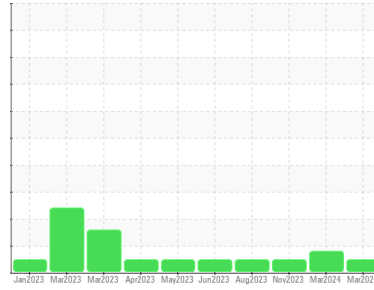




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**(C-GCJH)**  
Machine Id  
**[C-GCJH] PIPER PA31-350 RL-569-68A**  
Component  
**Right Piston Aircraft Engine**  
Fluid  
**PHILLIPS 66 AVIATION X/C OIL SAE20W50 (12 LTR)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

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

### Fluid Condition

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

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0886712</b>	WC0886714	WC0754572
Sample Date	Client Info		<b>17 Mar 2024</b>	08 Mar 2024	06 Nov 2023
TSN	hrs	Client Info	<b>0</b>	12903	0
TSO	hrs	Client Info	<b>1515</b>	1488	2187
Oil Age	hrs	Client Info	<b>27</b>	57	44
Oil Changed		Client Info	<b>Not Changed</b>	N/A	Changed
Sample Status			<b>NORMAL</b>	ABNORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>4.0	<b>&lt;1.0</b>	<1.0	<1.0
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>90	<b>33</b>	52	37
Chromium	ppm	ASTM D5185(m)	>20	<b>8</b>	14	10
Nickel	ppm	ASTM D5185(m)	>15	<b>11</b>	▲ 16	10
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>25	<b>3</b>	7	6
Lead	ppm	ASTM D5185(m)	>20000	<b>5210</b>	7887	6763
Copper	ppm	ASTM D5185(m)	>25	<b>6</b>	9	10
Tin	ppm	ASTM D5185(m)	>30	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## ADDITIVES

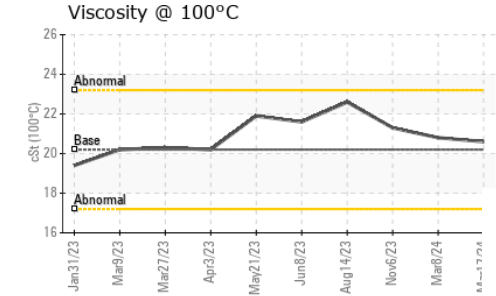
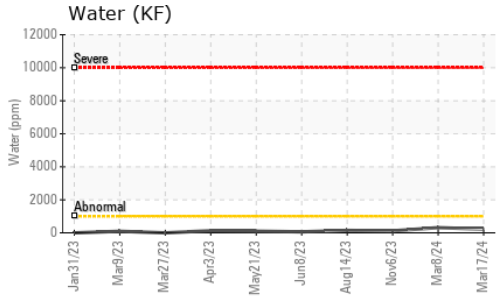
	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	0.0	<b>0</b>	0	<1
Barium	ppm	ASTM D5185(m)	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	0.0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	0.0	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	0.0	<b>4</b>	7	4
Calcium	ppm	ASTM D5185(m)	4.7	<b>&lt;1</b>	4	<1
Phosphorus	ppm	ASTM D5185(m)	0.0	<b>0</b>	<1	0
Zinc	ppm	ASTM D5185(m)	0.1	<b>2</b>	3	2
Sulfur	ppm	ASTM D5185(m)	848	<b>951</b>	1039	973
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>15	<b>5</b>	6	3
Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	1
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	0
Water	%	ASTM D6304*	>0.1	<b>0.022</b>	0.031	0.011
ppm Water	ppm	ASTM D6304*	>1000	<b>222</b>	314	119.9



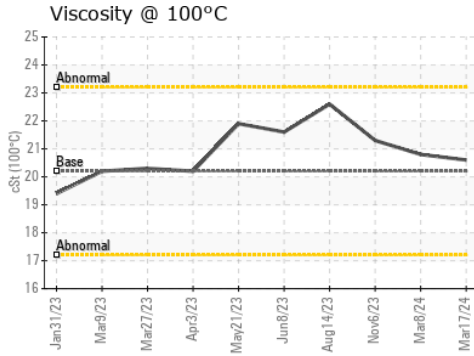
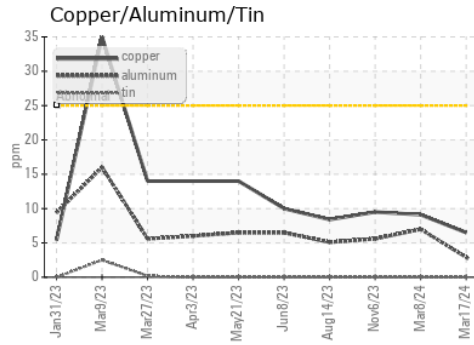
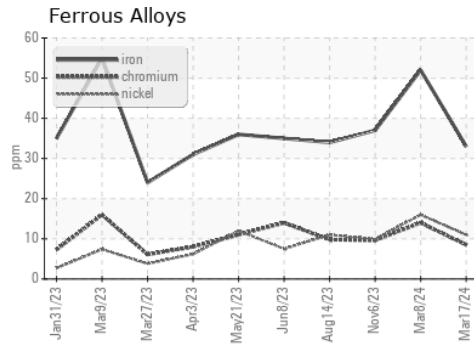
# OIL ANALYSIS REPORT



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	NONE	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	.2%	.2%
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D7279(m)	20.2	20.6	20.8	21.3

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0886712 **Received** : 21 Mar 2024  
**Lab Number** : 02623701 **Tested** : 22 Mar 2024  
**Unique Number** : 5748820 **Diagnosed** : 22 Mar 2024 - Kevin Marson  
**Test Package** : AVI 1 ( Additional Tests: KF )

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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.