



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
(C-GJRH)
Machine Id
[C-GJRH] PIPER PA31-350 L-6892-61A
Component
Left Piston Aircraft Engine
Fluid
PHILLIPS 66 AVIATION X/C OIL SAE20W50 (12 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0838466	WC0826696	WC0754571
Sample Date		Client Info		12 Jan 2024	18 Nov 2023	02 Nov 2023
TSN	hrs	Client Info		0	0	0
TSO	hrs	Client Info		2092	2003	1959
Oil Age	hrs	Client Info		49	44	55
Filter Age	hrs	Client Info		49	44	55
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>90	26	45	80
Chromium	ppm	ASTM D5185(m)	>20	8	12	22
Nickel	ppm	ASTM D5185(m)	>15	7	7	9
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>5	<1	<1	<1
Aluminum	ppm	ASTM D5185(m)	>25	6	8	20
Lead	ppm	ASTM D5185(m)	>20000	5548	6104	5689
Copper	ppm	ASTM D5185(m)	>25	8	15	24
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

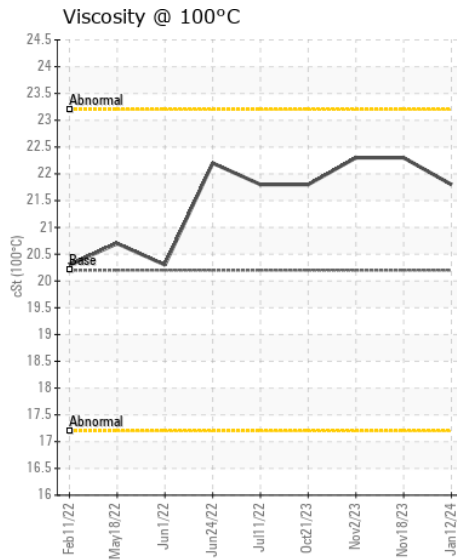
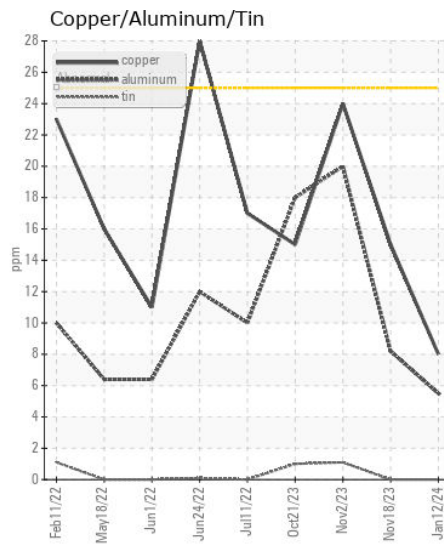
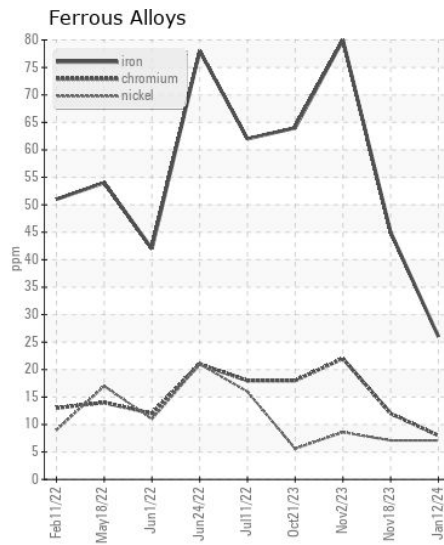
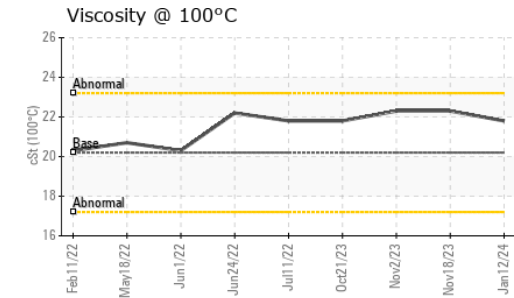
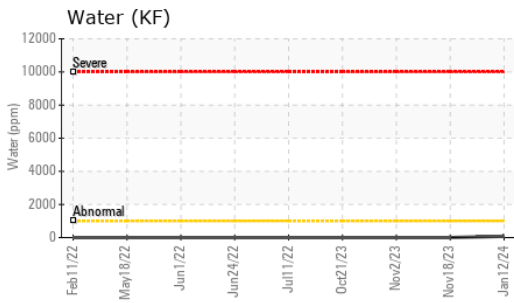
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	6	8	▲ 18
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	0.007	---	---
ppm Water	ppm	ASTM D6304*	>1000	76	---	---
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	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	MILKY	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		<1	<1	2
Boron	ppm	ASTM D5185(m)	0.0	0	<1	<1
Barium	ppm	ASTM D5185(m)	0.0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	0.0	0	0	2
Manganese	ppm	ASTM D5185(m)	0.0	0	0	0
Magnesium	ppm	ASTM D5185(m)	0.0	5	5	11
Calcium	ppm	ASTM D5185(m)	4.7	2	5	22
Phosphorus	ppm	ASTM D5185(m)	0.0	0	<1	3
Zinc	ppm	ASTM D5185(m)	0.1	5	6	11
Sulfur	ppm	ASTM D5185(m)	848	1032	998	954
Visc @ 100°C	cSt	ASTM D7279(m)	20.2	21.8	22.3	22.3



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0838466 **Received** : 18 Jan 2024
Lab Number : 02609696 **Diagnosed** : 22 Jan 2024
Unique Number : 5710782 **Diagnostician** : Kevin Marson
Test Package : AVI 1 (Additional Tests: KF)

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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