONTAMINANTS

There is no indication of any contamination in the oil.

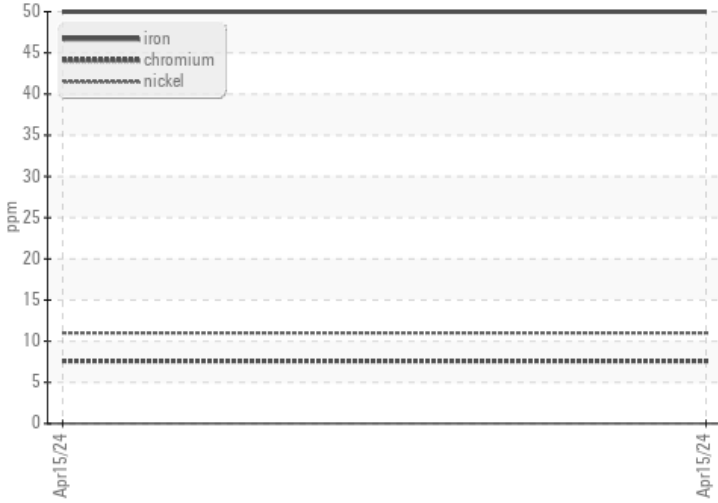
Silicon	ppm	ASTM D5185(m)	>15	7	---	---
Potassium	ppm	ASTM D5185(m)	>20	<1	---	---
Fuel		WC Method	>4.0	<1.0	---	---
Water		WC Method	>0.1	NEG	---	---
Glycol		WC Method		NEG	---	---
Silt	scalar	Visual*	NONE	VLITE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.1	NEG	---	---
Carbonaceous Material	Scale 0-10	ASTM D7684*				
Sand/Dirt	Scale 0-10	ASTM D7684*		1		
Fibres	Scale 0-10	ASTM D7684*				
Spheres	Scale 0-10	ASTM D7684*				
Other	Scale 0-10	ASTM D7684*		2		

OIL CONDITION

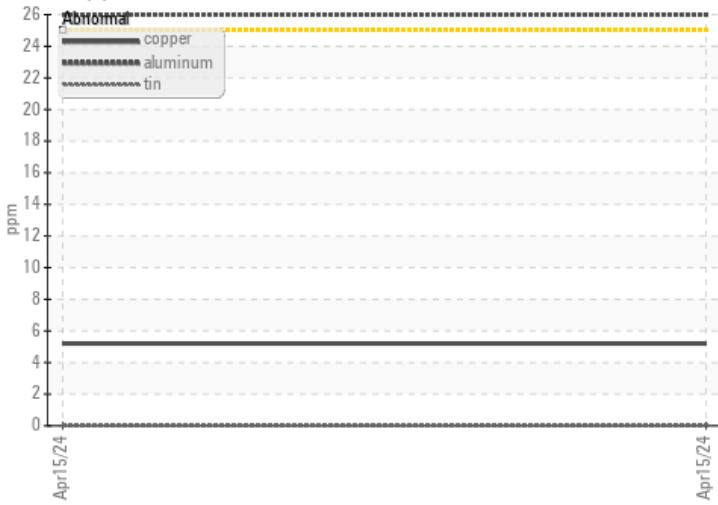
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185(m)		<1	---	---
Boron	ppm	ASTM D5185(m)		<1	---	---
Barium	ppm	ASTM D5185(m)		0	---	---
Molybdenum	ppm	ASTM D5185(m)		6	---	---
Manganese	ppm	ASTM D5185(m)		0	---	---
Magnesium	ppm	ASTM D5185(m)		1	---	---
Calcium	ppm	ASTM D5185(m)		83	---	---
Phosphorus	ppm	ASTM D5185(m)		38	---	---
Zinc	ppm	ASTM D5185(m)		3	---	---
Sulfur	ppm	ASTM D5185(m)		1377	---	---
Acid Number (AN)	mg KOH/g	ASTM D974*	0.15	0.74	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	19.8	20.2	---	---
Lubricant Degradation	Scale 0-10	ASTM D7684*				

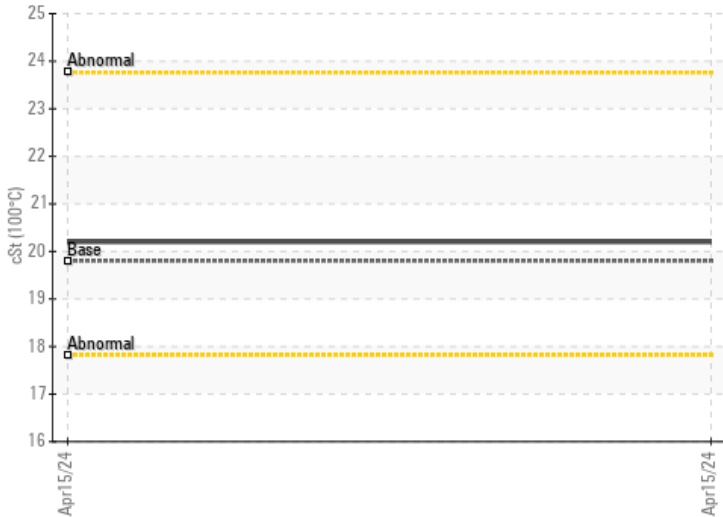
Ferrous Alloys



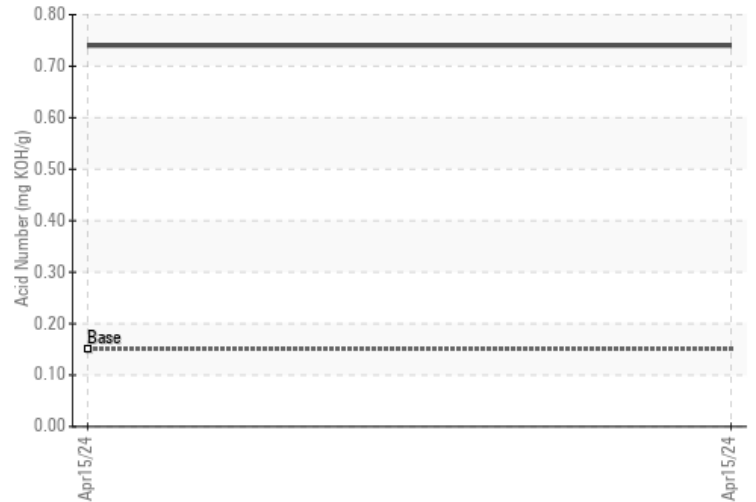
Copper/Aluminum/Tin



Viscosity @ 100°C



Acid Number



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0725558
Lab Number : 02629592
Unique Number : 5762724
Test Package : AVI 3
Received : 17 Apr 2024
Tested : 23 Apr 2024
Diagnosed : 23 Apr 2024 - Kevin Marson

GENERAL AIRSPRAY LTD.
 6375 AIRPORT DRIVE, R.R. #1
 LUCAN, ON
 CA N0M 2J0
 Contact: Paul Hodgins
 genairspray@hotmail.com
 T: (519)227-4091
 F: (519)227-1588

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.

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