



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

(C-GMTC)

Machine Id

[C-GMTC] BEECH B36TC 527048

Component

Piston Aircraft Engine

Fluid

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

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill.
Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0921425	WC0776209	WC0648100
Sample Date		Client Info		15 May 2024	26 Apr 2023	22 Mar 2022
TSN	hrs	Client Info		2632	0	2610
TSO	hrs	Client Info		72	60	49
Oil Age	hrs	Client Info		12	10	4
Filter Age	hrs	Client Info		12	10	4
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>90	52	59	44
Chromium	ppm	ASTM D5185(m)	>20	11	14	10
Nickel	ppm	ASTM D5185(m)	>15	8	9	7
Titanium	ppm	ASTM D5185(m)		0	<1	0
Silver	ppm	ASTM D5185(m)	>5	0	0	0
Aluminum	ppm	ASTM D5185(m)	>25	14	14	19
Lead	ppm	ASTM D5185(m)	>20000	1370	1225	838
Copper	ppm	ASTM D5185(m)	>25	4	3	4
Tin	ppm	ASTM D5185(m)	>30	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	VLITE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

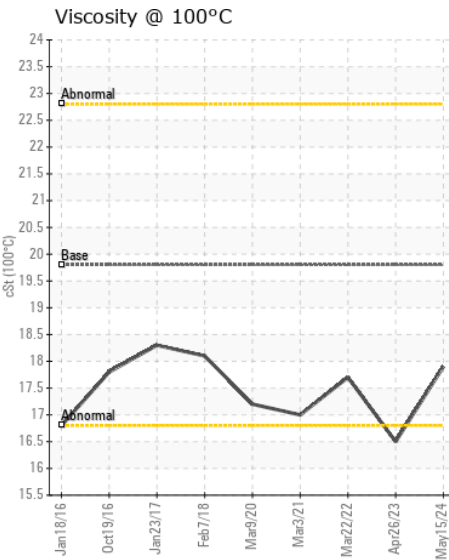
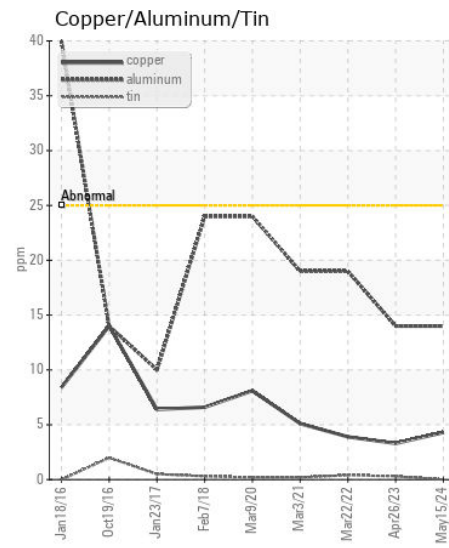
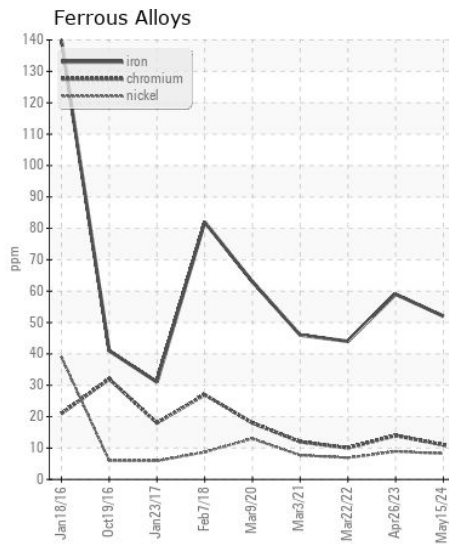
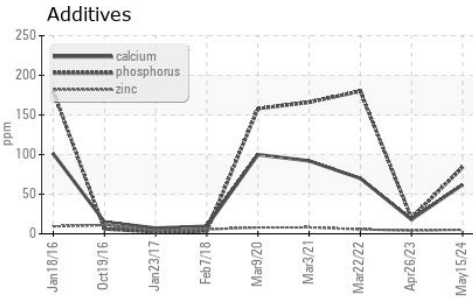
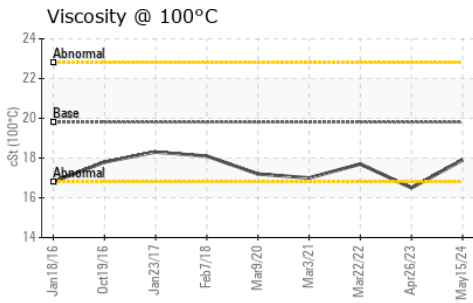
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	5	8	9
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	2
Fuel		WC Method	>4.0	<1.0	0.8	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Silt	scalar	Visual*	NONE	NONE	VLITE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	VLITE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	.2%	.2%

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.

Sodium	ppm	ASTM D5185(m)		1	2	1
Boron	ppm	ASTM D5185(m)		0	<1	<1
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		5	8	7
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)		1	2	<1
Calcium	ppm	ASTM D5185(m)		62	18	70
Phosphorus	ppm	ASTM D5185(m)		84	20	180
Zinc	ppm	ASTM D5185(m)		5	4	6
Sulfur	ppm	ASTM D5185(m)		1520	1158	1948
Visc @ 100°C	cSt	ASTM D7279(m)	19.8	17.9	16.5	17.7



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0921425
Lab Number : 02636346
Unique Number : 5785508
Test Package : AVI 1
Received : 17 May 2024
Tested : 17 May 2024
Diagnosed : 21 May 2024 - Kevin Marson

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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.