



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

(C-FUMP)

Machine Id

[C-FUMP] PIPER PA28-180 L-23758-36A

Component

Front Piston Aircraft Engine

Fluid

PHILLIPS 66 AVIATION X/C OIL SAE20W50 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0921439	WC0820318	WC0713327
Sample Date		Client Info		13 May 2024	18 Jul 2023	27 Jun 2022
TSN	hrs	Client Info		0	0	3182
TSO	hrs	Client Info		367	305	179
Oil Age	hrs	Client Info		22	26	22
Filter Age	hrs	Client Info		22	26	22
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>90	27	21	24
Chromium	ppm	ASTM D5185(m)	>20	14	13	18
Nickel	ppm	ASTM D5185(m)	>15	1	1	1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>5	0	0	0
Aluminum	ppm	ASTM D5185(m)	>25	5	4	6
Lead	ppm	ASTM D5185(m)	>20000	2759	2645	2074
Copper	ppm	ASTM D5185(m)	>25	4	4	6
Tin	ppm	ASTM D5185(m)	>30	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

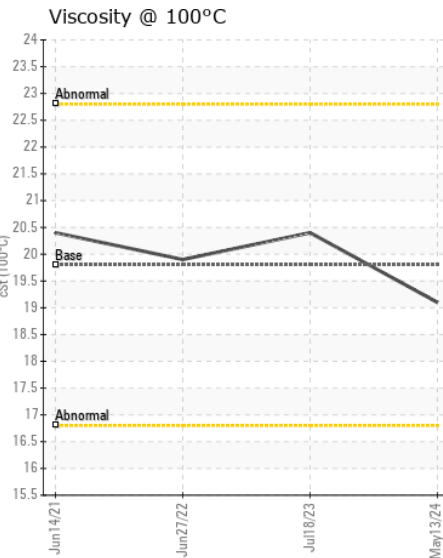
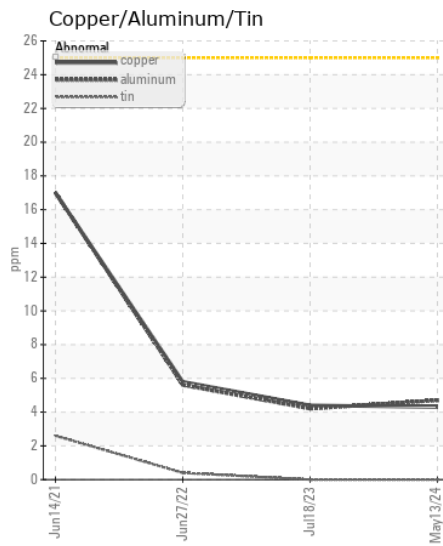
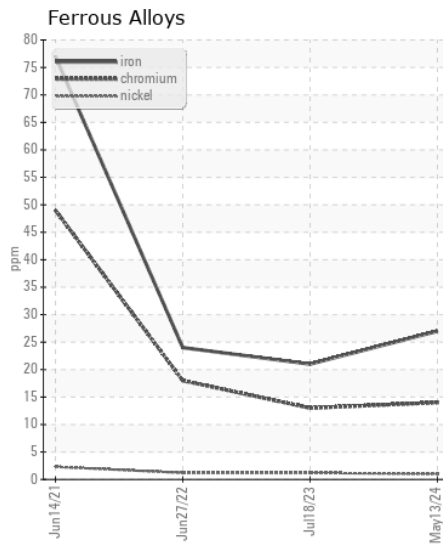
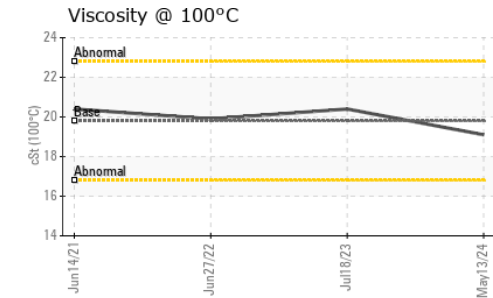
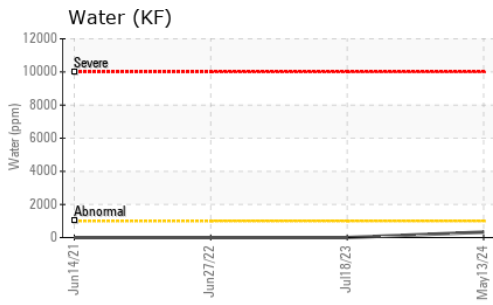
The water content is negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	2	2	4
Potassium	ppm	ASTM D5185(m)	>20	<1	0	<1
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Water	%	ASTM D6304*	>0.1	0.032	---	---
ppm Water	ppm	ASTM D6304*	>1000	330	---	---
Glycol		WC Method		NEG	NEG	NEG
Silt	scalar	Visual*	NONE	NONE	VLITE	LIGHT
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	MILKY	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	.2%	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		<1	<1	<1
Boron	ppm	ASTM D5185(m)		<1	<1	<1
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		0	<1	1
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		<1	2	<1
Calcium	ppm	ASTM D5185(m)		<1	4	4
Phosphorus	ppm	ASTM D5185(m)		1	1	2
Zinc	ppm	ASTM D5185(m)		8	9	9
Sulfur	ppm	ASTM D5185(m)		947	975	1077
Visc @ 100°C	cSt	ASTM D7279(m)	19.8	19.1	20.4	19.9



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0921439
Lab Number : 02635620
Unique Number : 5776773
Test Package : AVI 1 (Additional Tests: KF)

CORPORATE AIRCRAFT RESTORATIONS
 481 AVIATOR LANE
 OSHAWA, ON
 CA L1J 0B8
 Contact: Maurice Nesbitt
 hangar@bellnet.ca
 T: (905)434-5173
 F: (905)983-9599

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.