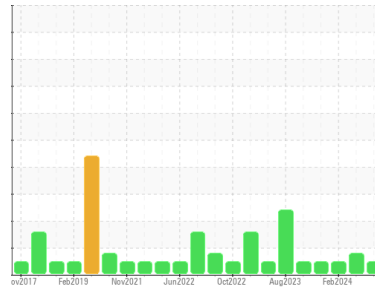




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area

**(C-FAJR)**

Machine Id

**[C-FAJR] PIPER PA31-350 L-2001-68A**

Component

**Right Piston Aircraft Engine**

Fluid

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

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

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>WC0945315</b>	WC0896315	WC0838457
Sample Date	Client Info		<b>10 Jun 2024</b>	03 Jun 2024	26 Feb 2024
TSN	hrs	Client Info	<b>0</b>	0	0
TSO	hrs	Client Info	<b>3083</b>	3065	2852
Oil Age	hrs	Client Info	<b>18</b>	65	42
Oil Changed		Client Info	<b>Not Chngd</b>	Changed	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
Water	WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>90	<b>19</b>	36	29
Chromium	ppm	ASTM D5185(m)	>20	<b>6</b>	12	8
Nickel	ppm	ASTM D5185(m)	>15	<b>7</b>	▲ 15	10
Titanium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>25	<b>3</b>	5	6
Lead	ppm	ASTM D5185(m)	>20000	<b>4589</b>	9800	6805
Copper	ppm	ASTM D5185(m)	>25	<b>3</b>	5	5
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>&lt;1</b>	2	2

## ADDITIVES

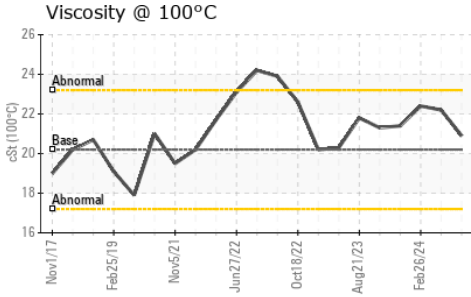
	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	0.0	<b>&lt;1</b>	0	0
Barium	ppm	ASTM D5185(m)	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	0.0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	0.0	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	0.0	<b>2</b>	4	6
Calcium	ppm	ASTM D5185(m)	4.7	<b>2</b>	3	3
Phosphorus	ppm	ASTM D5185(m)	0.0	<b>&lt;1</b>	<1	0
Zinc	ppm	ASTM D5185(m)	0.1	<b>3</b>	4	3
Sulfur	ppm	ASTM D5185(m)	848	<b>994</b>	1043	1051
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>4</b>	5	5
Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	<1



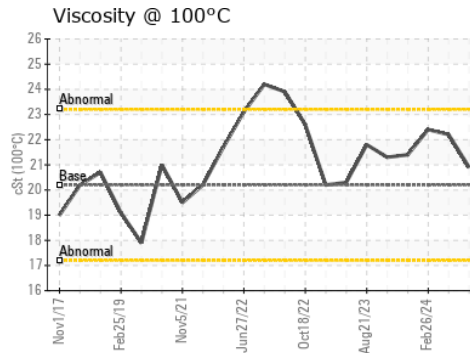
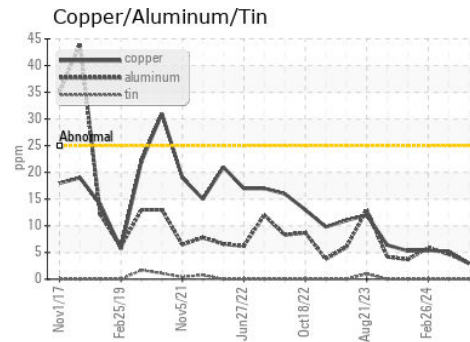
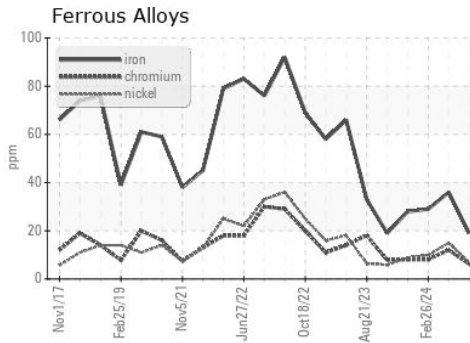
# OIL ANALYSIS REPORT



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	VLITE	VLITE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	VLITE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	.2%
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D7279(m)	20.2	<b>20.9</b>	22.2	22.4

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0945315  
**Lab Number** : **02641678**  
**Unique Number** : 5799217  
**Test Package** : AVI 1

**Received** : 13 Jun 2024  
**Tested** : 13 Jun 2024  
**Diagnosed** : 13 Jun 2024 - Kevin Marson

**SKYCARE AIR AMBULANCE**  
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 F: (807)737-0040

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.